



cutting through complexity

Cyber Security

For not-for-profit organizations

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About me



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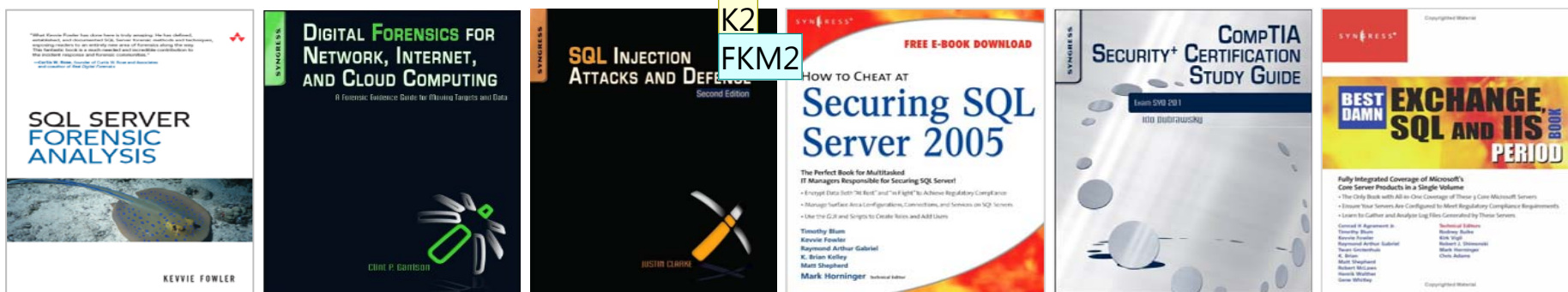
KPMG LLP

Toronto, ON

Industry contributions



SANS Lethal Forensicator



- **Cyber security is a serious threat to not-for-profit organizations:**
 - Theft of sensitive donor and staff information
 - Personal information / Health Records
 - Potential reputation as easier targets
- **Small and Medium sized organizations and Not-for-Profits are targets as well**

Ontario church website hacked with ISIS



CTV News.ca Staff
Published Monday, November 3, 2014 6:44PM EST
Last Updated Monday, November 3, 2014 6:51PM EST

Police in Barrie, Ont., are investigating after a local church's website was proclaiming support for the Islamic State terror group and calling for the e

Someone posted what appears to be the ISIS logo and wrote "I love you I Baptist Church website Monday afternoon.

A long, difficult-to-decipher message calling for the destruction of America's site, along with images of fighter jets and bloody victims of attacks.

Sick children's charity website hacked

Published Wednesday, 22 October 2014

A charity which takes terminally ill and life limited children away meet Santa has had its website hacked and taken down.



The Northern Ireland Children to Lapland and Days to Remember Trust's website was taken down in the past week.

It featured tens of thousands of pictures of those it has taken away on trips down in the past week.

Online Fundraising Platform MyCause hacked

Posted: Tuesday, August 5, 2014 - 10:54

The credit cards of more than 12,000 donors and charity partner organisation mycause are said to have been "compromised" after a statement from mycause says credit card data from donors used in 2014 was obtained and possibly used for fraudulent transactions.

"On July 29th mycause staff became aware that the mycause site had been hacked by opportunistic and sophisticated hackers," mycause CEO and Founder said.

"In response mycause notified over 12,000 donors and our charity partners on the website was set up. A statement was released on July 30th stating that the site had been hacked and that the site was being remediated."

Burstin said mycause does not store credit card data and all information was deleted in the past week.

"The hackers intercepted the sensitive information in the fraction of a second before it reached the payment gateway," she said.

"mycause's in house tech team along with our server providers have now fixed the problem and are working on further enhancements."

"Hacking is an ongoing security concern for all online companies, but mycause is proud of the work we do in crowd funding and online fundraising, and the large number of donors who support our cause."

Online donors' data breached: Conservatives

Hacker account that touted Harper hoax posts names, emails online

CBC News Posted: Jun 08, 2011 11:51 AM ET | Last Updated: Jun 08, 2011 10:14 PM ET



The Conservative Party confirmed Wednesday a database that contains the personal information of donors, including credit card numbers, was hacked.

The acknowledgment came several hours after a Twitter account that claimed to have hacked the Conservative Party website this week suggested it also hacked a party database, and posted online names and emails it said were from that database.

Fred DeLorey, the party's communications director, issued a statement that said names, personal addresses and email addresses of people who had donated online to the Conservatives had been lifted from the database.

"In some instances the first four and last four digits of the credit card were taken, but no useful credit card information was taken and our internal database was not hacked," DeLorey said.

Cyber security: The cyber criminals



Petty criminals / Motives: Financial gain



Hacktivists / Motives: Political support



Organized / Motives: Financial gain



State / Motives: State agenda

- The price (USD) of stolen data within the underground economy:



Username / Passwords
\$5.60



Debit Card (#)
\$9.55



Credit Card (#)
\$.25 - \$100

Loyalty Rewards

Loyalty Rewards
\$.50 for 50k points



Social Media
\$.05 - \$8.00



Health Record / SSN
\$47.62

References:

- <http://blogs.wsj.com/corporate-intelligence/2015/03/28/whats-more-valuable-a-stolen-twitter-account-or-a-stolen-credit-card/>
- <http://blogs.wsj.com/riskandcompliance/2013/06/26/passwords-more-valuable-than-credit-card-data/>
- <http://www.tripwire.com/state-of-security/vulnerability-management/how-stolen-target-credit-cards-are-used-on-the-black-market/>
- <http://www.foxbusiness.com/technology/2015/01/15/e-bazaar-crooks-hawk-your-info-in-online-black-market/>
- http://www.theregister.co.uk/2015/11/05/hilton_honor_cards_breached/



Cyber security: Impact of a breach

■ Impact of a breach:

- Financial
- Loss of business operations
- Brand reputation

60% of small organizations go out of business after a security breach

Source: https://www2.fireeye.com/smb_five_reasons_wp.html



Key risks

1

Corporate infrastructure

Secure your data and infrastructure

- **Identify and restrict access to critical data**
- **Implement security protection**
 - Firewall
 - Anti-malware
- **Identify and close “front-door” vulnerabilities**
- **Encrypt mobile devices**



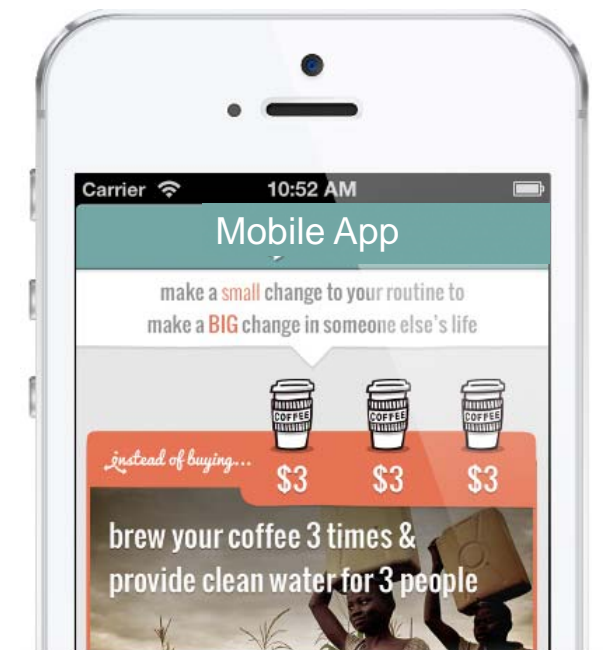
Key risks

2

Mobile Applications

Fundraising applications
Donation applications

- Secure development of in-house developed applications
- Many COTS applications are not secure-by-default



Key risks

3

**Social
Media**

Corporate information
Users

- **Secure password management**
 - Use complex passwords
 - Rotate passwords every 60-90 days
- **Monitor social media account activity**



Key risks

4

Cloud

Leverage cloud processing
and payment solutions

- **Manage your 3rd parties**

- Solution security
- Security roles and responsibilities
- Notification expectations



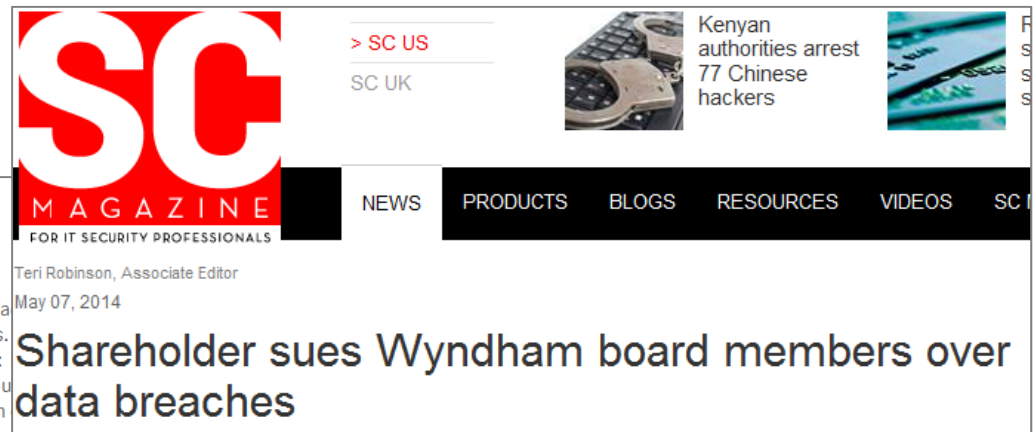
- Cyber security accountability once with the back office now resides with the board of directors

Target Data Breach Shareholder Lawsuit



In mid-December, 2013, Target announced that hackers had stolen credit and debit card information on 70 million customers. Now, much of security law deals with one basic question: How are members of the board of directors to fulfill their duties to you, the shareholder? How are we to analyze this basic question in light of Target's massive data breach?

Hackers embedded malware in Target's point-of-sale terminals to steal credit and debit card information.



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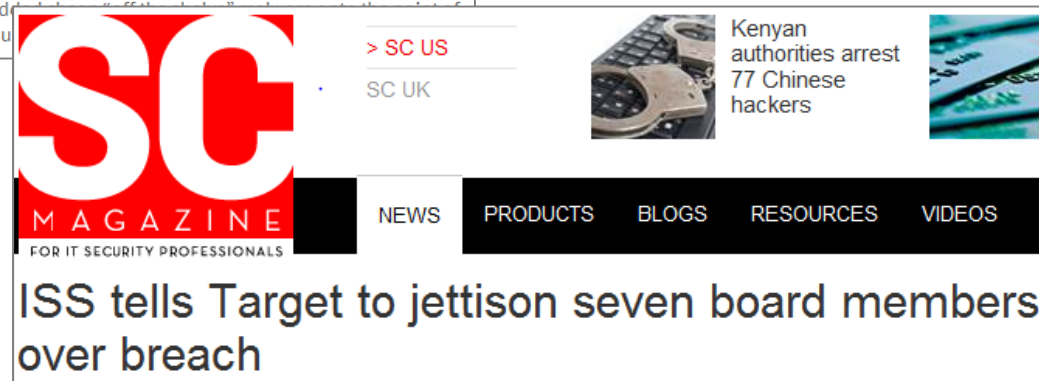
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Kenyan authorities arrest 77 Chinese hackers

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Teri Robinson, Associate Editor
May 07, 2014

Shareholder sues Wyndham board members over data breaches



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ISS tells Target to jettison seven board members over breach

Putting yourself in a defensible position:

- 1) Meet regularly to discuss cyber security
- 2) Maintain adequate access to cyber security expertise
- 3) Make the minutes count





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Thank you



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