

The Social Sciences and Humanities Research Council in collaboration with the Future Skills Centre

SSHRC's Imagining Canada's Future initiative mobilizes social sciences and humanities research to address emerging economic, societal and knowledge needs for Canada, and help guide decision-making across all sectors toward a better future. This evidence brief addresses the Future Challenge Area of: **Skills and Work in the Digital Economy**

Digital transformation of work: Gender considerations, impact on racialized women, and opportunities for skills retraining and entrepreneurship

About the project

The digital transformation of Canadian workplaces has been accelerated significantly by spread of COVID-19. The adjustment to remote work, digitalization of product and service delivery, and automation of workflows have impacted some groups harder than others. Women, especially racialized immigrant women, have been and likely will continue to be disproportionately impacted by these structural changes. Although gender biases in the digitization of the workforce have previously been explored, often missing is a discussion on how to overcome the cumulative impact of gender, immigration status, and race through these transformations. Our interdisciplinary research team from political science, economics, and sociology developed this knowledge synthesis to assist policy-makers (municipal, provincial, and federal

government), academics in a variety of disciplinary fields, and stakeholders such as industry associations and labour groups to:

- identify how and where Canada's racialized immigrant women have been most impacted by the digital transformation of workplaces, particularly those transformations accelerated by COVID-19 lockdowns and ensuing economic downturn; and
- synthesize knowledge from both Canada and other advanced economies on successful reskilling approaches that equip racialized immigrant women workers to take advantage of digital transformations in the economy and workplace.

Key findings

- The impact of digitization of work can be categorized into three broad categories: (1) job creation, (2) job change, and (3) job displacement. Skilled and non-routine labour jobs are expected to be created, while low-skill and routine jobs are expected to be lost. Most jobs will at least change their task structure, which will require existing workers to obtain new skills to remain employed. While many firms are implementing in-house training programs, it is difficult to determine their return on investment.
- Sectors that have lagged in technological innovation will face greater challenges in terms of obtaining strong technological talent and upskilling existing workers to perform the new tasks necessary to keep up with more innovative firms. Small firms in each sector may struggle to afford the digital infrastructure and talent while the inertia of large firms could cause them to lose their competitiveness in a changing market.
- Digital transformation is opening new opportunities in entrepreneurship and the gig economy that could provide avenues for marginalized groups to break the "glass ceiling"; however they also bring new challenges in the rise of precarious work and the loss of boundaries between work and personal life.
- Positive impacts of the digital transformation of work on women include greater access to employment, career flexibility, and the ability to work from home. Some reports expect women-dominated occupations to be less affected by digitalization in the short term due to their psycho-social nature. However, these jobs tend to have lower income, and there continue to be barriers to women obtaining higher-paying positions such as those in STEM.

- There is a lack of discussion in the existing literature on the cumulative impact of gender, immigration status, and race with digital transformation. Racialized and immigrant women earn less on average than racialized and immigrant men as well as non-racialized and/or Canadian-born women. Not only are they in a worse economic position to begin with, but they are also more likely to be affected by digitalization because of the industries in which they
- work, labour market discrimination, and their lack of a financial safety net to retrain or acquire new skills.
- Existing adult skills training programs in Canada are underfunded, lack co-ordination between the provinces, provide insufficient outreach to people most in need of skills training (such as those in rural and remote locations), and lack support for lifelong learning.

Policy implications

- Existing adult skills training programs in Canada are focused on bringing workers to market quickly rather than teaching them how to build sustainable careers and navigate changing market conditions, including the need for evolving digital skillsets. In the U.S., the Career Pathways model is a program that combines in-house sector-based training with modular post-secondary training that assists participants not only in obtaining a job but in growing their career to more advanced and lucrative positions. These types of programs must be developed in Canada to ensure that marginalized groups do not hit a "glass ceiling" in their careers.
- To provide racialized and immigrant women the support needed to take advantage of the digital transformation of work, it is necessary not only to focus on skills training and policy mechanisms but to have a comprehensive and global understanding of the challenges that prevent vulnerable groups from taking advantage of digital transformations of work. There is a misperception that women are not good at science and technology because they have strong soft skills, yet what is more often the case is that women are not socialized or encouraged to pursue STEM higher education and more technical work.

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FURTHER INFORMATION

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The views expressed in this evidence brief are those of the authors and not those of SSHRC, the Future Skills Centre or the Government

SSHRC is a funding agency of the Government of Canada. Through research grants, fellowships and scholarships, SSHRC supports research that provides key insights on the social, cultural, environmental and economic challenges and opportunities of our ever-changing world.

The Future Skills Centre (FSC) is a forward-thinking centre for research and collaboration, dedicated to preparing Canadians for employment success. As a pan-Canadian community, we are collaborating to rigorously identify, test, measure and share innovative approaches to assessing and developing the skills Canadians need to thrive in the days and years ahead.