

*The New Zealand Society for*  
***RISK MANAGEMENT Inc.***  
*[www.risksociety.org.nz](http://www.risksociety.org.nz)*

The Society gratefully acknowledges the support  
of our premier sponsor



We also thank our hosts for this event:  
Beca, KPMG Wellington, Christchurch City  
Council, Mighty River Power, Powerco, Trust  
Power and Nelson Marlborough DHB



# ***Privacy & Data Loss Prevention***

***Keeping our sensitive  
data out of the wrong  
hands***

# ***Introduction***



**Andrew Parker  
Senior Manager  
Security & Technology Team**

MSc Information Security (Dist)

CISSP

CISM

PCI-SSC QSA

drew.x.parker@nz.pwc.com



# ***Overview & Agenda***

## **1. The Value of Information**

- To individuals
- To organisations

## **2. Concept of Information Leakage**

## **3. How is data lost?**

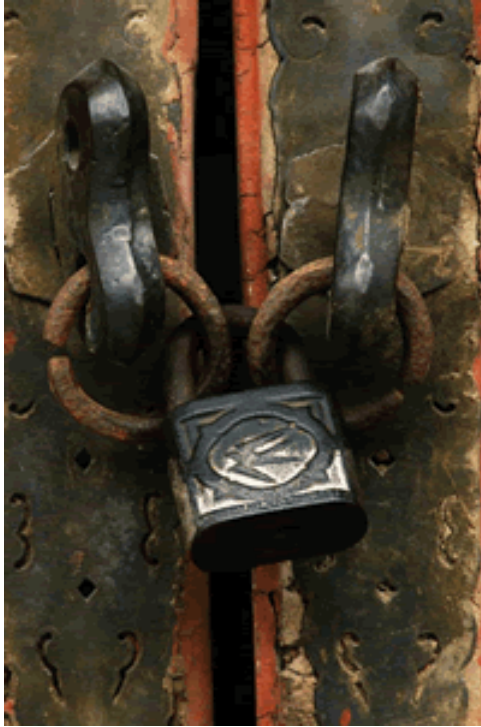
- Global and local examples

## **4. What can we do about it?**

- Ideas and actions
- Who is responsible?

## **5. Questions?**

# ***The Value of Information***



# ***The Value of Information***

## ***– to Individuals***

- Leaked information could lead to private information becoming known by inappropriate persons, which could lead to
  - Identity theft and fraud
  - Financial impact
  - Loss of privacy
  - Physical security



# ***The Value of Information – to Organisations***

- Intellectual Property
- Sensitive Business information
  - Pricing information
  - Generation Strategy
  - Origin group information
- Customer details
- Customer and supplier trust
- Embarrassment from negative publicity

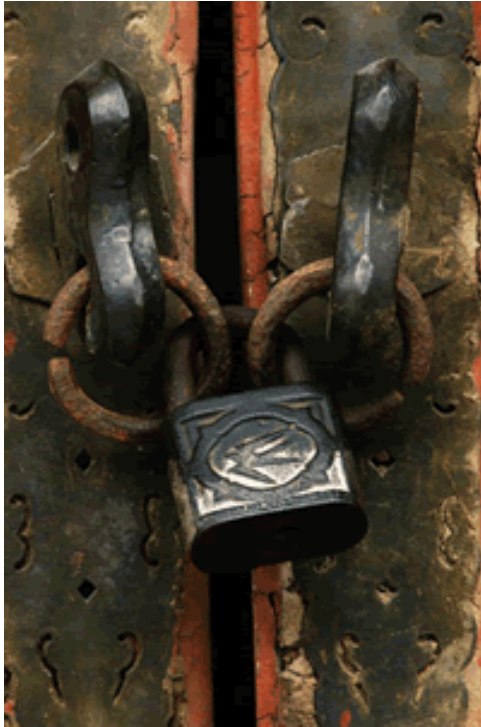


## ***The Value of Information – Real \$\$\$***

500 USA Visa platinum/gold - \$5000  
1000 USA Visa platinum/gold - \$8000  
Price for CVV:  
UK CVV without BINS and DOB is \$6 each  
UK CVV with BINS(Serial) is \$15 each  
UK Swich CVV is \$15 each  
UK Amex CVV is \$10 each  
US CVV(Visa) is \$3 each  
US CVV(Master) is \$3 each  
US CVV(Amex) is \$6 each  
AU CVV is \$8 each  
EU CVV is \$15 each  
Track 1& 2 CC is 50\$  
Fresh Fullz is 20\$  
Dead Fullz is 15\$  
Eu is 15\$  
Minimum order : \$50



# ***Concept of Information Leakage***



# ***The CIA Triangle***

Data is available to  
appropriate  
trusted parties

*Confidentiality*

**Information  
Security**

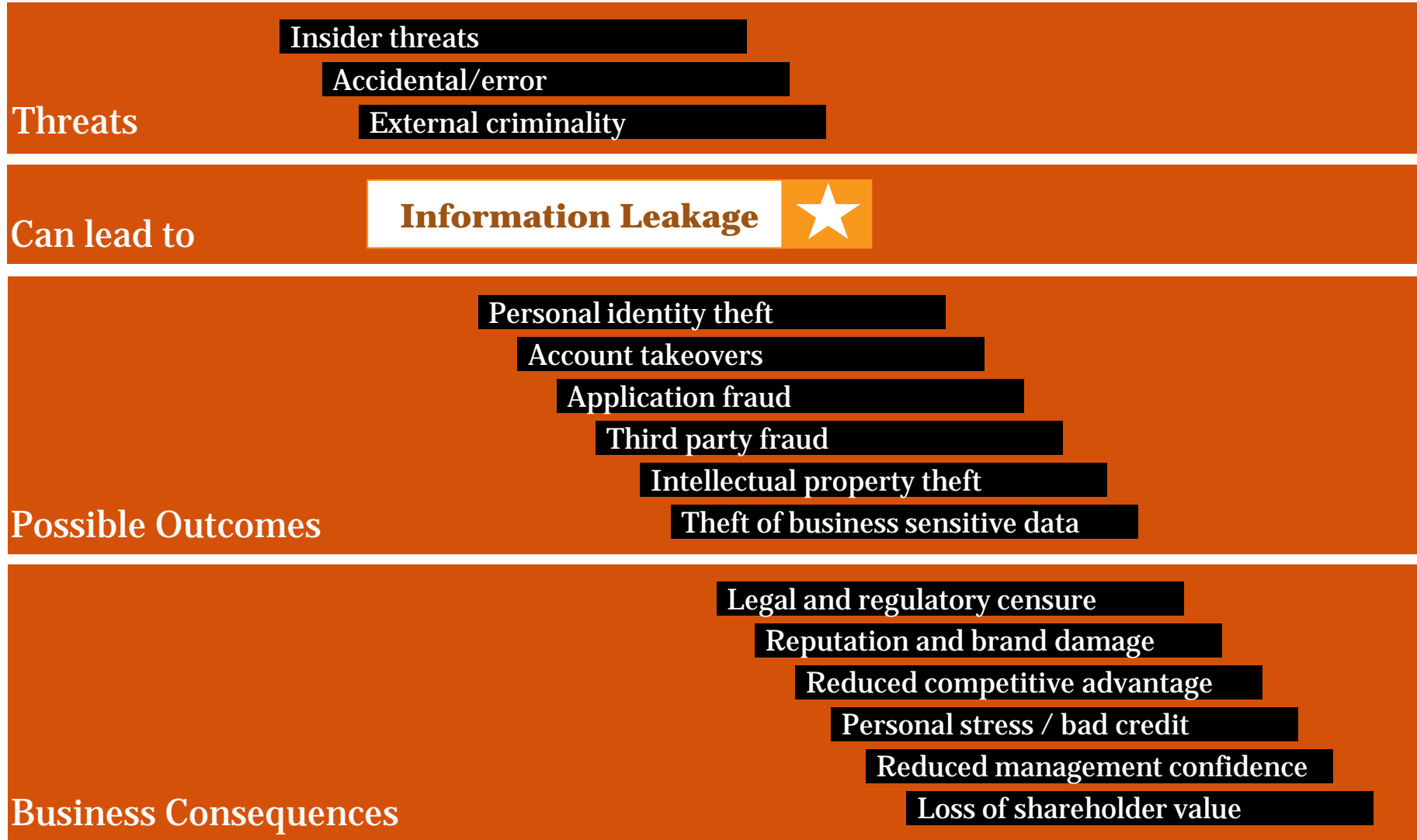
*Integrity*

Data is not  
tampered with

*Availability*

Data is available when needed

# ***Information Leakage - problem on a page***



# ***It's an information issue – top 5 myths***

## **Top 5 myths**

Customer data held was too limited or too piecemeal to be of value to fraudsters

Only high net worth individuals are attractive targets for identity fraudsters

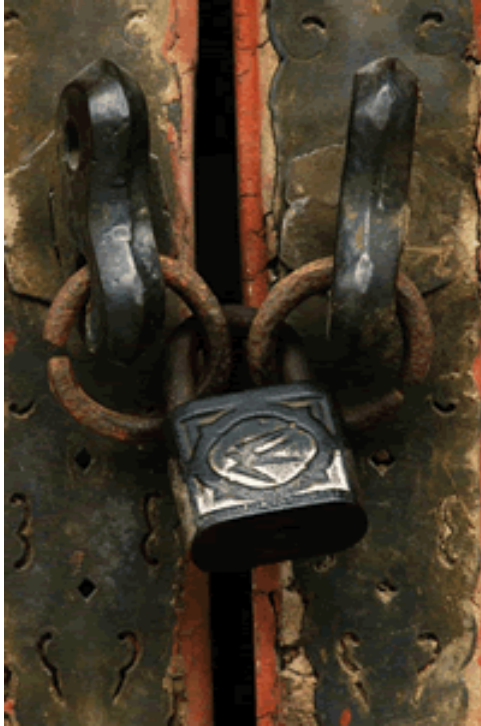
Only large firms with hundreds of thousands of customers are likely to be targeted

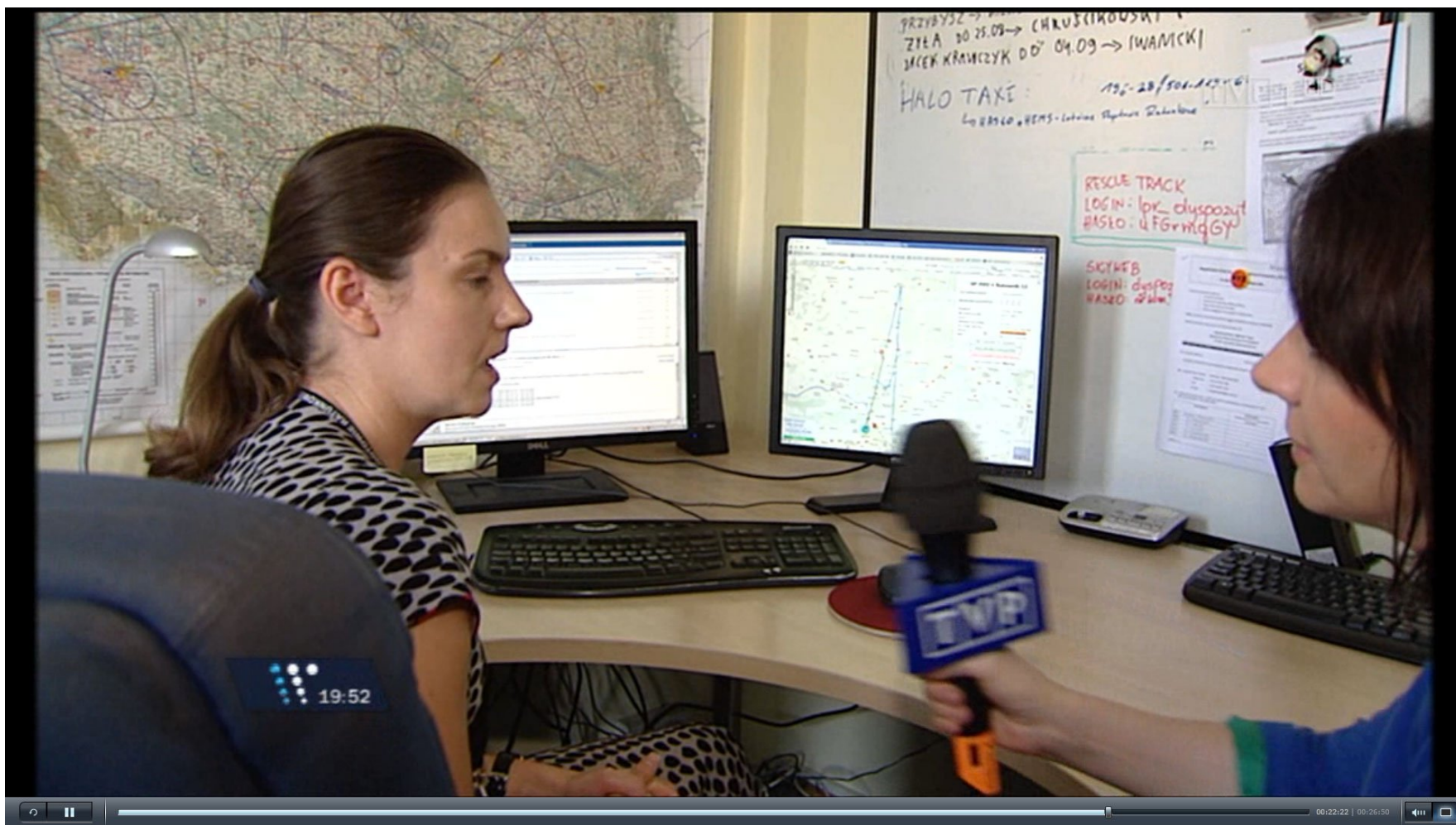
The threat to data security is external – from burglars or computer hackers for example

Impervious to data breaches because no customer has ever alerted them to identity theft and fraud.



# ***How is data lost?***









## ***Global Examples***

- Indian credit card company – hackers raised the withdrawal limits on prepaid cards issued by the Bank. Cloned cards used to withdraw \$45million from ATMS  
**Loss of money, customers , reputation, bank account and credit card information**
- Heartland Payment Systems hacked, **130 million credit card numbers** leaked  
**Cost over \$140 million in fines and investigation, loss of reputation**
- Sony Corporation, **77 million & 24 million account details** stolen within a few weeks including credit card and personal information leaked  
**Loss of reputation and customers as well as revenue from online gaming channel**
- Her Majesty's Revenue and Customs **lost 2 CDs**, each containing personal records and bank account details of 25 million British citizens  
**Minister resigned**
-



## ***New Zealand Examples***

- Hell Pizza website hacked in July 2010, compromising **240,000 customer records** containing personal customer information including passwords.  
**Competitor profiling and brand reputation**
- Employee at EQC **accidentally emailed a spreadsheet** containing details of 83,000 claimants to an external organisation in March 2011. This was **subsequent to a similar email error** containing 2200 names and cheque values of \$23 million

**Loss of reputation, adverse media coverage**

- Employee at ACC **accidentally emailed a spreadsheet** containing details of 6572 claimants to a client in August 2011. It was only realised when they were notified by the client 1 December 2011.

**Loss of reputation, adverse media coverage**

- TV3 OnDemand service **hacked** allowing mobile users to **illegally download and retain watched shows**

**Service offline, copyright infringement, loss of reputation**

---

## ***New Zealand Examples***

**Waikato District Health Board website hacked and defaced**  
**Loss of reputation, costs in restoring website, loss of public confidence**

**Two Romanian nationals deported in April 2013 – attempting to install credit card skimmer at Coastland Mall**

**Auckland car park machine tampered with by Romanian criminals. 100,000 credit cards affected**  
**Theft, inconvenience, cost to banks, brand reputation**

**A sensitive police manual left with Mongrel Mob members during a raid**  
**Next time they will know how and where to hide the goods**

**A Treasury employee dropped a notebook containing sensitive information about secret Intelligence agencies in central Wellington**  
**Sensitive information leaked to media, national security**

---

## ***More NZ examples***

**MSD/LINZ – kiosk breach**

**Ministry of Justice – Website breach revealing internal authentication information**

**Inland Revenue – 32 data breaches in 2012**

**Auckland hospital – Medical staff shared sensitive information about a patient**

**Mid Central DHB – 3 data breaches in the past year**

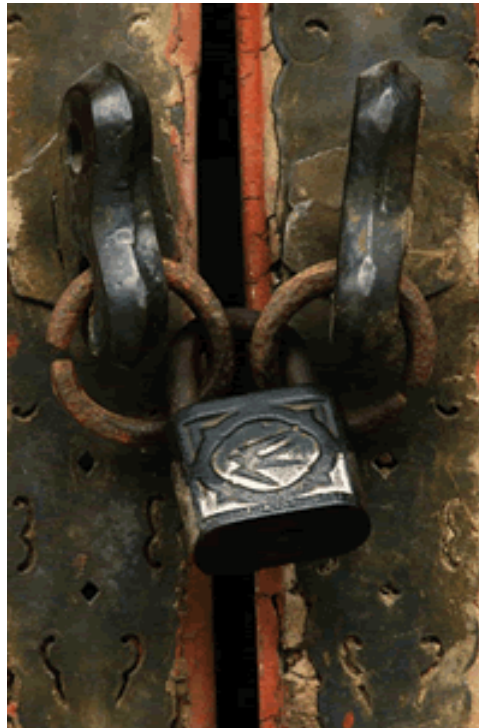
# Epic Personal Hack



Matt Honan  
Journalist



<http://www.wired.com/gadgetlab/2012/08/apple-amazon-mat-honan-hacking/>



***What can we do about it?***

## ***What can we do about it - Ideas and Actions***

- Understand the value of personal & business information
- Common sense
- Use appropriate security over sensitive information
- Limit sensitive information on Facebook, Twitter etc



## ***Preventative measures – what can businesses do?***

# GOVERNANCE



---

***Who is responsible?***

**We all are**





---

# ***Questions?***