



Boosting productivity: Investing in skills development and workforce wellness in the manufacturing sector

Canada's manufacturing sector is facing a crisis in productivity, impacting the country's economic prosperity and threatening the sustainability of the current standard of living. A lack of investment in workers is making qualified people harder to find and harder to retain.

The challenge

Canada is falling behind, according to global productivity measures. Productivity can be measured through capital intensity (capacity of machinery), labour composition (workforce skills and training), and more complex multi-factor measures (competition, management practices, or innovation like machine learning and artificial intelligence). Canada ranked 18th out of 38 OECD countries in productivity, producing only 58 per cent of the output of the top country, and ranked 8th in growth in productivity.¹ Canada's productivity is now the second-lowest in the G7.² Not only is Canada falling behind on productivity, it is also not growing fast enough to catch up.

In a recent speech, the Senior Deputy Governor of the Bank of Canada pointed to a range of factors—including training and skills development—contributing to Canada's low productivity figures. “When a business gives workers better tools and better training, those workers can produce more,” she said.³ In the period between 2012 and 2021, Canada's capital productivity was roughly three times that of labour productivity,⁴ showing a major lag in how Canada's businesses are investing in labour.

To sustain the workforce, more investment is needed for skills development and training to improve the overall capability of the workforce. The demand for skilled workers is not slowing, with specialized skills needed in the manufacturing sector, among others.⁵ This will be an ongoing need, as new manufacturing technology becomes available and manufacturing processes evolve. The days of imagining manufacturing as simple, repetitive tasks are behind us.

What's driving this challenge?

Many workers are leaving the manufacturing sector because they are frustrated by lower wages or lower benefits than they expect, and less tangible factors like feeling a lack of purpose, a misalignment of personal and corporate values, and poor relationships with management.⁶ The issue of wages and benefits is concerning, because without an increase in productivity, sustained growth of wages and benefits is not possible for employers to maintain.⁷ The less tangible expectations of employees require a broader perspective on what workers want from a job and what they expect from a workplace.

Workplace hazards—physical and mental—are also creating challenges for manufacturing. Physical injury on the job is always a concern, and increasingly there are concerns about mental health risks like PTSD after suffering a major injury on the job.⁸ There are also chronic mental health concerns that can hamper productivity.



Almost 20 per cent of Canadian workers have a mental health condition, such as depression or anxiety. More than 20 per cent make drug claims for a chronic mental health condition and 36 per cent of workers on long-term disability report mental health conditions as the cause.⁹ For the skilled trades, mental health issues often go unreported or under-reported because of workplace cultural norms that focus on physical outputs and can stigmatize mental health concerns.¹⁰ Mental health risks have productivity impacts when workers are leaving jobs or concerned about their jobs.

These concerns are impacting companies' ability to find qualified workers, especially workers for skilled trades occupations. More than 80 per cent of manufacturers are facing labour availability challenges and are calling on governments to support employer-led initiatives to upskill and reskill workers who are seeking employment in the manufacturing sector.¹¹

Productivity is dependent on a steady flow of qualified workers with the right skills to contribute today, and be willing to evolve and adapt to contribute tomorrow. Supporting employer-led initiatives would help offset the cost of training new workers, and likely improve productivity by retaining workers.



The impacts

If manufacturing productivity remains low, it will limit Canada's ability to compete internationally, and will ultimately impact Canada's overall economic prosperity.

Impact on communities

The cost of not adapting is the aggregate opportunity cost of missing out and will translate into real impacts for Canadian workers, families, communities and companies who cannot compete because of low productivity. Canada's relative standard of living—measured by GDP per capita—decreased significantly between 1981 and 2021, falling from 6th globally to 13th. Projections show that this figure could continue slipping into 2026 if nothing is done to address productivity.¹²

Missing economic opportunities

The labour shortages are creating opportunity costs already, with worrying statistics:¹³

- 62 per cent of manufacturers have lost contracts, faced delays, or turned down contracts because they did not have enough workers to deliver, at a cost of \$7.2 billion in lost sales or penalties for late delivery
- 43 per cent of companies have postponed or cancelled projects because of labour shortages, at a cost of \$5.4 billion in lost investment
- 80 per cent of companies are facing skilled labour shortages
- 15 per cent of companies have considered moving operations abroad for lack of workers

Missing out on the future

There is also a risk that Canada will miss out on growth in new sectors and sub-sectors. An estimated eight out of every 10 economic sectors will be impacted by the acceleration of green and net-zero technologies, with 46 per cent of jobs in natural resources and agriculture impacted by net-zero technologies and 40 per cent of jobs in skilled trades, transport and equipment.¹⁴ The manufacturing sector for net-zero technologies is growing, with 17.2 per cent of the manufacturing and utilities sector in Canada already comprising net-zero production.¹⁵ Productivity challenges will be creating impacts well into the future if Canada does not adapt.

Costs of turnover

Turnover is another area where employers face hidden—but very real—costs that impact productivity. A labour market study showed that it costs on average \$30,000 for employers to replace a worker each year, based on the cost of hiring and the loss of productivity when a worker leaves.¹⁶ When employees leave a job, employers face further impacts on overall productivity through the costs of finding replacement workers.

Overcoming the challenge

The complexity of productivity and economic output is such that there will be no single solution that will address all aspects of the challenge. If improving the worker experience will help improve productivity, there are a range of things that can be done for workers and their leaders to address these challenges.

- Improving worker safety and skills development
- Occupational health and wellness support
- Mental health support
- Training for leaders

Improving worker safety and skills development

One of the key areas to focus on is training on the job. Providing comprehensive training on processes, equipment and the correct approach ensures that workers are well-prepared to handle their tasks efficiently. Implementing pathways to red seal or other relevant accreditations can further motivate workers by offering them clear career progression opportunities.

Using technology for training, especially virtual reality (VR) technology, can make the process faster, cheaper and safer, reducing the overall time-to-competency with less instructor input. Additionally, the right technology can facilitate validation of skills and training programs to ensure that the training is effective and meets the required standards.

Upskilling is another vital aspect of improving worker experience. As new processes and equipment are introduced, it is essential to provide training that leverages existing knowledge and skills into these new areas. This is particularly important for foreign workers who may have some skills but need additional training to fully integrate into the workforce. Expanding the existing workforce skills base with new training programs not only enhances individual capabilities but also contributes to the overall growth and adaptability of the organization.



Health and safety training is paramount in the manufacturing sector. Ensuring that workers are well-versed in WHMIS (Workplace Hazardous Materials Information System) and HAZMAT (hazardous materials) protocols, as well as occupational health and safety (OHS) practices, is essential for maintaining a safe working environment. Training workers in self-care to stay safe and providing first aid training to help others in case of emergencies can significantly reduce workplace accidents and injuries. By prioritizing health and safety training, organizations can create a safer and more supportive work environment for their employees and reduce turnover.

Occupational health and wellness support

Providing occupational health and wellness support in the manufacturing sector offers many benefits that enhance the worker experience. Having medical professionals on-site ensures that injured workers receive prompt attention, which can mitigate the severity of injuries and expedite recovery times. This immediate care not only improves the health outcomes for workers but also reduces downtime and maintains productivity levels.



Not every manufacturing organization can provide on-site health services, but providing access to external or contracted occupational health and wellness experts can also play a crucial role in wellness and injury prevention. Regular health check-ups can identify potential issues early, allowing for timely interventions and preventing more severe health problems down the line.

Occupational therapists and other health experts can provide proactive health management, with programs that address issues before they occur. This includes both physical considerations, such as ergonomic assessments before workers report musculoskeletal injuries and mental health support to employees before they start feeling stressed.

These services are particularly vital for temporary and immigrant workers, who may face barriers in accessing healthcare. On-site health services ensure that all workers, regardless of their employment status or background, have access to essential healthcare. This inclusivity fosters a safer and more supportive work environment, ultimately leading to higher job satisfaction and retention rates. By prioritizing worker health, manufacturing companies can create a more resilient and engaged workforce and reduce turnover due to injuries, illness, burnout or disengagement.

Mental health supports

Mental health support is essential for fostering a healthy and productive manufacturing workforce. Implementing mental health safeguards can significantly enhance workers' well-being. By educating employees on the warning signs of mental health issues and substance abuse, companies can create a more aware and supportive environment. This proactive approach helps in early identification and intervention, preventing minor issues from escalating into more severe problems.

Employers must also recognize the needs of neurodivergent employees and foster an inclusive environment that reflects these differences. Providing consistent workspaces and clear communication can alleviate stress for some employees, reducing anxiety and improving productivity. Other employees may benefit from reduced noise or adjustments in light conditions to perform their best. Additionally, providing access to mental health resources and support can help all employees manage stress and maintain well-being.

Providing clear pathways for requesting help is equally important. Establishing accessible and confidential support systems ensures that workers feel safe asking for help when needed. This can include on-site counselling services, employee assistance programs and partnerships with mental health professionals. By prioritizing mental health support, manufacturing companies can reduce absenteeism, improve job satisfaction, and enhance overall productivity.

Training for leaders

Leaders play a pivotal role in employee retention by recognizing the signs of potential issues, whether they are related to job performance, health or mental well-being. Leaders who are trained to identify warning signs early can intervene promptly and provide the necessary support to their team members. This proactive approach not only helps in addressing problems before they escalate but also demonstrates to employees that their well-being is a priority for the organization.

Engaging employees effectively is another critical aspect of employee retention. This begins with hiring for the right fit, ensuring individuals are matched to jobs that they find fulfilling and that they can perform well. Leaders who are skilled in communication and engagement can foster a positive work environment where employees feel valued and fulfilled.

By investing in leadership training, manufacturing companies can create a supportive and responsive workplace culture that enhances employee health and safety, satisfaction and productivity.



References

1. Organisation for Economic Co-operation and Development (OECD), 'OECD Compendium of Productivity Indicators 2023,' https://www.oecd-ilibrary.org/sites/74623e5b-en/1/3/2/index.html?itemId=/content/publication/74623e5b-en&csp_=726cfd36827aced56f33312dd7c53477&itemIGO=oecd&itemContentType=book
2. Ontario360, 'Policy Papers – Taking Productivity Seriously: The Case for an Ontario Productivity Commission,' 19 March 2024. <https://on360.ca/policy-papers/taking-productivity-seriously-the-case-for-an-ontario-productivity-commission/>
3. Carolyn Rogers (Senior Deputy Governor of the Bank of Canada), 'Time to break the glass: Fixing Canada's productivity problem,' Bank of Canada. 26 March 2024. <https://www.bankofcanada.ca/2024/03/time-to-break-the-glass-fixing-canadas-productivity-problem/>
4. Public Policy Forum, 'What is productivity? And why is it such a problem in Canada?'. 3 April 2024. <https://ppforum.ca/policy-speaking/what-is-productivity-and-why-is-it-such-a-problem-in-canada/>
5. Canadian Chamber of Commerce, 'Policy Matters: Canada's Productivity Problem,' <https://chamber.ca/policy-matters-canadas-productivity-problem/>
6. Randstad, '5 reasons why workers in the manufacturing sector leave their jobs,' 20 September 2020. <https://www.randstad.ca/employers/workplace-insights/talent-management/5-reasons-manufacturing-workers-quit-their-jobs/>
7. Nathan Janzen, 'Proof Point: Weak productivity ins threatening Canada's post-pandemic wage growth,' Royal Bank of Canada. 28 February 2024. <https://thoughtleadership.rbc.com/weak-productivity-is-threatening-canadas-post-pandemic-wage-growth/>
8. Shane Mercer, 'Then Now: the progression of Canadian manufacturing,' Canadian Occupational Safety. 27 February 2023. <https://www.thesafetymag.com/ca/topics/manufacturing/then-now-the-progression-of-canadian-manufacturing/437560>
9. Manulife, 'Mental health concerns impact the workplace,' 3 January 2024. <https://www.manulife.ca/business/news/group-benefits-news/how-mental-health-affects-the-workplace.html>
10. Aysha Raad, 'Discussion mental health in the skilled trades,' Canadian Fabricating & Welding. 27 October 2023. <https://www.canadianmetalworking.com/canadianfabricatingandwelding/blog/management/discussing-mental-health-in-the-skilled-trades>
11. Canadian Manufacturers & Exporters, 'Canada leaving almost \$13 billion on the table due to labour and skills shortages in manufacturing,' 25 October 2022. <https://cme-mec.ca/blog/canada-leaving-almost-13-billion-on-the-table-due-to-labour-and-skills-shortages-in-manufacturing/>
12. Jonathan Deslauriers, Robert Gagné, 'The low productivity of Canadian companies threatens our living standards,' 17 April 2023. Policy Options. <https://policyoptions.irpp.org/magazines/april-2023/the-low-productivity-of-canadian-companies-threatens-our-living-standards/>
13. Canadian Manufacturers & Exporters, 'Canada leaving almost \$13 billion on the table due to labour and skills shortages in manufacturing,' 25 October 2022. <https://cme-mec.ca/blog/canada-leaving-almost-13-billion-on-the-table-due-to-labour-and-skills-shortages-in-manufacturing/>
14. Colin Guldemann, Naomi Powell, 'Green Collar Jobs: the skills revolution Canada needs to reach Net Zero,' Royal Bank of Canada. 16 February 2022. https://thoughtleadership.rbc.com/green-collar-jobs-the-skills-revolution-canada-needs-to-reach-net-zero/?_gl=1*1lepfr*_up*MQ.*_ga*MTkxNjYyMjAxNy4xNzIxMTM5ODMz*_ga_89NPCTDXQR*MTcyMTEIMjU0OS4yLjEuMTcyMTEIMjU2Ny40Mi4wLjA.*_ga_22PRMSS*MTcyMTEIMjU0OS4xLjAuMTcyMTEIMjU2Ny4wLjAuMA
15. Ibid.
16. GlobeNewswire, '1 in 3 Canadian Companies Bracing for Higher Employee Turnover in 2024,' Financial Post. 28 February 2024.



Calian® helps people communicate, innovate, learn and lead safe and healthy lives. Every day, our team embodies our core principles of unwavering customer commitment, integrity, innovation, respect and teamwork, to engineer reliable solutions that solve complex challenges. That's Confidence. Engineered.

We are a growing company headquartered in Ottawa with offices and projects spanning North American, European and international markets with a focus on innovative healthcare, communications, learning and cybersecurity solutions.