

Key findings from
The Global State of
Information Security®
Survey 2016
— *Canadian Insights*

Turnaround and transformation in cybersecurity How Canadian businesses are responding to rising cyber-risks



By now, the numbers have become numbing. Cybersecurity incidents are daily news, with reports of escalating impacts and costs. Beyond the headlines, however, you'll find new reasons for optimism. We take a closer look at how innovative businesses are responding and how Canadian organizations are doing compared to global peers.

Organizations are investing in core safeguards to better defend their ecosystems against evolving threats.



57%

53%

Have employee training and awareness programs



55%

52%

Have security baselines / standards for third parties



50%

54%

Have a CISO in charge of cybersecurity



50%

49%

Conduct threat assessments



65%

58%

Have an overall information security strategy



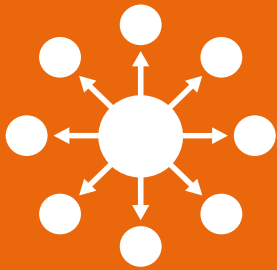
54%

48%

Active monitoring analysis of security intelligence



Overview of key findings



🇨🇦 **92%**

🌐 **91%**

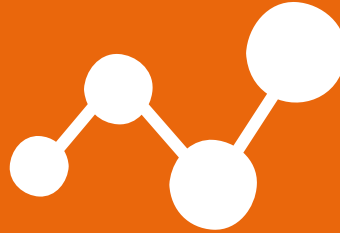
follow a risk-based
cybersecurity framework



🇨🇦 **64%**

🌐 **69%**

use cloud-based
cybersecurity services



🇨🇦 **54%**

🌐 **59%**

leverage Big Data to
improve cybersecurity



🇨🇦 **63%**

🌐 **65%**

collaborate with others to
improve cybersecurity



🇨🇦 **59%**

🌐 **59%**

Have purchased
cybersecurity insurance



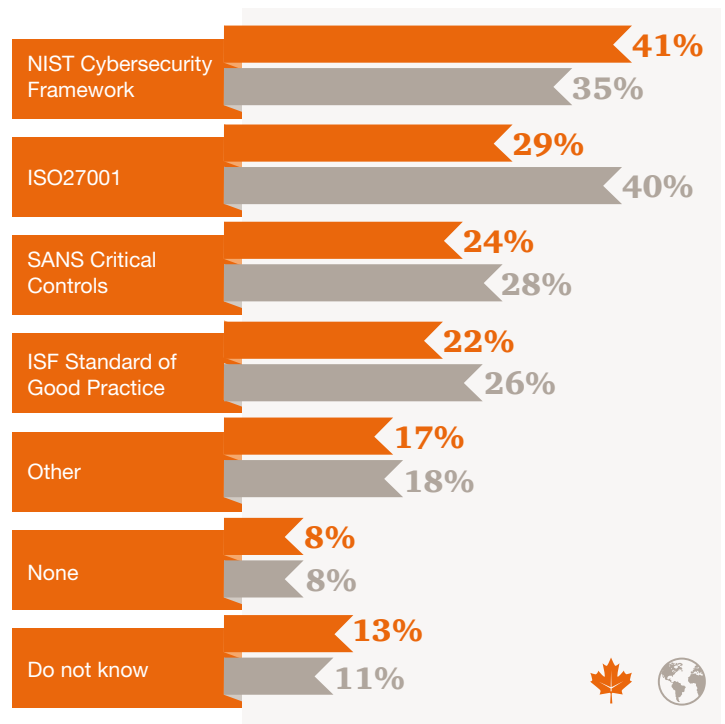
Key finding #1

**The rewards
of risk-based frameworks**

92% of Canadian companies have adopted a security framework or a combination of frameworks

These frameworks help:

- identify and prioritize risks
- quickly detect and mitigate threats
- understand security gaps
- design, monitor and measure progress
- communicate better and collaborate on cybersecurity efforts

Key figure #1 | **Adoption of risk-based frameworks**

Key finding #2

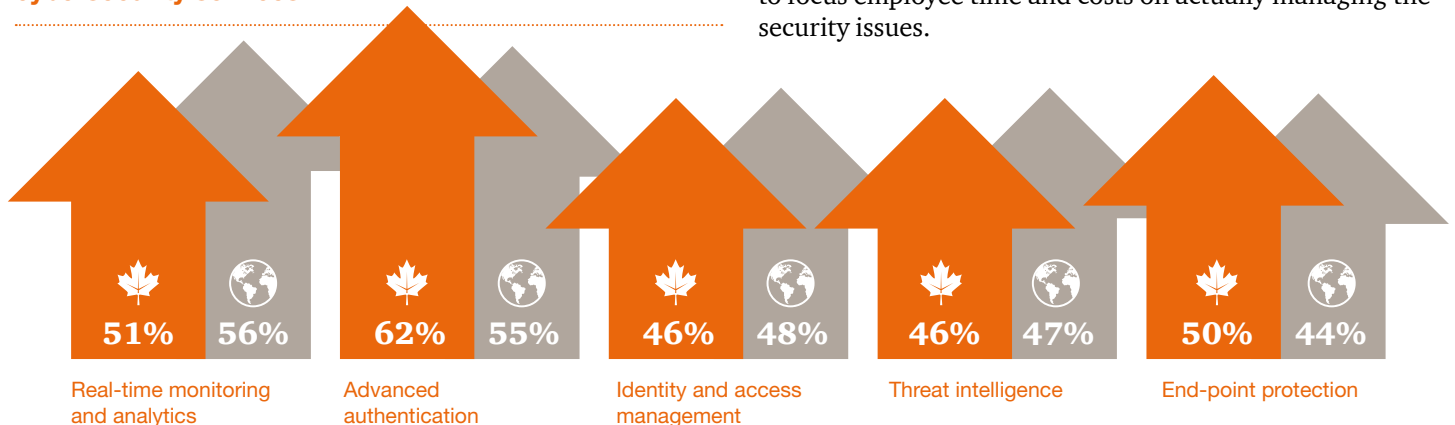
**Harnessing the power
of cloud-enabled cybersecurity**

64% in Canada use cloud-based cybersecurity services

Cloud computing has emerged as a viable cybersecurity tool with advanced technologies for:

- data protection
- privacy
- network security
- identity and access management
- infrastructure capabilities to improve intelligence gathering and threat modelling,
- better capabilities to block attacks and accelerate incident response

And Canadian companies seem to recognize this with their increasing adoption of cloud-based cybersecurity services. Cloud-based security services can filter threats, allowing you to focus employee time and costs on actually managing the security issues.

Key figure #2 | **Adoption of cloud-based
cybersecurity services**

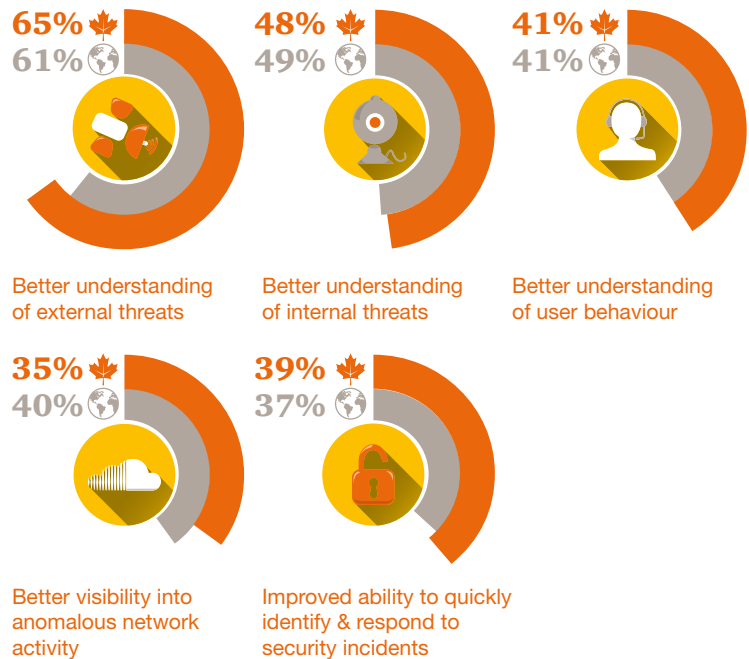
Key finding #3

The growing impact of big data security analytics

54% of Canadian companies leverage big data analytics for cybersecurity

A data-centric approach to cybersecurity can help organizations use real-time information to understand and predict irregular user or network activity, and identify and respond to cybersecurity risks and incidents quicker.

Key figure #3 | Benefits of data-driven cybersecurity

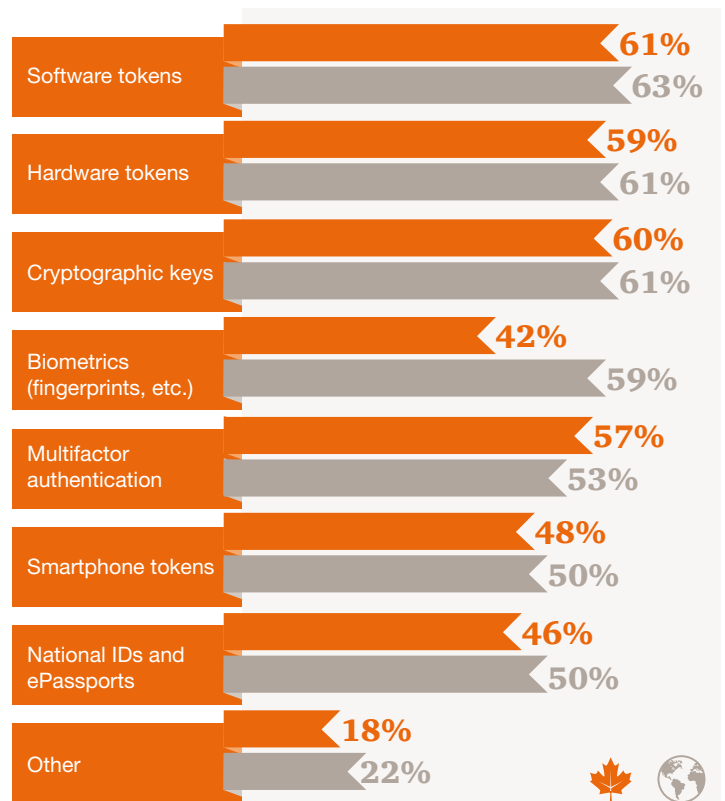


Key finding #4

Replacing passwords with advanced authentication

Many Canadian organizations are turning to advanced authentication to improve trust among customers and business partners. The reason is apparent—many high-profile hacks begin with compromised credentials. Use of such password-less authentication and apps will require that organizations rethink their approach to identity management, and design authentication solutions that reflect the risk of access method or transaction in the level of authentication.

Key figure #4 | Authentication technologies in place



Key finding #5

Partnering to sharpen security intelligence

63% in Canada collaborate to improve cybersecurity and reduce cyber-risks

Over the past three years, the number of organizations that embrace external collaboration has steadily increased. And those that do work with others cite clear benefits. Organizations that don't collaborate often cite the lack of an information-sharing framework, as well as incompatible data formats and platforms. Another weakness: updates aren't communicated at network speed.

Key figure #5 | **Benefits of external collaboration**

62% **56%**

Share and receive information from peers



40% **46%**

Share and receive information from ISACs



46% **42%**

Improved threat intelligence and awareness



42% **40%**

Share and receive information and government



42% **37%**

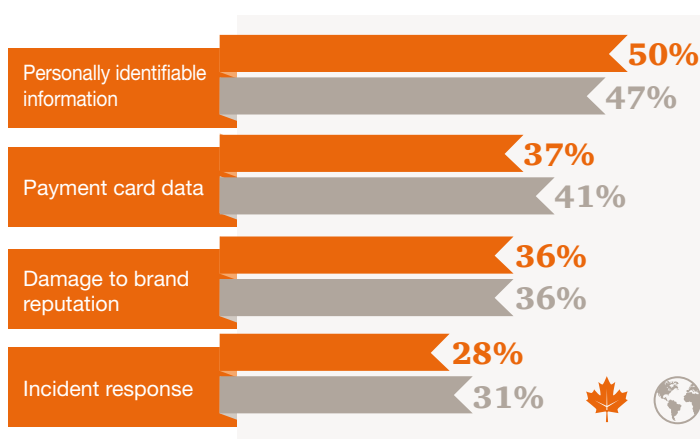
Share and receive information from law enforcement

Key finding #6

What can't be protected can be insured

59% of Canadian respondents said that they've purchased some form of cybersecurity insurance.

Information sharing and advanced cybersecurity technologies won't stop all cyberattacks. By now it seems clear that technically adept adversaries will always find new ways to circumvent cybersecurity safeguards. That's why many businesses are purchasing cybersecurity insurance to help mitigate the financial impact of cyber incidents when they do occur.

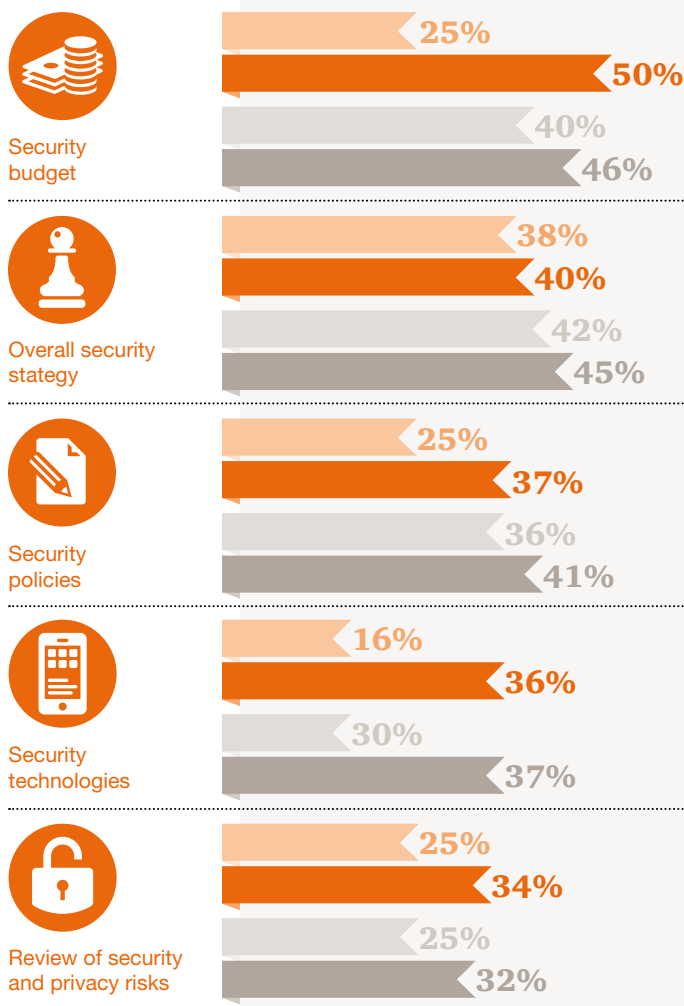
Key figure #6 | **Incident-related losses covered by cybersecurity insurance**

Key finding #7

The evolving involvement of top executives

The roles and responsibilities of the top cybersecurity executive have expanded in recent years. Today's chief information security officer (CISO) is a business manager who needs to have expertise not only in security but also in risk management, corporate governance and overall business objectives. Just as the top cybersecurity executive has become more involved in a wider range of activities, so too has the board of directors.

Key figure #7 | Board participation in information security



2014
2015

2014
2015





The adoption of innovative cybersecurity safeguards discussed above will help organizations better defend against today's known vulnerabilities and threats. But as technologies evolve and adversaries sharpen their skills, how can businesses anticipate the risks of tomorrow?

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