CYBER CRIME AND YOUR BUSINESS

Surrey Board of Trade Hot Topic Series

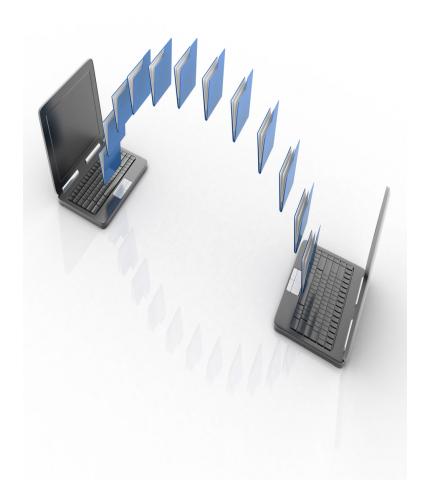
Rosanne Walters, BDO Canada LLF 31 March 2017



Introduction

- Cyber security is replacing physical security over assets
- Incidences of cyber attacks are increasing
- Attacks to obtain:
 - Confidential information (organizational and customer)
 - Financial resources
 - Disrupt operations
- Risk from insiders and outsiders
- An attack can be very devastating to an organization

How can you protect against Cyber Fraud?





Scams

Access by Phishing

- Emails, text messages and website fabricated to look like they come from well-known or trusted businesses or person
 - Requesting funds
 - Requesting confidential information

Malware

- Load malware onto computer or network through various methods
 - Clicking on attachments
 - Can sit on network undetected until attack

Ransomware

 Attack on network locking down system, creating chaos to operations, includes a request for ransom





Risks - Insiders

Employees

- Employees using an opportunity to benefit personally from the organization's resources (by-pass security, over-ride controls)
- Disgruntled employees (dismissed or quit)
- Well-meaning and/or negligent employees who provide information to malicious outsiders (simple passwords, write down passwords)

Volunteers

Contractors





Risks - Insiders

Examples

- Employees wire transfers funds to friend, by-passes controls on cheques
 - Friend receives \$300,000 in funds, never recovered
- Disgruntled employee removes confidential information by email to personal account and USB flash drive
 - Organization loses bids, revenues, lost potential purchaser, closed doors
- Ex-employee uses password to access cash register
 - Removed \$500 a day at a bingo hall, after termination, for months





Risks - Insiders

Examples

- Volunteer board member uses organization's funds to pay personal bills
 - Volunteer used weak password to access bank account
 - Organization loses \$90,000 in funds, never recovered
- New employee receives email from boss to transfer money and asks questions later
 - Employee almost transfers \$20,000 funds to hackers account
- Contractor with criminal record for embezzlement obtains access to computer system
 - Due diligence prevented further access





Risks - Outsiders

Hackers - deliberate attack on your computer systems to access information or cause problems

- Steal financial resources
- Obtain confidential data
- Disrupt operations



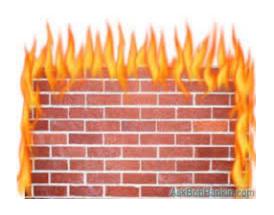


CYBER SECURITY How to Protect Your Organization

Secure your computer system

- Activate firewalls, keep out hackers
- Use anti-virus/malware software, prevents viruses, install and update regularly
- Ensure the software also blocks spyware, scareware, Trojan horses, worms
- Daily back ups
- Encrypt confidential information
- Use secure sites to transfer confidential information

Consider the services of someone skilled





How to Protect Your Organization

- Restrict use of USB flash drives or emailing of large amounts of data
- Avoid using public Wi-Fi to do financial transactions
- Secure mobile device, be careful of downloading applications from untrusted sources
- Try "secure pay" services at your bank
- Get cyber fraud insurance





Cyber Fraud Insurance

- Protects against actual financial losses
 - Loss of money due to fraudulent transfers
- Business interruption, loss of income
- Lawsuits
 - Privacy, defamation, copyright infringements
- Costs due to privacy breach notifications, crisis management, disaster recovery
- Cyber investigation costs





Train Staff

- Do not click on attachments
- Do not share passwords
- Change passwords regularly
- Never give out personal/confidential information
- Verify source of requests before action is taken
- Use code names in emails
- Risk of using social media
- Always think or ask before clicking





Weak Passwords





CYBER SECURITY Strengthen Passwords

- Use upper case, lower case, symbols and numbers in password
- Change frequently
- Train employees on how to use them
- Change passwords when employee leaves company
- Use different levels of access for different employees





CYBER SECURITY Due Diligence

Employee due diligence

- Screen employees and contractors
- Criminal check
- Resume check
- Know your suppliers and business partners
- Always check and double check before funds go out the door
 - Two tier authorization on all payments





Be Aware

- Talk about the risks within your organization
- Consider preparing a response plan in the event of a cyber attack
 - Get a cyber fraud risk assessment done
- Consider if software and hardware is updated. Does system has up to date security software?
 - Use the services of a cyber security specialist
- Do some employee/board training
 - Fraud awareness training for organization
- Speak with an insurance provider regarding cyber fraud protection

Thank you ©





Thank You!





SPEAKER'S BIOGRAPHY



rwalters@bdo.ca Direct: 604 646 4381

600 Cathedral Place 925 West Georgia Street Vancouver, BC V6C 3L2 Tel: 604 688 5421 Fax: 604 688 5132 www.bdo.ca

Rosanne Walters, CFF, CPA, CA, CBV, CFE, Partner

Rosanne is a Chartered Professional Accountant, Certified Fraud Examiner and Chartered Business Valuator. She has over 25 years experience in accounting, auditing and forensic investigations. Rosanne's practice focuses on forensic investigations addressing allegations of fraud, quantification of economic damages, business valuations, special purpose audits and financial consulting.

Rosanne has provided expert witness testimony for civil and criminal trials in the Supreme Court of British Columbia. She has also acted as a courtappointed special referee.

Roseanne is the President of the Vancouver Chapter, Certified Fraud Examiners. She is also a frequent speaker on topics related to fraud for the Institute of Chartered Accountants of British Columbia, Continuing Legal Education, universities and other organizations.

