



@SOUTHERNALBERTARIMS

Welcome to February Breakfast



Sat Parhar



Jeannine Adams

Thank You to Our Sponsors

Gold

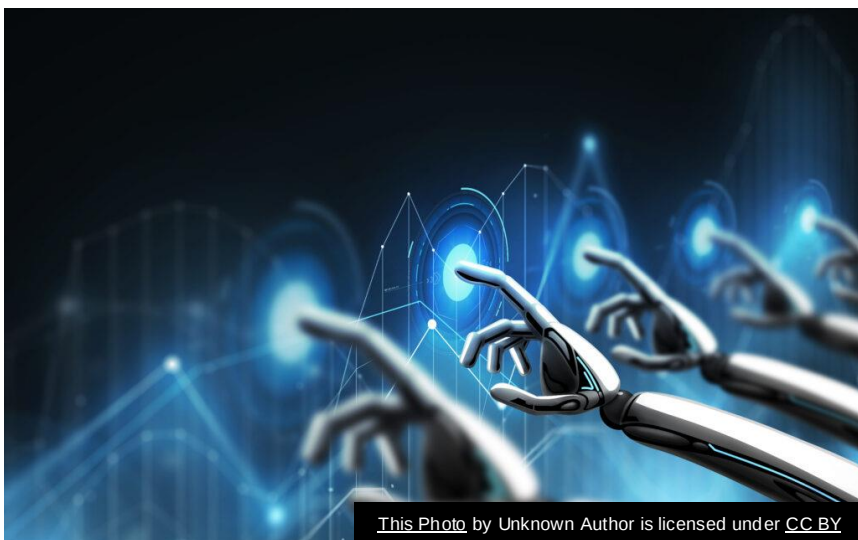


Platinum



Silver





AI in the Crosshairs: Risks, Resilience, and Leadership in Cybersecurity



AI's Role in Cyber Threats, Risk and Law
Enforcement Response

Sat Parhar

Jeannine Adams

s0lve.io



A little about s01ve Cyber Solutions

Canadian cybersecurity service provider.

Focuses on prevention.

Former Law enforcement, Insurance & Risk cybersecurity specialists.

Partners with small and medium businesses.

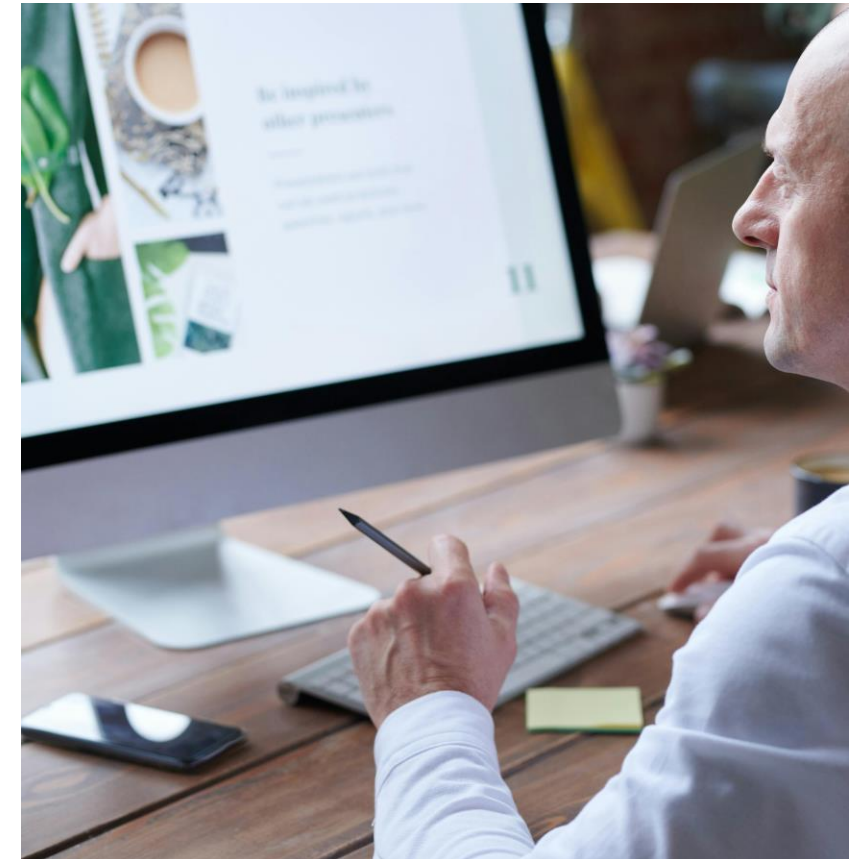
Collaborates with insurance and legal partners.

Cyber Crime Individualized View

- ❑ Globally \$9.5 Trillion USD in losses (2024)
- ❑ Canada 41,000 reported cyber crimes
 - ❑ Represents 10-25% of actual incidents.

Let's personalize this:

- ❑ Data reveals that **31%** of data breaches led to job losses.
- ❑ Of those job losses, **29% were outside the IT department.**
- ❑ Cybercrime affects **1 person every 22 seconds** globally.
- ❑ Cybercrime in Calgary Out of Control: up 50% from 2023
 - ❑ 54% increase in ransomware attacks 50% increase in reported crypto losses 42.8 million
- ❑ **Romance scam** victims lose on average **\$4,300 CAD** (2023).
- ❑ Average phishing click rate is **17.8% & targeted (Spear) at 53.2%.**
- ❑ **30% of phishing victims** report being targeted multiple times.



AI Introduction

**Manipulative
AI-driven
cyberattacks**

**Growing AI
accessibility
gaps**

**AI as both an
offensive and
defensive tool**

AI's Dual Role:

How AI Enables and Defends Against Cyber Crime

AI as Hacking Tool:

- Deepfake phishing attacks
- AI-generated social engineering tactics
- AI-automated Exploitations
- Personalize Spear-phishing At scale
- Adapting in real time to counter law enforcement measures
- Malware with Built-in anti-detection
- Polymorphic malware
- Further lowers technical skills required
- Mimic legitimate user behaviour

AI as a Defense:

- AI-driven anomaly detection
- Automated threat intelligence
- AI-assisted security automation
- Automated active threat mitigation
- Behaviour analysis
- Self-healing security systems
- AI-Driven Honey pots
- AI-Dark Web Monitoring
- AI-Table Top Exercises

Canada's Global Cyber Rank and Impact Indicators

Ranking of Canada: Tier 3 “Emerging Cybersecurity” alongside Japan, South Korea, and India.

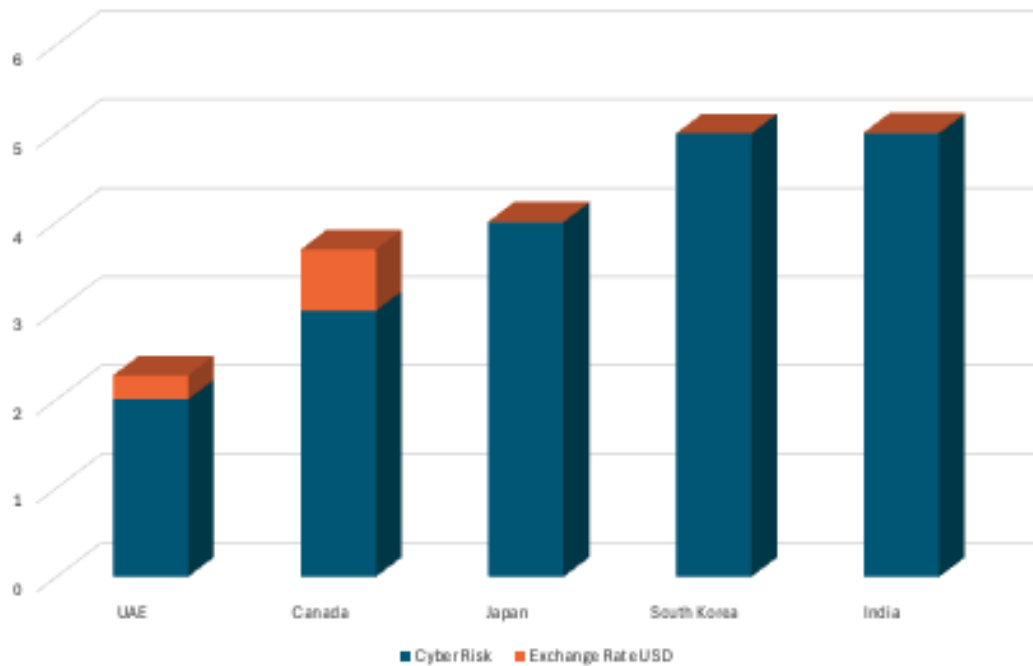
- ❑ Identity theft, scams and Fraud and ransomware are impacting a larger proportion of businesses
- ❑ Identity theft is the largest growth for businesses risk
- ❑ Scams and fraud remain the largest portion of method
- ❑ Spending on recovery from cyber incidents doubles aka-recovery becoming more severe.

Tier 1: US, UK, Israel, Singapore, Estonia

Tier 2: EU, Germany, Australia, France

Tier 4: Brazil, Mexico, Nigeria, Iran

Cyber Security Risk and USD Exchange Rate
Tier 3 Emerging Cybersecurity Countries



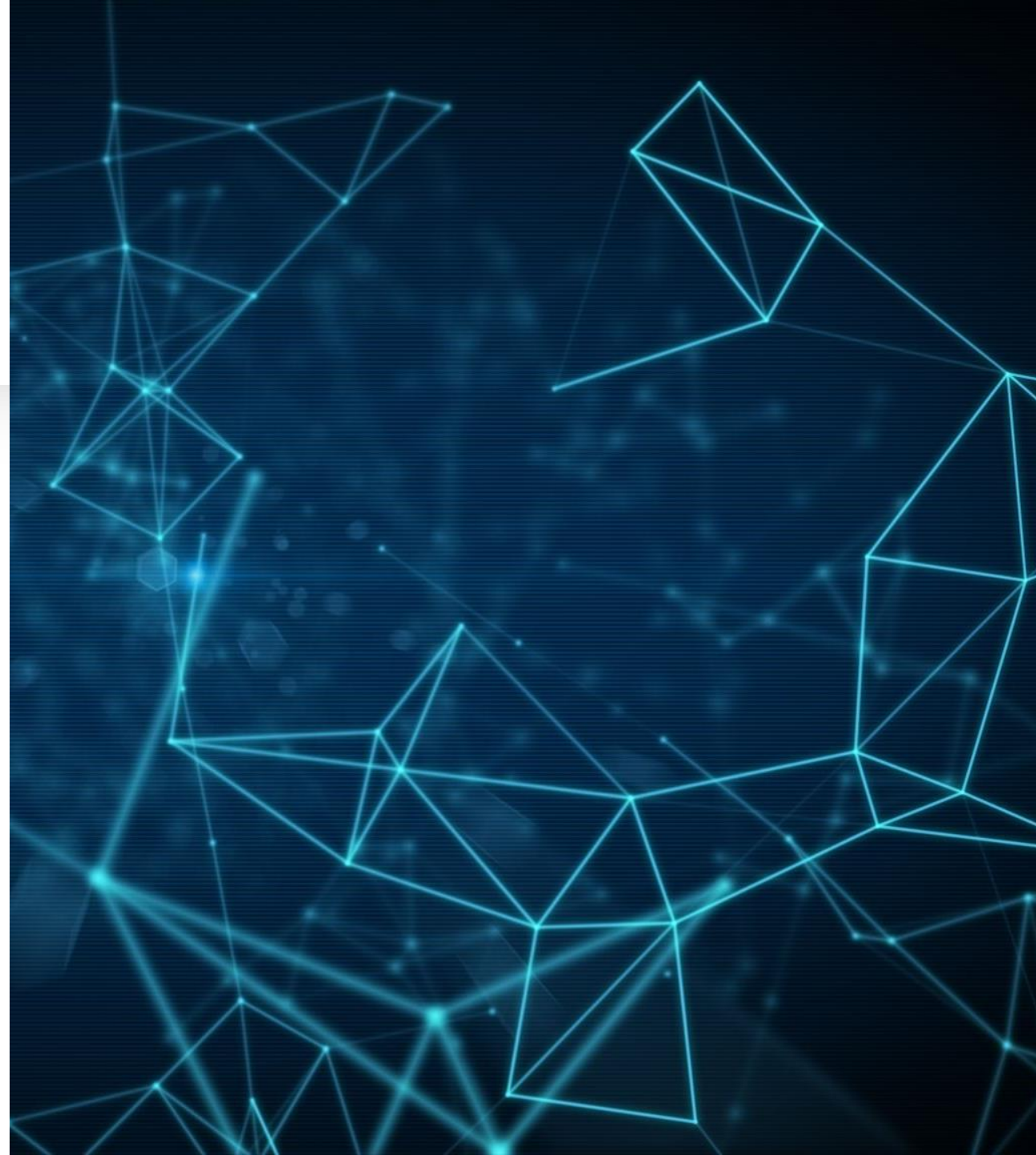
Impact of AI on Cyber- Security

Key Indicators

- ❑ Increased Sophistication of attacks, increased complexity
 - ❑ Deep fakes
 - ❑ Social engineering
- ❑ Threat actors are investing more time to slightly fewer companies for higher returns
- ❑ Increase in AI-Powered Cybercrime
- ❑ Generative AI enables highly personalized emails increasing Business Email Compromise
- ❑ Lack of AI expertise in companies or law enforcement
- ❑ No Canadian Governance at the Federal Government level
- ❑ Increased Risk to small and medium businesses as they don't have processes or education in place

AI Challenges for Law Enforcement

- Limited AI Expertise
- Criminals use AI to generate fake evidence and mislead investigations
- Jurisdictional challenges: Global, Too small, Too Big
- Differential outcomes: active crime vs conviction driven
- Manual investigations vs automated attacks: Speed to respond
- AI Attacks can self modify in real time
- Hackers use AI to disguise their activities



AI and Corporate Risk

Leadership Accountability

- Understand how decisions impact where applied governance resides
- Who decides cyber expectations for clients & vendors (Board, CIO, Risk Officers, IT Manager) should be deciding how to treat clients and vendors when it comes to cyber expectations

Board-level AI oversight

- Understand Personal legal accountability
- Educate them on their own vulnerabilities

Legal and regulatory gaps in AI governance

- Governments are too slow to adapt creating cyber phishing holes

Law Enforcement and Cybersecurity Adaptation

- Struggling to hire and retain talent
- Public vs Private funding challenges
- Public- Private- Partnerships
- Community Model

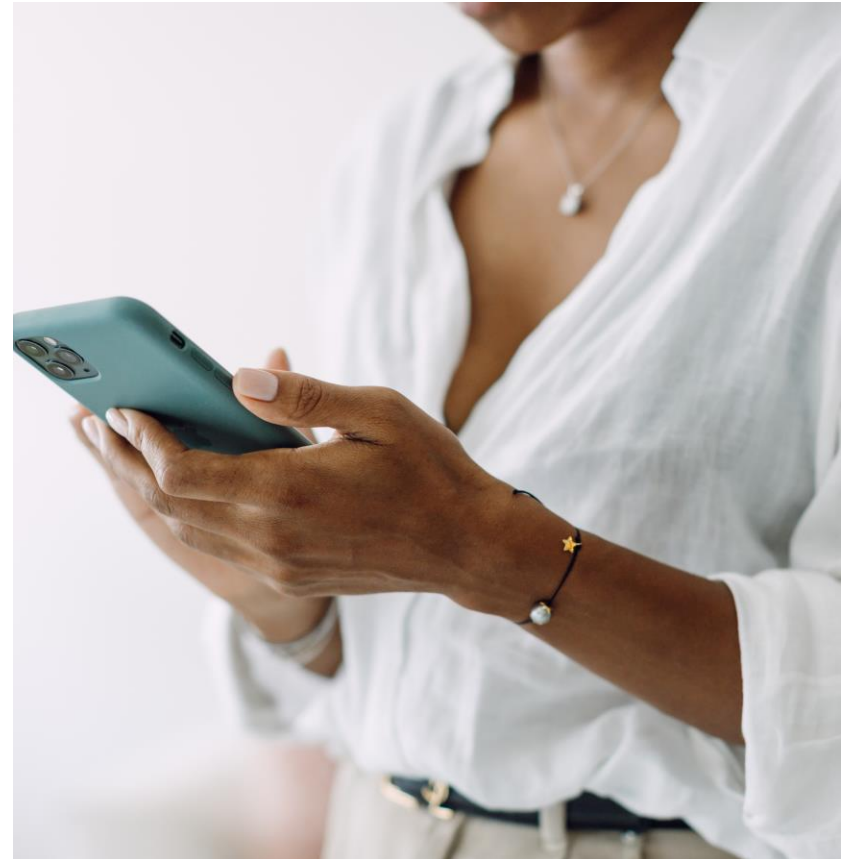


This Photo by Unknown Author is licensed under [CC BY-SA](#)

Cybersecurity Impact on Staff

What your staff does matters

- Unsecure employee behaviour is the number 1 cause of breaches.
- More than 80% of breaches are due to human error.
- AI Chatbots mimic human emotions making scams more convincing.
- AI-Generated phishing click rates are 75% higher than regular phishing
- Generative AI tools enables attackers to make smarter more personalized scaled attacks.
- Cybersecurity Failures can cost you your client / Job!



AI Generated People



Business Email Compromise (BEC) Occurs When:

An attacker gains credentials to an email account

or

Impersonates a trusted entity

to

Manipulate employees, partners, clients or vendors into taking harmful actions.

Fake Invoice

CEO/Executive/Authority figure
impersonation

Account compromise

Data Theft

Changing of Bank Details



Sometimes the
account isn't taken
over...

Lookalike Variations

- contact.us@calpeteclub.com
- contaetus@calpeteclub.com
- contaetus@calpeteclub.com
- contactus@calpeteclub.com
- contactus@calpeteclub.com
- contactus@calpeteclub.com
- contactuss@calpeteclub.com
- contac.tus@calpeteclub.com
- contactus@calpete-club.cc
- contactus@calpeteclubhb.com



BEC Tool AUTHREQUEST.io



IMPLEMENT ZERO
TRUST



VERIFY REQUESTS:
AUTHREQUEST.IO

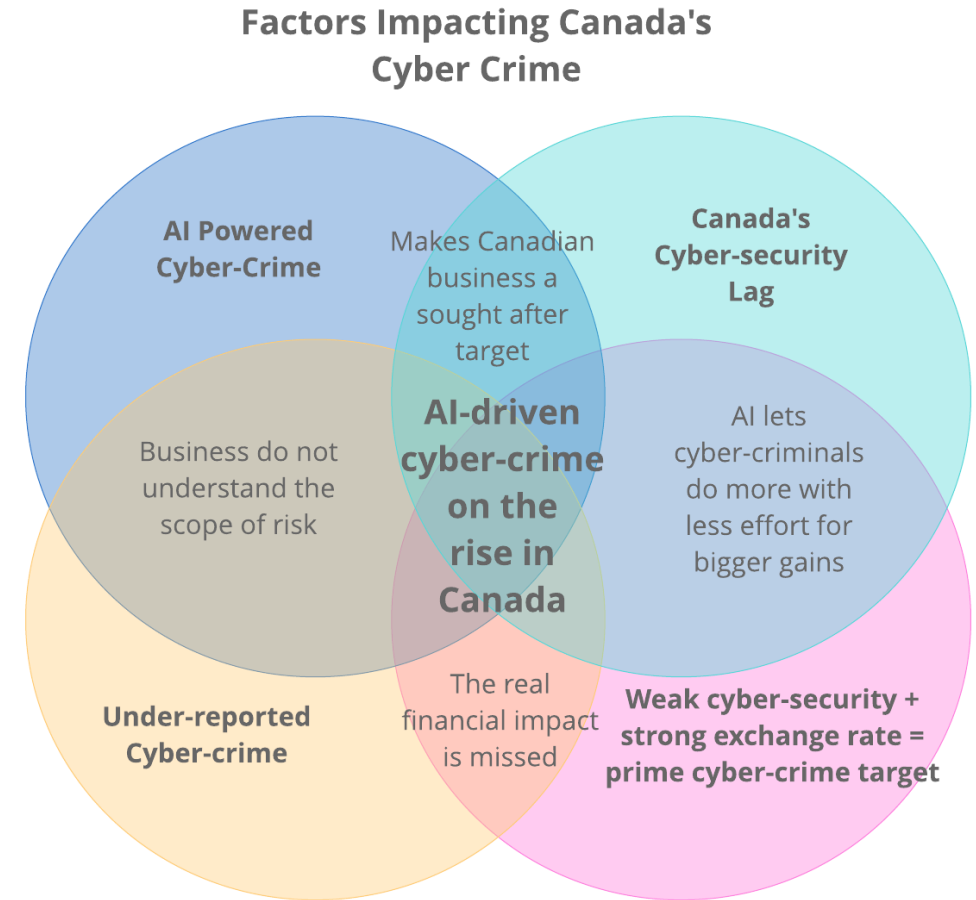


HAVE A PLAN

Most understand to verify new interactions, however with the sophistication of AI,
it's the trusted interactions and relationships that
need as much or more verification

Are You or Your Client Prepared for AI Cyber Threats?

- Implement zero trust
- Use multi-factor authentication (MFA)-don't pick your own passwords
- Get regular cyber assessment
- Get a BEC defense program
- Employee training that includes AI risks – Train by department



Key Drivers making Canada an increased target for AI Cyber-Crime

Thank you!



s01ve.io

1.844.828.3393

Path to RIMS Canada: the SARIMS Student Engagement Challenge



@SOUTHERNALBERTARIMS



Registration coming soon

Thank You to Our Sponsors

Gold



Platinum



Silver

