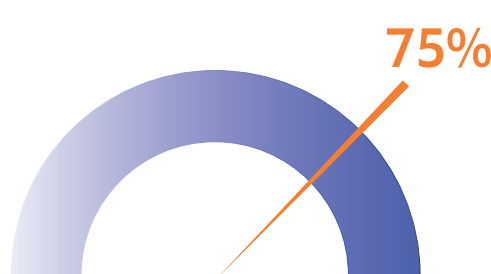


The scale and potential of Ontario's intangible economy

Going from 75 to 100

In a post-covid-19 world, economic success is more closely tied to intangibles than ever. Does Ontario have everything it needs to build a thriving intangible economy? Four areas stand out as critical to Ontario's competitiveness.



Ontario's intangible economy is the strongest in Canada. In our index measuring the intangible economy's scale and potential, Ontario received a score of 75/100.

What are intangibles?

17% **COMPUTERIZED INFORMATION**
software, databases, data processing and analysis

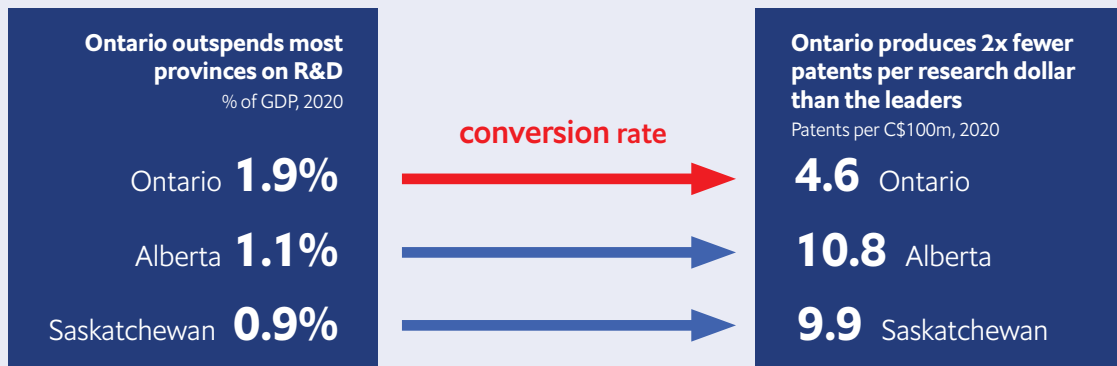
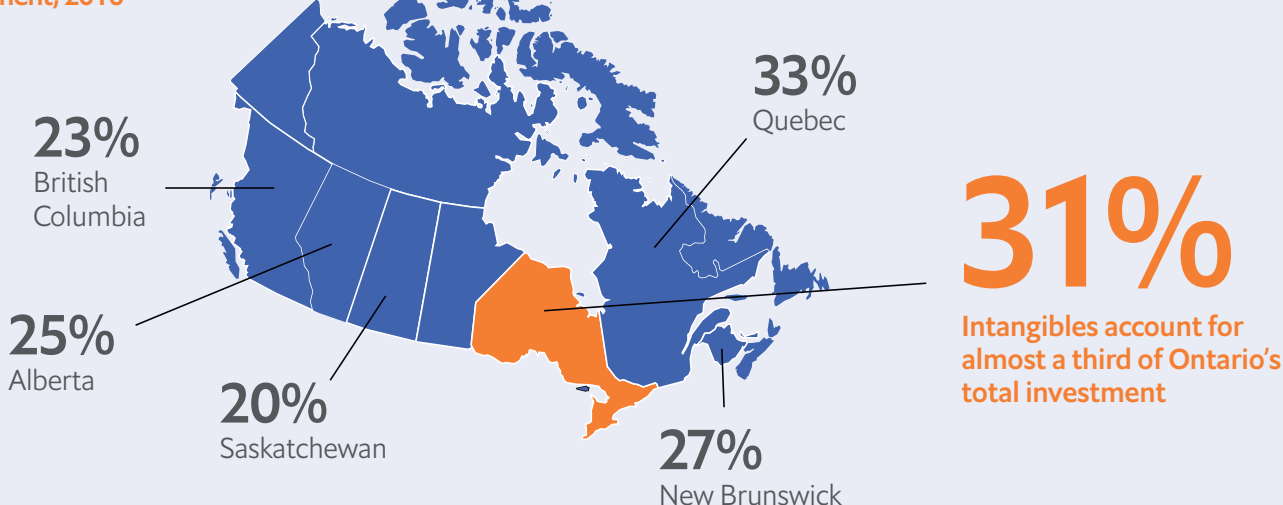
27% **INNOVATIVE PROPERTY**
creation/discovery work, intellectual property, R&D and patents

56% **ECONOMIC COMPETENCIES**
human capital, market research, brands and organizational capital

*percentages refer to composition of intangible investment in Ontario

1. Ontario invests heavily in developing intangibles, but struggles in translating those efforts into a productive, locally owned stock of IP

Intangible share of total investment, 2016



Patents are not a one-for-one predictor of intangible success, and many businesses now rely on trade secrets. But, in general, low rates of new patent generation point to potential problems in exploiting intangible assets.

2. Commercializing IP and other intangible innovations is crucial for growth, but this has proven difficult in Ontario

There is room for improvement...

Ontario lags in terms of scale-up potential and access to finance



Only 6%

High-growth* firms in Ontario (5th in Canada)



0.66%

Firms scaling up to 50+ employees in ten years (lags behind all US states)

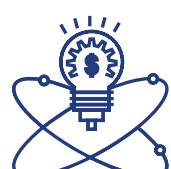


11%

Share of total lending to small and medium-sized enterprises, lowest among OECD countries

*High growth firms exhibited annual revenue growth of at least 20% over 2016-19

...but there are some bright spots



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New AI companies in Ontario in 2019-20



81,200

Tech jobs added in 2016-20 (as many as Seattle, New York and Boston combined)

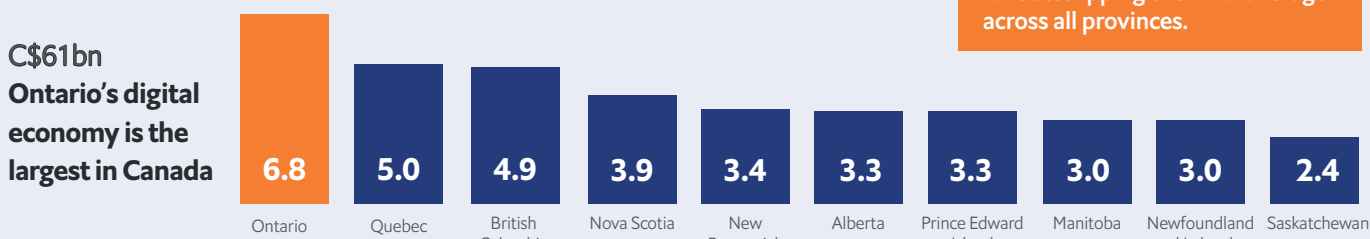


Shopify

Canadian leader in terms of intangible value; doubled its sales during the pandemic

3. The pandemic has accelerated the need for informed decision-making about digital infrastructure, central to a sustainable intangible economy.

Size of digital economy (% of GDP) 2019



*The digital economy includes production of digital goods and services, specifically digitally delivered products, e-commerce, and digital infrastructure.

New needs and risks are emerging around infrastructure and resilience



Accessibility

12%

of Ontario's population has little or no high-speed internet access



Competitiveness

21%

of Ontario businesses plan to invest in e-commerce this year



Cybersecurity

1 in 4

Canadian businesses experienced a cyber-attack in 2021



Sustainability

Intangible IP and a focus on climate have propelled growth in Ontario's clean tech sector

4. To support growth, Ontario should strengthen intangible economy-specific education and skills training

Ontario needs better matching of skilled workers to intangible-related jobs

5.2%

vacancy rate in intangible sectors, which is also growing

55%

of entrepreneurs reported difficulty hiring employees



5th

in Canada in labor force participation among college graduates, despite having a more highly educated population than any other province or advanced country

Integrate work opportunities into education

Only **57%** of graduates participate in internships, co-op programs, clinical placements and field experiences

Ontario's **C\$200m Skills Development Fund** has helped 280,000 workers and job seekers advance in their careers

Strengthen the STEM pipeline

11% jobs in STEM fields (2nd in Canada)

Down 5 percentage points: share of STEM graduates employed in a STEM field, 2006-16

Immigrants in STEM fields earn **28%** less compared with their Canadian-born counterparts

Conclusion

Across Canadian companies, the **share of intangible assets** to total market capitalization **reached 53% in 2021**, up five percentage points in two years.

Intangibles have become increasingly vital for provincial development. However, **comprehensive information about the intangible economy is limited or lagging**, constraining our understanding about how to realize its full potential. Better data and policies will be crucial for informing Ontario's innovation strategies of the future.

Source for all data presented: Economist Impact. "The scale and potential of Ontario's intangible economy," 2022.

The research was developed by Economist Impact and is supported by CPA Ontario. The views and opinions expressed in this publication are those of Economist Impact and not the authoritative position or guidance of CPA Ontario.