



The Supply Chain Digitalization Pillar of Canada's Supply Chain Strategy

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Supply Chain Digitalization Challenges



Despite recent efforts towards digitalization, **Canada's transportation supply chain lacks visibility** at the corridor and national levels:



Need **timely** operational **traffic information and analytical tools** to optimize the use of existing assets (e.g., demand info)



Need information on the **operations of more supply chain participants** to achieve **end-to-end visibility** (e.g., users, warehousing)



Need **information** that will enable transportation service providers **to plan their resources** and meet demand (e.g., planning, forecast)

This reflects supply chain players' hesitancy to share data due to concerns about confidentiality and privacy.

As a result:

- The **level of resilience** to disruptions is **suboptimal** (e.g., natural disasters, strikes at key transportation facilities)
- **Coordination** across supply chains is **limited**
- **Logistics costs** for shippers are **higher**
- Our **transportation and trade logistics** sector is **not keeping pace** with global leaders

Canada's ranking at the World Bank's Logistics Performance Index	
2007	2018
10th	↓ 20th



Input into the Supply Chain Digitalization Roadmap



To inform the development of its **National Supply Chain Digitalization strategy**, Transport Canada has sought the advice of experts and stakeholders.

- 1 PricewaterhouseCoopers** was hired to propose a **Five-Year Roadmap to achieve end-to-end supply chain visibility** informed by:



- 2 A Supply Chain Task Force** was created to consult with industry expert and make recommendations on actions to alleviate supply chain congestion. It notably recommended the use of digitalization to achieve end-to-end visibility.
- 3 The Commodity Supply Chain Table** serves as a forum to exchange with stakeholders.
- 4 Experts on digital solutions**, data governance and data standards (e.g., Gartner, Protago, Standards Council of Canada)



International Lessons Learned



A lot can be learned from international experience in digitalization supply chains

PortXchange (Port of Rotterdam): accrued benefits of long-standing commitment to digitalization, model for technology adoption.

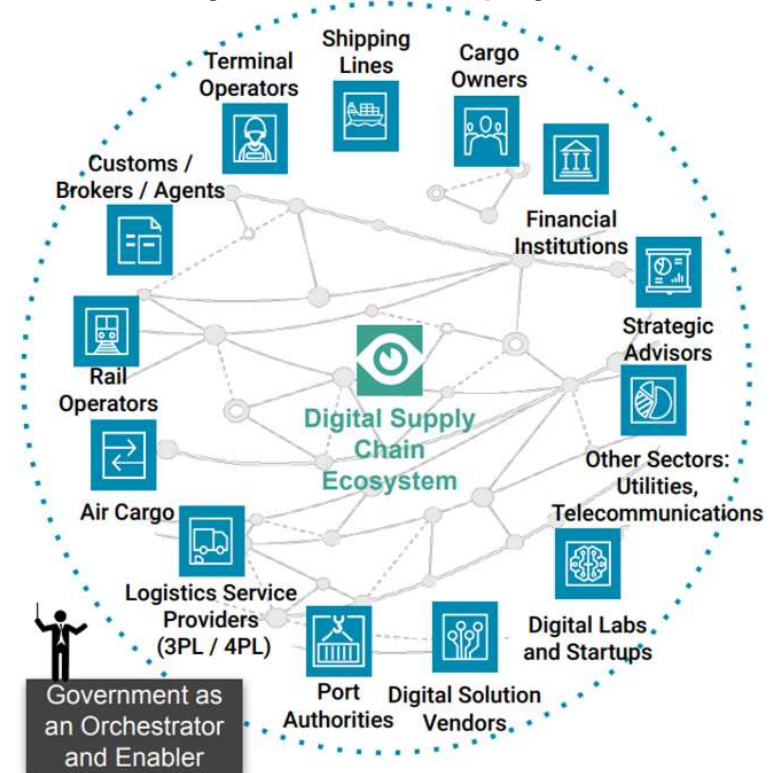
US Freight Logistics Optimization Works (FLOW): take a value-driven use-case approach, strong national leadership and federal partners.

Australia's Trade Community System: model of national strategy within a federated system to bridge national + regional initiatives

SGTradex (Singapore): cutting edge technology, example of strong central gov't leadership and a PPP model, with a distinct approach to including SMEs, financial institutions

EU Commission, who have undertaken several initiatives to support the harmonization of standards

Engage ecosystem stakeholders beyond traditional players



Government of Canada to play an active role



Transport Canada recognizes the importance of national leadership on three key elements.



Initiate a national dialogue to mobilize and engage stakeholders across the supply chain and technology service providers

- Identify early wins (digital applications/projects)
- Share resources to improve readiness and prepare internal business systems for the digitalization of supply chains
- Catalyze participation with other supply chain players on corridor and national level projects
- Build consensus on data governance framework for data sharing (e.g., data standards, security protocols)



Launch **Call(s) for Proposals** to accelerate **gateway-corridor digitalization**



Engage with key **trade partners and other levels of government** to foster coordination in our digitalization efforts



Digitalization of Key Gateways and Corridors



On February 13, a **new call for proposals was launched** under the National Trade Corridors Fund, called *Advancing Supply Chain Digitalization*. Transport Canada will commit up to **\$50 million to support eligible projects**. Applicants are invited to submit proposals by April 11, 2023.

Transport Canada is seeking **collaborative industry-led projects** that strengthen Canada's digital infrastructure and help optimize Canada's supply chains. Projects supported will:

- increase the efficiency and reliability of our transportation supply chains;
- benefit a **broad base of stakeholders** by **relieving key bottlenecks and pain points in the network**;
- **leverage data across the supply chain** and promote interoperability with other visibility initiatives; and,
- enable expansion of participation to more supply chain stakeholders.

Eastern Artic Sealift
Visibility Project

Gateway-Corridor
Optimization Tools for
Bulk Supply Chains

Burrard Inlet Port
Optimization

ILLUSTRATIVE

Marine Information System
in St-Lawrence Seaway

Container Drayage Virtual
Twin in Montreal

Container Supply Chain
Visibility at Port of Halifax

Logistics and Warehousing
Capacity in GTA



Next Steps



- **Call for proposal:** receive and review applications
- Broaden engagement to capture national and regional input and perspectives
 - Advancing supply chain digitalization is a complex task that will require **strong collaboration and support** from both public and private sector
- Canada still in **early stages of its digital journey** and needs to **accelerate transition** to keep pace with key trading partners
 - Visits with key global leaders (e.g., US FLOW, Port of Rotterdam, East Asian ports)
- The coming months will be crucial in laying the groundwork for a **National Supply Chain Strategy**

