Cyber Security Due Diligence:

Will You Be the One to Save Your Company & CEO From Disaster

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Partner | Chief Operating Officer, Sylint Group Incorporated

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The Question of the Day

How did we come up with the company name **"Sylint"** and what does it mean?

- Sylint (si-lent): from the Greek variant "**Syl**-" meaning "together" and the suffix "-**int**" comes from the variant meaning "information", usually associated with secret information regarding the enemy or about hostile activities, or "**int**elligence"

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Sylint Group, Inc

Incident Response, Cyber Security, Digital Data Forensics (SRQ 1999)

- Clients - Fortune 500, Gov't, Public, Private, High Profile, LEO
- 1 of 16 Companies Accredited by National Security Agency (NSA) and NSCAP for Cyber Incident Response Assistance (CIRA)
- 1 of 11 Companies Authorized to Investigate Card Breaches (PCI) in USA for VISA, MasterCard, AMEX: PCI Forensic Investigators (PFI)
- NSA, DoD/Air Force – Intelligence Centric Methodologies
- DHS Industrial Control System (ICS) Joint Working Group Member

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What is Your Position?

CCEO / General Counsel	**A**
C&E Staff	**B**
Other Senior Management	**C**
Techical / Security Staff	**D**
Other	**E**

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Have Senior Executives Been Held Responsible For Data Breaches in the Past?

Target
- CEO (Fired); CIO (Fired)

Yahoo
- General Counsel (Fired)

FACC (Austrian Aerospace Company)
- CEO (Fired); CFO (Fired)

UBER
- Founder / CEO (Fired)
- CSO and Legal Director of Security and Law Enforcement (Fired)

SONY
- CEO (Fired)

Equifax
- CEO (Retired)
- CSO (Retired)
- CIO (Retired)

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Any Trends or Reports on This Issue?

Kaspersky Lab (Sep '18)

- *In North America, reports that 32% of breaches led to a member of the C-suite losing his or her job.*

- *Nearly 30% of SMBs and 27% of large enterprises fired senior, non-IT personnel*
  - Highlights how protecting data is a team sport
  - If done poorly, will often result in non-IT stakeholders leaving the building

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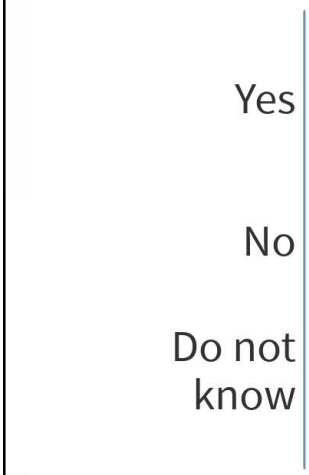
Has Your Company Experienced a Cyber Security Incident?



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Results of Public Outcry - Legislation

4/3/2019: Senator Elizabeth Warren (D-Massachusetts) announced that she was proposing legislation to ***ensure CEOs whose companies are involved in massive data breaches be held accountable "in ways not seen before"***

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Results of Public Outcry - Legislation

Data Breach Prevention and Compensation Act of 2019 (Sponsored by Senators Warren and Warner and Representatives Cummings and Krishnamoorthi), would impose jail time for violations:

- Violations would be defined as those who "negligently permit or fail to prevent" (**read as lack of due diligence**) a "violation of the law" (**read as a malicious cyber breach**), that "affects the health, safety, finances or personal data" of 1% of the population of any state.
- Recommends up to a one (1) year in prison for the CEO if it is their first offense with repeat offenders getting as much as three (3) years
- Penalty has constraints as it would only apply to companies that generate more than $1 billion in annual revenue ***(for perspective, Equifax generated $3.4 billion in revenues in 2017)***
- To appease those who think this prospective legislation might be too harsh, the authors added a clause that a company would also have to be either convicted of violating a law or have settled a claim with a state or federal regulator ***(Equifax signed a consent decree with state regulators in 2018)***

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Results of Public Outcry - Legislation

And there is more…

Senator Ron Wyden (D-Oregon) is proposing an even harsher legislative bill regarding data privacy that would recommend up to twenty (20) years of prison for corporate executives who violate their customer's privacy

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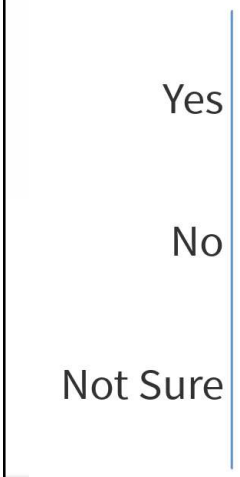
Do You Agree with the Proposed Legislation?



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Is It Really That Bad Out There with Regard to Senior Executive Oversight?

Let's Look at Equifax through the lens of Senior Executive Oversight

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Equifax Incident Response Review*

3/8	US-CERT sends Equifax an alert to patch Apache Struts software
3/9	Equifax GTVM team disseminates notification requesting to apply the critical patch within 48 hours
3/15	Equifax Security team runs scan to ensure patch compliance
5/13	**Attackers enter network** via Apache Struts vulnerability (9K queries)
7/29	Renew expired security certificate for monitoring device (19 months)
7/30	Equifax takes ACIS application offline; CIO informed of incident
7/31	Equifax staff determines PII may have been exfiltrated with intrusion

*US House of Representatives, Committee on Oversight and Government Reform, Dec 2018

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Equifax Incident Response Review*

7/31 (Mon)	CIO informs CEO of security incident
8/2 (Wed)	Law firm and cybersecurity company engaged; FBI informed
8/11	Security experts suspect threat accessed large amount of PII data
8/17 (Thurs)	Equifax holds senior leadership team meeting
8/24-25	Volume of PII confirmed; CEO holds telephonic BoD meeting
9/1	Board meeting convened to discuss investigation & another senior leadership team meeting
9/7	Equifax makes public announcement of breach

*US House of Representatives, Committee on Oversight and Government Reform, Dec 2018

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Equifax Incident Response Review*

Public Announcement Issues:

Website Notification

- New website that was totally separate from corporate website
- Equifaxsecurity2017.com provided customers with incomplete or incorrect information
- ***Equifax Twitter account directed customers to phishing website for nearly two (2) weeks***

Call Center Notification

- Grossly inadequate preparations weeks prior to announcement (Onboard, train and set up support for 1,500 call center agents)
- Immediately overwhelmed with volume as ***representatives were understaffed and untrained***
- Individuals unable to find out if personal information was compromised or failed to reach an actual person to talk with

Credit Monitoring

- Advised people to sign up for credit monitoring service but…forced consumers to agree to terms of use with a mandatory arbitration clause (preventing right to sue)
- Eventually, Equifax agreed that the arbitration clause would not apply to claims arising from the breach

Public outreach after the breach "haphazard," ill-conceived," and a "dumpster fire." Brian Krebs

*US House of Representatives, Committee on Oversight and Government Reform, Dec 2018

Equifax Incident Response Review*

9/14	Congressional Committee launches investigation
9/15	**CIO David Webb and CSO Susan Mauldin announce retirement**
9/26	**CEO Richard Smith announces retirement**
9/27	**Interim CEO Paulino de Regos Barros Jr. publishes public apology**
10/2	**2.5 Million more victims announced**
3/1/2018	**2.4 Million additional victims announced**
3/28	**Equifax names Mark Begor as CEO**

*US House of Representatives, Committee on Oversight and Government Reform, Dec 2018

Do These Facts Make a Difference?*

Did You Know?

- In 2015 Experian disclosed a breach of approx. 15 Million PII on individuals (risk to industry)
- In 2016, Equifax was assigned at rating of "Zero out of Ten" regarding their data security efforts
- In 2017, the rating remained unchanged….both reports included:

  "…The company's data and privacy policies are limited in scope and Equifax shows no evidence of data breach plans or regular audits of its information security policies and systems."
- Equifax never disclosed any cybersecurity risks or incidents in SEC filings prior to their 2017 data breach

*US House of Representatives, Committee on Oversight and Government Reform, Dec 2018

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Do You Think Equifax Senior Executives Demonstrated Appropriate Due Diligence?

Yes

NO

Do not know--Not a Lawyer

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Do You Now Agree with the Proposed Legislation Regarding Cyber Security and Senior Executives?

Yes

No

Still not sure and more confused

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Emerging Issue

General Data Protection Regulation (GDPR)

British Airways (2019) – UK (*GDPR Fine* = **$230M**)

BRITISH AIRWAYS

Marriot (2019) - UK (*GDPR Fine* = **$123M**)

Marriott

MARRIOTT

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What Can Compliance & Ethics Officers Do?

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What is "Reasonable" Cyber Security

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“Reasonable” Cyber Security Due Diligence

Pre-Incident Awareness/Oversight

- Operational Security Procedures and Processes
- Incident Response Plans and Testing
- Senior and Middle Management Communication Flow

Post-Incident Actions

- Senior and Middle Management Involvement
- Public Facing Communication

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Pre & Post Incident Due Diligence Commonalities

Timely, Relevant and Accurate Information Flow

Checks and Balances

Plans & Testing/Exercises

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Cyber Security Communications Flow
(For Non-Security People)

Key Performance Indicators (KPI) Metrics

- Identify Status of "Show Stoppers" in Timely Manner
- Different Levels of "Indicators" for Levels of Management

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Cyber Security Checks and Balances

Communication Flow (KPI)

Internal IT Department (Tasks Accomplished)

- Patch Management / External and Internal Scans / Password Audit / Monitoring

Middle Management (Task Resolved)

- Inter-departmental Issues (Non-compliance with security processes/procedures)

Senior Management (Overall Awareness)

- Process Issues (see above)
- Compliance & Resource Issues
- Cyber Security Assessment (Internal & 3rd Party Venders/Business Associates)

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Plans and Testing/Exercises

Business Continuity Plans

Cyber Security Incident Plan / Exercises

- *Internal IT Department* – Technical focus ("Systems Owner")
- *Middle Management* – Operational concerns focus ("Business Owner")
- *Senior Management* – Strategic focus / Public facing

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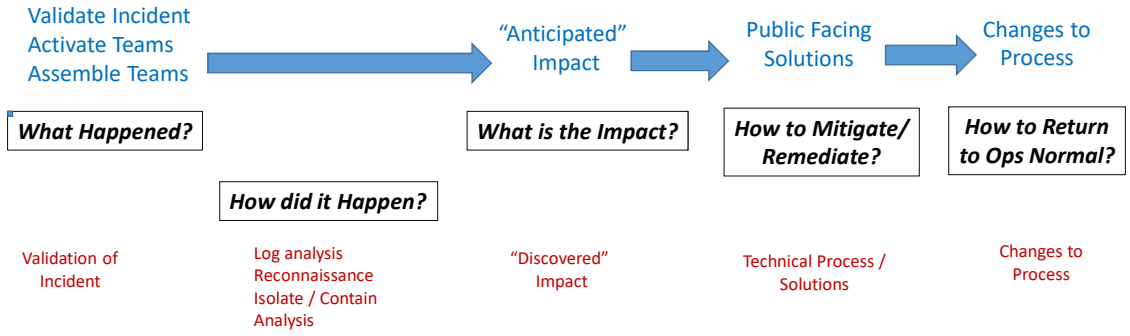
Division of Responsibilities

Senior Incident Response Team



Internal Technical / External Incident Response Team

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Major Points to Ponder From Equifax

Pre-Incident

- Follow up/awareness of cyber security posture review discrepancies *(at least they did one annually)*
- Ensuring policies and procedures are synchronized *(at least they had policies)*
  "…we had the notifications, but we didn't notify the people…we had scanning, but it didn't scan all the things…" *Mark Begor, new Equifax CEO*
- Credible Senior Executive feedback on current cyber security posture *(at least it was on BoD agenda)*

Post-Incident

- "Who & When to pull the fire alarm" (push as low as possible)
- Well thought out (discussed/exercised) potential cyber security scenarios/plans of action (internal & public facing)

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Where Does Your Company / Organization Stand Regarding Cyber Security Due Diligence?

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