

The Next Generation of Trade: How Frontier Technologies Transform Trade and What This Means for Canada

Danielle Goldfarb

The Trade Shock Coincides with Opportunity

Canada has a relatively small economy and depends on trade to grow and maintain its living standards. But the 2025 trade shock challenges Canada's long-held assumptions about tariff-free and predictable U.S. market access.

It is now urgent for Canada to expand and de-risk trade in new markets and sectors and modernize the tools that support it. The stunning recent advances in artificial intelligence (AI) and other frontier technologies offer new opportunities for Canada to expand trade and make it more resilient to shocks.

Canada's Trade Conversation Gap

The current Canadian public and policy discussion on trade is largely reactive and focused on preserving tariff-free Canada–U.S. trade in physical products.

There is little publicly available analysis or profile in Canada on how digital trade offers the fastest growing segment of trade across all regions. The same is true for discussion on how the latest advances in AI and other frontier technologies offer new trade opportunities and ways to streamline trade. Digital services are only briefly mentioned as part of the new geographic trade diversification strategy outlined in the November 2025 Federal budget.

This project aims to start filling this important gap.

Advances in AI and Other Frontier Tech Are Reshaping Trade

Advances in AI, blockchain, and other frontier technologies are reshaping or have the potential to reshape global trade by reducing trade costs and disruptions, expanding trade in new types of goods and services, and redefining economies' comparative advantage.

Recent advances in general-purpose AI, from seamless language translation to large-scale image processing, mean that AI tools can categorize products from shipping manifests, translate trade documents in real time, detect patterns or anomalies, flag chokepoints, and enable live customs clearance. Technological advances can also enable real-time visibility across global supply chains to respond to emerging environmental and labour standards and to anticipate and adjust to disruption. Blockchain technologies can additionally secure trade documentation and transactions.

Implications for Canada's Trade and Trade Strategy

As AI capabilities and those of other frontier technologies advance at a stunningly rapid pace and reshape global trade and value chains, and as the United States becomes a less predictable trade partner, Canadian decision-makers need a clearer view of the shifts underway and opportunities they raise to grow, de-risk, and smooth trade.

The project will map out some of the main ways in which frontier technologies are changing or likely to change trade with a focus on what is most relevant for Canada. It will draw on foundational recent studies from international institutions such as the WTO and WCO, as well as the work of experts such as Kati Suominen. It will also highlight select examples from global and Indo-Pacific leaders that are testing the use of AI and other technologies to make trade faster, cheaper, more resilient, and/or more transparent. The analysis may also consider new types of trade that are less reliant on geography or language and which offer growth opportunities in the Indo-Pacific.

The project will then consider some of the possible implications of these developments for Canadian trade and public policy. This could include the potential to grow Canadian exports in Indo-Pacific and other markets and in new types of services (including AI expertise itself), to modernize Canada's trade picture, trade data and government trade support, to improve real-time supply chain visibility and resilience to disruption, and to develop the next generation of trade indicators and rules related to these developments.

In short, this research aims to outline what advances in AI and other frontier technologies might mean for Canada's trade and how these developments may be able to advance a forward-looking agenda to expand and facilitate Canadian trade.