

HUMAN CAPITAL LAW AND POLICY



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PREPARING CANADA'S WORKFORCE FOR THE NEXT 150: PART ONE – GOVERNMENT DRIVEN SOLUTIONS

HIGHLIGHTS

- In light of Canada's 150th anniversary celebrations this year, there will be many conversations about innovative, exciting ideas to advance national and regional prosperity. During these discussions, it is important not to lose sight of the less exciting—but vital—work of tending to our policy frameworks so that British Columbians are well prepared to succeed amid shifting economic, technological and labour market realities.
- The extent to which new technologies, labour market restructuring, and shifting demographics are transforming the nature of work remains

In light of Canada's 150th anniversary celebrations this year, there will be many conversations about innovative, exciting ideas to advance national and regional prosperity. During these discussions, it is important not to lose sight of the less exciting—but vital—work of tending to our policy frameworks so that British Columbians are well prepared to succeed amid shifting economic, technological and labour market realities. Policy and institutional change tend to be slow. Yet rapid changes in work and technology at a time of chronically sluggish economy-wide productivity growth mean we need to push back against uncertainty and re-tool our human capital strategies for the future.

GROWING DEMAND FOR POLICY INNOVATION – WHICH IS STRUGGLING TO KEEP UP

A number of trends are bearing down on the labour market, from new technologies to demographic developments linked to population aging, high levels of immigration, and growing diversity. And while we know change is under way, more anxiety-inducing is uncertainty about the impact. How quickly will existing jobs be created, altered, or made obsolete by digital technologies? A challenge for policymakers is to strike a balance between understanding the skills that will remain essentially human versus

uncertain. But regardless of how this plays out, there are baseline assumptions about the future of work to guide public policy through a time of change and uncertainty.

- For policy-makers in British Columbia, smart human capital strategies must be a top of mind concern. The challenge will be to strike a balance between the skills that will remain essentially human versus the tasks that will be displaced by technology—and design a workforce development strategy that produces a skillset appropriate to the 21st-century.

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How well is policy responding? In their [2017 Human Capital Trends](#) report, Deloitte sees significant room for improvement. A gap is growing between technological advances and the amount of work being performed, resulting in flat or declining productivity (refer to Figure 1). One might think that the introduction of new technologies would lead to higher productivity, but while this often happens at the enterprise level, it is not apparent in the economy as a whole, with productivity growth in Canada showing no sustained rise.¹

¹ Average Canadian productivity growth between 2004-2014 was 0.9%, or less than 1% a year. OECD, [Compendium of Productivity Indications](#), 2017.

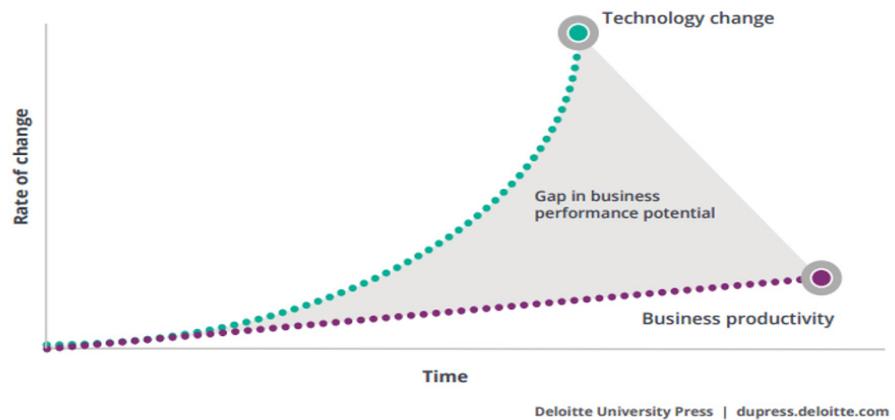
Examining the issue more closely, Deloitte concludes that weaknesses in human capital are a major factor behind Canada’s mediocre productivity record. Figure 2 sheds some light on the situation. Curve 1 depicts the exponential rate of technological progress, based on the theory that computing power is estimated to be doubling in capability [every 2 years](#). Curve 2 shows the pace at which individuals are keeping up, as evidenced by the pervasiveness of mobile devices, integrated lifestyle-tracking apps, etc. Then comes the broad business sector, which is gradually adapting. In last place is government, which moves glacially and has been slow to recalibrate human capital policies – in the areas of education, training and immigration, among others – to meet the needs of a dynamic economy.

What does slow-moving policy look like day-to-day? Arguably, it plays out in part through [increasing job polarization](#), [declining or stagnant living standards](#), and [rising inequality](#). Canada’s performance is not terribly stellar on key productivity indicators compared with many of our OECD compatriots, with one [recent study](#) finding us near the bottom among G7 countries (Figure 3). On a more encouraging note, this is where better policies and better-performing institutions can help.

WHAT DO WE KNOW ABOUT THE FUTURE OF WORK?

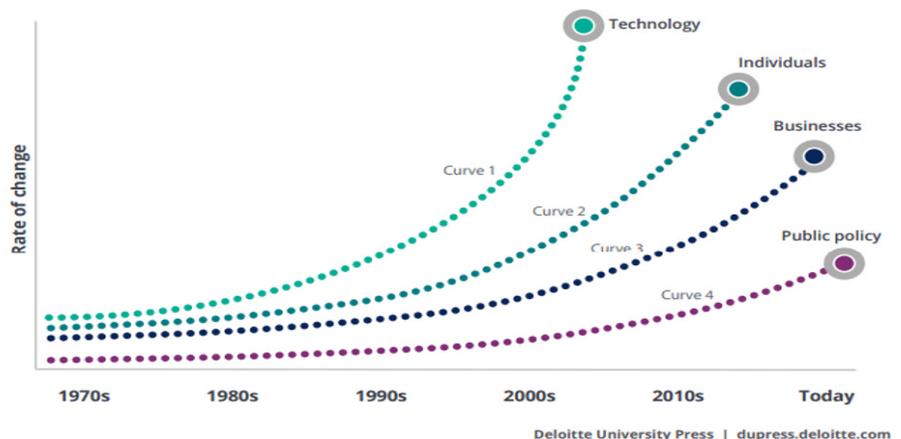
There’s no doubt the world of work is changing. A baseline from which to inform policy is a useful starting point. Based on our reading of the policy and academic literature, here are three reasonable projections of what the labour market is expected to look like in the decades ahead:

FIGURE 1: **WHAT APPEARS TO BE HAPPENING**



Source: Deloitte, [2017 Human Capital Trends](#).

FIGURE 2: **WHAT IS REALLY HAPPENING**

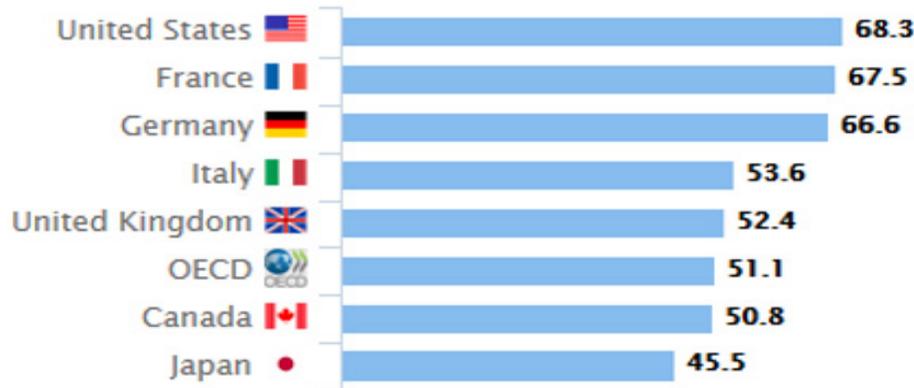


Source: Deloitte, [2017 Human Capital Trends](#).

1. **Less secure.** One often remarked trend is a shift from stable, [predictable employment to more precarious work](#) – employment arrangements that lack the security afforded by more traditional jobs. This includes work that is temporary in nature, features unpredictable hours, and typically provides few or no non-wage benefits, such as extended health or dental care. According to [Statistics Canada](#), 239,000 British Columbians are classified as “unincorporated

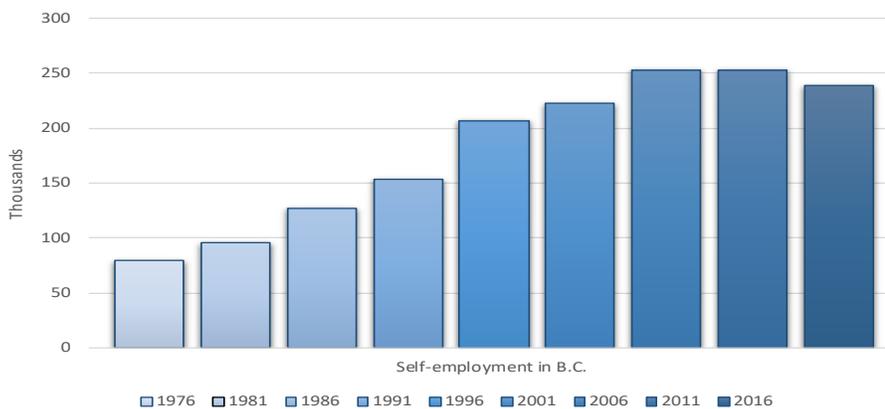
self-employed,” up 67% from 1976. Although this is far from a complete measure of precarious or contingent work, people in this category often go from contract to contract and/or participate in [the sharing or “gig” economy](#). The rise of short-term, insecure work is consistent with an economy that’s being reshaped by technology and associated disruptions to many existing businesses and business models.

FIGURE 3: **LABOUR PRODUCTIVITY IN 2015: G7 COUNTRIES**
GDP PER HOUR WORKED, US DOLLARS, CURRENT PPPs



Source: OECD Compendium of Productivity Indicators 2017.

FIGURE 4: **UNINCORPORATED SELF-EMPLOYMENT, BRITISH COLUMBIA**
1976-2016 (THOUSANDS)



CORRECTION - This chart and references to "unincorporated self-employed" figures on page 2 have been updated since original publication as the original figures mistakenly included *incorporated* self-employment.

Source: LFS, CANSIM [282-0012](#).

2. Polarization between skilled and non-skilled workers. Over the [last thirty years or so](#), skill-biased technological change has fueled the polarization of both employment and wages. Median workers have seen a [slow-down in wage growth and purchasing power](#), with many of those who lack post-secondary credentials experiencing a [decline in real employment earnings](#). Increased polarization leads to greater

inequality in the distribution of jobs, which in turn tends to aggravate overall [income inequality](#).

3. Declining quality of jobs. According to a [recent report](#) by CIBC Economics, employment quality² in Canada is at a 25-year low. This means more people are working part-time instead of full-time (often not by choice), more are self-employed (see Fig. 4), and more are engaged in

relatively low-paid work. Young people between the ages of 15 to 29 are [disproportionately affected](#) by dwindling full-time job opportunities that offer the usual suite of non-wage benefits. The growing share of low-paying, relatively less-secure employment is cause for concern, as it impinges on the ability of younger workers in particular to gain income mobility, save for the future, and start families.

For policy leaders, these trends form a base for priority-setting. They should also serve as a wake-up call that we need to adapt or risk falling further behind on productivity and human capital.

THE GOOD NEWS

The good news is that there are levers available to government that can make a positive difference in the labour market.

Unsurprisingly, there is a [correlation between countries](#) that invest in the right kinds of education and skills development and those that punch above their weight on innovation and productivity. Canada's record is mediocre on both counts. Investing in the right types of [early childhood education](#) is an important starting point. Continuing to focus on the K-12 system to improve [adaptive literacy and quantitative skills](#) should also be a priority. Softer skills, such as communications, creativity and emotional intelligence, are less likely to be automated and can complement the gains stemming from greater use of artificial intelligence and other digital technologies. Additionally, increased

² Defined in this study solely by compensation.

attention towards building scientific and computer literacy can give students a solid foundation for a technology-integrated future (see Fig 5).

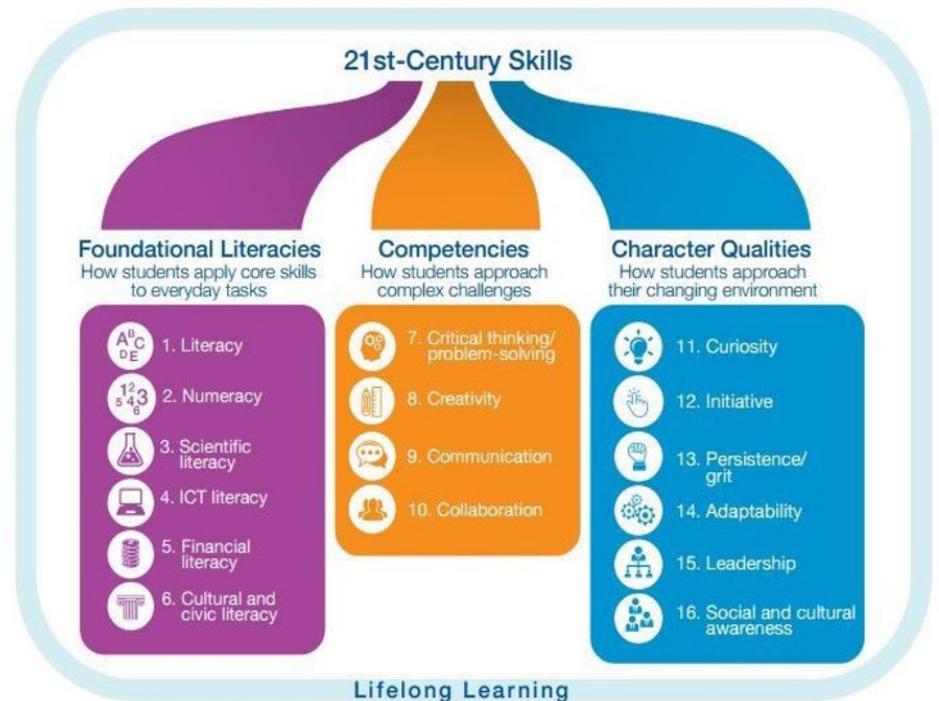
A priority for government is to focus even more on post-secondary education. Research continues to [show](#) a positive correlation between economic prosperity and a highly-educated workforce. Most importantly, post-secondary education, training and upskilling should no longer be considered a one-time event, but rather are becoming a [lifelong process](#).

Governments should also continue to support investment in STEM³-related occupations and the industries that rely on STEM and related technical skills. In an era of waning job quality in some sectors, [STEM-related jobs lead the pack](#) for high-paying, quality jobs.

Human capital potential remains largely untapped in some segments of the population. Many British Columbians are still unable to access post-secondary training, particularly lower-income individuals and First Nations. It is a [common myth](#) that First Nations receive free post-secondary education, but this is not the case. Many are not able to pursue higher education because they lack funding or social supports to do so. Social policy, housing strategies and funding need to be better aligned with skills training so that BC does not miss out on leveraging the talent of our [fastest growing population](#) sub-group.

Modernized social policy could also incentivize another untapped cohort into the labour market – mothers. Increased labour force participation

FIGURE 5: **WHAT SKILLS WILL BE NEEDED THE MOST?**



Source: World Economic Forum, [21st Century Skills](#), 2016.

by mothers with dependent children would boost the economy in several ways – notably, by expanding gross domestic product, augmenting the pool of skills available to employers, and increasing government income and payroll tax revenues. Some estimates suggest that, with improved access to quality child care, increased maternal labour supply could yield [\\$450 million per year](#) in private employment income.

Smart immigration policy adds talent to the workforce and gives the province a competitive edge in the global race to build human capital. BC should work with the federal government to expand its annual allotment to 11,000 under the Provincial Nominee Program (PNP). The PNP program should

also include doctoral and other graduate university-level programs to encourage skilled foreign graduates to remain in BC.

Governments can also incent [private sector training schemes](#) to better equip workers to adapt to new technologies and operating environments. A deeper dive into industry-led upskilling initiatives and human capital strategies will be the focus of a future article.

DRIVING INTO THE FUTURE

The extent to which new technologies, labour market restructuring, and shifting demographics are transforming the nature of work remains uncertain. Some studies estimate up to half of

³ Science, Technology, Engineering, Mathematics and Computer Science.

all jobs are at risk of being eliminated by emerging technologies, while others suggest a milder impact. But regardless of how this plays out, there are baseline assumptions about the future of work to guide public policy through a time of change and uncertainty. For policy-makers in British Columbia, smart human capital strategies must be a top of mind concern. If the workforce is not able to keep up with the pace of change, the province's prosperity will suffer.

But government is not the only party responsible for creating a skilled workforce. Industry is also a key partner, along with educators, communities and First Nations.

Preparing the Workforce for the Next 150: Part Two will highlight industry-driven human capital strategies to help address the challenges and opportunities posed by the changing nature of work.

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