

Managing Risk and Staying Safe Online

Presented by

Isaac Straley, Chief Information Security Officer, University of Toronto

Chloe Payne, Program Coordinator, Education and Awareness, Information Technology Services, University of Toronto

WHAT DOES RISK MEAN TO YOU?

Ask yourself and your colleagues questions:

"This data is valuable. I don't want it in the wrong hands. What is the right way to store it? What is the right way to share it?"

"I want to communicate with my colleagues online. Is it OK to use Twitter? Slack?"

"I'm travelling to the United States next week and China next month. Can I bring my laptop and my phone?"

"This email is from a colleague so I should be able to open the attachment. But why did he send me an attachment?"



IN THE LAST YEAR ALONE:

- A malicious email was distributed to University of Toronto (U of T) employees that demanded a large sum of Bitcoin be delivered to the sender's account within 24 hours, or explicit footage of the victim would be sent to the victim's social media and contacts list.
- A number of U of T staff received a phishing email instructing readers to purchase \$500 worth of gift cards. The email appeared to be from a senior U of T official, and fostered a sense of urgency and secrecy that pressured recipients to respond to the request quickly.



MANAGING RISK IN YOUR PERSONAL SPHERE

Another way to think about risk is level of comfort. Are you...



An open book



Super secure



Somewhere in between



ADJUST YOUR SETTINGS

Privacy Settings

• The default privacy setting for most social media platforms is set to open. Before sharing, consider your comfort level and select your privacy setting accordingly.

Permissions

• Before downloading any app, take a moment to consider the permission settings. Do you want the app to have access to your camera, mic, or Wi-Fi connection info?

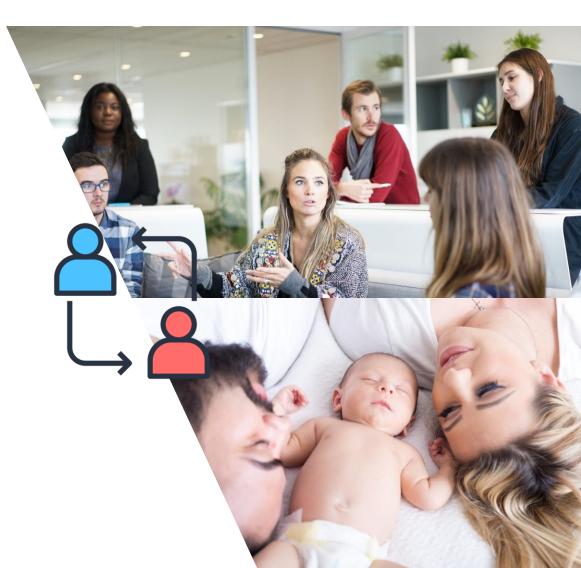
Location

• When using apps, consider whether they need access to your location. Often this is only a convenience and this info is often used for commercial offers.

KEEP YOUR ONLINE PERSONAS SEPARATE

PROFESSIONAL: Your career snapshot. Most commonly it would include your website, your blog, your LinkedIn profile and more.

PERSONAL: Your personal sphere includes everything from your banking, to your government dealings, to your shopping and photo sharing and online audio streaming and more.



STAYING SAFE ON SOCIAL MEDIA

- Enable multifactor authentication on Google, Facebook and Twitter.
- Service to monitor social media attacks ZeroFox.
- Review privacy and security guidelines for the social media provider:
 - <u>https://www.facebook.com/about/basics</u>
 - <u>https://help.twitter.com/en/safety-and-security/account-security-tips</u>
 - <u>https://help.instagram.com/369001149843369</u>



SECURE YOUR BRAND

- Maintaining your professional brand (your name) is important to you.
- Consider reserving your name space on common online services such as Twitter, Facebook, LinkedIn etc.
- If you don't intend to use these accounts, just set them to private and add them to your list of accounts to maintain.
- 'Verify' your accounts, if possible, to confirm your identity with each social media platform.

GOOGLE YOUR NAME

When was the last time you searched your name?

- It's good practice to search your name at least a few times a year and know what's out there with your name or picture on it.
- Subscribe to Google Alerts to automate this task.



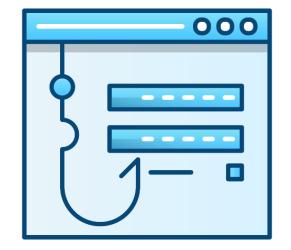
WHAT IF I GET DOXXED OR HARASSED?

- Interact with social media provider using the links on the previous slide.
- Seek assistance at the University.
 - If you receive a threat to life or property, call 911.
 - Access mental health, personal safety and/or sexual harassment support at: http://safety.utoronto.ca/

TECHNIQUES FOR MANAGING RISK ONLINE

PHISHING

- Malicious attempts to steal your personal information.
- Install malware (malicious software, e.g., ransomware).
- Prompts for passwords.
- Messages often appear to be from your contacts.
- Not only email: can also come through text or phone calls.
- Spear phishing targeted at you.



Signs that you're being phished could include: messages that seem odd or have a sense of urgency, bad grammar/spelling, phony links and a reply field that doesn't match the sender.

If an email seems suspicious, always trust your instincts. Verify communications and ask your IT office or email help.desk@utoronto.ca for assistance if you're unsure.

Report suspected phishes to report.phishing@utoronto.ca.

PHISHING AT U OF T

⊅ Reply all ∨
list. Failure to confirm
k

Report suspected phishes to <u>report.phishing@utoronto.ca</u>.

EDUCATION AND AWARENESS

- The 2018 Verizon Data Breach Investigations Report (DBIR) found that 93 percent of data breaches in 2017 involved phishing and pretexting.
- The best way to combat these 'social attacks' is through educating organizational members and making them aware of the signs.
- U of T is taking on this security risk through running strategically planned anti-phishing campaigns. These campaigns simulate real phishing emails and educate individuals who become susceptible.
- Information Technology Services is currently running campaigns for 12 different faculties. We distribute three scenarios for each faculty over the course of nine months.

PASSWORDS AND PASSWORD MANAGERS

- Keep passwords strong: Use long, complex passwords or passphrases or shorter, highly complex passwords.
- Use more than one: Use a different password for each account.
- Never share your password: Do not share your password, even if someone claiming to be the bank, the University or another institution asks.
- **Password Managers** are an easy way to practice good password hygiene:
 - Store tens, hundreds of account passwords.
 - Convenience of a list of bookmarks.
 - Auto fill-in username and password.
 - Examples: Password Safe, KeePass.
 - Instructions for KeePass: <u>https://isea.utoronto.ca/infotip-using-a-password-manager/</u>

COLLABORATION

- Where is your data?
- O365 email: one copy of attachment for internal and external sharing.
- O365 OneDrive: share data but maintain control and visibility.
- <u>https://office365.utoronto.ca/office-365-tip-14-sharing-files-with-onedrive/</u>
- Avoid using thumb drives, or any portable media unless encrypted.
- Send to the wrong person? Fix it using OneDrive.
- Instructions to encrypt thumb drives: <u>https://isea.utoronto.ca/infotip-index/</u>





WHO CAN I SHARE CONFIDENTIAL INFORMATION WITH?

• Classify your data.

- Do not share your computer login info or UTORid login info with colleagues, interns and/or students. Your UTORid is a gateway to accessing your private personal and professional data.
- Only share confidential information over O365.

GOOD PRACTICES

- Keep a clean desk.
 - Put away confidential files in a locked cabinet.
 - Your desk should be clear of any documents, USBs or external drives. They should all be locked away in a secure space.
- Maintain a clean digital space. Delete old emails, delete drafts of the same document etc.
- Enable lock screen passwords.
- Sign up for self-serve password reset:

https://www.utorid.utoronto.ca/cgibin/utorid/acctrecovery.pl





WORK DEVICES

- Always remember that you are responsible for the security of the data on your U of T work devices.
 - Never download unauthenticated software to your U of T devices.
 - Do not share your work devices with friends and family members.
- When working remotely, ensure you are always using U of T's VPN service across all work devices. Set up instructions can be found here: <u>http://vpn.utoronto.ca/</u>.
- Ensure your office hardware and software are up to date.
 - Updates will fix known security gaps.
 - If you have a managed desktop, U of T will upgrade your hardware and software for you.

TRAVEL: GOOD PRACTICES

BEFORE YOU TRAVEL

- Write down critical contact information including after-hours and have a plan
- Update all device software.
- Back up your data.
- Bring empty travel devices and a "burner" phone stripped down devices used solely for travel.
- Avoid storing data on device travel "empty"
 - Set up remote access methods (e.g., Office 365)
 - If you need to bring data, use encrypted portable hard drives or USB sticks
- Turn off "remember me" and wipe stored passwords from travel devices.
- Setup and test Eduroam: http://eduroam.utoronto.ca/
- Setup and test the U of T VPN: http://vpn.utoronto.ca/
- Manage your online passwords: Use different passwords while traveling and if possible, setup Multi-Factor Authentication and one-time use passwords

TRAVEL: GOOD PRACTICES

AS YOU TRAVEL

- Never left unattended (especially at security checkpoints and in hotels).
- Turn off auto-connect for Bluetooth and Wi-Fi.
- Access your files via your remote access methods (e.g., Office 365) and avoid downloading copies
- Do not use public Wi-Fi connections.
 - Use the U of T VPN : <u>http://vpn.utoronto.ca/</u>.
- Avoid public computers.
- Make sure you know how to remotely wipe your personal device in case you lose it, and the provider's phone number to suspend or block service.
- Do not plug in unknown or untrusted devices, especially USB power chargers.
- When you return, use a trusted device to change all passwords used while travelling.

WHAT IF I GET HACKED?

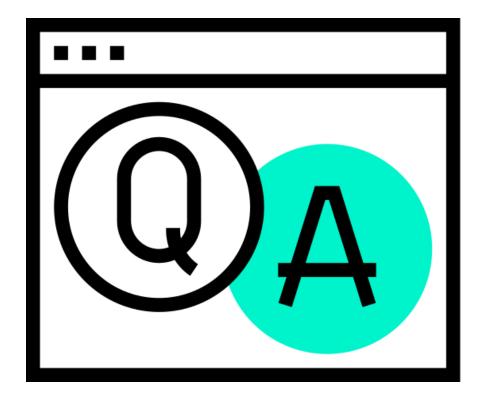
- Don't be embarrassed ask for help!
 - Contact your local Help Desk or security.response@utoronto.ca
 - Inform your manager right away.
 - Do you have sponsors or partners who need to be informed?
- If devices or data were stolen:
 - File a local police report
 - Consider remote wiping your device
- If you use GPS tracking and you believe your device is stolen, work with local law enforcement!
- Ransom request? Think about what has been lost and how it can be recovered – backups will help here. It's never recommended to pay.



RESOURCES

- Security Matters resources for staff: <u>https://securitymatters.utoronto.ca/resources/staff/</u>
- Security Planner by the Citizen Lab: https://securityplanner.org/#/
- If you are experiencing a known or suspected information security incident contact security.response@utoronto.ca
- Spotting phishing emails: <u>https://securitymatters.utoronto.ca/wp-content/uploads/Tip-Sheets-draft06-gray.pdf</u>
- Safety & Support: <u>https://safety.utoronto.ca/</u>

QUESTIONS & DISCUSSION



THANK YOU FOR YOUR TIME! securitymatters.utoronto.ca