23 MAY 2014
SYDNEY AUSTRALIA

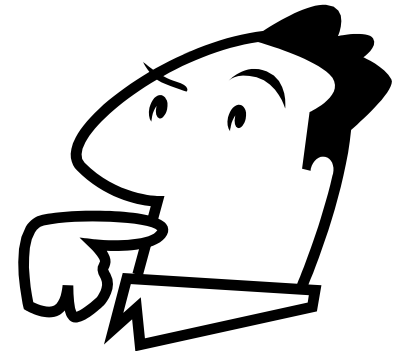CCR14
Crisis & Consumer Response 2014

Prevention is Always Better than Cure

Malcolm Crompton
Managing Director
Information Integrity Solutions
Crisis & Consumer Response 2014
Sydney, 23 May 2014

INFORMATION
INTEGRITY
SOLUTIONS

Can data breaches be *good* for you?

Building trust and innovative privacy solutions

INFORMATION INTEGRITY SOLUTIONS

Breaches, breaches, everywhere

Evernote hacked - almost 50 million passwords reset after security breach

by Graham Cluley on March 2, 2013 | 24 Comments
FILED UNDER: Data loss, Featured, Privacy

Evernote, the online note-taking service, has posted an advisory informing its near 50 million users that it has suffered a serious security breach that saw hackers steal usernames, associated email addresses and encrypted passwords.

It's not clear how the hackers managed to gain access to Evernote's systems, or how long the hackers had access to Evernote's account information.

However, in an interview with *TechCrunch*,

Immigration dept confirms asylum seeker data breach

Powered by SC Magazine **SC**

By Allie Coyne, Paris Cowan on Feb 19, 2014 11:43 AM
Filed under Security
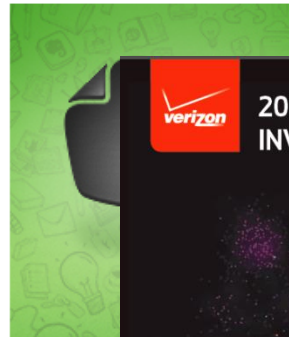
g+1 1   in Share 9

2 Comments

Updated: Personal details of up to 10,000 exposed.

The Department of Immigration and Border Protection (DIPB) has admitted to inadvertently leaking the personal details of close to 10,000 asylum seekers housed in Australia via its website.

News of the leak was broken today by *The Guardian*, which reported the

2014 DATA BREACH INVESTIGATIONS REPORT

verizon

INSIDER MISUSE
MISCELLANEOUS ERRORS
PHYSICAL THEFT AND LOSS
PAYMENT CARD SKIMMERS

DOS ATTACKS
CYBER-ESPIONAGE   CRIMEWARE
WEB APP ATTACKS

92%

THE UNIVERSE OF THREATS MAY SEEM LIMITLESS, BUT 92% OF THE 100,000 INCIDENTS WE'VE ANALYZED FROM THE LAST 10 YEARS CAN BE DESCRIBED BY JUST NINE BASIC PATTERNS.

POINT-OF-SALE INTRUSIONS

Conducted by Verizon with contributions from 50 organizations from around the world.

The Target Data Breach Is Becoming A Nightmare

+ Comment Now   + Follow Comments

TARGET

Over the past month, details about the breadth of th[e] TGT -0.6% data breach have continued to emerge. It's [a] story. Bad enough when it appeared that through s[o] hackers had gotten data all the way from credit card swipe

Adobe Data Breach Affects 38 Million — Not 3 Million, as Reported

1.2k f Share   Share   +

SHARES   WHAT'S THIS?

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Common responses

➢ "Just encrypt everything"

➢ "Trust us, we'll do the right thing"

➢ Head in the sand ("That's not my problem")
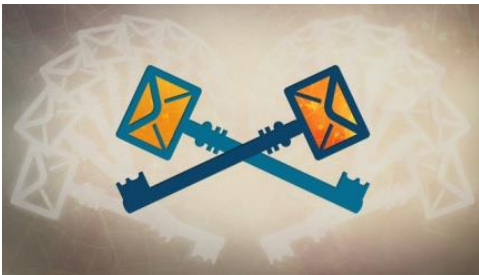
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Where is the edge?

➢ <u>Traditional assumption</u>: getting security right depends on knowing where your organisation's boundaries are

➢ <u>Today *there are no definite boundaries*</u>:

- time, location, device, identity, and more

➢ Technology exacerbating this trend:

- Social media – employee or company?
- Cloud – data sovereignty
- Big Data – how to define new purposes
- Mobile – BYOD
- …

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Privacy as one aspect of data management strategy

➢ **APP 1 – Open and transparent management of personal information**

> 1.2 An APP entity must take such steps as are reasonable in the circumstances to implement practices, procedures and systems relating to the entity's functions or activities that:
>
> (a) will ensure that the entity complies with the Australian Privacy Principles and a registered APP code (if any) that binds the entity; and
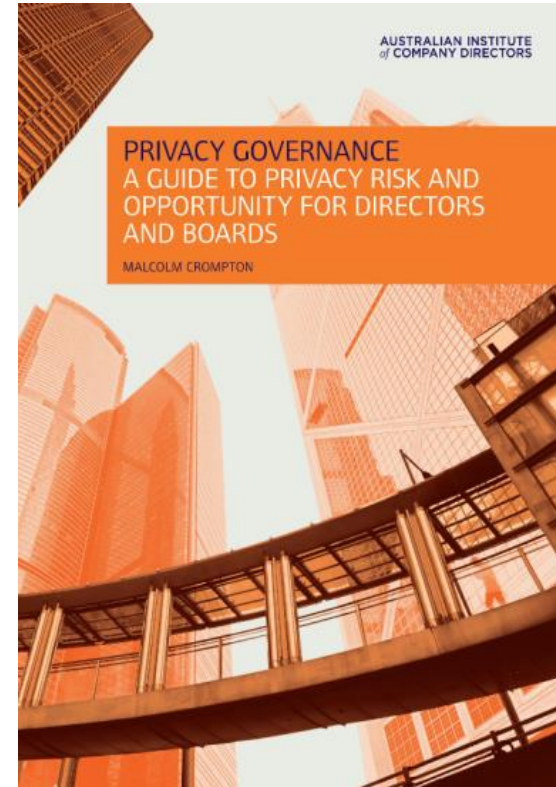
➢ "The bedrock principle"

➢ Read in conjunction with increased powers of the Privacy Commissioner

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Good data management starts from the top

➢ A Guide to Privacy Risk and Opportunity for Directors and Boards (2014):

- Governance of data assets

- Privacy awareness

- Privacy strategy

- Executive and senior management responsibility

- Partners and contractors

- Regular privacy audits

AUSTRALIAN INSTITUTE
of COMPANY DIRECTORS

PRIVACY GOVERNANCE
A GUIDE TO PRIVACY RISK AND
OPPORTUNITY FOR DIRECTORS
AND BOARDS
MALCOLM CROMPTON

http://www.companydirectors.com.au/Director-Resource-Centre/Publications/Book-Store/Privacy-Governance

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Framework for risk management

Source: David Tattam, Protecht (2013)

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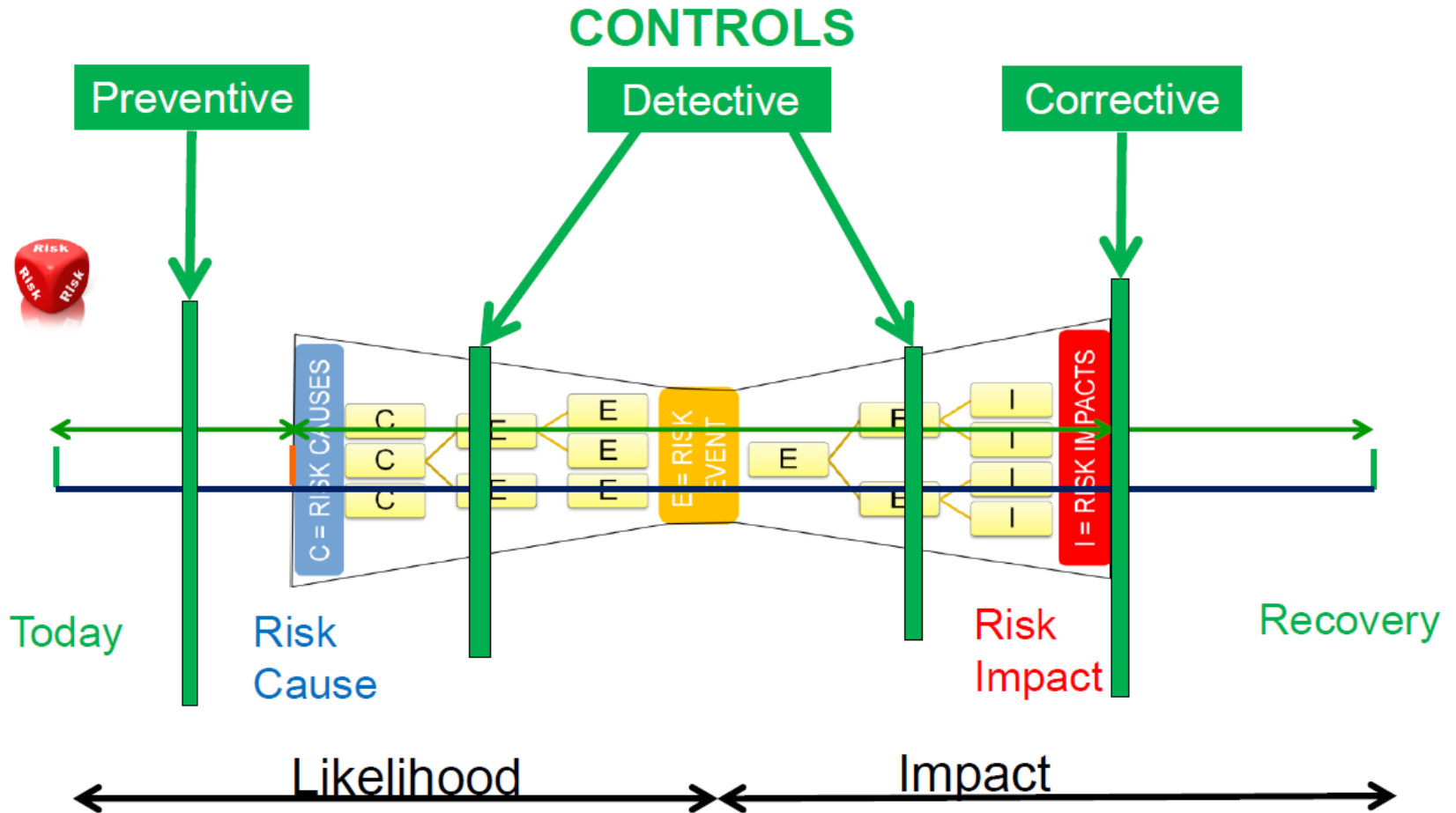
Prevent

➢ Compile, understand and plan for potential risks:

- Organisation-wide – **Privacy Health Check**
- Before a change to handling of personal information (eg, policy, project, etc) – **Privacy Impact Assessment**
- **Privacy by Design** principles
- **Data Breach Response plan**

www.privacybydesign.ca

Privacy Health Check

➢ What is it?

- **High level, diagnostic tool** assessing an organisation's privacy and security against existing obligations and best practice
- Identifies key issues and provides practical solutions

➢ What does it involve?

- Evaluating data management strategy
- Examining relevant documentation
- Interviewing key staff
- Mapping data flows
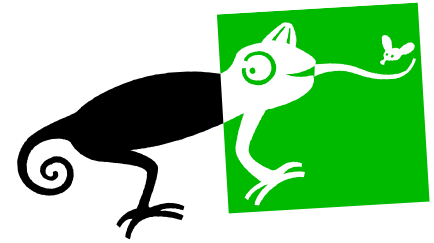- Reviewing processes for managing failure

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Privacy Impact Assessment

➢ A PIA 'tells the story of a project from a privacy perspective and helps to manage privacy impacts' (*Australian Guide*)
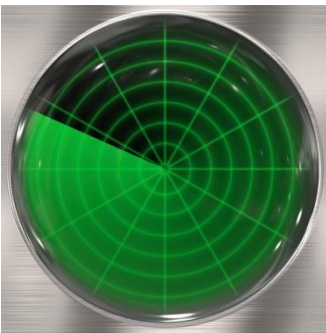
➢ It is:

1. Prospective
2. Adaptive
3. Process-oriented
4. Risk assessment

Detect

- Collect relevant records

- Separate signal from noise

- Ensure mechanisms are working as intended

  - Deployment
  - Checking
  - Taking action – don't ignore warning signals!

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Correct: more than OMG
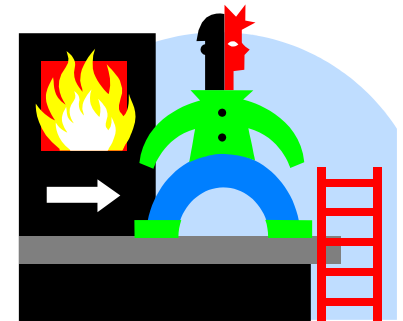
➢ Who:

- Individuals
- Regulators
- Media

➢ What:

- Going 'above and beyond'
- Restitution and recovery, proper allocation of risk
- Independent review
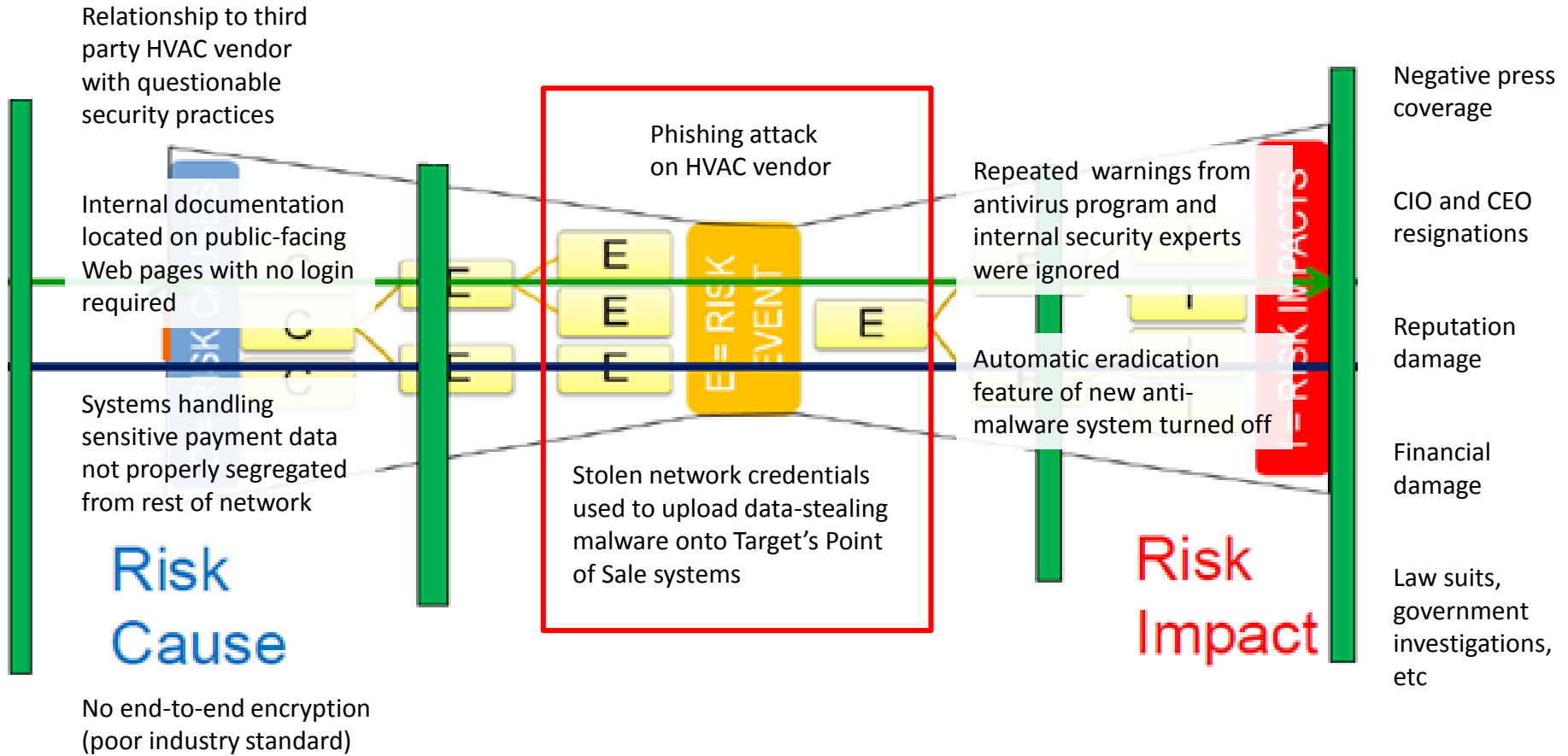- Maximise learning, minimise need for punishment

➢ How:

- Implement your Data Breach Response plan!
- Open, upfront, responsive, honest, decisive, cooperative

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Risk bow-tie in practice: Target data breach

Relationship to third party HVAC vendor with questionable security practices

Internal documentation located on public-facing Web pages with no login required

Systems handling sensitive payment data not properly segregated from rest of network

Risk Cause

No end-to-end encryption (poor industry standard)

Phishing attack on HVAC vendor

E = RISK EVENT

Stolen network credentials used to upload data-stealing malware onto Target's Point of Sale systems

Repeated warnings from antivirus program and internal security experts were ignored

Automatic eradication feature of new anti-malware system turned off

Risk Impact

Negative press coverage

CIO and CEO resignations

Reputation damage

Financial damage

Law suits, government investigations, etc

Source: David Tattam, Protecht (2013)

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Use data breaches as a business opportunity!

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What does that mean?

"You never want a serious crisis to go to waste. What I mean by that is it's an opportunity to do things you think you could not do before."

- Rahm Emanuel (former Chief of Staff to US President Obama), 2008

➢ Learn and improve

- Address vulnerabilities; Fix mistakes; Make improvements; Reduce risk of future breaches
- Remember the Target story: it's learning this the hard way

➢ Share and learn from each other

- Do you really need to keep everything secret?
- SOCAP; iappANZ; …

➢ Build brand

- How you handle moments of truth can build trust (or erode it even further)
- How you handle a data breach/crisis will demonstrate another side to customers haven't seen before: make sure it's one that they like!

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What now?

1. Engage your board and top executives

   - Strategic intent, not ad hoc tactics

2. Consider the risk bow-tie when allocating resources (prevent/detect/correct)

3. Leverage planning tools into existing processes, eg

   - Privacy Health Check
   - PIA
   - Privacy by Design
   - Data Breach Response Plan

AND ABOVE ALL:

CARPE
DIEM

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Questions?

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