



Privacy – what every auditor should know

Malcolm Crompton, Managing Director, Information Integrity Solutions Pty Ltd
Souella Cumming, Partner, KPMG

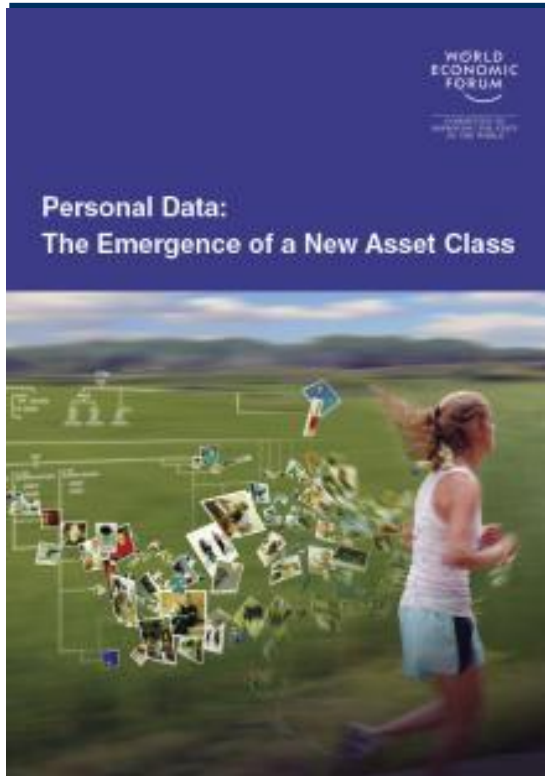
13 November 2012



Overview

- ▶ Current environment/context
 - Data as asset
 - Data as liability
- ▶ Data breach could happen to anyone
- ▶ ACC – facts and findings
- ▶ Implications for internal auditors

Data as asset



*“As some put it, **personal data will be the new ‘oil’ – a valuable resource of the 21st century.** It will emerge as a new asset class touching all aspects of society ... Stakeholders will need to embrace the uncertainty, ambiguity and risk of an emerging ecosystem.*

– World Economic Forum (2011)

Data as liability

Data may be vulnerable to external parties, who act for fun and/or profit

- ▶ 81% of data breaches involved some form of **hacking**
- ▶ Most common hacking methods are:
 - Exploitation of default or guessable credentials (55%)
 - Use of stolen login credentials (40%)
- ▶ 69% of data breaches involved **malware**

- ▶ 97% of breaches were avoidable with basic or intermediate security controls
- ▶ 85% of breaches took more than a week to discover

Source: '2012 Data Breach Investigations Report', Verizon, 2012

Globally

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By **DEVLIN BARRETT, JENNY STRA**

The company that owns the Nasdaq weekend that its computer network had been broken, letting leaders of companies, including board members, access sensitive documents.

Rise of the hacktivist: Activists now outsteal the thieves MARCH 23, 2012 | BY GEOFF DUNCAN



A new report on data breaches finds that hacktivists, not traditional cybercriminals, nabbed 58 percent of stolen data in 2011. Is this a sea-change in attacks, and what does it mean for everyday technology users?

Verizon released its annual [Data Breach Investigation Report](#) for 2011, in which it finds that

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Payment Processor Breach May Be Largest Ever all to

A data breach last year at Princeton, N.J., payment processor **Heartland Payment Systems** may have compromised tens of millions of credit and debit card transactions, the company said today.

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repeated incidents of data

VISA **MasterCard**

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Under attack ... Visa and MasterCard. Photo: AFP

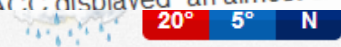
INFORMATION INTEGRITY SOLUTIONS

New Zealand

Accident Compensation Corporation NZ slammed over data breach

NZ Privacy Commissioner says ACC displayed "an almost cavalier" attitude towards client information, recommends change

Hamish Barwick (Computerworld) | 27 August



ged user data breach

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By Juha Saarinen on Oct 15, 2012
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Paula Bennett, NZ minister for social development and senior advisor

ACC makes another privacy breach

Published: 6:21PM Saturday October 20, 2012

The Accident Compensation Corporation has breached the privacy of someone else, in another breach of the Privacy Act.

Waikato truck driver Bruce Liddington has been battling the history in the post along with his family.

Liddington has been battling the history in the post along with his family for six months ago at work.

As reported on iNews earlier today, blogger Keith Liddington has been battling the history in the post along with his family to highly sensitive information - including invoices and other data from self-service kiosks installed by the New Zealand Post agency.

The data included invoices issued to the Ministry that

Privacy breaches at Inland Revenue

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Mon, 29 Oct 2012

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The Inland Revenue Department had 32 privacy breaches involving the personal information of 6300 people being sent to the wrong person in the past year.

Revenue Minister Peter Dunne said 638 people affected by the most serious breach had been contacted because details like their addresses and tax numbers had been released.

Not all those affected by every breach would be contacted, however. The information about

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INFORMATION INTEGRITY SOLUTIONS

Cost of data breach

- ▶ Overall financial burden:
 - ❑ US – \$5.5 million per organisation
 - ❑ Australia – \$2.16 million
- ▶ Lost business costs due to customer turnover and diminished goodwill:
 - ❑ US – \$3 million per organisation
 - ❑ Australia – \$840,000
 - ❑ Industries with highest turnover rates: technology, consumer and financial services
- ▶ Intangibles – **reputation and trust**

Source: 2011 Cost of Data Breach Studies: Global and Australia, Ponemon Institute and Symantec, 2012

It could happen to anyone

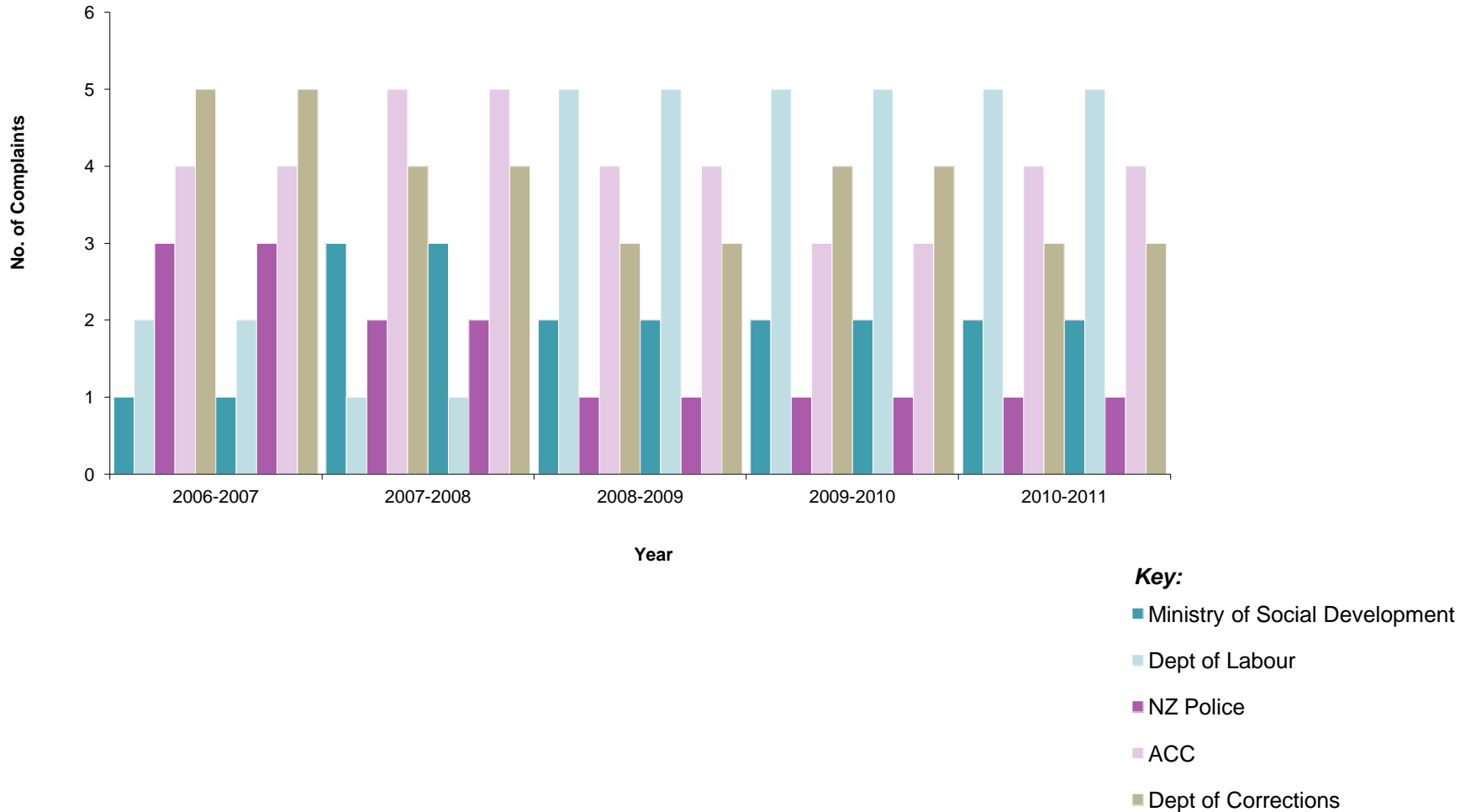
Privacy Commission statistics

- ▶ Levels of reported breach have been fairly consistent in recent years
- ▶ However...
 - ❑ Larger volumes of data
 - ❑ Greater visibility – media and general public
 - ❑ Multiple incidents reported this year across many agencies
- ▶ Reported breach statistics unlikely to settle back to pre-ACC levels

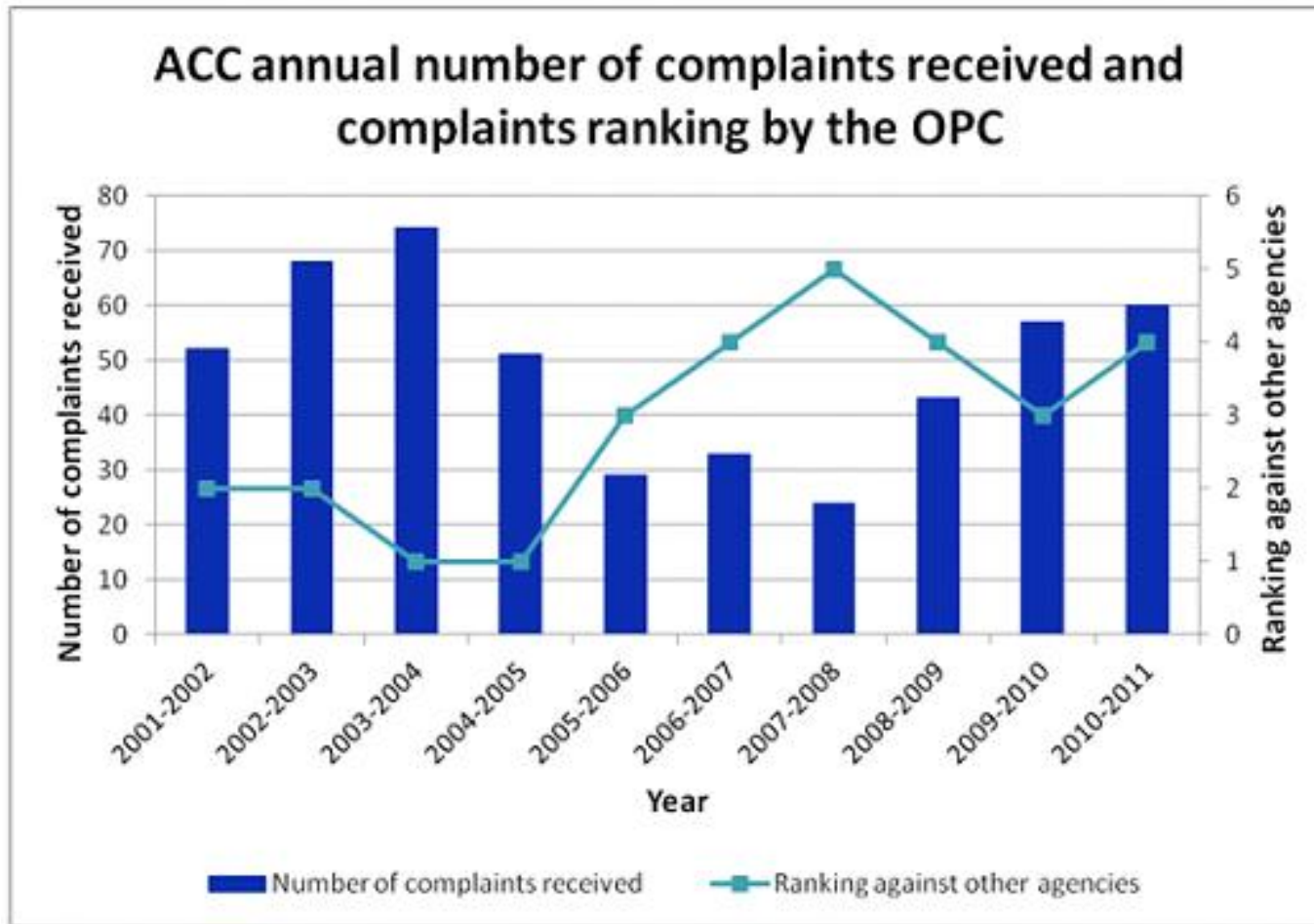
Source:

It could happen to anyone

Privacy complaints to OPC about agencies



It could happen to anyone



ACC – what happened

- 05/08/2011 ACC staff member sends email to the Client, inadvertently attaching an internal ACC report containing personal information on 6,748 clients.
Over the next two months, the Client raises concerns with ACC regarding its handling of claims and managing personal information.
- 01/12/2011 Client meets with two senior ACC managers, disclosing the incident.
- 01/03/2012 Client meets with reporter at Dominion Post. Some information relating to the breach, including re-dated personal information, is provided.
- 13/03/2012 Media story regarding the breach is made public.
- 23/03/2012 Independent inquiry is announced.

▶ “Just a careless mistake?”

ACC – findings

- ▶ Data management and privacy is a **whole-of-business issue**
- ▶ Cannot address management of personal information in isolation from:
 - ❑ Governance
 - ❑ Leadership, including privacy strategy
 - ❑ Privacy programme
 - ❑ **Culture**
 - ❑ Accountability
 - ❑ Business processes and systems
 - ❑ Safety mechanisms
 - ❑ Compliance with the IPPs and the HIPRs

Implications for internal auditors

- ▶ **Privacy impact assessment – who knows?**
 - ▶ What personal information is collected, stored, used, disclosed?
 - ▶ Volumes, nature of the information
- ▶ **Understand and assess risk – is it on the risk radar?**
 - ▶ What are the risks associated with collecting, storing, using and disclosing personal information?
- ▶ **Assess compliance activity – what assurance is provided?**
 - ▶ What analysis of reported breaches is undertaken?
 - ▶ How effective is the compliance programme?
- ▶ **Is a privacy audit on your annual internal audit plan?**

Implications for internal auditors

▶ Types of internal audit review/activity

- ▶ Privacy programme review – appropriateness and effectiveness of organisational approach to privacy
- ▶ Privacy breach monitoring and reporting – completeness and integrity of information reported to the Board/management
- ▶ Information management strategy
- ▶ IT performance and controls including user access management
- ▶ Monitoring and reporting - use of spreadsheets, exchange of information internally and externally
- ▶ Compliance review (separate from or part of legislative compliance review)
- ▶ Risk review
- ▶ Culture review

Summary

“An organisation’s data needs to be protected by thorough and effective risk mitigation strategies to the same or higher levels as other vital assets. Without these strategies in place, the organisation is at risk of significant reputational damage.”

Souella Cumming commenting on ACC Privacy Breach

“We emphasise the significance of a culture and environment where personal information is valued. This must be supported by an approach to compliance with the privacy principles that is embedded within governance, leadership, business processes and systems.”

Malcolm Crompton and Souella Cumming commenting on ACC Privacy Breach



Thank you

Malcolm Crompton
Managing Director
Information Integrity Solutions Pty Ltd
T: + 61 2 8303 2438
E: mcrompton@iispartners.com
W: www.iispartners.com

Souella Cumming
Partner
KPMG
T: + 64 4 816 4519
E: smcumming@kpmg.co.nz
W: www.kpmg.co.nz

