



There is a concerning gap in Technology Governance in Canada's Top Companies

Over the last decade the impact of technology on business and society at large has been profound. The call to “Digital Transformation” to ensure the continuity of business has been amplifying in recent years and during 2020 reached feverish pitch. Much has been written about the accelerated pace of change and positive contributions technology has made in dealing with the Covid-19 global pandemic. As new routines are taking root leaders are looking toward the future and what it will look like for their organizations.

Technology will take a predominant role going forward, yet this new reality will drive unfamiliar dialogue for many Board of Directors. Today, most boards do not consider digital technologies in their strategic conversations and others focus their technology attention on cybersecurity, delegated to the Risk or Audit Committee. This will be insufficient going forward.

For boards to fulfill their primary roles of stewardship and guiding strategy, directors need to be interested in how evolving technologies will likely impact their organization and their competitive landscape. Boards should be embarking on their own digital transformation which we recommend would involve board-level education, having the nomination committee prioritize digital directors, and establishing a customized series of digital impact reports with read-outs being a standing agenda item.

Many companies are leveraging operations technologies in their processes very well - manufacturing, engineering, energy and resources sectors in particular. These boards, with industry expert directors, appear to be well covered in terms of understanding the niche automation and process improvement technologies in place or being proposed. Our research was designed to understand the emerging digital technologies that have been the most significant disruptors or drivers of business in recent years.

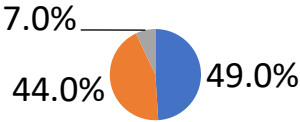
Research was undertaken in November 2020 to understand the state of digital-savvy directors of the Top 100 TSX listed companies by revenue; organizations with revenue over

\$3B, approximately.

The results of our study are concerning.

Only 7% of directors of Canada’s Top 100 TSX listed companies have technology expertise.

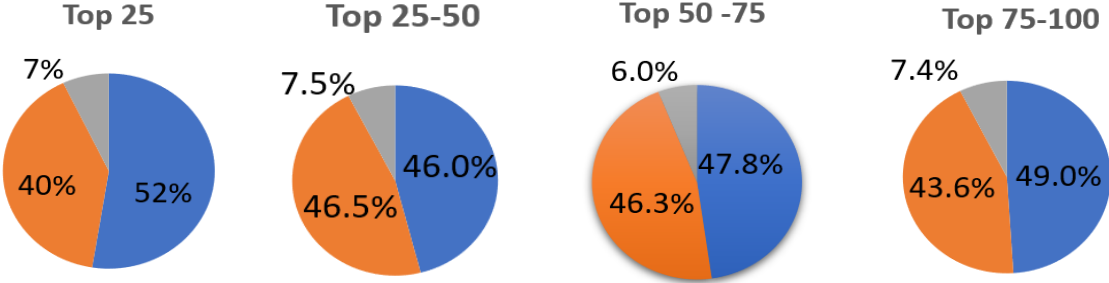
Top 100
TSX Company Board Composition



■ Legal, Finance, Audit ■ Other less Technology ■ Technology

Even more troubling is that 50% of these companies have no directors with technology backgrounds, 36% have 1 director and 14% have 2 or more. This being the case, it seems unlikely that impacts of emerging technologies and strategies to future proof the organization are being given their due attention at the board level.

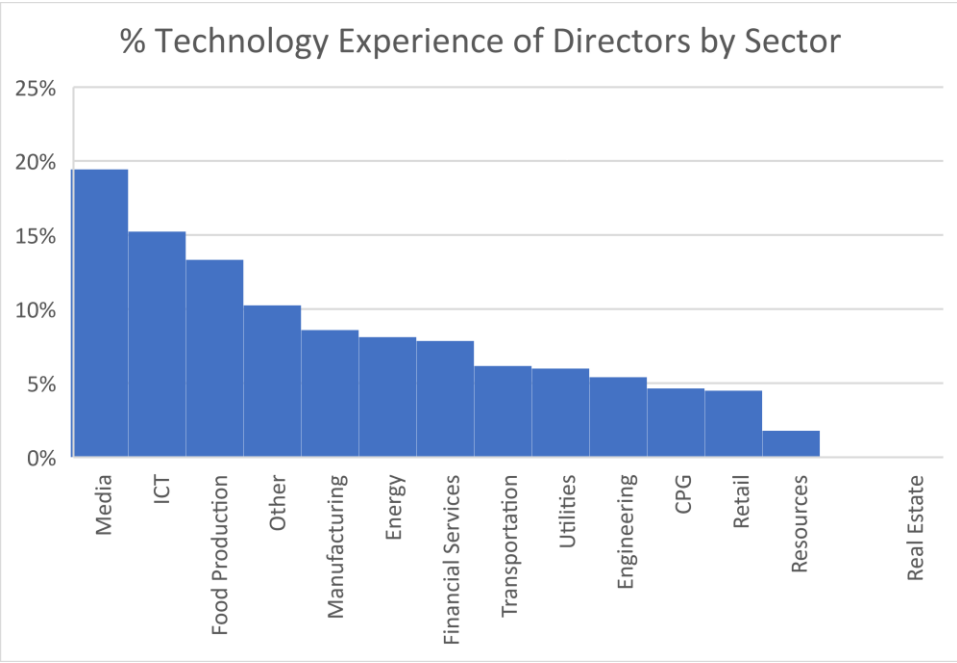
Interestingly, the number of digital savvy directors are consistent regardless of the size of the company.



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Further review of the data by sector tells another interesting story. In industries where technology is at the core, such as Media and Information and Communications Technologies (ICT), where one would expect management to be providing high value support in reporting to the board, digital-savvy-directors are more prevalent.

Surprisingly, retail and consumer products companies (CPG) have very few directors – 4% and 5% respectively - when these industries are the best poised to leverage technologies such as e-commerce, social



media, AI and data analytics to enhance the customer journey and experience. It is these industries that would benefit the most from the insight, foresight and recalibration of strategy, that are among the most important value contributions a Board of Directors can provide.

A 2019 study at MIT Sloan CISR¹ sought to understand if Digitally-Savvy Boards perform better. Researchers looked at 40,000+ director biographies across the NYSE and Nasdaq listed companies, eventually culling to 1,223 organizations with over \$1B in revenue. While they discovered that boards with 1 or 2 digital directors did not significantly impact the financial performance, once an organization had 3 or more directors with technology experience, the positive impact was remarkable.

¹ Peter Weill, Stephanie L. Woerner, Thomas Apel, and Jennifer Banner, “Companies with a Digitally Savvy Board Perform Better,” MIT Sloan Center for Information Systems Research (CISR), vol. XIX, no. 1, January 17, 2019, https://c isr.m it.edu/publication/2019_0101_DigitallySavvyBoards_WeillWoernerApelBanner

Digitally-Savvy Boards out-performed non-savvy boards on 4 highly valued metrics:

- 38% Revenue Growth (over 3 years)
- 34% higher ROA
- 34% Market Cap Growth
- 17% in Profit Margin

While the digital savviness of directors in the US by industry sector is similar to Canada’s, US companies have almost 4 times as many digital-savvy directors as leading Canadian firms. Considered by industry sector, the information industries have the highest number, while retail, transportation, construction and mining have among the lowest. The difference in digital expertise between US (NYSE/NASD) and Canadian (TSE) company boards should cause Canada’s Top 100 to take notice and action.

		% of Industry with a Digitally Savvy Board (US)/Technology Experienced Director(s) (CA)	
		USA [1,233 NYSE/NASD]	Canada [Top 100 TSX]
The MIT study defines a digital-savvy board as having 3 or more technology experienced board directors. If this definition were applied to the Canadian Top 100 only 8 companies would qualify as digitally-savvy with the majority (62.5%) in Media and ICT sectors.	All Industries averaged	24%	7%
	Information Industries²	57%	16.2%
	Retail	24%	4%
	Transportation, Construction & Mining³	< 10	3.2%

² Combined Canada’s Media and ICT industry

³ Combined Canada’s Transportation, Real Estate and Resources industries

Extrapolating the MIT research on company performance based on the composition of the board by skill sets, we can draw correlations to Canada's performance in the World Economic Forum's (WEF) *Global Competitiveness Index* (GCI). Since 2013 Canada has been in the top 15 countries in the world for overall Global Competitiveness. However, in 2020 the country has fallen to 17th place, despite Toronto performing well in the Top S&T Clusters (Science and Technology) at #39, one of only two North American city/clusters in the Top 100 globally. (San Francisco was #5). This ranking reflects the positive weighting given to Toronto area start-up infrastructure, accelerators, incubators and university partnerships.

Innovation is critical to Canada's success and adoption of technology and digital transformation is essential to innovation. We must reshape the composition of our Board of Directors to meet the needs of today's and tomorrow's globally competitive organizations.

In an informal study of approximately 60 of Canada's top companies in 2017, over 80% of the CIO or IT leaders stated that they met with or presented to the Board of Directors either "rarely or never". Hopefully, the impact of Covid-19 during 2020 has seen top technology leaders be more engaged with the board, although that engagement has likely been tactical on COVID response rather than strategic to the long term sustainable opportunities for the organization.

By relegating technology and digital transformation discussions to a sub-committee of the board, Canada's top companies risk being overtaken by more agile competitors or new entrants who have leveraged technological advances to deliver increasing value.

As boards approach annual renewals and nomination cycles, care should be taken to ensure that technology expertise is a top skill set recruited for. If a vacancy is not near term, organizations might consider accommodating the addition of these critical skills by expanding the size of the Board, even if only transitionally. In parallel, increasing board education on this topic, and providing a technology update as a standing agenda item can help to build confidence across the board, and can serve to generate questions which will drive new insight and ideas.

The impact of technology on organizations is only going to accelerate. Just as financial expertise is essential to the board's ability to provide oversight, insight and foresight on the strategy and performance of the organization, so goes the need for directors experienced in technology. Without regular consideration of the risks and opportunities being driven by emerging technologies and digital transformation, the board will have great difficulty executing their duty of care.

Mary Whittle, MBA, ICD.D is an IT Consultant helping business leaders understand the implications of technology on their organizations today and in the future. She has developed a series of workshops on the Fundamentals of Technology and Digital Transformation specifically for Board of Directors and other non-technical executives. Visit www.strategic-matters.com for more information.