



# The Emerging Economy 2030: Some initial explorations

Public Service Foresight Network  
22 July 2016



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of Canada  
Policy Horizons  
Canada

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Canada

# THE HORIZONS FORESIGHT METHOD

**The *Horizons Foresight Method* is a rigorous and systematic approach that allows us to test assumptions against a range of plausible futures and identify policy challenges and opportunities**

FRAMING

- Identify the issue or problem of interest
- Consider the larger system(s) shaping the issue
- Prepare a simple domain diagram of what is "in" or "out" as a guide. Allow it to evolve over the study.

ASSUMPTIONS

- Identify "current assumptions" buried in public dialogue and policy documents
- Identify key trends people assume are true
- Summarize key assumptions as a description of the expected future.

SCANNING

- Scan for weak signals of potentially disruptive changes
- Conduct interviews and facilitate dialogue to understand the system and develop insights

SYSTEM MAPPING

- Identify key elements or nodes in the system
- Describe key relationships
- Use a system map to identify where change could occur and direct further scanning for weak signals as needed

CHANGE DRIVERS

- Use insights from scanning to identify change drivers shaping the system
- Do influence maps to see 2<sup>nd</sup> to 5<sup>th</sup> order consequences

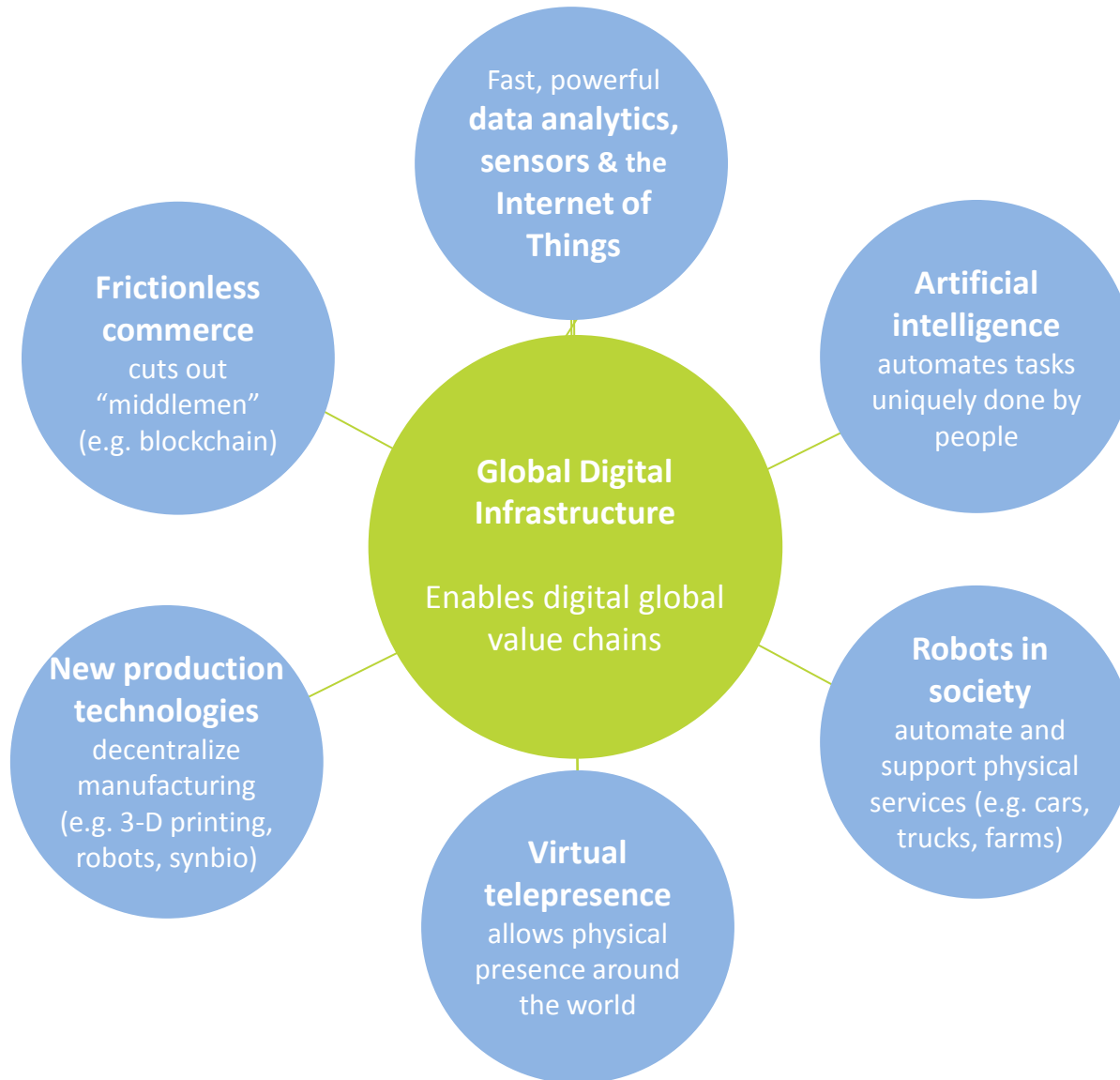
SCENARIOS

- Develop scenarios to explore a range of futures
- Identify potential challenges and discontinuities
- Test robustness of current assumptions and strategies

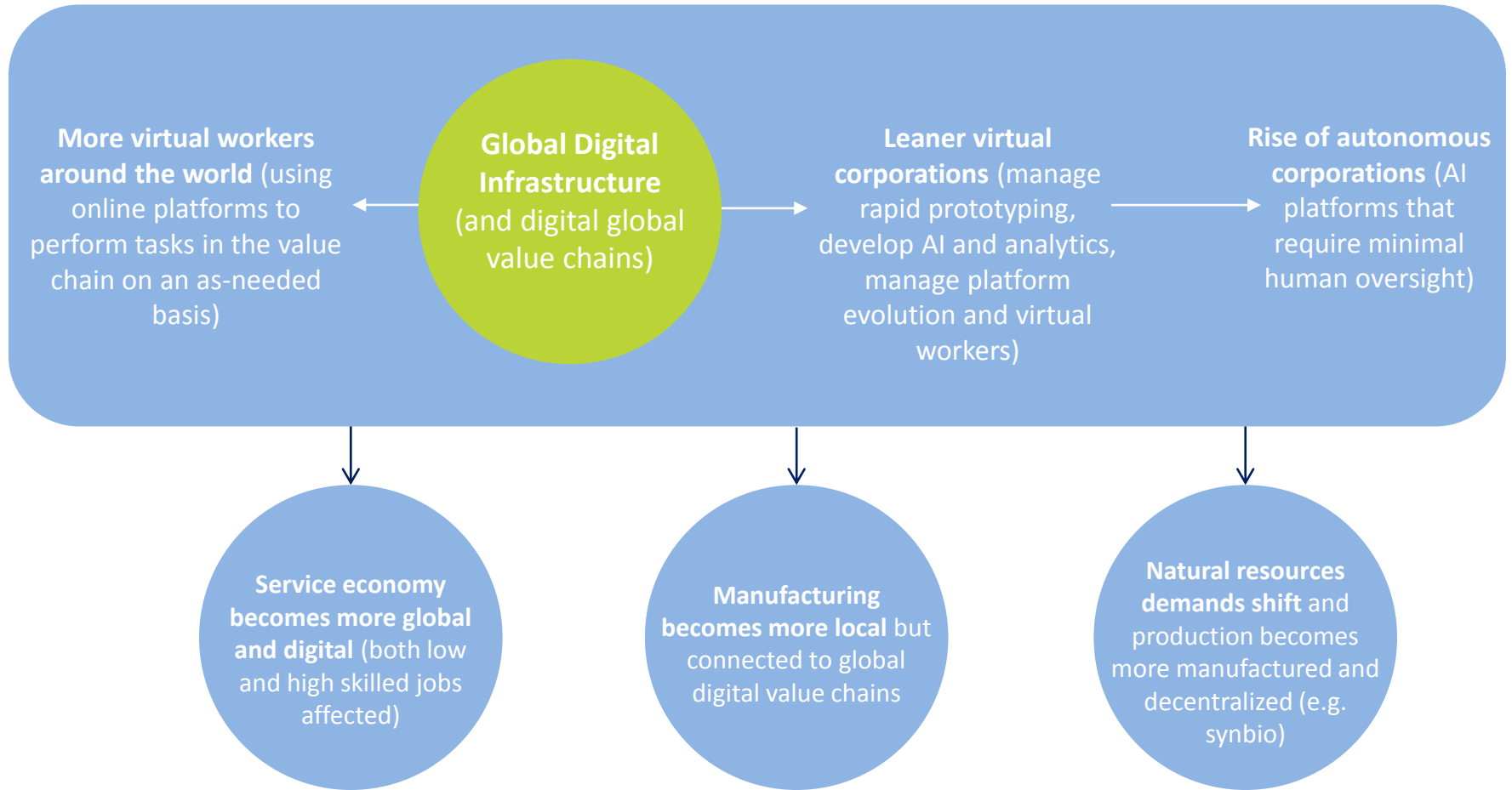
RESULTS

- Explore policy challenges and opportunities
- Identify credible assumptions and robust strategies
- Identify key uncertainties, surprises and emerging issues
- Better understand how the system or issue could evolve

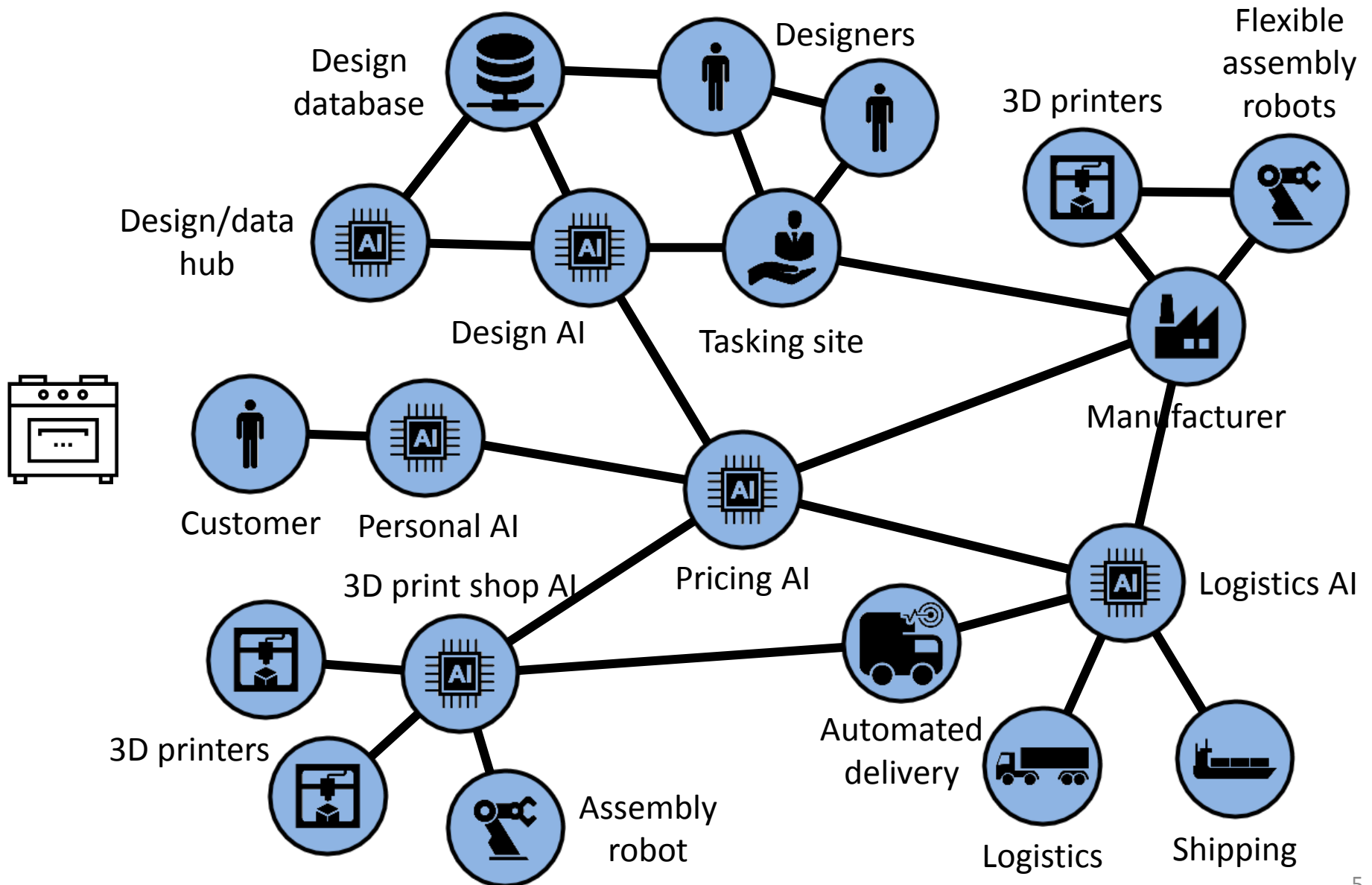
# *A new global digital infrastructure is emerging...*



*... that could transform global economic, labour, energy, and governance systems...*



# ... Into a digitally intermediated mesh economy (DIME)...



# DIGITAL DISRUPTION DRIVES GLOBAL ECONOMIC CHANGE

*What is driving change?*

*What is changing?*

*What are the emerging challenges/opportunities?*

Evolving digital technologies

Decentralized Autonomous Organizations

Virtual workers on digital platforms

Collaborative economy

Many economic sectors decline or transform. Period of turbulence and opportunity.

As a result of new technologies, a growing portion of the economy is shaped by zero marginal cost.

**A wide variety of goods and services become cheap or free, increasing consumer welfare.**

**A period of near-zero GDP growth due to potentially falling prices, wages, and profits.**

**Need to support adaptation and innovation that best advance consumer welfare.**

**Digital trade becomes truly free. Taxation and other instruments may be less effective in the emerging digital era.**

# VIRTUAL WORK COULD TRANSFORM GLOBAL LABOUR MARKETS

*What is driving change?*

*What is changing?*

*What are the emerging challenges/opportunities?*

Job unbundling

Automation

Evolving digital technologies

Collaborative economy

As automation erodes traditional jobs, billions of skilled workers move into the global digital services market, accelerating the expansion of global virtual work

**Global convergence of wages in a growing number of occupations**

**Increase in non-standard and insecure work**

**Challenge to social safety nets, tax revenues, social cohesion**

**Potential backlash from those left behind or moving at different speeds**

...all of which could create a range of plausible futures...

## SCENARIOS 2030

DOMAINS

	<b>Muddling Through</b> - As we react to problems	<b>Slow Decline</b> - In a world experiencing a long period of deflation	<b>Gradual improvement</b> - As we embrace new technologies	<b>Transformation</b> - As we proactively address complex issues
<b>Economy</b>	Half the economy is digital. Expanding use of artificial intelligence and robotics leaves many firms uncompetitive and unprepared.	Successful firms deliver digital services globally with new technologies and fewer workers. Many firms fold in a long period of falling prices and deflation.	Virtual corporations manage digital value chains that allow workers to be anywhere.	Standard of living disconnects from wages as new technologies provide free and higher value goods at zero marginal cost.
<b>Work</b>	Rising technologically driven unemployment. More precarious work. Traditional policy responses fail to improve job security.	Declining wages and tax revenues. Piecemeal national response fails to stem an international “decent to the bottom”.	Traditional jobs sharply erode. Many workers and SMEs use technologies to invent new virtual work opportunities in global digital value chains.	Coordinated multi-stakeholder response helps workers thrive in virtual work. Work is flexible, with portable benefits.
<b>Energy</b>	Vested interests resist change as cheaper renewable energy challenges the fossil fuel-based status quo.	Many energy firms fold in face of falling demand and low prices. Fossil fuels lose ground to cheaper renewables.	Significant transition to renewables underway but uneven across the globe.	Renewables dominate the energy mix. Significant fossil fuel reserves left unexploited as price approaches zero.
<b>Geopolitics</b>	West vs. Asia. Asia builds effective regional economic institutions.	More fragmented international system. US is fiscally challenged and leadership is more narrowly targeted.	Growing cooperation to address cross-boundary issues (e.g. digital work conditions, minimum wage).	Technologies allow growing subsidiarity and a more integrated international governance system.
<b>Governance</b>	Lack of trust. Continued data breaches. Trusted firms deliver some public goods digitally.	Longstanding government solutions begin to fray. Coop, non-profit and public-private partnership solutions expand.	Technologies enable new customizable solutions to help citizens.	New relationships with citizens. Trust in government grows through direct digital access and co-creation.





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### Weak Signals

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As part of Horizons foresight effort, we conduct regular, ongoing environmental scanning to identify weak signals of possible change that have the potential to disrupt our current systems.

Below is an evergreen inventory of weak signals across a broad range of fields organized by category (social, technology, economy, environment, governance and security). This material is not predictive, rather it is meant to alert the reader to interesting indicators of possible change within or across various domains.

Each weak signal posted to the inventory includes a concise description of what it is and why it is seen as important, as well as a link to the original source. Horizons encourages those individuals involved in the formulation of policies to read and make use of these weak signals to help inform their work. After all, insightful scanning is the foundation for good foresight.



All Economy Environment Governance Security Social Technology

[Public transit - examining other options](#)

March 8, 2016  
Technology, Environment

[Shifting the economic debate - incorporate emerging disruptive technologies](#)

March 8, 2016  
Technology, Economy



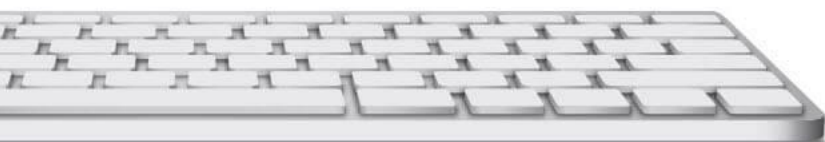
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QUESTIONS?