

# Cyber for Law Firms

February 2019



Incident  
Response

FORENSIC & CYBER

Campbell McKenzie  
Incident Response Solutions  
Forensic and Cyber  
<https://incidentresponse.co.nz/>

# INTRODUCTION

## Cyber for Law Firms

### **Our mission**

To provide speciality forensic, cyber security and crisis management expertise at all stages throughout the incident response lifecycle.

### **Why Sully?**

It is an intellectual hyperlink that establishes a relationship between Air Traffic Safety and Cyber Safety, and it's a great movie!



**“I'VE HAD 40 YEARS IN THE AIR BUT IN THE END,  
I'M GOING TO BE JUDGED BY 208 SECONDS.”**

— CAPTAIN CHESLEY SULLENBERGER

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**“NO ONE WARNED US. NO ONE SAID YOU ARE GOING TO LOSE TWO ENGINES AT A LOWER ALTITUDE THAN ANY JET IN HISTORY. THIS WAS DUAL ENGINE LOSS AT 2,800 FEET FOLLOWED BY AN IMMEDIATE WATER LANDING WITH 155 SOULS ON BOARD. NO ONE HAS EVER TRAINED FOR AN INCIDENT LIKE THAT.”**

— CAPTAIN CHESLEY SULLENBERGER

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# FACT

## Data Breaches | WHEN, NOT IF.

If your competitors offer more security than you, your clients may opt to entrust their data to firms with stronger, documented cybersecurity practices



# 1

## Law firms electronically store

- **Client documents for eDiscovery**
- **Intellectual property, such as trade secrets or draft patent applications**
- **Business strategies**
- **Financial account details**
- **Inventories of assets**
- **Litigation strategies**
- **IPO or M&A detail**
- **Personally identifiable information**

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# 2

## Consequences of a law firm data security breach

- **Financial loss**
- **Reputational damage to client and firm**
- **Reputation and standing of the legal profession**
- **Damage to economic infrastructure or threats to national security**
- **Questions of professional misconduct**



# FACT

## Mossack Fonesca | LESSONS LEARNED.



# Mossack Fonseca

## Panama Papers



150 Inquiries



2.6 Terabytes



79 Countries



Unknown Vector



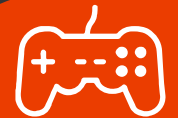
11.5 million



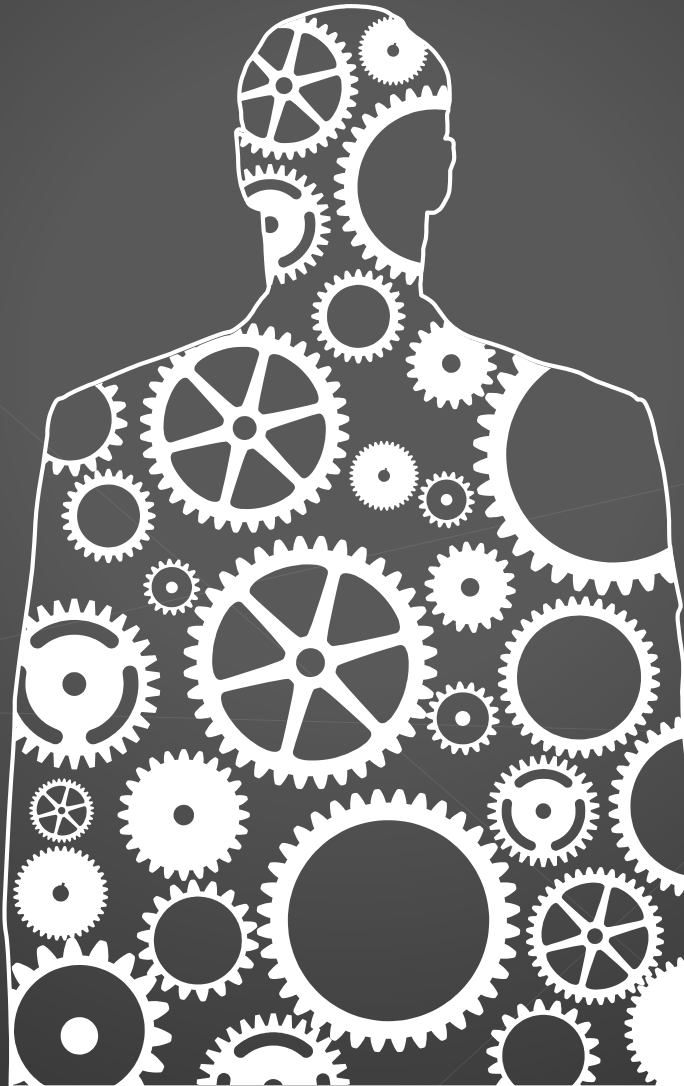
40 Years



Biggest Leak in  
History



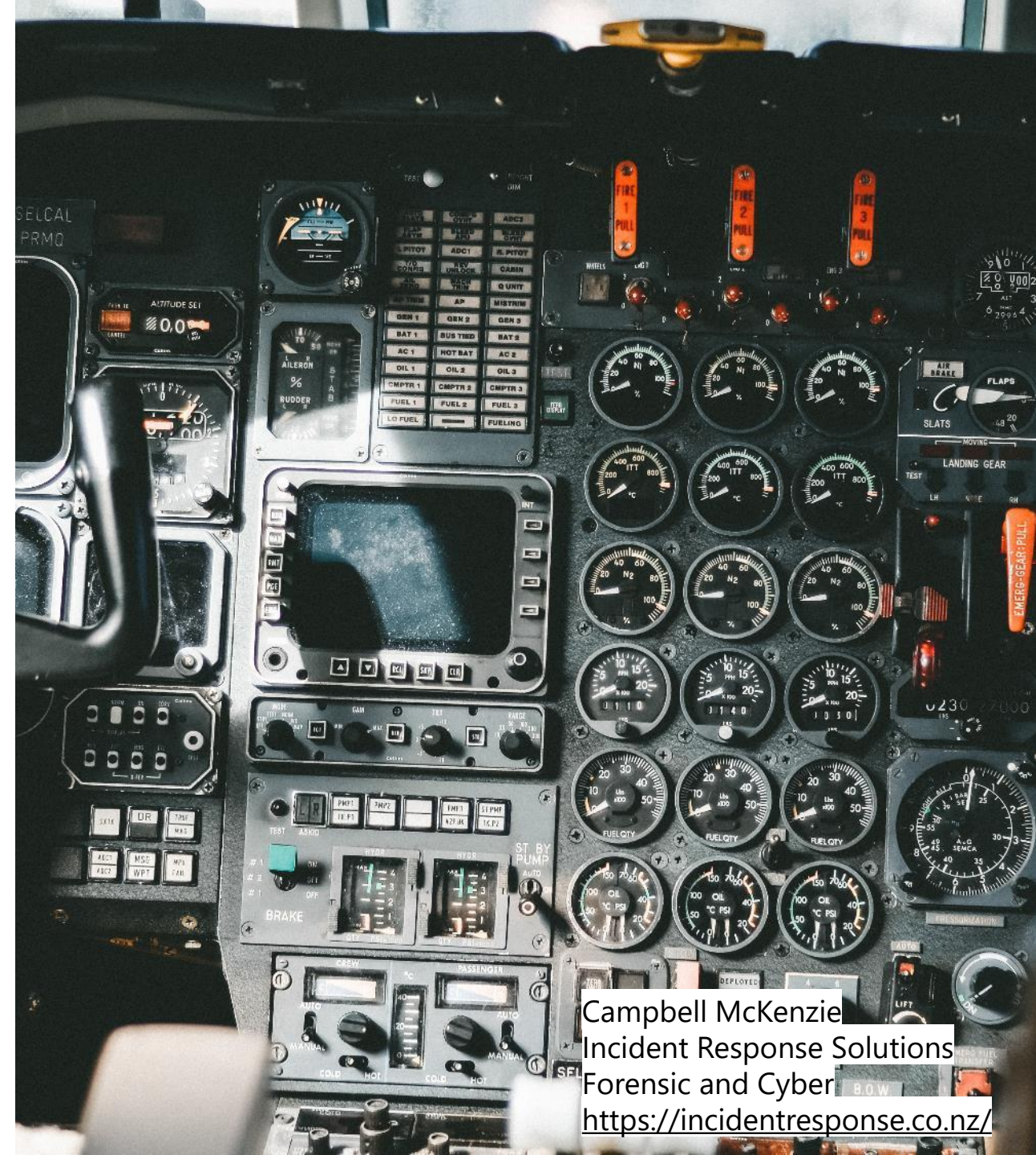
Firm  
Shut Down



# 3

## Lawyers in management positions should implement

- **An inventory of the digital assets in the firm**
- **Training to legal and administrative staff**
- **Periodic cybersecurity risk assessments**
- **Security strategies and controls**
- **A cyber incident response plan which is regularly tested**
- **Oversight of external business and third-party service provider arrangements**
- **Ongoing cyber monitoring and analysis**



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# 2017 ROUNDTABLES KEY TAKEAWAYS

## CYBERSECURITY AND LEGAL PRACTICE

(Centre for Legal Innovation)

# 1

Cybersecurity threats are increasing.

# 2

Cybersecurity among the nation's legal firms is inadequate and most professionals with responsibility for cyber defenses are aware of their vulnerabilities.

# 3

The fight against cyber threats is hampered by a lack of resources, especially among smaller law firms without dedicated internal IT capabilities.

# 4

Employees are the weakest link.

# 5

Investment in awareness and training of cybersecurity issues is increasing.

# FACT

## **New Zealand Law Society** **CLOUD COMPUTING GUIDELINES FOR LAWYERS.**

The Lawyers and Conveyancers Act (Lawyers: Conduct and Client Care) Rules 2008 and the Privacy Act 1993 require lawyers to protect and hold in strict confidence all information concerning a client acquired in the course of the professional relationship.

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## DATA STORAGE

Know where your data is going to be stored and what privacy laws apply.



## JURISDICTION

What legal jurisdiction's privacy laws a cloud provider operates under.



## SECURITY

Different cloud services carry different risks and responsibilities.



## RESPONSE

How you will be informed if your data has been compromised.



## RESEARCH

Read and compare providers' terms and conditions.



## ENCRYPT DATA

Make sure your client's data will not be seen by any third parties.

# NIST Framework for Improving Critical Infrastructure Cybersecurity

**1**

Identify

**2**

Protect

**3**

Detect

**4**

Respond

**5**

Recover



<https://www.nist.gov/cyberframework>

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# PREPARE

## NIST Framework

Function	Category
IDENTIFY (ID)	Asset Management (ID.AM)
	Business Environment (ID.BE)
	Governance (ID.GV)
	Risk Assessment (ID.RA)
	Risk Management Strategy (ID.RM)
	Supply Chain Risk Management (ID.SC)
PROTECT (PR)	Identity Management, Authentication and Access Control (PR.AC)
	Awareness and Training (PR.AT)
	Data Security (PR.DS)
	Information Protection Processes and Procedures (PR.IP)
	Maintenance (PR.MA)
DETECT (DE)	Protective Technology (PR.PT)
	Anomalies and Events (DE.AE)
	Security Continuous Monitoring (DE.CM)
RESPOND (RS)	Detection Processes (DE.DP)
	Response Planning (RS.RP)
	Communications (RS.CO)
	Analysis (RS.AN)
	Mitigation (RS.MI)
RECOVER (RC)	Improvements (RS.IM)
	Recovery Planning (RC.RP)
	Improvements (RC.IM)
	Communications (RC.CO)

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# PREPARE

## certnz Top tips for cyber security

### Back up your data



Using an external hard drive or a cloud-based service, copy your data to another separate location so you can retrieve it if necessary.

### Keep your operating system up to date



Updates often fix vulnerabilities that attackers can find and use to access your system. It's an effective way to help keep them out.

### Install antivirus software



Free online antivirus software can be fake. Purchase antivirus software from a reputable company and run it regularly.

### Choose unique passwords



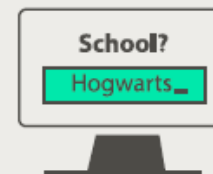
Create unique passwords for each account – that way if an attacker gets hold of one of your passwords, they can't get access to all of your other accounts.

### Set up two-factor authentication (2FA)



Choose to get a code sent to another device like your phone when logging in online – it helps stop hackers getting into your accounts.

### Use creative recovery answers



Common security answers like your pets name or your school can be easy for an attacker to find out. Choose novel answers that aren't necessarily real.

### Be cautious of free WiFi networks



Be careful using free Wifi and hot spots - they are untrusted networks so others could see what you are doing.

### Be smart with social media



What you post on social media can give cyber criminals information that they can use against you. Set your privacy so only friends and family can see your details.

### Don't give out personal info



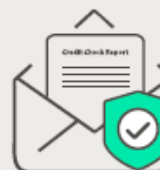
Legitimate-looking emails are very clever at trying to trick us into giving away personal or financial information. Stop and check if you know who the email is from.

### Check bank statements regularly



Keeping an eye on your bank statements could be the first tip-off that someone has accessed your accounts. Ring your bank immediately if you see something suspicious.

### Get a regular credit check



An annual credit check will alert you if someone else is using your details to get loans or credit.

To report a cyber security problem, visit [www.cert.govt.nz](http://www.cert.govt.nz)

<https://www.cert.govt.nz/it-specialists/critical-controls/10-critical-controls/>

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# PREPARE

- cyber strategy and cyber incident response plan
- test plan through simulations
- engage panel of experts (legal, forensic, PR, HR, IT)

# RESPOND

- identify
- contain and eradicate

# RECOVER

- carefully return to business as usual
- conduct lessons learned and update preparation



**Thank you**



## **Campbell McKenzie**

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