Intelligence MEMOS



From:	Rosalie Wyonch
To:	Provincial Ministers of Education and Skills Development
Date:	January 24, 2018
Re:	RISE OF THE ROBOTS – WHICH PROVINCES ARE READY?

S ome provinces, with more economic diversification or a concentration of workers in areas that are not very susceptible to automation, appear to be better situated for technological change than others.

In my recent report, <u>Risk and Readiness: The Impact of Automation on Provincial Labour Markets</u>, I assessed the risk workers in each province face from automation against the readiness of workers to adapt to technological change.

Throughout history, technological change has helped lift people out of squalor and poverty, raised standards of living and improved wellbeing. However, it can also be disruptive, rendering specific occupations and skills obsolete, unsettling economic structures and contributing to unemployment and economic uncertainty.

Since provinces vary significantly in industrial and labour market structure, each faces different challenges with respect to automation and technology. To determine the impact of automation on Canada's labour markets, I used the likelihood that each occupation could be automated in combination with labour market information to determine the jobs and industries most susceptible to disruption.

To assess the readiness to adapt to a changing labour market, I consider workers' core skills (literacy and numeracy) and ability to solve problems in a technology rich environment. In addition, to assess whether provinces are ready to adopt new technologies, I consider the employment rate and proportion of the population that hold advanced degrees. High-skill workers are less likely to be automated; moreover, if the past is any guide, the labour market's demand for skills is likely to continue to increase.

In this context, workers in New Brunswick, Newfoundland and Labrador and Saskatchewan are the most susceptible to disruption due to technological change, while those in Ontario, British Columbia and Alberta face the least risk of labour market disruption due to technological change.

To help provinces mitigate the impacts of technological change, there is room for public policy to moderate the effect of technological change on the labour market, primarily in two different ways.

- All governments should continue to adapt existing policies that support workers displaced by technology. Provinces facing a lower risk
 of disruption might be able to mitigate labour market disruption by leveraging existing policies to expand educational or
 unemployment support where necessary. For example, Ottawa has leveraged the existing flexibility of the employment insurance
 program to ensure that workers can return to school without losing their eligibility, and Ontario has expanded access to its Student
 Assistance Program to mature students.
- 2. Provinces at higher risk of labour market disruption should take a broader and longer term approach when developing policy to tackle the challenges associated with technological change. <u>Innovation policy is more likely to be successful</u> if it integrates considerations for talent and knowledge, entrepreneurship and business growth, innovation in government, and clarity of purpose for government support.

Differences in the composition of employment and skills levels across the country highlight priority areas that provincial governments should consider in developing policy responses to adapt to current and future technological change.

Disruption as a result of technological change is not a uniform process, so the policies to tackle it similarly should not be uniform, but should take into account each region's strengths and weaknesses.

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