

| THE ROLE OF CYBER SECURITY IN DIGITAL TRANSFORMATION

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Treasury Board of Canada Secretariat

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OVERVIEW

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- 4 GC CYBER SECURITY CHALLENGES



The background features a dark blue gradient with glowing cyan circuit traces and binary code (0s and 1s) scattered throughout. A large, semi-transparent, jagged shape resembling a stylized 'M' or a mountain range is overlaid on the right side. The text 'DIGITAL TRANSFORMATION' is centered on the left side, preceded by a vertical bar.

| DIGITAL TRANSFORMATION

DIGITAL TRANSFORMATION

VISION FOR THE GC



“We can’t be a Blockbuster government when we’re serving a Netflix citizenry”

“Because in 2018, you’re either digital or you’re dead”

– The Honourable Scott Brison, President of the Treasury Board

DIGITAL TRANSFORMATION

EXCITING TIMES



DIGITAL TRANSFORMATION

IMPORTANCE OF TRUST





| ROLE OF CYBER SECURITY

TRADITIONAL SECURITY MODEL

NEED FOR CHANGE



UNINFORMED SECURITY

USERS WILL FIND A WAY



A NEW CYBER SECURITY MODEL

WE'RE HERE TO ENABLE



WE NEED TO STOP SAYING



NO

WE NEED TO START SAYING



**YES, AND HERE'S
HOW**

A NEW CYBER SECURITY MODEL

FINDING THE RIGHT SIZE



A NEW CYBER SECURITY MODEL

NEED TO GET BETTER AT RISK MANAGEMENT



Risk



Transfer



Accept



Avoid



Mitigate

INCIDENTS WILL HAPPEN

FRONT PAGE NEWS

CBCnews | Politics

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Politics Inside Politics Blog Photo Galleries

Foreign hackers attack Canadian government

Computer systems at 3 key departments penetrated

By Greg Weston - CBC News Posted Feb 16, 2011 9:03 PM ET | Last Updated: Feb 17, 2011 1:05 PM ET

IN THE NEWS
• Spy watchdog
• Flu vaccine

Hacker Tracker: Breach Hits Canadian Agency, Cyber Ransoms Surge

By PYMNTS

'We were lucky': Massive 'WannaCry' cyberattack avoids Canada

TRENDING | TSAa | Apple | Warren Buffett | FP 500 | FATCA | Energy | BlackBerry | Housing

National Research Council computers hacked by Chinese, says Canadian spy agency

CANADIAN PRESS AND POSTMEDIA NEWS

Apache Struts 2 bug bites Canada, Cisco, VMware and others

Canuck tax and stats outages revealed as patch pauses

By Richard Chigwin 14 Mar 2017 at 00:28

CBCnews | Politics

Home World Canada **Politics** Business Health Arts & Entertainment Technology & Science

Politics Inside Politics Blog Photo Galleries

Hackers stole secret Canadian government data

By Julie Irwin - CBC News Posted Jun 02, 2011 4:15 PM ET | Last Updated: Jun 03, 2011 2:24 PM ET





| GC CYBER SECURITY PRIORITIES

GC CYBER SECURITY PRIORITIES

MOVING IDENTITY INTO THE DIGITAL AGE

ID



TRUSTED ACCESS



SMARTER SERVICES



BETTER EXPERIENCE

GC CYBER SECURITY PRIORITIES

#GCCLOUDFIRST



**Baseline security
controls for cloud**



**Access to Public Cloud
Services**



**Standard for Protected B
Cloud (SPIN 2017-01)**

GC CYBER SECURITY PRIORITIES

SECURITY IS BAKED IN



GOVERNANCE



ARCHITECTURE



**STANDARDIZATION AND
CONSISTENCY**

GC CYBER SECURITY PRIORITIES

BASIC SECURITY HYGIENE

TOP 10 IT SECURITY ACTIONS

Protect your network. Protect Canada's Information.

The Top 10 IT Security Actions were selected and prioritized based on CSE's analysis of cyber threat trends affecting Government of Canada (GC) Internet-connected networks. When implemented as a set, the Top 10 helps minimize intrusions or the impacts to a network if a successful cyber intrusion occurs.

www.cse-cst.gc.ca/en/ITS

THREAT SURFACE BEFORE THE TOP 10

- 1 USE SHARED SERVICES CANADA INTERNET GATEWAYS
- 2 PATCH OPERATING SYSTEMS AND APPLICATIONS
- 3 ENFORCE THE MANAGEMENT OF ADMINISTRATIVE PRIVILEGES
- 4 HARDEN OPERATING SYSTEMS
- 5 SEGMENT AND SEPARATE INFORMATION
- 6 PROVIDE TAILORED AWARENESS AND TRAINING
- 7 MANAGE DEVICES AT THE ENTERPRISE LEVEL
- 8 APPLY PROTECTION AT THE HOST LEVEL
- 9 ISOLATE WEB-FACING APPLICATIONS
- 10 IMPLEMENT APPLICATION WHITELISTING

THREAT SURFACE
AFTER THE TOP 10



Communications
Security Establishment

Centre de la sécurité
des télécommunications

Canada

GC CYBER SECURITY PRIORITIES

INCIDENT RESPONSE AND MITIGATION



Cyber Security Event Management Plan



Preparation and Exercising



Post-mortems and Continuous Improvement



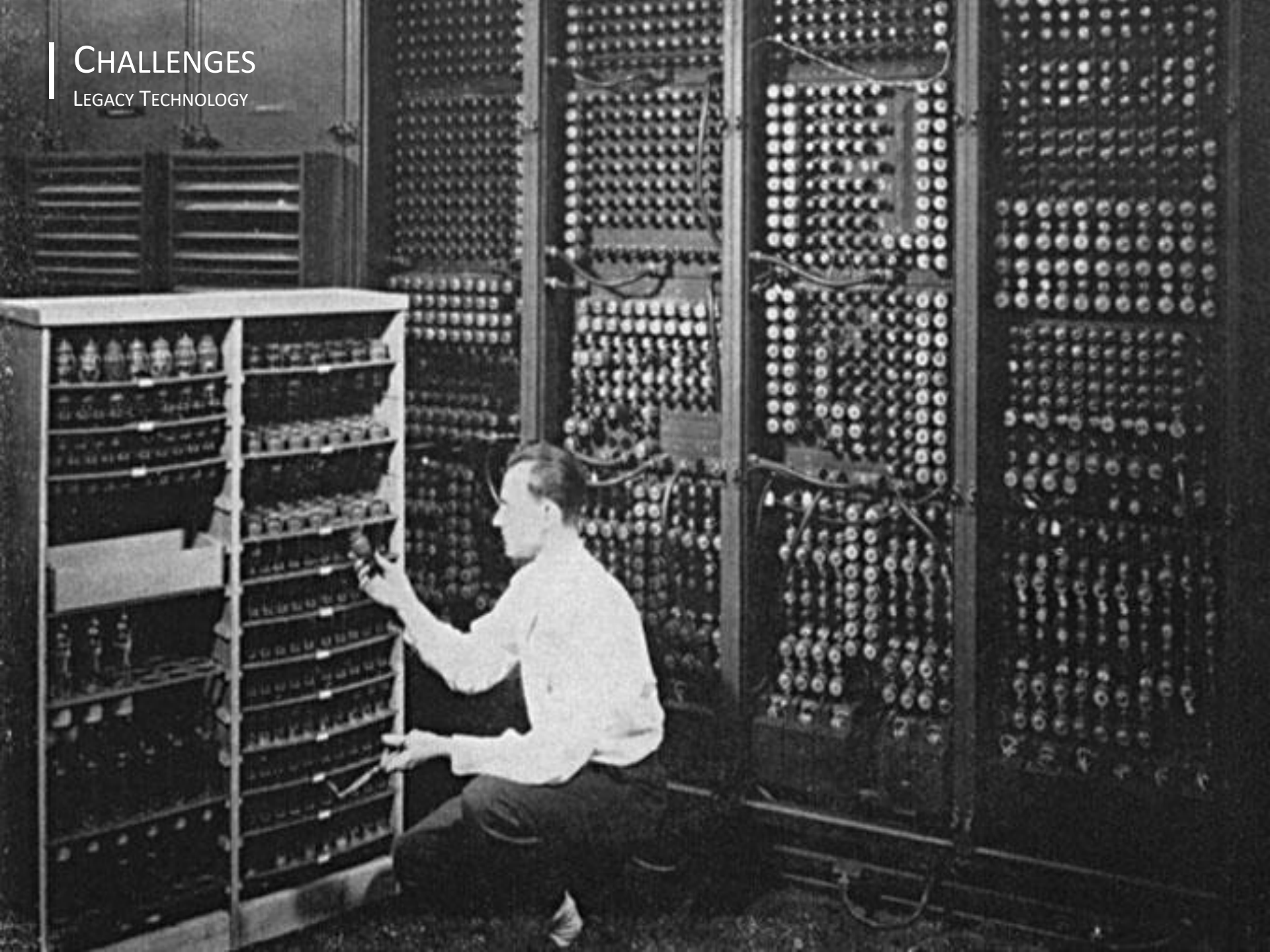
ASSUME BREACH AND PLAN ACCORDINGLY



| GC CYBER SECURITY CHALLENGES

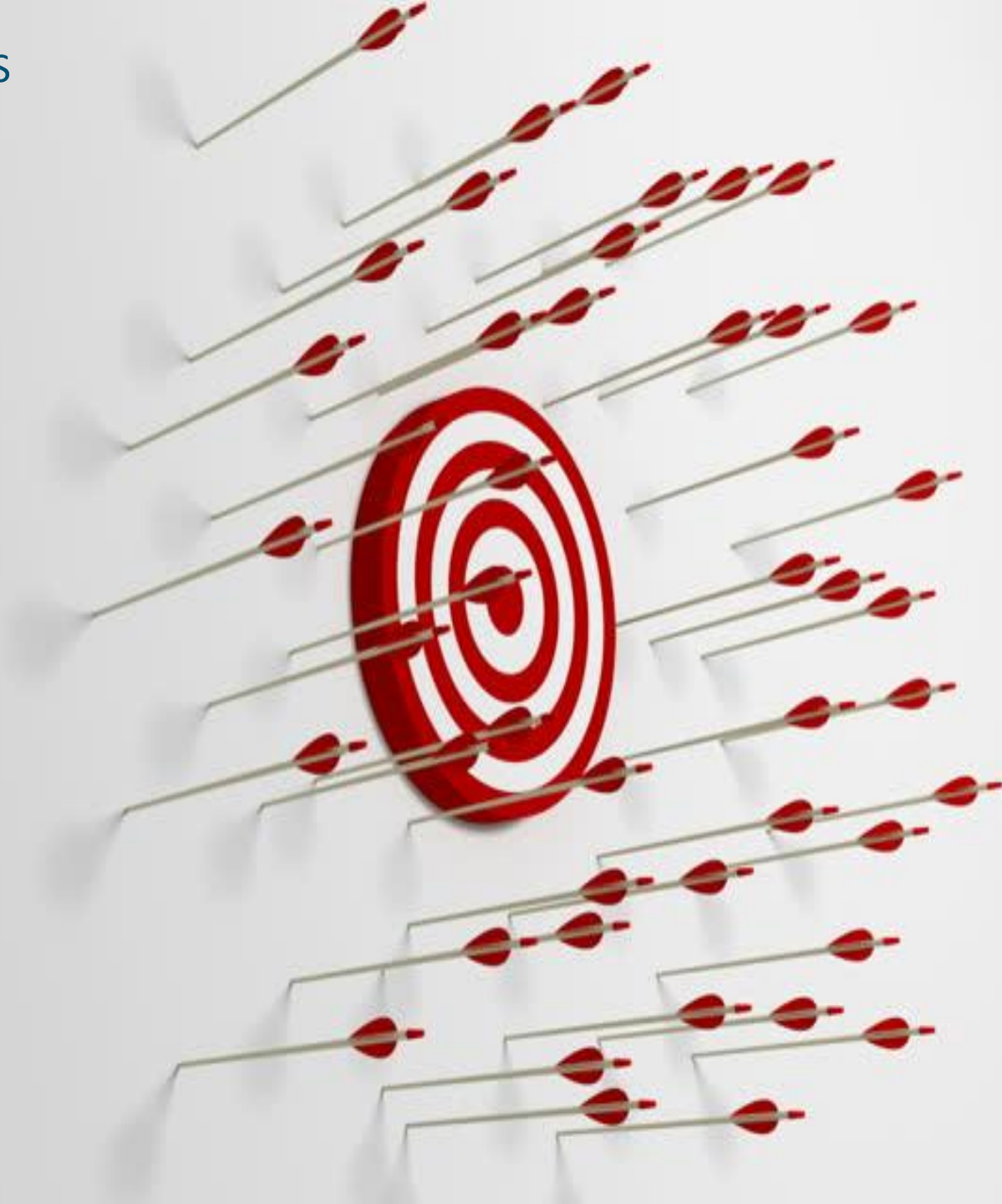
CHALLENGES

LEGACY TECHNOLOGY



CHALLENGES

CONSISTENCY



CHALLENGES

KNOWLEDGE OF ASSETS



CHALLENGES

TALENT SHORTAGE



FUTURE OF CYBER SECURITY IN THE GC

WE'RE IN THIS TOGETHER



A large, stylized, dark grey maple leaf graphic is positioned on the right side of the slide, partially overlapping the text area. It has a jagged, pointed top edge and a smooth, rounded bottom edge.

| THANK YOU

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