

Secure Innovation

Security advice for emerging technology companies and researchers

Security from the start



The following guidance is largely intended for founders and leaders of small-to-medium-sized companies in the emerging technology sector, but is relevant to researchers across Canada's research ecosystem and to decision makers at Canadian universities, in addition to public and private research organizations.

Increased awareness of threats and mitigating security measures can protect your expertise and competitive advantage, making your company more attractive to investors and customers. Implementing security measures as soon as possible will lay a strong foundation for future success.

Know the threats

Canada is a global research leader due to our world-class universities, public and private research organizations, and human talent. This innovative reputation, however, attracts threat actors, including:

- **Hostile state actors (HSAs)**

HSAs seek to steal **your** technology to

- fast-track their technological capability, thereby undermining your competitive edge.
- target, harm and repress individuals to prevent dissent or political opposition, ultimately damaging your reputation.
- increase their military advantage over other countries, to the detriment of our national security.

- **Competitors**

Competitors want to obtain commercial advantage.

- **Criminals**

Criminals look to profit, at the expense of others.



Secure your environment

Your assets include people, premises, products and services, as well as your information, intellectual property (IP) and knowledge. Identifying the value of each of these assets—and any necessary security measures—is an ideal starting point, since protection of these assets will determine the ultimate success of your company.

Understanding the following will help you to determine which risks to prioritize:

- Your company's goals and priorities.
- Your most critical assets.
- The threats to those critical assets.
- The likelihood and consequences of a threat affecting you.

Although it may not be possible to protect against every threat, security protections will pay long-term dividends, particularly when possible threats are assessed and mitigated alongside any other risks.

Security measures should be based on a combination of information, physical, human and cyber security measures.



Secure your products

When designing products, security issues, including the assurance that products are free from any security vulnerabilities, should be addressed as soon as possible.

Understanding the value and purpose of your assets will help you devise effective intellectual asset (IA) and IP management strategies. You need to understand:

- What needs to be protected.
- How it can be protected.
- What in-country laws are in effect for countries in which you operate.
- How to manage your IP.



Secure your partnerships

Partnerships, including with investors, suppliers or other researchers, increase the vulnerability of your company—and any information or data you may share. As you expand, you may need to manage additional risks associated with increased collaboration. Your choice of partners may affect future business partners. Answering the following questions will help you manage the additional risks that collaboration brings.

- **Why you are collaborating?**

Think about the outcomes you need; the benefits a partner can bring; the risks and red lines.

- **With whom are you working?**

Conduct due diligence on all prospective partners.

- **What are you sharing?**

Be strategic about what and when you share with partners.

- **How are you protecting your innovation?**

Include protections for your assets and data contracts.



Secure your growth

As your company evolves, you may need to increase or adapt your security measures. The risks you face may well have changed—your team has grown, you have moved to more or larger premises, you are collaborating with more partners, or you are looking for investment.

It is essential to continuously review your security measures and consider whether you need to take additional precautions.

