

## THE FUTURE OF WORK

Elizabeth Dhuey  
University of Toronto Scarborough

### Issue

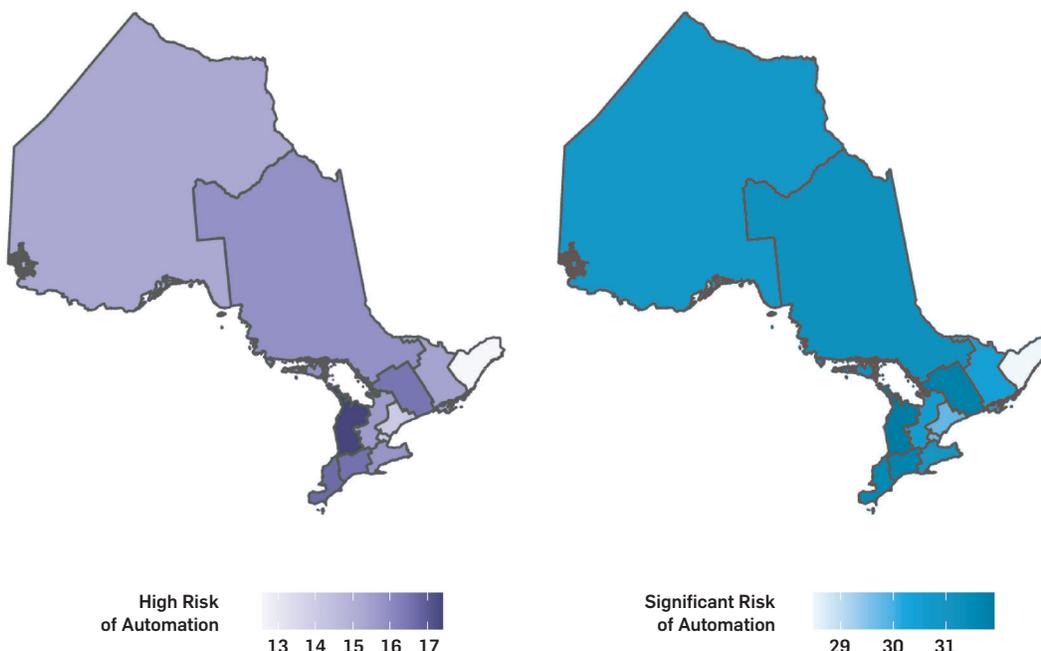
The nature of work in Ontario is transforming, and the COVID-19 pandemic has accelerated those changes. It has also exposed the precarity of many sectors of the economy. The effects of automation, the gig economy, and job polarization are already being felt by the average Ontarian, and these effects will only be amplified over time. To protect workers, both now and in the future, Ontario needs to embrace these changes while doing everything in its power to protect and support workers during this time of unprecedented change.

### Overview

#### *Automation and Technology Changes*

Though the “future of work” has been a topic of concern for the last decade, the COVID-19 pandemic has made labour market instabilities a more pressing issue for policymakers. Technology is rapidly transforming the kinds of jobs available to Ontarians, causing widespread skills mismatches (workers' skills not appropriate for their currently held positions), skills shortages (workers' skills not appropriate for unfilled jobs), and labour shortages (overall lack of workers available to work). The labour demands created by these technological changes are also causing employment polarization and diverging job quality—forces that in turn increase social inequality.

Figure 1: The Share of Jobs at Risk of Automation Varies Across Regions in Ontario



Data from OECD (2020), 'The local impacts of automation in Canada', in *Preparing for the Future of Work in Canada*, OECD Publishing, Paris, <https://doi.org/10.1787/cc3455c3-en>.

The OECD [estimates](#) that close to half of all jobs in Ontario are at risk for automation. However, the share of those at-risk jobs varies geographically. The regions that face a higher risk of losing jobs to automation have lower shares of working-age population, are more rural, are more likely to have large goods-producing sectors and have workers with lower skill levels.

The shifting labour market is garnering a great deal of legislative attention, speculation, and more recently, investment. The federal government has invested large sums into the [Future Skills Centre](#), a research hub that spearheads programs and research related to the future of work in Canada. At the provincial level, the Minister of Labour, Training, and Skills Development released a report by the [Ontario Workforce Recovery Advisory Committee](#) on the future of work in November 2021. Its recommendations have already

led to [policy changes](#), such as banning the use of non-compete agreements, and the removal of barriers for internationally trained professionals to get licensed. However, there is still room for improvement, as [Canada sits well below](#) the OECD average in terms of the amount of spending on active labour market policies measured as a percentage of GDP.

### ***The Care Economy***

The focus on the future of work should not only be in areas typically thought of as “high tech.” The care economy—the sector of economic activities related to the provision of social and material care—accounts for about [20% of all jobs](#) in Canada. The World Economic Forum [estimates](#) that this proportion will increase precipitously in the next decade. Because care-related jobs are among the least automatable, they can potentially serve as a strong foundation for the economy as the labour market undergoes a transformation. The care economy also plays a crucial role in maintaining economic stability by creating a supported and healthy workforce.

### ***Innovation***

Lagging rates of innovation have plagued Ontario’s economy for decades. More specifically, Ontario earned a “C” in the Conference Board of Canada’s [Innovation Report Card](#) in 2021. Though it scored higher than any other province in Canada, Ontario still lagged behind nations like Switzerland, Norway, and Austria. Because companies that [invest in innovation through a crisis](#) have historically outperformed their peers during the recovery, 2022 might be the ideal time for Ontario to support innovation more proactively across numerous sectors and industries.

## **The Need For Reform**

### ***Skills, more skills, and the correct skills are required***

[Currently, 62% of sectors in Ontario](#) are facing labour shortages. This problem is due partially to the upheavals of the pandemic, but the labour market before COVID-19 was facing pronounced skills shortages in the skilled trades, data science and analytics, and computer science, among others.

**TABLE 1: *Skills shortages in 2019, Ontario***

Basic digital	4%
Computer science	15%
Information Technology (IT)	11%
General data science and analytics	16%
Management	11%
Business	10%
International business	5%
Skilled trades	59%
Design	11%

Skills mismatch is also a pervasive issue. Overall, about [13%](#) of Canadian workers have skills mismatched to their jobs, and there is significant variation across demographic groups. Women, immigrants, and older workers are more likely to be under-skilled for their jobs.

Unfortunately, the problem of skills mismatch cannot be solved by simply retraining workers. On-the-job training is challenging because firms don't have incentives to provide general human capital training to their workers. The alternative, government-supported or -provided training, also has historically mixed results. The Nobel award-winning economist [David Card](#) found that classroom and on-the-job training programs were not particularly effective in the short run, but had more positive relative impacts after two years. The University of Toronto's [FutureSkills Research Lab](#) has found [significantly less evidence](#) of the effectiveness of government-supported training programs in Canada.

***Primary and secondary education need support post-COVID-19***

[Ontario](#) currently has little vision and few guidelines in place to respond to the educational impacts of COVID-19 on students. This comes after years of [under-investing](#) in primary and secondary education. Ontario's students of today are Ontario's workers of the future – the ones that will be directly impacted by the increasing job polarization of the future.

***The care economy is a foundation that needs to be repaired and reinforced***

The [care economy](#) in Ontario needs a complete overhaul. Prior to the pandemic, understaffing and high turnover had been a recurrent problem. These issues have only been magnified during the last two years, with COVID-19 exposing both the importance and the fragility of Ontario's care economy.

***Innovation needs to be embraced***

Innovation is a driving force behind economic growth and prosperity. Ontario needs to harness this force and use it to benefit the entire citizenry. More specifically, Ontario needs to ensure that innovation helps citizens across the income distribution, as uneven benefits can create anxieties about the future that in turn slows down the overall pace of innovation.

**How To Move Forward*****Near term***

- Create opportunities for marginalized populations in the labour market. Ontario is full of underutilized talent. Workers with less work experience or differing education and employment trajectories need to be embraced and supported more fully in job assistance and reskilling programs. All current and new programming should be required to do an analysis to assess the potential impacts on diverse groups of individuals (similar to a [GBA+ analysis](#)).
- Focus on reshuffling workers in declining industries into new jobs that require a similar skillset instead of focusing on providing them with new or increased skills. This reshuffling process will require improved information about skills in the labour market.
- Require employers to provide workers with paid time off to reskill. Expecting workers to engage in reskilling efforts only during periods of unemployment or while trying to work a full-time job is neither realistic nor productive.
- Require rigorous evaluations of all training and education programs and report the results of the evaluations to the public. Ontario has a [dearth of evaluations](#) of its programs and this needs to be remedied.
- Stop stalling on a federal child-care deal. This is a fundamental step in repairing a broken component of the care economy and will prevent more migration of families to other provinces.

### **Longer term**

- Invest more in primary and secondary education, not less. Ontario's Science Table on COVID-19 [estimates](#) that each month of school loss that students experience will cause a 1% drop in their lifetime earnings. It also decreases the national income by 0.5% per year: a GDP loss of \$1.6 trillion CAD. Without a proper investment into our school system at this crucial moment, the Ontario economy will falter in the future.
- The care economy needs to be stabilized and expanded. Ontario needs to make sure there are enough skilled workers, and that those workers enjoy sustainable working conditions. Public spending on this social infrastructure will reap economic rewards in the future.
- Ensure investments in innovation that benefit everyone. Many Ontarians and [Ontario businesses](#) are moving out of the province to seek better long-term opportunities. In the last year, Ontario saw the [most citizens moving out](#) of the province since 1990. The province can combat this wave of emigration by expanding investment in ways that ensure the whole population reaps the rewards.

*Elizabeth Dhuey is Assoc Professor of Economics at University of Toronto Scarborough and co-Director of Future Skills Lab.*