IN-DEPTH RESEARGH REPORT: Analyses and Recommendations for Al and the Future of Work

"Work is one of the most fundamental aspects in a person's life, providing the individual with a means of financial support and, as importantly, a contributory role in society. A person's employment is an essential component of his or her sense of identity, self-worth and emotional well-being. Accordingly, the conditions in which a person works are highly significant in shaping the whole compendium of psychological, emotional and physical elements of a person's dignity and self-respect"

Dickson C.J. in Alberta Reference



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Background

Artificial intelligence (AI) is fundamentally reshaping the global workforce at an unprecedented rapid pace: it is creating extraordinary opportunities and significant challenges for workers, organizations, and societies. The World Economic Forum has stated in its <u>Future of Jobs Report 2025</u> that technological advancements are the most significant drivers of business transformation. In fact, by 2030, it has been projected that there will be 170 million new jobs globally by 2030 compared to 92 million facing displacement—this represents a 22 percent transformation of today's total jobs.

Over the next five years, there will be a great deal of movement and transformation with many workers—the transition to the 2030 job market presents complex sociological, economic, psychological, legal, policy, and ethical challenges that require coordinated responses. While workers are concerned about the security of their jobs, many employers will need to utilize several workforce strategies such as upskilling and reskilling in order to remain competitive.

Employers responded that 86 percent expect that AI will transform their businesses by 2030. This will likely be manifested by the significant change to top jobs and skills. That is, some jobs will grow significantly (like Big Data Specialist, FinTech Engineers, AI and Machine Learning Specialists) due to technological developments including AI, and there will also be some jobs that decline (like Cashiers and Ticket Clerks, Administrative Assistants and Executive Secretaries).

Some workers may be worried about being displaced because their jobs have been devalued as a result of AI. In fact, the Pew Research Centre recently found that in the US, 52 percent of workers are worried, 36 percent are hopeful, 33 percent are overwhelmed, and 29 percent are excited. Indeed, there have been considerable mass layoffs by major companies, where employers have cited AI as the reason.

For instance, we should note that <u>Duolingo</u>, the world's leading language-learning app, has just laid off their contract employees in April, 2025, and replaced them all with AI. Human workers that wrote lessons or innovated ways to translate phrases from one language to another are being let go. This news was announced on top of Duolingo's termination of 10 percent of its workforce last year.

Secondly, <u>Amazon</u> has stated in June, 2025 that it will reduce its workforce as AI replaces human employees. In fact, it has been reported that Amazon is warning its employees that AI will help the company have a smaller workforce in the future.

And thirdly, tech employees have been <u>laid off in 2025</u> citing AI as the reason at Tata Consulting Services, Intel, and Microsoft to name a few. How is this happening? AI is replacing repetitive jobs, companies are making cuts so they can fund AI growth, and AI is helping companies do more with less. Also, junior jobs are not being filled because AI tools can perform these less complicated tasks. Further, companies are removing multiple layers of team leadership (that is, middle management), saying that they can now track performance and coordinate work using automation tools. In California,

there have been over 11,000 jobs lost recently in the Silicon Valley region alone. Many believe that this situation is not a normal downturn, and workers will need to adapt by engaging in upskilling and reskilling training programs.

There may be some cause for concern. In regard to the interplay between humans, machines, and algorithms, there is some question about autonomation versus augmentation: it has been forecasted that the proportional share of tasks performed solely by humans is expected to decline. Today, 47 percent of work tasks are performed mainly by humans alone, with 22 percent performed mainly by technology (machines and algorithms), and 30 percent completed by a combination of both. But by 2030, employers can expect these proportions to be nearly evenly split across these three features. Yet, some assure us that any concern about humans running out of things to do due to automation are misplaced.

The top skills that will be needed by 2030 include AI and big data; networks and cybersecurity; technological literacy; creative thinking; resilience, flexibility, and agility; curiosity and lifelong learning; leadership and social influence; talent management; analytical thinking; environmental stewardship; systems thinking; motivation and self-awareness; empathy and active listening; and design and user experience.

This is why there is an urgent need for upskilling and reskilling the workforce, which is the most common workforce strategy (86 percent of employers). More precisely, for a representative sample of 100 workers, 41 will not require significant training by 2030; 11 will require training, but it will not be accessible to them in the foreseeable future; and 29 will require training and be upskilled within their current roles. Additionally, 19 out of 100 workers will require training and will be reskilled and redeployed within their organization by 2030.

To fund the training, employers expect to fund their own training programmes (86 percent), or use free training (27 percent), government (20 percent), public-private funding (18 percent), and co-funding across the industry (16 percent). Due to training initiatives, employers expect enhanced productivity (77 percent), and improved competitiveness (70 percent).

Given the above findings by the World Economic Forum, it is important to examine work and the meaning that workers attribute to it. Daniel Susskind recently delved deeply into this question in his article, "Work and Meaning in the Age of Al", and concluded that new technologies such as Al could erode the meaning that people get from their work in the short term.

What's more, he concluded that if jobs are lost in the future, the relationship between work and meaning also matters when designing bold policy interventions such as Universal Basic Income (income replacement) and Job Guarantee Schemes (job protection) in the medium term. In other words, the policy design will depend on assumptions about the nature of this underlying relationship between work and meaning. For instance, policymakers must decide whether to simply focus on replacing lost income alone (with a Universal Basic Income) or, if they believe that work is an

important and non-substitutable source of meaning, on protecting jobs for that additional role as well (with a Job Guarantee Scheme).

The OECD Employment Outlook 2025 has examined labour market demographics and suggested that OECD labour markets remain resilient, but there are early signs of economic slowdown. Real wages are currently growing everywhere in the OECD, however, their levels remain below the levels seen in early 2021. Moreover, there is evidence of worsening labour conditions and further labour market tightness. The OECD concludes that it is necessary to create policy action, especially one that supports an aging workforce and invests in skills that are necessary to allow older workers to thrive.

The problem of AI and the future of work extends beyond fears of complete job displacement to fundamental questions on human purpose and meaning. With the introduction of AI in the workforce, there are significant implications for employers and society alike. In the midst of all this change and transformation, employers need to find ways to adapt in order to remain competitive. In particular, employers need to decide which jobs will remain intact, be updated to remain relevant, and which ones will need to be phased out. Employers need to know how to support their departing and transitioning employees and move forward with a reduced workforce. We aim to deal with addressing this problem in issue one.

Additionally, something needs to be done from a public policy perspective to support the significant number of workers who will experience job displacement. The situation is urgent since the changes in AI technologies have been introduced at an extremely rapid pace. This creates a critical window where proactive intervention can shape outcomes and mitigate risks. Although there have been some pilot projects in the world, there are few insights that can help swaths of employees who have lost their jobs permanently due to AI technology disruption. Therefore, we aim to address this challenge in issue two.

More specifically, this report delves into the topic of AI and the future of work. It explains: the current technological landscape; the sociological implications of AI disruption; the Universal Basic Income and the Employment Guarantee; the economic implications of AI disruption; the psychological effects of AI disruption; as well as upskilling and reskilling. Subsequently, we examine legislative considerations involving both AI and Employment Law and policy in our jurisdictions of interest (Canada, the United States, and the European Union) as well as ethical considerations. We then revisit our two issues and propose options and recommendations for tackling them.

ssues

The following are the two issues that we would like to address throughout the report:

1. What can employers do to address the implications of AI disruption to remain competitive and provide support for their departing and transitioning workers?

2. What can we do on a societal level to help the large number of workers who will become permanently displaced due to AI disruption?

The jurisdictions that we are examining in this report are Canada, the United States, the European Union. It is necessary to refine the scope in order to create a concise report, and these jurisdictions are comparable to Canada (our jurisdiction).

Current Technological Landscape

The current AI revolution represents a qualitative shift in machine capabilities, moving beyond rule-based automation to systems that demonstrate reasoning, creativity, and complex problem-solving previously exclusive to humans. In fact, researchers at Northwestern Institute for Policy Research state that:

"In the last few years, artificial intelligence (AI) has moved from a futuristic concept to a powerful technology reshaping our everyday lives. AI tools are driving cars, detecting credit card fraud, scanning X-rays for fractures, composing music—even "helping" kids with their homework"

While a researcher asserts that AI is starting to be very good at creating things that humans like, there is a feeling that AI's effects on job markets will likely unfold gradually. In particular, some believe that there is not likely to be mass layoffs or mass increases in productivity either. As humans, we need to avoid the innovation fallacy, the belief that major advancements in technology automatically drive sweeping social change.

Al may be changing us by supercharging our capabilities, but it may also undermine our expertise and creativity. However, the researchers point out that a large amount of the content we are exposed to on the Internet is generated by models, and this could lead to the homogenization of knowledge. It is possible that experts that rely on these models might start to gradually lose their own domain expertise.

To understand the origins of AI technology, we need to go to Alan Turing and the "Turing Test". Today, AI is reshaping industries across the globe, driving innovation, improving efficiency, and creating new business models. When it comes to automation, modern manufacturing involves AI-powered robots that can assemble products, detect defects, and optimize production schedules without human intervention.

Another area that is being significantly affected by AI is healthcare. AI has been integrated into medical research, diagnosis, and treatment, and it is transforming how we approach health and wellness. The result is that doctors are enabled to make more accurate diagnoses, develop personalized treatment plans, and even predict future health outcomes.

In transportation, AI is being used to power self-driving cars. And in education, AI has helped students as a tutor; correspondingly, AI has helped teachers with lesson planning and grading.

But what makes Al revolutionary? Al is now able to do much of what we can do, such as learning, problem-solving, and decision-making. We have made intelligent systems that can perform tasks that typically require human intelligence. And Al can learn and adapt too. Al systems can analyze vast amounts of data, recognize patterns, and make predictions. What is more, Al has the ability to become more efficient over time.

And how can AI do all this? AI is driven by a combination of advancements in computing power, big data availability, and breakthroughs in machine learning algorithms.

Thus, there are endless possibilities with AI technology, whether it is in the manufacturing, education, finance, retail, or entertainment. As such, we can see that using AI is leading to increased efficiency and productivity, and is improving customer experiences. The impact on human society can only grow.

On July 18, 2025, Deloitte noted a few forces that are likely to shape the future of Ai:

- Agentic AI: autonomous, intelligent systems that can adapt to changing environments, make complex decisions, and collaborate with other agents and humans. This enables organizations to automate not just repetitive tasks, but also dynamic, multistep processes. Agents can be used in customer service to resolve support tickets, supply chains to optimize inventory, and finance to automate portfolio management and do fraud detection. Currently, 56 percent of organizations are not using AI agents, 25 percent are in a pilot phase of use, 13 percent have moderate deployment, and six percent have full-scale deployment. That said, 49 percent say that AI agents will transform their organization in the next two to three years. Early predictions for 2026 involve things like scaling pilots to production, increased focus on governance and compliance, and agentic-focused upskilling and reskilling
- Physical AI: embeds intelligence into the physical world, enabling machines to interact with their environment in meaningful ways. It integrates AI with robotics, autonomous vehicles, the Internet of Things, and digital twins to sense, interpret, and act in the physical world. For example, physical AI can be used with warehouse robots, smart medical devices, or traffic lights. Physical AI can unlock new efficiencies, improve safety, and reduce costs. It can be used in manufacturing with robots and AI-powered quality control systems, in logistics with autonomous vehicles and drones to streamline deliveries and warehouse operations, and in health care with wearable devices and smart sensors to enable real-time monitoring and adaptive therapies. Currently, organizations anticipate that they will use physical AI in the next two years with minimal usage (44 percent), moderate usage (31 percent), extensive usage (13 percent), and full integration (13 percent). Early predictions for 2026 involve paced adoption, focus on safety and security, and harmonization of human-machine collaboration

Sovereign AI: helps to ensure that data, model weights, and compute resources remain within specific national or regional boundaries. Along with addressing regulatory, privacy, and geopolitical concerns, sovereign AI can help build confidence with customers and partners and reduce dependency on foreign technology providers. It can be used in health care to process and store patient data locally to comply with local privacy laws, in finance to ensure that transaction data and AI models remain within national borders, and in the public sector to ensure that government AI systems can be designed to improve transparency and local control. Currently, Al leaders say that data residency constraints and national compute considerations are important to their organizations extremely (38 percent), very much (19 percent), slightly (19 percent), moderately (13 percent), and not at all (13 percent). Yet, it is viewed as more important in the next one to two years as significant (49 percent), moderately (38 percent), to a limited extent (8 percent), and not at all (5 percent). Early predictions for 2026 involve increased regulatory scrutiny, initial demand for sovereign AI solutions, and rise of regional and national AI hubs.

It is important to appreciate that <u>Al chips</u> have made a significant difference in Al capabilities because they provide higher speed and efficiency through the use of smaller, faster transistors. These smaller transistors are quicker and use less energy. And unlike the CPUs, Al Chips also offer Al-optimized design features. There are different types of Al chips:

- FPGAs: these chips can be rearranged "on the fly" in an unprecedented way to make them "hyper-specialized"
- NPUs: these chips are specifically designed for deep learning models and European Union networks
- ASICs: these chips are accelerator chips that are developed for a specific application (AI), and they are applied to fit some applications
- GPUs: these chips help training AI models. Interestingly, these chips were initially invented for applications that required high graphics performance, such as running video games or generating video sequences

With all the wonderful things that AI can do, it is important to appreciate that there are currently <u>several limitations</u>:

- Limited availability of sufficient data
- Al algorithms are susceptible to bias and inaccuracies present in training data, leading to biased outcomes and flawed decision-making processes (Biases may arise from historical data, societal stereotypes, or human annotation errors, resulting in unfair or discriminatory outcomes)

- There is a lack of transparency and explainability since AI systems are "Black boxes": their decision-making processes are complex and cryptic in nature
- There is a significant need for compute: training AI models needs considerable computing that includes GPUs, CPUs and TPUs while deploying requires large distributed resource pools
- Al brings ethical and societal implications such as privacy, security, fairness, accountability, and transparency
- Al systems fail to perform efficiently in domains where specialized domain knowledge or contextual understanding is required
- Al systems are vulnerable to various security threats and adversarial attacks, where malicious actors manipulate inputs or exploit vulnerabilities to deceive or sabotage Al models. This can lead to misleading predictions, system failures, or privacy breaches, which can undermine the trust and reliability of Al systems
- Al systems need continuous learning and adaptation, however, updating and retraining Al models with new data or changing circumstances can be challenging and resource-intensive
- There is a need to comply with legal requirements, which are still in progress and are inconsistent between jurisdictions
- Compared to humans, AI systems are less creative and struggle with nuance with respect to context. AI systems lack emotional intelligence and make decisions based on algorithms and data. Also, AI has ethical and moral limitations that involve a lack of emotion or empathy
- What can be dangerous is that AI systems could manipulate people using deepfakes or algorithms, engage in social surveillance, or create socioeconomic inequality. Worse, AI systems could power autonomous weapons or cause a full-on financial/political crisis, or even progress so rapidly that they become conscious or sentient and act beyond humans' control (potentially maliciously). Even worse, AI might become so powerful that there could be an erosion of skills and mental deterioration among humans

Sociological Implications of AI Disruption

It seemed that we were first <u>hit with the COVID-19 pandemic in 2020</u>, and then ChatGPT <u>was introduced soon thereafter in November, 2022</u>. Needless to say, things have never been the same in the world of work since these events took place.

According to the <u>International Labour Organization</u>, we faced multiple challenges as a result of the pandemic that have threatened our global recovery. For example, the combination of high inflation, job losses, tightening monetary policy, and economic slowdown has led to market uncertainty.

Moreover, the <u>National Library of Medicine</u> has pointed out that the pandemic abruptly changed all aspects of our lives, including the way we worked, how we socialized with friends and family, and how communities functioned. The global scope of the pandemic meant that every country was affected. For many people, this meant learning to work remotely from home. For others who worked in essential services in person, it meant that they also had to learn to work in new ways such as avoiding physical contact.

What's more, people found it challenging to remain socially connected. This was also true in the work sphere; workers had to learn to use new kinds of technology like <u>Teams</u> and <u>Zoom</u>, which became a core feature of their work. They had to become accustomed to having every meeting in this manner.

With respect to the introduction of ChatGPT, the <u>International Labour Organization</u> has conducted research and found that the outcome of AI integration will largely depend on the levels of automation and augmentation that occur. For instance, jobs where most tasks can be automated by machines are likely to experience displacement, whereas jobs where only some tasks can be automated are more likely to experience augmentation. In the case of augmentation, the technology can enhance the work of humans while still requiring human input.

To this, the International Labour Organization concludes that the potential benefits of augmentation outweigh the risks of automation—but this is contingent upon workers having the necessary skills to adapt to and benefit from these technological advancements.

Further, AI will likely have a significant gender effect, where women's employment will be disproportionately impacted due to their overrepresentation in clerical and administrative roles, which are vulnerable to automation. Whether women and other affected groups can benefit from the augmentation potential of AI will depend on their ability to access the tools, training, and infrastructure needed to adapt. Interestingly, AI is creating demand for new hybrid skillsets that blend technical, cognitive, and interpersonal abilities.

Moreover, when examining the socioeconomic implications of AI on the world of work, the International Labour Organization has noted that AI will likely widen existing disparities and ultimately cause an AI divide. Yet on the flip side, it is important to note that AI could reduce inequality by revitalizing the middle class by enabling non-elite workers to perform high-stakes work. AI could even create new job opportunities, improve productivity, and enhance access to education and training.

Another socioeconomic consideration is labour rights and discrimination—the International Labour Organization stresses that AI needs to be used in a way that protects and promotes labour rights, detects labour violations, improves working conditions, and fosters a culture of transparency and accountability. More specifically, AI tools can be used to monitor and report on labour practices, identify potential risks and hazards, and provide workers with a safe and confidential means of reporting concerns and violations. Likewise, it is crucial that AI be used to prevent abuses and discrimination by ensuring that algorithms are fair, unbiased, and transparent.

Another aspect is occupational health and safety. All has been used to transform the way that monitoring and inspections are conducted. Additionally, smart tools, robotics, wearable devices, and algorithmic management systems are helping to improve workplace safety by removing workers from hazardous environments, automating highrisk tasks, and enabling predictive risk monitoring. That said, it is important to note that algorithmic management poses challenges to psychosocial well-being and job autonomy. That is, Al systems are increasingly being used to track worker behaviour, evaluate performance, and allocate tasks, often leading to intensified workloads and reduced recovery time. This causes workers to report higher stress levels and reduced job satisfaction when managed by opaque, automated systems, and many are unaware of how their data is collected or used.

Accordingly, the International Labour Organization created a <u>Centenary Declaration</u> for the Future of Work. It declared that:

- It is imperative to act with urgency to seize the opportunities and address the challenges to shape a fair, inclusive and secure future of work with full, productive and freely chosen employment and decent work for all
- Such a future of work is fundamental for sustainable development that puts an end to poverty and leaves no one behind
- It must carry forward into its second century with unrelenting vigour its humancentred approach to the future of work, which puts workers' rights and the needs, aspirations, and rights of all people at the heart of economic, social, and environmental policies
- Social justice can be achieved in all regions of the world
- It must direct its efforts to:
 - ensuring a just transition to a future of work that contributes to sustainable development in its economic, social and environmental dimensions
 - harnessing the fullest potential of technological progress and productivity growth, including through social dialogue, to achieve decent work and

- sustainable development, which ensure dignity, self-fulfilment, and a just sharing of the benefits for all
- promoting the acquisition of skills, competencies, and qualifications for all workers throughout their working lives as a joint responsibility of governments and social partners
- developing effective policies aimed at generating full, productive and freely chosen employment and decent work opportunities for all
- supporting measures that help older workers to expand their choices, optimizing their opportunities to work in good-quality, productive and healthy conditions until their retirement, and to enable active ageing
- promoting workers' rights as a key element for the attainment of inclusive and sustainable growth
- achieving gender equality at work by ensuring equal opportunities,
 enabling a more balanced sharing of family responsibilities, providing
 better work-life balance, and promoting investment in the care economy
- ensuring equal opportunities and treatment in the world of work for persons with disabilities
- supporting the role of the private sector as a principal source of economic growth and job creation by promoting an enabling an environment for entrepreneurship and sustainable enterprises
- supporting the role of the public sector as a significant employer and provider of quality public services
- strengthening labour administration and inspection
- ensuring that diverse forms of work arrangements
- eradicating forced and child labour and promoting decent work for all and fostering cross-border cooperation, including in areas or sectors of high international integration
- promoting the transition from the informal to the formal economy, while giving due attention to rural areas

 developing and enhancing social protection systems, which are adequate, sustainable, and adapted to developments in the world of work

Understanding Universal Basic Income and the Employment Guarantee

This section reviews some of the main studies that have been conducted on Universal Basic income and explains how it is different from the Employment Guarantee.

<u>Universal Basic Income</u> (also referred to as basic income) involves providing periodic recurring payments to all members of a community, paid on an individual basis. What is most striking is that it is unconditional—there are no strings attached—not even a work requirement.

As can be seen on the <u>map provided by Stanford's Basic Income Lab</u>, there are several important Universal Basic Income projects transpiring in many different countries.

Firstly, <u>Canada's pilot project</u> took place in 2017 in Ontario. Ontario's Basic Income Pilot Project had a budget of \$150,000,000, where the 4,000 participants received up to \$16,989 per year for a single person, less 50 percent of any earned income; or up to \$24,027 per year for a couple, less 50 percent of any earned income, in monthly installments.

Although the incoming Progressive Conservative government had promised to maintain the three-year pilot program, it <u>cancelled the program</u> in August 2018, only 10 months after the previous Liberal government started distributing payments. That said, the government assured recipients that it would wind down the program in a compassionate manner, where payments to eligible participants would continue until March 31, 2019. Essentially, there were not many reasons provided for the cancellation, other than basic income was not a viable solution.

Contrary to what one may think, there was a number of <u>benefits</u> to the cancelled program, including participants were happier, healthier, and continued working even though they received money. In fact, about 75 percent of participants were working when it started and kept working or went back to school throughout the program—the study contradicted criticisms that it would demotivate people.

In fact, some who were working were able to find better jobs with higher wages and better working conditions. In just one year, 83 percent of participants described feeling stressed or anxious less often and 81 percent said they felt more self-confident. Also, 66 percent said that they formed better relationships with family members.

It appeared that as people moved toward some financial stability, their physical health improved, their mental health improved, their outlook on life improved, and their

employability improved. Researchers believed that it was a tragedy that the three-year pilot project was cancelled prematurely.

Secondly, a pilot project took place in <u>Finland</u> between 2017 and 2019. Participants were selected randomly from a pool of unemployed individuals. The monthly amount that the participants received was €560. In this program, there were no conditions—the monthly amount was not affected by any other income that recipients received. That is, they were not obligated to seek or accept employment during the trial period, and their basic income payments continued even if they found a job. The project involved 2,000 randomly selected unemployed individuals who were between the ages 25 and 58.

The program was designed to ascertain whether the basic income could help reduce poverty, social exclusion, and bureaucracy while increasing employment. Finland's government hoped that it would reduce bureaucracy, provide financial security, and encourage recipients to seek employment without fear of losing benefits.

Although the Universal Basic Income payments did not significantly increase employment levels among the participants during the first year, many participants reported feeling less stressed about finances. Also, participants reported better well-being on many dimensions such as life satisfaction, better mental and physical health, less worry about basic survival, and the ability to pursue happiness and growth. In addition to increased financial security and streamlined welfare services, the participants also felt an increased trust in social systems.

The study demonstrated that Universal Basic Income could bring about significant improvements in well-being, reduce bureaucracy, and foster trust in social systems. That said, Universal Basic Income alone might not be sufficient to increase employment levels—in fact, the program could work best as part of a broader policy mix. For example, it could be combined with other measures such as job creation initiatives, education, and training programs to achieve the desired socio-economic outcomes.

Thirdly, a pilot project took place in <u>rural Kenya</u>. The 2013 pilot by GiveDirectly attempted to determine the effects of unconditional transfers on the welfare and economic well-being of village members. In fact, this program is used as an example of why Universal Basic Income works and that this type of program reduces administrative costs, reaches poorer households than conditional cash transfers, and has the potential to be a more efficient way of distributing funds to the poor than conditional cash transfers.

Basic Income Today stated:

"Rather than using the funds to purchase temptation goods such as alcohol, tobacco and entertainment, recipients sought to create more stable and consistent revenue streams to better themselves and their families on a long[-] term basis. Such findings help disprove the common misconception that

[Universal Basic Incomes] cause laziness and incompetence, and help shed light on the true positive economic impacts of [Universal Basic Income]"

Indeed, researchers found that the majority of the pilot's funds were used to invest into assets and ventures used to generate income to prevent against future financial distress.

More specifically, poor households in villages in rural Kenya received monthly no-strings-attached cash transfers via a mobile banking app. Recipients were asked to provide survey and consumption data for the duration of the program. In return, they received between \$404 and \$1,530 USD in monthly installments over nine months.

Ultimately, GiveDirectly found the following:

- the unconditional cash transfers helped households to invest a significant portion of the funds into assets needed for self-employment activities (namely agricultural and farming activities)
- households that received the transfer increased the value of their assets by \$279 compared to similar households that were not included in the pilot program
- investments at the household level translated into permanent increases in revenue from agriculture, animal husbandry, and other non-agricultural enterprises due to the purchases of newer, more productive machinery and assets
- the Universal Basic Income payments allowed the recipients to invest in stable and long-term revenue streams, prevent financial insecurity, and protect against any potential future shocks such as illness or natural disaster
- the researchers collected cortisol samples from recipients through the duration of the program, so that they could quantify the overall reduction in stress related to the transfers (cortisol was typically released in high-stress situations)—recipients had significantly lower cortisol levels when compared to non-recipients, which suggests a causal effect of poverty alleviation on reductions in stress levels. Also, the recipients self-reported higher overall levels of happiness and life satisfaction, as well as significantly lower overall levels of depression
- recipients generally did not change their spending behaviour for temptation goods—the greatest expenditures were for were for food and food security, as well as durable assets such as housing renovations and equipment purchases
- transferring to the primary female in a household led to improvements in outcomes that were more likely to benefit children, such as in food security, health, and education, as well as larger improvements in psychological wellbeing and self-reported female empowerment

- given that the recipients did not spend on temptation goods, the pilot helps to
 debunk the argument that unconditional cash transfers cause recipients to
 become lazy and mooching off members of society—"The lazy welfare
 argument, which claims that the poor are poor due to their own laziness or lack
 of motivation, is unambiguously false"
- to truly help the poor, we as a society must provide them with the means to invest in themselves and their future. Universal basic income provides a very practical means of doing so

Fourthly, <u>Sam Altman</u> has conducted studies on the topic of Universal Basic Income. That is, Sam Alman's OpenResearch had a basic income pilot, where recipients received \$1,000 per month, no strings attached. The following were some of the main findings:

- **Basic income lets people buy back some time**: Single parents and younger recipients (more likely to be in school) took two to three hours/week away from work. For everyone else, there was no conclusive impact on employment
- Ending poverty and growing the middle class: \$1,000/month lifted virtually all single households out of poverty. Working class families (\$30k avg income from work) got a substantial income boost
- Unlocking entrepreneurship: Recipients were more likely to report having an
 idea for a business, wanting to start a business in the next five years, and buying
 materials to start a business. Black entrepreneurship boosted 26 percent;
 women-led businesses by 15 percent
- Freedom to seek better work, take risks: Recipients were more likely to be
 actively searching for work, to have applied for work, and to be more selective
 about jobs. Some took risks and pursued employment opportunities that were
 not possible without the financial cushion of a basic income
- Escaping abuse and having more housing options: Recipients had more freedom to leave toxic or abusive environments and to find more suitable housing. They were more likely to look for new housing, move, and pay for housing
- Enabling longer-term planning: There was a significant positive impact on budgeting, planning for the future, and the desire to pursue further education. It increased recipients' agency to form these goals and take steps towards achieving them

- **Spending on basics and helping others**: Recipients spent the majority of basic income on food, housing, transportation, and childcare. The greatest increase as a percentage of spending was on support to others
- Prioritizing health: Recipients showed greater use of medical/dental services and lower likelihood of skipping other bills to pay for healthcare, suggesting a greater ability to prioritize one's own health. Problematic drug and alcohol use decreased, especially among males
- More financial security and resilience: Recipients were more able to pay for an
 unexpected or emergency expense and had increased financial health, credit
 scores, and savings. Financial well-being improved the most for lower income
 recipients

Sam Altman noted that basic income could be funded without taxing working individuals and would save taxpayers from the even higher costs of poverty. He also stated that there were examples of residents of certain areas, such as Alaska, where individuals would receive a dividend of about \$2,000 per year from natural resources like oil.

<u>Currently</u>, Canada, the United States, and the European Union do not have a specific Universal Basic Income program on which to report.

A job guarantee (also referred to as an employment guarantee) is a policy innovation that helps to create full and meaningful employment for all through direct job creation. It is a voluntary program that is for those who are ready, willing, and able to work. This type of program provides living-wage employment opportunities in public service projects that address social and environmental needs.

The goal of the job guarantee is to tackle the problem of employment insecurity. In turn, it can stabilize the economy, alleviate poverty, mitigate the impact of economic uncertainty on families, and improve working conditions throughout the economy. Some of the main features include:

- Financing the program is not the problem.
- There is an abundant and unfilled need for socially useful work
- Everyone who wants a job should have access to decent employment
- No one is unemployable
- Unemployment should not be used as a policy tool

According to the <u>United Nations</u>, exploitative employers have had the upper hand for too long, knowing that workers would choose poorly-paid and insecure work over destitution; the job guarantee turns the tables so that workers can fall back on

government jobs that offer decent conditions and wages. These jobs could be infrastructure jobs as well as care, education, and health jobs.

Interestingly, the global employment paradox is that while there are too few decent jobs, there is certainly no shortage of work to be done. A job guarantee could fill the roles that we so desperately need, but that the private sector has no financial incentive to provide.

Moreover, a job guarantee scheme should be strictly voluntary and sit alongside—not replace—social protection as a permanent feature of the labour market. The United Nations Special Rapporteur on extreme poverty and human rights Olivier De Schutter stated:

"If designed in this way, it would play a hugely important role in wiping out unemployment, ending the race to the bottom on working conditions, and providing the income security and social inclusion millions urgently need to break free from poverty"

Furthermore, in April 2023, the <u>Human Rights Council</u> of the United Nations wrote a report on the employment guarantee as a tool in the fight against poverty. In a nutshell, The Special Rapporteur on extreme poverty and human rights explained how the introduction of a job guarantee, with the State acting as an employer of last resort, can contribute to the full realization of the right to work, transforming it from a policy objective into an enforceable legal right. The job guarantee tackles the paradox of structural unemployment and underemployment coexisting with important unsatisfied societal needs, as neither the State nor the market currently supplies the public goods that are needed for the greening of the economy and for a thriving care economy.

More precisely, the Special Rapporteur pointed out the following:

- The right to work is a human right
- To achieve the full realization of this right, States need to take steps to achieve full and productive employment under conditions safeguarding fundamental political and economic freedoms to the individual (see also Article 1 of the International Labour Organization Employment Policy Convention, 1964 (No. 122), which imposes on States a duty to adopt an active policy, and Goal 8 of the Sustainable Development Goals)—the States are obliged to do what they can to create jobs
- Globally, 473 million people are seeking employment, yet many people are
 jobless. In fact, only around half of those seeking employment are officially
 unemployed. This is the paradox of too few jobs and unfulfilled societal needs.
 An additional 470 million people will be looking for work in developing countries
 between 2019 and 2035

- As a tool of employment policy, public employment programmes can provide jobs to those who are jobless. They can include those who have become inactive in the market and provide employment to those who are involuntarily working part-time or who depend on seasonal work
- There are opportunities that are not being taken advantage of: the greening of the economy, ecological transformation, and the growing recognition of the importance of the care economy—care to older or dependent persons, early childhood education and care, and health care
- The problem is that markets undersupply the public goods that are needed for the greening of the economy and for a thriving care economy, and that governments have too little public revenue to invest in creating the jobs needed for these transitions. This is why we need to think about the introduction of a job guarantee
- The benefits of the job guarantee include: reducing poverty, supporting social inclusion, and increasing self-confidence; raising the bar on labour standards (less precarious work due to the gig economy); building skills and training; ensuring that there is integration of the most disadvantaged in the labour market such as youth, women, and the long-term unemployed; providing an automatic stabilizer for the economy; building assets and providing goods and services; strengthening local resilience; and promoting local democracy and civic participation
- There are several job guarantee schemes and there is no single best model. That said, each scheme should take into account local conditions and be codesigned by social partners, civil society, and public authorities. For example, the program can be universal versus targeted. If it is universal, it is open to all adults who are able and willing to work (the participants are chosen based on self-targeting). If it is targeted, it might focus on certain categories or geographic areas that can help the poorest in the areas by increasing their opportunities
- An example of a job guarantee program is the Mahatma Gandhi National Rural Employment Guarantee Scheme in India, where the 100 days guarantee is addressed to households rather than individuals. This is an example of a program that is specifically targeted to rural areas. Another example of a targeted program is Ethiopia's Productive Safety Net Programme that targets droughtprone and food insecure communities
- With community-based targeting, the community members decide who is to be included in the social program. On the other hand, categorical targeting involves determining eligibility by clearly observable and understood

demographic or social criteria. Regardless of the method to determine eligibility, the goal needs to be that people in need are reached

- Recipients receive food and in-kind support alone or alongside cash (or sometimes only cash) for a certain period of time like one year. The statutory minimum wage is the norm
- The objections to this type of scheme, which can each be refuted are:
 affordability; there could be negative impacts on the labour market; there is
 concern that it would make social protection conditional upon accepting a job;
 governments should aim for an unemployment rate that, while low, is high
 enough to manage inflation; household impacts; and corruption and
 maladministration

Currently, Canada and the United State do not have a specific job guarantee program on which to report, but many regions have had conversations about the topic in the past.

However, the <u>European Union</u> has implemented several initiatives, including the following:

- <u>The Youth Guarantee</u>: provides young people with an offer of employment, education, apprenticeship, or traineeship within four months of becoming unemployed or leaving education
- <u>The Social Economy</u>: promotes job creation and work integration and contributes to social inclusion
- <u>Long-term Unemployment</u>: integrates the long-term unemployed into the labor market, which includes three key steps: encouraging registration with an employment service, providing individual in-depth assessments, and offering job integration agreements
- Flexicurity: an integrated strategy that aims to enhance flexibility and security in the labour market, ultimately benefiting citizens. This approach recognizes that labour markets are constantly evolving and that workers and employers need to adapt to changing circumstances. It means that workers can easily transition between jobs, and employers can adjust their workforce to meet changing demands

Economic Implications of AI disruption

In Daniel Susskind's <u>A World Without Work</u>, which is a deep dive into economic theory and pragmatic solutioning about technology, automation, and how we should respond, we see that economists have been examining job tasks and asking whether

they have features that make them easier or harder for a machine to handle. For example, Susskind states that "task encroachment" is a situation where machines take on more and more tasks that were once performed by people. If we are looking for an example, we only need to look at the three main areas of human work capabilities: manual, cognitive, and affective capabilities. All three areas are facing pressure through robotics, Al that thinks and reasons, and affective computing that has feelings and emotions.

As a result of the AI revolution, there have been two strong forces relating to the future of work: a harmful substituting force, and a helpful complementing force. Technology plays both roles at once—it displaces workers and simultaneously raises the demand for their efforts elsewhere in the economy (there will still be demand for human work in other activities). Susskind notes that it is important to recognize both forces throughout the process.

According to Susskind, one consequence of AI proliferation is that there could be "frictional technological unemployment", which involves "frictions", or things in the labour market that prevent workers from moving freely into whatever jobs might be available. If we think of the economy as a big machine, we will notice that there is sand getting caught in the wheels that prevents their smooth running.

This is already happening in some places; for example, in the United States, since WWII, men of working age have experienced a dramatic reduction in participation in the labour market. Many men have fallen into frictional technological unemployment. It is important to pay attention to participation rates because some men have existed the labour market altogether. For many, there is no difference between work that is out of their grasp and no work at all. For many of these men, work is out of reach. In like manner, this has taken place with manufacturing workers as well.

According to Susskind, there are three kinds of frictions: a mismatch of skills (the leap to the top with high-paying jobs is getting harder to make and there will likely be a continued hollowing out of middle-class jobs), a mismatch of identity (highly educated workers are moving down the labour market to jobs for which they are overqualified in "pink-collar jobs", or they leave the job market altogether), and a mismatch of place (workers with in-demand skills may be in the wrong geographical area).

In addition to frictional technological unemployment, the other consequence is structural technological unemployment, where there is just not enough work in the labour market for human beings. As task encroachment continues, with machines taking on more tasks, the more harmful substituting force will grow even stronger. Workers will be displaced for more activities than ever before. The helpful complementing force will not be as helpful because now, it is being worn down and can no longer raise demand for displaced workers as strongly through the productivity effect (machines help humans be more productive), the bigger-pie effect (technological progress has had many pies bigger), and the changing pie effect (technological progress has added new ingredients to the pie).

One thing that Susskind points out is that we need to always be aware of the "superiority assumption", where we imagine that when human beings become more productive at a task, they will be better placed than a machine to perform it. It is about thinking that when the economic pie gets bigger, human beings will be better placed to do the newly in-demand tasks. And it is about thinking that when the economic pie changes, human beings will be better placed to do whatever new tasks have to be done. As jobs dwindle, we can assume that there will not be enough demand to keep everyone working in the remaining roles.

In Susskind's view, the Age of Labour will likely come to an end. As machines become more capable performing human tasks, task encroachment will continue, and more tasks will fall to machines. At some point in the future, the harmful force will outpower the helpful complementing force, and the world of human work will finally wither out.

Susskind cannot say for sure how long this will take. What he can say for sure is that tomorrow's machines will be more capable and take on more of the tasks that are performed by human beings. He suggests that we try not to overblow the current fears of immanent collapse in the demand for the work of human beings.

Another thing that Susskind stresses is that we need to be aware of the economic inequality that currently exists—it is projected to be worse in the future because human capital is less evenly distributed (different skills are rewarded at differing degrees), human capital is becoming less valuable relative to traditional capital, and traditional capital is being distributed in an uneven fashion.

When it comes to policy responses, Susskind mentions education, but suggests that it is limited in its current form with respect to what we teach, how we teach, and when we teach. He also points out that there is currently a backlash against education. He notes that there are serious issues with taking *more* education in response to technological unemployment and logistically finding ways to have the entire workforce receive more education to solve the problem.

Also, Susskind suggests that the Big State will need to tax income and find ways to distribute it to the rest of society. More specifically, it will need to tax workers and owners of traditional capital. There have even been proposals to have a robot tax. There could be a place for inheritance tax and taxing large corporations. But what might be the trickiest task is deciding how to share the money so that everyone has enough.

This is where Susskind brings up the Universal Basic Income. With a program that sidesteps the labour market altogether, recipients receive regular payments with no conditions attached. There are two possibilities: recipients could receive cash, or they could receive the things that they need to survive. The main idea is that the basic income should cover things like food, clothing, and shelter.

However, Susskind proposes something that is strikingly different—instead of the typical basic income, he suggests that there should be a conditional basic income: it would not be available to everyone, and there would be conditions or strings attached to

receiving the payments. More precisely, the payments would only be available to members of the country that pays out the basic income; the Big State would tax and share out income with some non-economic conditions attached to build social solidarity; there would be a sharing of traditional capital; the Big State would step in and redistribute the economic prosperity if the labour market can no longer do this in a world with less work; there could be additional legislative initiatives to help workers by setting new floors for pay; and the Big State could encourage new forms of organized labour.

Susskind also points out that our lives will be increasingly dominated by Big Tech, namely Facebook, Amazon, Google, Apple, and Microsoft. That is, in the last decade, the Big Five have made 436 acquisitions totalling about \$131 billion. These companies are consolidating data, engineering talent, and network popularity. They are amassing tremendous political power as well. Competition policy has fallen short, and at this point, we are unprepared to respond appropriately.

In his final chapter, Susskind discusses meaning and purpose. He notes that technological unemployment will not just deprive people of income—it will deprive people of significance and purpose. This is beyond economics: we will face a serious challenge of finding a way to have meaningful lives when a major source of it disappears. And a prevailing political philosophy of meritocracy does little to help the situation. In particular, in a world with less work, we cannot view all people who do not have jobs as meritless or worthy of shame.

While some believe that there is a relationship between work and meaning, some do not. And while some would prefer to work even if they did not have to, we cannot assume this. Regardless of these distinctions, the main question we need to answer is, in a world with less work, what will people do?

Susskind proposes that we think more carefully about creating leisure policies on how jobless people spend their time, and revisiting education that does not focus on preparing people for work. Will we be in the outdoors? Play sports? Visit art galleries and museums? Volunteer? In a world with less work, we will not be able to think about leisure activities as a few hours of spare time before or after work—we will need to make this a priority. Moreover, we can no longer conflate success in work with human flourishing. Rather, we will need to think about moral virtues such as honesty, civic virtues such as community service, intellectual virtues such as creativity and curiosity, and performance virtues such as diligence and perseverance. Indeed, there will be less paid work but plenty of unpaid work to perform in society. Susskind states, "what people choose to do will mostly not look like work today". He admittedly notes that we will likely find meaning elsewhere instead.

To have social solidarity, Susskind states that there will be a need to have everyone contributing in meaningful ways—through some paid work that can be taxed or contributing to the collective pot in non-economic ways. He thinks that there will be a need to have a conditional basic income where recipients do something in return.

Future communities will have to decide what constitutes meaningful work that can be done in the community. Caregiving will likely be a part of this. Obama's parting words on the future of work had to do with re-examining what we value and deciding what we are collectively willing to pay. Rather than using market wages, we need to decide what we think is valuable through community recognition. And the Big State may need to influence how we spend our free time. Indeed, Susskind concludes that work and meaning goes beyond pure economics, and the Big State will likely have to help us create meaning so we can be fulfilled and answer the question how we can live meaningful lives.

Psychological Effects of Al disruption

Some may have experienced or encountered an "<u>Al-induced intellectual identity</u> <u>crisis</u>", "<u>automation anxiety</u>", or even "<u>technostress</u>"—these all deal with stress reactions as a result of the introduction of new technologies in the workplace.

In a nutshell, as a result of AI technology becoming more intertwined with workplaces, some are concerned about the societal impact and individuals in particular may experience distress and confusion regarding their own intellectual capabilities and identity. That is, there is a tendency among elite professionals to recognize that AI may be able to complete some or all of their work consisting of cognitive tasks. Indeed, AI systems are capable of outperforming humans in several intellectual tasks. Consequently, many professionals may experience a decline in self-esteem and confidence.

As humans stand by and watch intellectual tasks become more and more automated, they may need to take a step back and reassess their roles and purpose—and identity. This may involve experiencing anxiety and fears of obsolescence. Some professionals may feel as though their intellectual worth has diminished. They may feel fatigue and exhaustion, headaches, tension, or an inability to focus. They may feel overloaded, depressed, anxious, irritable, or nervous about having to work alongside their Al counterparts. They may even feel brunt out or have trouble sleeping.

It makes sense because the conditions in which a person works are highly significant in <u>shaping the whole compendium</u> of psychological, emotional and physical elements of a person's dignity and self-respect.

On a societal level, education, retraining, and psychological support may be necessary in order to address these issues. Moreover, some initiatives may need to be introduced to promote the harmonious co-existence with AI systems and to address the psychological impacts of a reduced workforce. For example, there may need to be psychological supports to deal with situations where professionals are in crisis and need to completely disconnect and detox from anything digital.

Another example of supports that can help professionals is mindfulness and meditation. In fact, many believe that the practice of staying present and aware of our thoughts,

feelings, and bodily sensations can serve as a powerful antidote to the anxiety and stress caused by the rise of Al and automation. This is primarily because it can break the cycle of constant worry about the future. It also helps to make clear and rational decisions in the face of uncertainty.

Furthermore, mindfulness helps to stop the cycle of negativity and acknowledge and accept the emotions rather than reacting impulsively. It also helps to build resilience and adaptability. Simply put, mindfulness and meditation help individuals navigate uncertainty that comes with AI.

Additionally, it is important to pair these ideas with the tougher challenge of setting healthy boundaries and developing healthy technology habits. It is critical that there be good mental health and wellbeing in the workplace. It is recommended to not have an "always on" work culture and communicate with all actors in the workplace about the employer's expectations about technology use and how much is just too much. Ideally, workers can strive to achieve a healthy work-life balance in a psychologically safe environment. If needed, it is imperative that workers seek individual psychological help. Psychologists may employ cognitive behavioural therapy to help the worker reframe thoughts from anxious to resilient.

One positive aspect of all this is that AI will continue to evolve and help improve its capacity to improve psychological safety in workplaces. In fact, future AI technologies may implement predictive analytics to spot early signs of burnout before they escalate.

Still, the <u>World Economic Forum</u> states that the looming occupational identity crisis, namely the loss of purpose, structure and social belonging that comes when work disappears, may create a class defined by insecurity, exclusion, and anxiety. Also referred to as the "Al precariat", identity and meaning may vanish too—with real consequences for mental health. According to the World Economic Forum, this looming crisis is real and has been underestimated.

However, the disruption will likely come in waves:

- Wave 1: Traditional automation continues to displace routine, manual and service jobs
- Wave 2: Generative AI is already reshaping content creation, routine cognitive tasks and repetitive knowledge work in sectors like marketing, law, finance and tech
- Wave 3: Agentic AI is already executing multi-step tasks without human input, impacting jobs in human resources, market research and IT support. It may eventually replace mid-level and managerial roles, restructuring entire organizations
- Wave 4: Artificial general intelligence could perform most cognitive tasks by 2030, rendering entire professions obsolete. Artificial super intelligence may follow, surpassing human capabilities

Consequently, the World Economic Forum stresses that it is necessary to have governments and companies invest heavily in AI strategies that are focused on innovation, education, and upskilling. Also, it is important to prepare for the psychological demands ahead. In particular, people will need to address the unique challenges of the AI precariat, including the grief of losing a profession, the potential alienation from society, and the possible breakdown of civic trust.

Research coming out of <u>Toronto Metropolitan University</u>, the <u>Dais</u>, and the <u>Future Skills</u> <u>Centre</u> shows that public sector workers may be significantly affected by AI. Despite the fact that governments struggle with digital transformation, they want to find ways to efficiently use AI in their public sector work. The key findings include the following:

- Canada's public sector workers, (over 1.1 million) are significantly more likely to be in occupations that are exposed to AI applications than workers in the overall Canadian labour force (74 percent versus 56 percent)
- Compared with the overall Canadian workforce, a similar share of jobs is in highexposure occupations (25 percent versus 27 percent) with tasks more likely to be assisted or augmented by current AI technologies. Worse, a much larger proportion are in low-complementarity occupations (49 percent versus 29 percent) comprised of tasks that are more likely to be substituted or replaced
- The federal public sector has a much higher concentration of workers in the high-exposure and low-complementarity quadrant (58 percent), reflecting a larger proportion of jobs in business, finance, and administration occupations than Canada's overall workforce. And in the higher-complementarity quadrant, the public sector has a larger concentration of workers in occupational groups such as senior management; natural and applied sciences; and education, law, and social, community and government services
- The AI applications that are most useful based on the public sector's major occupational groups identifies four categories: interpreting and reproducing language (e.g. reading and writing tasks); recognizing and interpreting images (analytics); applications in abstract strategy games (data analysis and pattern recognition); and interpreting auditory information (speech recognition)
- With respect to public sector technology adoption, non-technology factors are
 also important determinants of success, such as the role of human oversight,
 access to AI tools and training for workers, and consistent application of core
 non-technological values and ethical principles to ensure successful, responsible
 deployment of AI in the public sector

With words like "looming" and "urgent" being used to describe what is likely to transpire in the near future and given what we need to do to respond, we may wish to examine fear about Al and the future. Why is there fear? Plainly put, workers are afraid of losing their feeling and self-worth and their value in the labour market. That is, when workers lose their jobs, they feel as though they have lost inherent worth as a person.

We know from recent research from the <u>National Library of Medicine</u> that there is a correlation between unemployment and psychological disorders including depression, anxiety, and bipolar disorder. In addition, there is a correlation between unemployment and higher rates of drug use and eating disorders. Sadly, there is a strong relationship between long-term unemployment and low self-esteem, loss of purpose, interrupted sense of routine, depression and doubts, and negative stigma. Long-term unemployment is typically described as "devastating" and "brutal".

This may be due to the fact that long-term unemployment leads to <u>disengagement</u> and <u>apathy</u>. Humans have a need to control—this need is a fundamental aspect of human motivation, and when it is unmet, it can lead to significant psychological consequences since it strips individuals of both the explicit benefits of employment (such as income), and the implicit ones (such as structured time and social connections). What's more, the longer the unemployment continues, the more negative emotions like being depressed and frightened. They also experienced fewer positive emotions like active engagement and enthusiasm.

The emotional disengagement comes with fewer active stress coping strategies and a decrease in the pursuit of personal projects and future-oriented goals, leading to a sense of learned helplessness. Individuals who have been unemployed long-term are also more likely to disengage from social and political activities. They also show higher levels of psychological defensiveness, blame others for their unemployment, and do not turn to external sources of comfort or control, such as belief in an intervening God or system justification.

In addition to fear of losing value in the market and being replaced, there may also be a fear of having to collaborate with AI systems and tools. Research has demonstrated that human-AI workplace collaborating may enhance worker capabilities and improve task performance, but this may come at some significant psychological costs:

- reduced intrinsic motivation
- increased boredom when transitioning away from AI assistance
- complex individual differences in adaptation
- increased dependence on AI and thus a decrease in feelings of competence and engagement
- increased feelings of isolation and loneliness, and loss of social standing
- Al-induced change <u>fatigue and burnout</u>

- Increased levels of stress
- Feelings of being second-guessed by an algorithm
- Worries about trust when working a machine

Studies suggest that it is necessary to prioritize the well-being of employees and proactively address the psychological issues associated with Al adoption. Also, Al training and development programs help to boost self-assurance in Al learning capabilities. Also, the literature stresses the significance of aligning Al system design and implementation with employees' requirements, competencies, and well-being. Yet, it is necessary to continuously assess how Al implementation affects worker's well-being and organizational outcomes. Organizations need to design Al systems that preserve human agency while providing emotional support. Lastly, psychologists using Cognitive-Behavioural Therapy may see improvements regarding feelings of hopelessness since this therapy is effective for addressing symptoms of depression and anxiety.

Understanding Upskilling and Reskilling During a Time of Technological Disruption

<u>IBM's Institute for Business Value</u> states that more than 60 percent of executives predict that Generative AI (GenAI) will disrupt how their organization designs experiences. Even more striking, 75 percent say that competitive advantage depends on GenAI. In a study by <u>Boston Consulting Group</u> where 13,000 people were surveyed, 89 percent of respondents said that their workforce needed improved AI skills—but only six percent said that they had begun upskilling in "a meaningful way".

Clearly, organizations that are not beginning the process of upskilling and reskilling can be at a disadvantage in this competitive game and risk being left behind during this transition. This may be why the Al Age is commonly referred to as an <u>era of upskilling</u>.

To understand upskilling and reskilling, we note that <u>IBM</u> states that upskilling and reskilling are two different things.

On one hand, upskilling is the process of improving employee skill sets through AI training and development programs. The goal is to minimize skill gaps and prepare employees for changes in their job roles or functions. For example, it could include asking customer care representatives to learn how to use GenAI and chatbots to answer customer questions in real time with prompt engineering.

On the other hand, reskilling is learning an entire set of new skills to do a new job. For example, someone who works in data processing might need to embrace reskilling to learn web development or advanced data analytics.

According to a report by <u>KPMG</u>, organizations are increasingly prioritizing upskilling and reskilling their workers to harness the power Al and realize true business value. The authors point out that the impact of Al transformation is often underestimated—Al is expected to surpass human intelligence, and organizations cannot be complacent.

Only 41 percent of organizations are increasing their AI investments. This is concerning since GenAI is not like past disruptive technology; there can be no one-time upskilling and reskilling session, but rather a continuous learning process that takes place.

Leaders in organizations need to get past employee resistance and help to drive AI adoption. How can this be accomplished? The authors note that leaders need to be equipped with the right mindset, knowledge, and skills to guide their AI transformation. By actively using AI in their own work and sharing their experiences with their teams, leaders can create a safe environment for exploration and experimentation, and this in turn helps to create a culture of innovation and continuous learning.

Most importantly, the authors state that leaders need to communicate the benefits of AI clearly and transparently: they need to share how the technology can augment and enhance human capabilities rather than replace them.

Diving more deeply, in an instructive report by <u>World Economic Forum</u> (in collaboration with Boston Consulting Group), the authors introduced an approach to mapping out job transition pathways and reskilling opportunities using the power of digital data to help guide workers, companies, and governments to prioritize their actions, time, and investments on focusing reskilling efforts efficiently and effectively.

To prepare the workforce for the Fourth Industrial Revolution, the authors stated that it was necessary to identify and systematically map out realistic job transition opportunities for workers facing declining job prospects. When mapping job transition opportunities, the authors asked whether the job transition was viable and desirable.

They broke down jobs into a series of relevant, measurable component parts in order to systematically compare them and identify any gaps in knowledge, skills, and experience. Then, they calculated "job-fit" of any one individual on the basis of objective criteria.

They asked whether the job was viable and desirable. Viable future employees were those who were equipped to perform those tasks (individuals who possessed the necessary knowledge, skills, and experience). When it came to whether the job was desirable, some jobs were simply undesirable because the number of people projected to be employed in this job category was set to decline. Using the United States Bureau of Labor Statistics, the authors aimed to find job transition pathways for all.

Let us take an example: the authors discovered several pathways for secretaries and administrative assistants. Some provided opportunities with a pay rise, such as insurance claim clerks, and some provided opportunities with a pay cut, such as library assistants or clerical workers.

The authors emphasized that employers could no longer rely solely on new workers to fill their skills shortages. One of the main issues was the willingness to make reasonable investments in upskilling and reskilling that could bridge workers onto new jobs. Similarly, they stressed that it was not possible to begin the transformation unless there was a focus on individuals' mindsets and efforts. For instance, they reasoned that some employees would need time off of work to gain additional qualifications, and some would require other supports and incentives to engage them in continuous learning. This transformation could involve a shift in the societal mindset such that individuals aspired to be more creative, curious, and comfortable with continuous change.

Moreover, the authors noted that no single actor could solve the upskilling and reskilling puzzle alone; in fact, they suggested that a wide range of stakeholders (governments, employers, individuals, educational institutions and labour unions etc.) needed to collaborate and pool resources to achieve this goal. Further, data-driven approaches were anticipated to bring speed and additional value to upskilling and reskilling. For example, it may be worth exploring the amount of time required to make the various job transitions, or nuanced evaluations of economic benefits from these job transitions.

So how do organizations begin upskilling and reskilling? <u>Boston Consulting Group</u> recommends that organizations:

- assess their needs and measure outcomes
- prepare people for change
- unlock employees' willingness to learn
- make adopting AI a C-Suite priority
- use AI for AI upskilling

Moreover, <u>IBM</u> recommends creating a lasting strategy, communicating clearly, and investing in learning and development. Some AI tools that are critical to upskilling include computer vision, GenAI, machine learning, natural language processing, and robotic process automation.

Upskilling use cases include customer service, financial services, healthcare, HR, and web development. Organizations can use AI technologies to enhance the AI learning experience itself via online learning and development, on-the-job training, skills-gap analysis, and mentorship. AI can provide added value for organizations because it combines institutional knowledge with advanced capabilities, fills important gaps, improves employee retention, and embraces the democratization of web development.

Furthermore, McKinsey & Company recommends that organizations use a cross-collaborative, scaled approach to upskilling and reskilling workforces. More specifically,

to realize the opportunity of GenAl, a new approach is required to address employee attraction, engagement, and retention.

So, before rushing in and starting the process, it is important to clarify business outcomes and how GenAl investments can enable or accelerate them. This involves defining the skills that are required to deliver these outcomes and identify groups within the organization that need to build those skills.

In addition, it is necessary to use a human-centred approach—from the outset, organizations are recommended to acknowledge that many employees view upskilling and reskilling as a threat to their well-established professional identities. To address this issue, organizations need to lead using an empathetic, human-centered approach; foster learning and development; transform fears into curiosity; and cultivate mindsets of opportunity and continuous learning.

And of course, it is necessary to make personalized learning possible at scale. This involves having tighter collaboration across the HR function, stronger business integration to embed learning experiences into working environments, and a refreshed approach to the learning and development technology ecosystem.

There are several <u>benefits</u> of upskilling and reskilling in an Al-driven environment:

- Organizations can remain competitive
- Employees can increase engagement and job satisfaction
- Workers with enhanced skills can improve their creativity, productivity, and efficiency
- Organizations can help employees reduce the risk of job displacement
- Employees can increase wages and enjoy better job opportunities
- Organizations can increase their retention numbers

According to an MIT study, evidence suggests that GenAI, specifically ChatGPT, substantially raised average productivity. Moreover, exposure to ChatGPT increased job satisfaction and self-efficacy, as well as concern and excitement about automation technologies.

We know that employee development programs, including upskilling and reskilling, are <u>highly valued by workers</u>. More precisely, employees appreciate the following:

- Skill assessment and analytics
- Personalized learning paths
- Adaptive learning platforms

- Al-powered content curation
- Virtual assistants and chatbots
- Simulation and gamification
- Predictive analytics for training ROI
- Natural language processing for feedback and coaching
- Augmented reality and virtual reality for leaning, mentoring, and training
- Continuous learning and adaptation

Given the above, it may be in organizations' interests to start the process of upskilling and reskilling, as recommended above. No one wants to find and hire new people: turnover costs organizations a great deal of money. And no one wants to stand by and watch an employer replace them with a robot or other form of GenAl. The solution is to take the time to create a solid plan, beginning with outlining goals and aligning them with what the business needs.

As seen in the 2024 Work Trend Index Annual Report by <u>Microsoft and LinkedIn</u>, it appears that many employees want, and even expect, this type of training and development at work. Employers need to catch up to the employees, given that 75 percent of employees are already bringing AI into the workplace.

It is important to keep in mind what was found in the <u>Future of Jobs Report 2025</u>: if the world's workforce was made up of 100 people, 59 would need training by 2030. Of these, employers foresee that 29 could be upskilled in their current roles and 19 could be upskilled and redeployed elsewhere within their organization. However, 11 would be unlikely to receive the reskilling or upskilling needed, leaving their employment prospects increasingly at risk.

Although time and financial constraints are primary obstacles, employers need to be aware of how crucial it is to start implementing these initiatives. They also need to think about those employees who are not eligible for upskilling and reskilling, and what sorts of supports they may create for them.

Legislative Considerations

The goal of this section is to examine the AI and employment laws of Canada, the United States, and the European Union in order to compare the different approaches and glean as much information as we can so that we are best positioned to tackle our two issues.

1. Al Law and Policy

a. Canada

Currently, Canada does not have a comprehensive national AI law. However, there was a recent attempt to create one in June, 2022 when <u>Bill C-27</u> was introduced with the <u>Artificial Intelligence and Data Act</u>. This Act, which is Part 3 of Bill C-27, would have regulated international and interprovincial trade and commerce in AI systems by requiring that certain persons adopt measures to mitigate risks of harm and biased output related to high-impact AI systems.

Interestingly, the Act covered employment-related decisions (such as recruitment, referral, hiring, remuneration, promotion, training, apprenticeship, transfer or termination) as one of the seven initial classes of high-impact AI systems requiring regulations, however, Bill C-27 died on the Order Paper when Parliament was prorogued on January 6, 2025. So too did Part 1 of Bill C-27 that contained an upgrade to Canada's personal information laws. The new Liberal government has not yet reintroduced a comprehensive federal AI or privacy bill.

In Ontario, <u>Bill 149</u>, <u>Working for Workers Four Act</u>, <u>2024</u>, received <u>Royal Assent on March 21</u>, <u>2024</u>. In terms of Al, Ontario's <u>Employment Standards Act</u> was amended to require that employers who advertise a publicly advertised job posting and who use Al to screen, assess, or select applicants for the position must include in the posting a statement disclosing the use of the Al. That said, further details are not present and definitions of Al are left to the regulations.

Additionally, Québec's <u>Law 25</u> contains some provisions that relate to AI since there are provisions that address automated processing. For instance, section 12.1 states that where an enterprise uses personal information to render a decision based exclusively on an automated processing of such information must inform the person concerned accordingly not later than at the time it informs the person of the decision. Also, the person must be informed of the personal information used, the reasons and main factors and parameters that led to the decision, and the right of the person concerned to have the personal information used to render the decision corrected.

Unfortunately, Canada has been in a state of legislative non-action for a number of years. Plainly put, there is no Al law, and the privacy law that is currently in force, PIPEDA, is from the year 2000. Undoubtedly, the federal government needs to spend the time and the effort to Catch up to other jurisdictions and become more aligned with current technologies.

Looking elsewhere at AI policy, the <u>Voluntary Code of Conduct on the Responsible</u> <u>Development and Management of Advanced Generative AI Systems</u>. Essentially, signatories to this Voluntary Code commit to adopting the identified measures. The Voluntary Code contains measures that should be applied by all organizations that are developing or managing the operations of a GenAI system with general-purpose capabilities, as well as additional measures that should be taken by organizations that

are developing or managing the operations of these systems that are made widely available for use.

To that end, developers and managers of advanced generative systems can voluntarily commit to working to achieve the following outcomes: accountability; safety; fairness and equity; transparency; human oversight and monitoring; as well as validity and robustness. Under the Voluntary Code, there are measures that apply to each principle, depending on whether the person is a developer or a manager.

Canada has also created a <u>Directive on Automated Decision-Making</u>. In short, the Directive took effect in April, 2019, with compliance required by April, 2020. The goal is to ensure that automated decision systems are used in a manner that reduces risks to clients, government departments, and Canadian society, and leads to more efficient, accurate, consistent and interpretable decisions made pursuant to Canadian law.

Under the Directive, the assistant deputy minister (or other senior official) has several requirements, including conducting an algorithmic assessment, providing notice before decisions, providing explanations of decisions, retains the right to access, test and monitor the automated decision systems, documenting decisions, testing and monitoring outcomes, validating data quality, completing data governance responsibilities, consulting appropriate experts, training employees, conducting risk assessments, consulting the legal department, ensuring that the automated decision system allows for human involvement, and reporting the effectiveness and efficiency of the automated system in meeting the program objectives.

Recently, the federal government launched programs to help small and medium-sized enterprises adopt and adapt AI solutions—in October, 2024, it <u>announced</u> the launch of two programs to grow Canada's AI ecosystem by supporting the development of new GenAI applications and enabling AI adoption among small and medium-sized enterprises to increase productivity.

These programs are part of a \$2.4 billion package of Al-focused initiatives announced in Budget 2024 to accelerate job growth, boost productivity, and ensure Al is used responsibly. More specifically, these are the two initiatives;

- the Regional Artificial Intelligence Initiative will invest \$200 million to help bring new AI technologies to market and help accelerate AI adoption by small and medium-sized enterprises and sectors across the country over the next five years
- 2. **the AI Assist Program** is investing \$100 million to help innovative Canadian small and medium-sized enterprises that are building or actively incorporating GenAI and deep learning solutions into their core products and services

Moreover, Budget 2024's \$2.4 billion investments include funding for sovereign compute (data centres) capacity, the creation of an AI safety institute, as well as skills training and programs to encourage AI adoption across the Canadian economy.

To be sure, <u>bulk of the \$2.4 billion</u>—\$2 billion—is going into a fund that will aim to provide access to computing capabilities and technical infrastructure. The goal of the funding is to help companies adopt AI in a way that will have positive impacts for everyone. More precisely, the <u>Canadian Sovereign AI Compute Strategy</u> aims to strengthen Canada's position as a global leader in AI. This initiative is based on the idea that it is essential for Canadian AI industries and researchers to have access to affordable, cutting-edge compute infrastructure. By boosting access to powerful computing resources, it will be possible to drive innovation, create new opportunities, and ensure that Canada stays competitive in the global AI race. Budget 2024 announced \$2 billion over five years, starting in 2024–25, to launch new initiatives that will give Canadian researchers and AI companies the tools they need to be competitive globally.

Further, the <u>Sectoral Workforce Solutions Program</u> is a Canadian federal initiative that provides targeted skills training and support for workers in specific industries or sectors that are experiencing or anticipating AI disruption. It is a contribution program that funds sectoral projects that support workers and employers through a wide-range of activities:

- training and reskilling to help workers gain new skills to meet the needs of employers and transition to in-demand jobs in key sectors
- helping employers, in particular small and medium-sized enterprises, attract and retain a skilled and innovative workforce
- initiatives to help equity-deserving groups get the skills they need to find work and succeed in key sectors
- other creative solutions, standards and tools to address sectoral labour market needs

There is a <u>projects list</u> for the program. The program recognizes that different industries face unique challenges and need tailored solutions. Specific industries are targeted using sector-specific market data, and a collaborative approach is used between employers and communities. It appears that <u>this program is also encapsulated in the federal funding</u> (\$50 million of the \$2.4 billion).

At this point, there are no specifics regarding the two initiatives regarding job displacement management, and most of the funding will go to Al infrastructure like compute. It may be challenging to predict when and how Al will affect each sector, how workers can fit into each sector, and there are limited resources for this program. We need to wait and see how these things will unfold.

And we cannot forget about the <u>Pan-Canadian Artificial Intelligence Strategy</u>—the Government of Canada has been investing since 2017 in attempt to drive the adoption of Al across Canada's economy and society. There are three pillars involved in this strategy: commercialization, standards, as well as talent and research. This program

supports the recruitment and retention of top researchers and the training of emerging leaders to ensure long-term excellence and innovation in AI.

Under *Pillar 1*, the National Al Institutes (<u>Amii</u> in Edmonton, <u>Mila</u> in Montreal, and the <u>Vector Institute</u> in Toronto) are helping to translate research in Al into commercial applications and growing the capacity of businesses to adopt these new technologies. The government is supporting this initiative with \$60 million provided in Budget 2021, with each institute eligible to receive up to \$20 million in funding over five years, from 2021-22 to 2025-26. Moreover, <u>Canada's Global Innovation Clusters</u> are strengthening Canada's innovation landscape by promoting the adoption of made-in-Canada Al technologies by businesses in key industries, and by public and not-for-profit entities. The government is supporting this initiative with \$125 million in funding provided in Budget 2021, over five years, from 2021-2022 to 2025-2026.

Under *Pillar 2*, the Government of Canada is supporting efforts to advance the development and adoption of standards related to AI through the <u>Standards Council of Canada</u>. The government is supporting this initiative with \$8.6 million in funding provided in Budget 2021, over five years, from 2021-2022 to 2025-2026.

Under *Pillar* 3, <u>CIFAR</u> is enhancing programs to attract, retain and develop academic research talent, and maintain centres of research and academic training at Amii, Mila, and the Vector Institute. In addition, CIFAR is renewing its advanced research, training, and knowledge mobilization programs. The government is supporting these initiatives with \$208 million in funding provided in Budget 2021, over ten years, from 2021-2022 to 2030-2031. Additionally, the <u>Digital Research Alliance of Canada</u> is providing dedicated computing capacity for AI researchers across Canada to support the objectives of the strategy. The government is supporting this initiative with \$40 million in funding provided in Budget 2021, over five years, from 2022-2023 to 2026-2027.

Likewise, we cannot forget about regional investments in AI such as Microsoft's investment of \$500 million in Québec's infrastructure and skills initiative. The goal is to create these investments alongside new cybersecurity skilling initiatives to reinforce the province's robust innovation economy, fuel high-value job creation, and help prepare the province for the new AI economy. Similarly, PacifiCan funding of over \$32 million will help businesses bring new technologies to market and adopt AI. More specifically, businesses and not-for-profit organizations will be able to apply for funding from the new Regional AI Initiative in British Columbia. The plan is that PacifiCan will deliver the Regional AI Initiative with \$32.2 million, making investments that help businesses commercialize and adopt AI technologies.

b. The United States

At this time, the United States does not have a comprehensive federal AI law either. But there was a previous attempt with <u>Bill S 3205</u>, the Federal Artificial Intelligence Risk <u>Management Act of 2023</u> introduced in the 118th Congress (2023–2024). This bill would have directed federal agencies to use the AI Risk Management Framework developed by the National Institute of Standards and Technology regarding the use of AI. However,

it only reached the second reading in the Senate and was last referred to the Committee of Homeland Security and Governmental Affairs.

It is not likely that there will be another AI bill proposed by the federal government, given the Executive Order signed by President Trump in July, 2025. In particular, there has been a clear agenda to prevent "woke AI", as seen in the <u>Fact Sheet: President Donald J. Trump Prevents Woke AI in the Federal Government.</u>

What is more, President Trump recently attempted to prevent States from creating and enforcing AI laws with the <u>Big Beautiful Bill</u>—the Trump Administration initially proposed a 10-year moratorium on AI laws where no State or political subdivision thereof would be able to enforce, during a 10-year period, any law or regulation of that State or a political subdivision thereof limiting, restricting, or otherwise regulating AI models, AI systems, or automated decision systems entered into interstate commerce. However, this <u>10-year moratorium was removed from the bill</u> before it passed. Following this, <u>Trump's AI Action Plan was released</u>, where the goal was to establish American global AI dominance. Given the current political climate, it is unlikely that another AI bill will be introduced in Congress anytime in the near future.

That said, there has been a flurry of activity in State Legislatures such as California, Colorado, Utah, Texas, New York, and Virginia, where there have been comprehensive AI statutes enacted or proposed. And like Québec, other States currently regulate AI through their privacy legislation involving automated processing. There have even been States that have taken more targeted approaches and prohibited deepfakes.

Let us take one example and deeply examine it: Texas. There are two main bills to discuss, namely Bill 149, which was signed into law by the Governor, and Bill 668, which was engrossed by the Senate and has been read by the House and referred to the Committee.

First, let us examine <u>Bill 149</u>, the <u>Texas Responsible Artificial Intelligence Governance Act</u>. Taking effect on January 1, 2026, some of the main aspects of this law include the following:

- Informed consent is required for the capture or storage of an image or other
 media containing one or more biometric identifiers used for a commercial
 purpose. It is prohibited to train an AI system used for a commercial purpose on
 a biometric identifier (the biometric identifier must be destroyed, and penalties
 ensue for the violation)
- The purpose of the AI section of the bill is to: facilitate and advance the responsible development and use of AI systems; protect individuals and groups of individuals from risks associated with AI systems; provide transparency regarding risks in the development, deployment, and use of AI systems; and provide reasonable notice regarding the use of AI systems by State agencies

- Government agencies are required to disclose that the consumer is interacting
 with an AI system. The disclosure must be clear and conspicuous, written in plan
 language, and may not use a dark pattern. If an AI system is used in relation to
 a health care service or treatment, the provider must provide a disclosure as
 soon as reasonably possible
- It is prohibited to develop or deploy an AI system in a way that intentionally aims to incite or encourage someone to commit physical self-harm, harm to another person, or engage in criminal activity
- A governmental entity may not use or deploy an AI system that evaluates a
 person or group of persons based on social behaviour or personal
 characteristics with intent to calculate a social score that leads to detrimental
 or unfavourable treatment of a person or group of persons in a social context
 unrelated to the context at issue; detrimental or unfavourable treatment of a
 person or group of persons that is unjustified or disproportionate to the nature or
 gravity of the behaviour; the infringement of any right guaranteed under the US
 Constitution, the Texas Constitution, or any other State or federal law
- A person may not develop or deploy an AI system with the sole intent of having the AI system infringe, restrict, or otherwise impair an individual's rights guaranteed under the US Constitution
- A person may not develop or deploy an AI system with the intent to unlawfully
 discriminate against a protected class in violation of State or federal law
 (protected class means a group or class of persons with a characteristic,
 quality, belief, or status that is protected and includes race, colour, national
 origin, sex, age, religion, or disability)
- A person may not develop or distribute an AI system with the sole intent of producing, assisting, or aiding in producing or distributing child pornography, deep fake videos or images or other sexting with a child under 18 years of age
- The Attorney General has exclusive authority to enforce the provisions
- A person who is in violation and who has not cured the violation is liable to the State for a civil penalty of \$10,000 to 12,000 for each violation. For each violation that is determined by the court to be incurable, to a \$80,000 to 200,000 for each violation. For a continued violation, \$2,000 to 40,000 per violation
- There is a regulatory sandbox program where a person is enabled to obtain legal protection and limited access to the market to test innovative AI systems across various sectors including healthcare, finance, education, and public services to encourage the responsible deployment of AI systems while

balancing the need for consumer protection, privacy, and public safety. There is a provision of clear guidelines for this developer to test the AI systems while certain laws and regulations concerning testing are waived or suspended. This program allows a person to engage in research, training, testing, or other predeployment activities to develop the AI system. Yet, the person needs to apply and get approved from the agency before testing under the program, and must provide quarterly reports to the department

The Texas Al Council is established to ensure Al systems in the State are ethical and developed in the public's best interests; do not harm public safety or undermine individual freedoms; identify existing laws that impede innovation and recommend reforms; analyze opportunities to improve efficiency and effectiveness of State government operations through the use of AI systems; recommend to applicable State agencies to improve its efficiency and effectiveness through the use of AI systems; evaluate instances of regulatory capture including undue influence by tech companies or disproportionate burdens on smaller innovators caused by the use of AI systems; evaluate the influence of tech companies on other companies and determine the existence of tools or processes that are designed to censor competitors or users through the use of AI systems; offer guidance and recommendations to the ethical and legal use of AI systems; publish studies on the current regulatory environment for Al systems; receive reports regarding the regulatory sandbox program; make recommendations to improve the regulatory sandbox program. Members of the Council must have expertise in AI systems, data privacy and security, ethics in technology or law, public policy and regulation, risk management regarding Al systems, improving governmental operations, or anticompetitive practices and market fairness

Moreover, <u>Bill 668</u>, which would take effect on September 1, 2025, has the following main features:

- A person to whom this law would apply must disclose on its website in Texas the
 name of the AI model used; a brief description of the functions and purpose of
 each AI model; the name of the public or private third party that has provided
 input on an AI model that the person has implemented; a description of the
 specific input provided by each third party; any changes made to an AI model
 based on the input of a third party
- A person may not discipline, retaliate against, or otherwise discriminate against an individual who in good faith reports a suspected violation of these provisions
- Violations of these provisions constitute a deceptive trade practice and the Attorney General may access records to ensure compliance

Additionally, the <u>Texas Data Privacy and Security Act</u> deals with automated processing, profiling, and dark patterns. Noncompliance leads to civil a penalty of up to \$7,500 for each violation.

Since the federal plan is to promote rapid Al innovation and deregulate as much as possible, it is up to the States to regulate Al. Indeed, States have stepped up and created several protections when it comes to Al transparency, responsible Al use, consumer protection, risk mitigation, and attempts to combat social scoring and discrimination.

However, it is important to note that American Al laws do not touch on the topic of dealing with Al disruption in a way that addresses our two issues.

Looking elsewhere at AI policy, the Federal Trade Commission has provided some helpful guidance about AI deception. More specifically, it examined the use of AI behind the screen to create or spread deception, and explained that GenAI and synthetic media can simulate human activity and through software create deep fake videos and voice clones. Fraudsters can already create the content quickly and cheaply and disseminate it to large groups, certain communities, or specific individuals. They can also use chatbots to generate spear-phishing emails, fake websites, fake posts, fake profiles, and fake consumer reviews, or to help create malware, ransomware, and prompt injection attacks. They can use deepfakes and voice clones to facilitate imposter scams, extortion, and financial fraud.

The Federal Trade Commission has listed certain questions that can help businesses and individuals not engage in deceptive or unfair conduct:

- Should you even be making or selling it?
- Are you effectively mitigating the risks?
- Are you over-relying on post-release detection?
- Are you misleading people about what they're seeing, hearing, or reading?

Another important document is the <u>Joint Statement on Enforcement Efforts Against Discrimination and Bias in Automated Systems</u>. The Consumer Financial Protection Bureau, Department of Justice's Civil Rights Division, Equal Employment Opportunity Commission, and the Federal Trade Commission highlighted that automated systems could contribute to unlawful discrimination and otherwise violate federal law.

On September 25, 2024, the Federal Trade Commission <u>announced a crackdown</u> on deceptive AI claims and schemes. As part of a new law enforcement sweep, the "Operation AI Comply" has reported on a number of cases that involve actions against a company promoting an AI tool that enabled its customers to create fake reviews, a company claiming to sell "AI Lawyer" services, and multiple companies claiming that they could use AI to help consumers make money through online storefronts.

c. The European Union

The European Union's <u>Al Act</u> is touted as the <u>world's first regulation on Al</u>. Commonly referred to as the golden standard, it is the most comprehensive piece of Al legislation. The main feature is that there are different rules for different risk levels. That is, there are different obligations for providers and users, so the level of risk needs to be assessed.

For example, things that carry unacceptable risk (they are totally banned) include:

- Cognitive behavioural manipulation of people or specific vulnerable groups, such as voice-activated toys that encourage dangerous behaviour in children
- **Social scoring** Al that classifies people based on behaviour, socio-economic status, or personal characteristics
- Biometric identification and categorization of people
- Real-time and remote biometric identification systems, such as facial recognition in public spaces
- Inferring emotions with emotion recognition systems in workplaces

Things that are considered high-risk include (these are highly regulated):

- Al systems that are used in products falling under the European Union's product safety legislation. For instance, toys, aviation, cars, medical devices, and lifts are included
- Al systems falling into specific areas that will have to be registered in an
 European Union database, namely: Management and operation of critical
 infrastructure; Education and vocational training; Employment, worker
 management and access to self-employment; Access to and enjoyment of
 essential private services and public services and benefits; Law enforcement;
 Migration, asylum and border control management; Assistance in legal
 interpretation and application of the law

It is important to note that high-risk AI systems must be assessed *before* being put on the market and throughout their lifecycle. Likewise, GenAI, such as ChatGPT, is not classified as high-risk, but will have to comply with transparency requirements and European Union copyright law. Individuals will need to:

- Disclose that the content was generated by Al
- Design the model to prevent it from generating illegal content
- Publish summaries of copyrighted data used for training

In fact, high-impact general-purpose AI models that might pose systemic risk, such as the more advanced AI model GPT-4 or GPT-5 would have to undergo thorough evaluations and any serious incidents would have to be reported to the European Commission. Also, content that is either generated or modified with the help of AI, like images, audio or video files (for example deepfakes) have to be clearly labelled as AI generated so that users are aware when they come across such content.

There is also a small section concerning *limited risk* Al systems—these have lighter transparency obligations, namely specific disclosure obligations to ensure that humans are informed when necessary to preserve trust. For example, developers and deployers must ensure that end-users are aware that they are interacting with Al (chatbots and deepfakes).

Lastly, minimal risk or no risk is unregulated. The <u>vast majority</u> of Al systems that are currently being used in the European Union fall into this category; for example, applications such as Al-enabled video games or spam filters fall into this category.

As can be seen from the summary of the <u>Classification rules for high-risk Al systems</u>, most of the text of the Al Act deals with high-risk Al systems, and most of the obligations fall on providers (developers) of high-risk Al systems.

Taking a look at the Act's Annex III use cases, we see the inclusion of Employment, workers management and access to self-employment. In particular, there is coverage of AI systems that are used for recruitment or selection, particularly targeted job ads, analysing and filtering applications, and evaluating candidates. Promotion and termination of contracts, allocating tasks based on personality traits or characteristics and behaviour, and monitoring and evaluating performance.

The timeline for implementation includes the following:

- February 2, 2025: the ban of AI systems posing unacceptable risks
- May 2, 2025: Codes of Practice apply
- August 2, 2025: general-purpose AI systems that need to comply with transparency requirements
- After this point, high-risk AI systems will have more time to comply with the requirements as the obligations concerning them will become applicable 36 months after the entry into force. The goal is to phase in the provisions between August, 2024 to August, 2026. And the consequences of noncompliance are serious—violations can carry fines of up to €35,000,000 or, if the offender is an undertaking, up to seven percent of its total worldwide annual turnover for the preceding financial year, whichever is higher

The AI Act in the European Union is the most comprehensive framework globally. The European Commission has provided a significant number of supportive documents for

small and large businesses alike so that they can receive the assistance that they need in order to comply. This includes the <u>Al Pact</u> that sets out the commitments of businesses to take part in agreeing to three core commitments.

Although the AI Act contains some provisions that deal with regulating AI systems, including in the employment context, we see that there are no provisions to deal with the effects of AI disruption on employees in these documents and initiatives. To be sure, employers do have obligations under the AI Act and it is important for them to decide whether they are providers or deployers when they set out to comply with their obligations.

Since the providers have most of the obligations in the AI Act, it is important to note that employers can be deemed providers in certain situations. For example, if they develop an AI system or have one developed, and place it on the market or put it into service, and they do this under their own trademark, they may have significant obligations. On the other hand, if the employer is using an AI system under its authority, it is likely to be considered a deployer, who has lighter obligations under the AI Act.

Furthermore, we'd be remiss to not mention that the European Union's <u>General Data Protection Regulation</u> provides additional protections concerning automated processing and profiling. For example, Article 21 provides data subjects with the right to object to the processing of personal data including profiling. Article 22 provides data subjects with the right not to be subject to a decision based solely on automated processing, including profiling, which produces legal effects concerning them or similarly significantly affects them.

As with the AI Act, the General Data Protection Regulation does not address the issue of dealing with AI disruption in ways that can help us answer our two questions.

Looking elsewhere at AI policy, in July 2025, the <u>European Commission introduced three</u> <u>key instruments</u> to support the responsible development and deployment of general-purpose AI models:

- The <u>Guidelines on the scope of the obligations for providers of general-purpose</u>
 <u>Al models</u> clarify the scope of the general-purpose Al obligations under the Al
 Act, helping actors along the Al value chain understand who must comply with
 these obligations
- The <u>General-purpose AI Code of Practice</u> is a voluntary compliance tool submitted to the Commission by independent experts, which offers practical guidance to help providers comply with their obligations under the AI Act related to transparency, copyright, as well as safety and security
- The <u>Template for the public summary of training content of general-purpose Al</u> <u>models</u> requires providers to give an overview of the data used to train their models. This includes the sources from which the data was obtained (comprising large datasets and top domain names). The template also requests information

about data processing aspects to enable parties with legitimate interests to exercise their rights under the law

Further, in January, 2024, the European Commission launched an AI innovation package to support Ai startups and small to medium-sized enterprises. In this package, the European Commission provided <u>financial support through Horizon Europe and the Digital Europe</u> programme dedicated to GenAI. This package will generate an additional overall public and private investment of around €4 billion until 2027. The package also contains a <u>Start-up and Innovation Communication</u> and access to a European Digital Consortium and <u>AI Factories</u>.

There is also the <u>GenAl4EU initiative</u>, which aims to support the development of novel use cases and emerging applications in Europe's 14 industrial ecosystems, as well as the public sector. Application areas include robotics, health, biotech, manufacturing, mobility, climate and virtual worlds.

What is more, the European Union is fostering critical computing capacity through several successful actions:

- The <u>Chips Act</u> establishes a legislative foundation to enhance the semiconductor industry's resilience
- The Chips Joint Undertaking accelerates semiconductor technologies in Europe
- The <u>European High Performance Computing Joint Undertaking</u> develops advanced computing capabilities accessible to European small to mediumsized enterprises
- The <u>Testing and Experimentation Facilities</u> support AI technology development for Edge AI Components and Systems
- The <u>Important Projects of Common European Interest</u> promote collaboration among Member States in cutting-edge microelectronics and communication projects

2. Employment Law and Policy

This part tackles the question of whether any of the three jurisdictions provide support for workers who have been affected by AI disruption. As we have discussed in the Background section, there are serious ramifications for both employers and employees because of AI, and it is necessary to explore and compare the approaches that have been used to address them.

a. Canada

In Canada, the federally regulated jurisdiction is governed by the <u>Canada Labour</u> <u>Code</u> (this includes both unionized and nonunionized work environments) and the provincially and territorially regulated jurisdictions have their own provincial and territorial legislation for each. For example, in Ontario, the governing labour laws

(unionized) are contained in the <u>Ontario Labour Relations Act</u>, and the employment laws (nonunionized) are set out in the <u>Ontario Employment Standards Act</u>. Additionally, there are corresponding federal and provincial or territorial human rights legislation, like the <u>Canadian Human Rights Act</u> and the <u>Ontario Human Rights Code</u> respectively.

First let us explore what happens in Canada when a worker experiences a typical job loss, which can be voluntary or involuntary. If we assume that this is a unilateral or involuntary termination, and we are in Ontario in a nonunionized work environment, we would need to examine section 54 and 57 to determine the statutory notice period, which depends on the employee's years of service with the employer. For example, section 57 states that employers need to provide at least one week before the termination, if the employee's period of employment is less than one year; at least two weeks before the termination, if the employee's period of employment is one year or more and fewer than three years; at least three weeks before the termination, if the employee's period of employment is three years or more and fewer than four years; at least four weeks before the termination, if the employee's period of employment is four years or more and fewer than five years; up to at least eight weeks before the termination, if the employee's period of employment is eight years or more.

But if there are 50 or more employees being terminated in the same four-week period, this is a mass termination, and section 58 states that the employer needs to give notice of termination in the prescribed manner and for the prescribed period. More specifically, the amount of notice that employees must receive in a mass termination is not based on the employees' length of employment, but on the number of employees who have been terminated. An employer must give:

- eight weeks notice if the employment of 50 to 199 employees are terminated
- 12 weeks notice if the employment of 200 to 499 employees are terminated
- 16 weeks notice if the employment of 500 or more employees are terminated

The employer might also have to pay statutory severance, depending on the circumstances. Section 64 states that employers who sever an employment relationship with an employee has to pay severance pay to the employee if the employee was employed by the employer for five years or more and,

- the severance occurred because of a permanent discontinuance of all or part
 of the employer's business at an establishment and the employee is one of 50 or
 more employees who have their employment relationship severed within a sixmonth period as a result, or
- the employer has a payroll of \$2.5 million or more.

With termination notice, it is important to remember that the *Employment Standards* Act sets out minimum standards—employers can always provide more at the end of a working relationship.

Also, in some situations, employees may have rights that are greater than the statutory termination notice periods and severance pay. For example, they may have rights under the common law when they sue the employer for wrongful dismissal or when there are no termination clauses in the employment agreement (or no agreement at all). This is referred to as common law reasonable notice. Courts have to examine the <u>Bardal factors</u> to determine the amount of reasonable notice.

Also, employees cannot sue an employer for wrongful dismissal *and* file a claim for termination pay or severance pay with the Ministry of Labour for the same termination or severance of employment. An employee needs to choose one route or the other.

What do employees do in Canada once they have been terminated or their contract ends? They can look to the *Employment Insurance Act* and *Employment Insurance Regulations*. More precisely, *Employment and Social Development Canada* deals with the Employment Insurance program. The program provides temporary income support to unemployed workers while they look for employment or upgrade their skills. For example, recipients can undergo training while they are receiving benefits. To achieve this goal, workers must show that they are unemployed, able and willing to work, and actively looking for suitable employment. In terms of funding, the Employment Insurance program provides *funding* for most people at a basic rate of 55 percent of their average insurable weekly earnings, up to a maximum amount.

Under the Employment Insurance program, terminated workers can <u>apply</u> with their social insurance number, personal details (the last name at birth of one of your parents and addresses), banking information, and employment details (name of employer, addresses, dates of employment, reason for separation).

Applicants need to be able to show the following to be able to receive regular Employment Insurance benefits:

- they were employed in insurable employment
- lost their job through no fault of their own
- have been without work and without pay for at least seven consecutive days in the last 52 weeks
- have worked for the required number of insurable employment hours in the last 52 weeks or since the start of your last Employment Insurance claim, whichever is shorter
- they are ready, willing and capable of working each day
- they are actively looking for work (and keep a written record of employers they have contacted, and when they contacted them)

 they can prove their eligibility by completing bi-weekly reports by internet or telephone

The Act and Regulations allow for some flexibility as well—for instance, right after Canada experienced tariffs on Canadian goods by the United States in March, 2025, the federal government was able to quickly respond by introducing new measures to support Canadian workers through the Employment Insurance program. In particular, the temporary measures will be implemented through a pilot project and will include:

- Artificially boosting the regional unemployment rates used to determine access
 to and duration of benefits. The rate will be boosted by one percentage point in
 all Employment Insurance regions, with no region seeing an unemployment rate
 of less than 7.1 percent. This temporary measure will reduce the hours required to
 qualify for regular benefits to no higher than 630 hours and increase the weeks of
 entitlement by up to four additional weeks. This measure will be in effect for three
 months
- Allowing claimants to receive benefits sooner by suspending the rules around treatment of severance, vacation, and other monies upon separation so that they do not need to be used up before claimants are able to start receiving benefits. This measure will be in effect for six months
- Waiving the waiting period so that workers will be able to receive benefits for the
 first week of unemployment, helping unemployed workers more easily adjust to a
 drop in income. All claimant types (regular, special, fishing) are eligible for this
 measure. This measure will be in effect for six months

There have been several pilot programs created over the years, and it is possible that the federal government can manage Al disruption in this way as well. In addition, there exists a framework and an opportunity to rework the Employment Insurance retraining elements of the program to enable more workers to upskill and reskill while they receive benefits.

It is important to mention at this point that we are not likely to be dealing with typical lay-offs or terminations in the near future—we are dealing with an unprecedented AI disruption and job displacement. It is safe to say that something more significant than traditional responses, will likely be needed as traditional approaches will likely be fundamentally inadequate for AI-driven displacement. It makes sense that more resources and different approaches will be required to manage the situation. Current termination notice and severance provisions operate under the assumption that the terminated workers will find new, comparable jobs within a reasonable period of time. However, it may be that large swaths of workers will not get a similar job and will need to start from the ground up in a completely different area. Thus, these workers would require extended support for the purposes of reskilling.

In Canada, gaps can arise when AI's impact leads to a situation where employees experience fundamental changes to their duties. This could arise when many skills in a certain job description may be ready for automation, leaving the human with considerably fewer tasks to do. This could be viewed as a <u>fundamental change</u> in the terms and conditions of employment, and potentially a termination.

For example, as the demand for human work lessens, workers might discover that the employer has failed to comply with the contract of employment in a major respect, unilaterally changed the terms of employment, or expressed a settled intention to do either, thus forcing the employee to quit and sue for damages for constructive dismissal. This may very well be considered a termination. In this case, non-unionized employees could argue that they have been constructively dismissed and seek the payment of damages. Similarly, in a unionized environment, there could be issues with collective agreements that do not address technology disruptions, which could lead to a union grievance and compensation for displaced workers.

With one or two cases, the employer might find the payment of notice and severance to be manageable. But what if the AI disruption is more impactful and leads to the termination of hundreds or even thousands of workers at the same time? Employers would need to have more guidance and direction from government in the form of law and policy in accordance with a more AI-focused strategy.

b. The United States

Labor and employment laws are organized a bit differently in the United States. There are several categories of laws that govern the rights and responsibilities of employers, employees, and unions. They are organized as federal and State laws.

It is worth going through a few of these differences between Canada and the United States. First, while Canada has labour and employment laws that are provincially regulated with laws that fall in each of the federal and all provincial and territorial spheres, the American system provides a federal law (such as the minimum wage law) and provides States the opportunity to provide more protections (like higher wage requirements, but they cannot be fewer). For example, the following are some of the main laws:

- Labor standards: the federal law, <u>Fair Labor Standards Act</u>. and State employment standards, such as the <u>California Labor Code</u>
- Workplace safety: the federal <u>Occupational Health and Safety Act</u> and State workers' compensation legislation such as the California Workers' Compensation and Insurance in the <u>California Labor Code</u> and <u>Title 8 Regulations</u> as well as the California Occupational Safety and Health Act
- Anti-discrimination: the federal <u>Civil Rights Act of 1964</u> and <u>1991</u>, <u>Equal Pay Act</u>, and the <u>Americans with Disabilities Act</u>, <u>Age Discrimination in Employment Act of 1967</u>, and State human rights law such as the <u>California Human Rights Law</u>

- Family and medical leave: such as the federal <u>Family and Medical Leave Act</u> and State laws such as the <u>California Family Rights Act</u>
- Union and collective bargaining: federal laws such as the <u>National Labor</u>
 <u>Relations Act</u> and <u>Federal Service Labor-Management Relations Statute</u>, and
 State unionized labor laws such as those contained in the <u>California Labor Code</u>

Some of the main entities that adjudicate complaints in these areas include the federal Wage and Hour Division, federal Equal Employment Opportunity Commission, federal Workers' Compensation Board, and the federal National Labor Relations Board. A California example is the California Department of Industrial Relations.

Another main difference between Canada and the United States is that the United States has <u>at-will employment</u>. The at-will doctrine states that employers can terminate an employee for any reason—without notice (see exceptions below). Similarly, employees can also leave their job at any time for any reason without providing notice.

Why is this preferred in all States in the United States except Montana? From the perspective of employers, the arrangement allows employers flexibility to adjust staffing and business operations, including altering pay, hours, or job responsibilities. It also reduces termination costs, encourages employee productivity,

However, there are some common law exceptions:

- Violations of public policy: this protects an employee from being fired for refusing to perform an illegal act, reporting a violation of law, or exercising a legal right like filing a workers' compensation claim
- Implied contracts, this can be created through an employer's oral assurances or language in an employee handbook. If a handbook outlines specific disciplinary procedures or lists reasons for termination, it may create a legally enforceable expectation that the employer will follow those terms
- Covenant of good faith and fair dealing: this implies a mutual obligation to act fairly. A claim might arise if an employer terminates an employee to avoid paying earned compensation, like a large commission. This exception is recognized by a minority of States and is applied narrowly to prevent firings made in bad faith
- **Discriminatory terminations**: employers are not allowed to terminate an employee based on race, color, religion, sex, and national origin. States add more such as sexual orientation, gender identity, genetic information, or marital status. Also, employers are not allowed to terminate employees because they have a disability, or employees who are over 40 years old. They also cannot

sexually harass an employee and then terminate them for making a compliant about the harassment

• **Whistleblowing**: employers cannot terminate an employee because they engaged in whistleblowing

As for Montana's <u>Wrongful Discharge from Employment Act</u>, there is no employment atwill in Montana, so employers in this jurisdiction must give a good reason for a termination. A "good cause" for a termination is defined as any reasonable job-related grounds for an employee's dismissal based on:

- the employee's failure to satisfactorily perform job duties
- the employee's disruption of the employer's operation
- the employee's material or repeated violation of an express provision of the employer's written policies, or
- other legitimate business reasons determined by the employer while exercising the employer's reasonable business judgment

Another thing that follows from the at-will employment doctrine is that once an employees are terminated, their former employers do not owe them termination notice or severance. Unlike Canada, there are no statutory notice periods.

However, it is important to keep in mind that if there is a mass termination or plant closing, the employer would need to provide 60 days' notice of termination under the federal <u>Worker Adjustment and Retraining Notification Act</u>. Also, some employees might be owed termination notice if they negotiated in their contracts of employment or collective agreements a certain amount of notice that the employer must provide.

Also, there is no Employment Insurance in the United States, but terminated workers can apply for <u>unemployment insurance</u>, also referred to as unemployment benefits. Eligible workers who become unemployed through no fault of their own and meet certain other eligibility requirements may be able to apply and receive benefits. States have minimum work and wage requirements for unemployed workers—for example, <u>California has the following requirements</u>:

- The worker has a Social Security number, or has authorization to work in the United States (if not a US citizen)
- The worker has earned enough wages during the base period (a specific 12month period)
- The worker is fully or partially unemployed
- The worker became unemployed through no fault of their own

- The worker is physically able and available to work
- The worker is looking for work each week
- The worker is ready and willing to accept work right away

Workers who have become unemployed contact their State's unemployment insurance program, and file their claim with the State where they worked. It takes a couple of weeks to receive the first check. In terms of financial support, the unemployment benefits are administered by the State, yet they are partially federally funded. The benefits replace about 45 to 50 percent of previous wages, up to a State maximum amount. For example, in <u>California</u>, there is a calculator where workers can input their information and learn how much they will receive. Also, the <u>Consolidated Omnibus Budget Reconciliation Act</u> gives workers and their families who lose their health benefits the right to choose to continue group health benefits provided by their group health plan for limited periods of time.

In addition, terminated workers may be able to receive job training under the <u>Workforce Innovation and Opportunity Act</u>. The Act was designed to help job seekers access employment, education, training, and support services to succeed in the labor market and to match employers with the skilled workers they need to compete in the global economy. Moreover, many States offer further opportunities to sign up for retraining.

It is important to note that the Department of Labor provides guidance documents to assist employees with filing their claims for unemployment insurance during trying times such as the pandemic. This signifies that the Department has the potential to provide social security benefits in more flexible ways if required.

In the United States, gaps can arise when AI's impact leads to a situation where employees experience fundamental changes to their duties. This could be viewed as a <u>fundamental change</u> in the terms and conditions of employment, and could be seen as a termination.

In this case, non-unionized employees could argue that they have been constructively dismissed and seek the payment of damages. Similarly, in a unionized environment, there could be issues with collective agreements that do not address technology disruptions, which could lead to a union grievance and compensation for displaced workers.

The United States is in a very similar situation as Canada—it would not be able to handle the sudden demand from terminated workers who have experienced job loss due to Al disruption. In the near future, both Canada and the United States would need to prepare by creating more suitable regulations.

c. The European Union

The European Union sets minimum standards and coordinates policies, but implementation and funding comes from the Member States (the national governments).

For example, the <u>European Union sets standards</u> regarding minimum wages; the <u>Directive on adequate minimum wages</u> sets out rules that should ensure that workers earn adequate minimum wages, improving social fairness in the European Union. In the Directive, Article 5 sets out the procedure for Member States to establish the statutory minimum wages. It is important to note that the European Union does not establish a common minimum wage that applies throughout the Union; rather, the Directive attempts to ensure that the procedure for setting and updating statutory minimum wages contributes to their adequacy, promotes collective bargaining on wages, and enhances the access of workers to both statutory minimum wages and minimum wages agreed in collective agreements.

When a worker becomes unemployed, we need to look to the Member States themselves. For instance, in <u>France</u>, the <u>French Labour Code</u> is aligned with the standards set out by the European Union. France has established <u>different notice</u> <u>periods</u> that apply to workers at different tenure durations. For example, for workers with less than six months' tenure, they have no legal minimum notice period. For workers with tenures of six months to two years, they have one month notice. And for workers with over two years' tenure, they have two months' notice. For unionized work environments, the collective agreements may provide for longer notice periods or more favourable tenure conditions, with differences between notice periods for managers and non-management staff (managers receive higher notice periods). Managers typically receive two months' notice at nine months of tenure, three months' notice at four years of tenure, and four months' notice at 20 years of tenure.

Therefore, the Member States design their own system within the European Union guidelines. The Member States pay the severance pay.

When a worker in France becomes unemployed, that worker can receive <u>unemployment benefits</u> (see below for the criteria). However, the amount of worker's allowance, and the length of time for which it will be paid, depend on the contributions the individual has paid into the General Social Security System and the duration for which they have done so.

To receive the benefits, workers must:

- live in France (mainland and DROM except Mayotte where the unemployment insurance rules differ)
- for foreign talent, to have a residence permit which allows them to register to France Travail

- not have benefited from early retirement or not to have reached the age and number of quarters required to receive a full pension
- have worked for at least six months (i.e., 130 days or 910 hours) during the last 24 months (last 36 months if the insured is at least 53 years old at the date of the end of the last employment contract). This condition can be met through one or more contracts, with different employers
- have involuntarily lost their job (end of a fixed-term contract or temporary assignment, early termination at the initiative of the employer, dismissal), or following a contractual termination
- have registered with France Travail (public service in charge of supporting applicants in their search for a professional activity) within 12 months of losing their job
- to be actively looking for a job or carrying out a training action
- not have reached the age and number of quarters required for full retirement, or not benefiting from early retirement

Moreover, there are <u>possible protections</u> such as housing benefits, family allowances, and specific tax reductions.

As we can see from the European Commission's <u>chart</u> of contributors and beneficiaries to and from the European Union, France contributes significantly more (\leq 25.8bn) than it receives (\leq 16.5bn). Plainly put, France is able to pay out their unemployment benefits to unemployed workers.

Continuing with our French example, unemployed workers can apply with a streamlined online process at <u>Pôle Emploi</u>, and can search for jobs at <u>France Travail</u>. The <u>amount of unemployment benefits</u> is determined primarily by the average daily reference wage during the period of employment. This wage is usually calculated based on the worker's highest-paid months in the last 12 months of employment. When it comes to the percentage of previous earnings, workers receive around 57 percent of their previous average daily wage. However, there's a minimum and a maximum limit to what can be disbursed as unemployment benefits.

With respect to the duration of benefits in France, the length of time workers can claim benefits is influenced by their age and the duration of their employment contributions. For example, for workers under 53 years, it's proportional to the duration of employment in the last 28 months. If the worker is aged between 53 and 54, it's based on their employment in the last 36 months. For workers who are 55 and older, it is based on their employment in the previous 44 months.

All this is to say that typically, eligible individuals can claim benefits for a duration ranging from four months to 24 months. In specific cases, especially for older workers with extensive employment history, this could extend up to 36 months.

And in respect of training, participation in certain training programs endorsed by Pôle Emploi can affect workers' benefits by extending the duration of benefits. While receiving benefits, workers need to keep looking for employment and do regular check-ins. Also, Pôle Emploi may require participation in training and workshops to enhance workers' employability.

Workers who are receiving benefits are entitled to be treated with respect and dignity, receive transparent communications, and have access to resources.

But what if the French worker becomes phased out of the labour market because of Al and automation? The European Union has four initiatives that can address several of the issues affecting displaced workers due to technological disruption:

1. Union of skills

First, it is important to note that the European Union has recognized that it needs skilled people to respond to new challenges and stay competitive. The Union of Skills strives to deliver higher levels of basic and advanced skills, provide opportunities for people to regularly update and learn new skills, facilitate recruitment by businesses across the European Union, and attract, develop, and retain top talent in Europe.

To that end, the European Union has set out to address gender imbalances and help European businesses find the workers they need—ultimately, it will help the European Union be more competitive and inclusive.

The Union of Skills has several pilot projects that can help young persons with reading, maths, science, and digital skills; improve skills in science, technology, engineering, and maths; and introduce a new vocational education and training strategy to make vocational education and training more attractive, innovative, and inclusive.

What is most exciting about this program is that there are options to engage in regular upskilling and reskilling. The European Commission will:

- propose to expand the use of micro-credentials as flexible learning solutions
- reinforce the Pact for Skills to help more workers gain new skills in strategic sectors
- pilot a skills guarantee to offer workers at risk of unemployment the opportunity to gain new skills
- support the roll-out of skills academies to provide businesses with the skills needed for the green transition and the Clean Industrial Deal

- facilitate the free movement of workers across the European Union via the skills portability initiative, establishment of a European degree or diploma, and enhancement of teacher and student mobility
- attract, develop, and retain talent by setting up a talent pool, presenting a visa strategy, and launching a Choose Europe initiative
- focus on governance informed by the European Skills Intelligence Observatory

2. <u>European Globalisation Adjustment Fund for Displaced Workers</u>

Second, the European Globalisation Adjustment Fund for Displaced Workers is a special instrument used to express European Union solidarity with European workers or the self-employed who were displaced due to restructuring and to help them find new jobs. It contributes to the creation of a more dynamic and competitive European economy by improving the skills and employability of displaced people to help them find better work.

The general rule is that the program can be activated when a single company (including its suppliers and downstream producers) lays off over 200 workers, by small and medium-sized enterprises in various sectors in the same region or in a particular sector in one or more neighbouring regions.

The program has an annual budget of €35 million for 2021–2027. It can fund from 60 percent to 85 percent of the cost of projects that are designed to help workers who have been made redundant find another job or set up their own businesses.

It is important to note that national or regional authorities implement and manage the cases, with each case running for two years.

The support that workers can receive includes:

- help with looking for a job
- career advice
- education, training, and re-training
- mentoring and coaching
- entrepreneurship and business creation
- training, subsistence allowances, or allowances for carers, mobility, relocation allowances, and employers' recruitment incentives

The individuals who benefit from the program are workers who have been made redundant, including the self-employed, temporary and fixed-term workers. However,

the program does not support social protection measures such as pensions or unemployment benefits. Similarly, the program does not support companies to help them stay in business, modernize, or restructure.

The <u>EGF Regulation</u> sets out the mission and objectives in Article 2. It commits to supporting socioeconomic transformations that are the result of globalisation and of technological and environmental changes by helping displaced workers and self-employed persons whose activity has ceased to adapt to structural change.

It also aims to demonstrate solidarity and promote decent and sustainable employment in the European Union by offering assistance in the case of major restructuring events, in particular those caused by challenges related to globalisation, such as changes in world trade patterns, trade disputes, significant changes in the trade relations of the European Union or the composition of the internal market and financial or economic crises, as well as the transition to a low-carbon economy, or as a consequence of digitisation or automation. The goal is to return to decent and sustainable employment as soon as possible. Emphasis is to be placed on measures that help the most disadvantaged groups.

Article 3 states that a "displaced worker" means a worker, regardless of the type or duration of his or her employment relationship, whose employment contract or relationship is ended prematurely by redundancy, or whose employment contract or relationship is not renewed, for economic reasons.

The intervention criteria are contained in Article 4. Member States may apply for financial contributions from the program for measures targeting displaced workers and self-employed persons in accordance with Article 4. The financial contribution must be provided where one of the following circumstances applies:

- the cessation of activity of at least 200 displaced workers or self-employed persons, over a reference period of four months, in an enterprise in a Member State, including where that cessation of activity applies to its suppliers or downstream producers
- the cessation of activity of at least 200 displaced workers or self-employed persons, over a reference period of six months, particularly in small and medium-sized enterprises, where all operate in the same economic sector defined at NACE Revision 2 division level and are located in one region or two contiguous regions defined at NUTS 2 level or in more than two contiguous regions defined at NUTS 2 level provided that there are at least 200 workers or self-employed persons affected in two of the regions combined
- the cessation of activity of at least 200 displaced workers or self-employed persons, over a reference period of four months, particularly in small and medium-sized enterprises, where all operate in the same or different economic

sectors defined at NACE Revision 2 division level and located in the same region defined at NUTS 2 level

Under Article 7, the financial contribution may form part of the package, and the package may include:

- tailor-made training and retraining, including with regard to information and communication technology and other skills required in the digital age, certification of acquired knowledge and skills, individual job-search assistance services and targeted group activities, occupational guidance, advisory services, mentoring, outplacement assistance, entrepreneurship promotion, aid for self-employment, business creation, employee take-overs, and cooperation activities
- special time-limited measures, such as job-search allowances, employers' recruitment incentives, mobility allowances, childcare allowances, training allowances, subsistence allowances, and allowances for carers

Article 9 makes it clear that the financial contribution that is provided under the program is not intended to replace measures that are the responsibility of the employers by virtue of national law or collective agreements. The goal is to compliment the measures of the Member States at the national, regional, and local levels. The program aims to provide what is necessary to provide temporary, one-off support for targeted beneficiaries.

3. European Pillar of Social Rights

Third, the Pillar of Social Rights has 20 established principles for fair working conditions and social protection. The purpose is to build fairer and more well-functioning labour markets as well as good welfare systems for the benefit of all Europeans.

The 20 principles include:

- 1. **Education, training and life-long learning**: Everyone has the right to good education and training throughout their whole life
- Equal treatment between women and men: Men and women must be treated in the same fair way in every part of life (including work)
- 3. **Equal opportunities**: Everyone has the same fair chance to take part in the world around them
- 4. **Help to get a job**: Everyone has the right to be supported to get work or set up their own business

- 5. Work that is flexible and lasts for a long time: All workers have the right to fair and equal treatment at work, get support and training, and feel safe and secure in their job
- 6. Pay: All workers have the right to fair pay, for a decent standard of living
- 7. **Clear information about the job**: All workers have the right to clear information about their work, and clear information about the reasons why they lost their job
- 8. **Listening to workers**: All workers have the right to speak up about decisions that affect them at work
- 9. **Work-life and home-life**: All workers who are parents or carers have the right to take time off work to help the people they look after
- 10. Health and safety: All workers have the right to be protected at work; workplaces should be safe and healthy for everyone; and personal information must stay private
- 11. Childcare and support to children: All children have the right to get good care and education, and all children have the right to protection from poverty
- 12. **Protection from being very poor**: Everyone has the right to the basic things they need to live
- 13. **Unemployment benefits**: Everyone without a job has a right to unemployment benefits since this is money to help to afford the basic things people need to live
- 14. **People who do not have enough money**: People who cannot afford basic services have the right to extra help from the government
- 15. **Old age pensions**: Women and men have equal rights to a pension, and pensions are there for when people retire
- 16. **Healthcare**: Everyone has the right to affordable, good-quality healthcare
- 17. **People with disabilities**: People with disabilities have the right to support to live with dignity and take part in the world around them
- 18. **Long-term care**: Everyone has the right to affordable long-term care, which is care for people who have a health condition or serious disability

- 19. Housing: Everyone has the right to a good-quality, affordable place to live
- 20. **Basic services**: Everyone has the right to basic services such as water, electricity, banking and internet

The goal is for institutions, national, regional and local authorities, social partners and civil society in the European Union to deliver on the Pillar of Social Rights by participating in the concreate initiatives set out in the <u>Action Plan</u>. The Action Plan sets three ambitious targets by 2030: in employment, at least 78 percent of the population aged 20 to 64 should be in employment by 2030; for training, at least 60 percent of all adults should be participating in training every year by 2030; and for poverty, there will be a reduction of at least 15 million in the number of people at risk of poverty or social exclusion.

4. European Social Fund Plus

The European Social Fund Plus is the European Union's main instrument for investing in people. With a budget of €142.7 billion for the period 2021-2027, it will continue to provide an important contribution to the European Union's employment, social, education and skills policies, including structural reforms in these areas.

In fact, the initiative supports the implementation of the European Pillar of Social Rights. Moreover, the fund will help Member States with economic recovery following the pandemic. Furthermore, as part of cohesion policy, the program will also continue its mission to support economic, territorial and social cohesion in the European Union and reduce disparities between Member States and regions.

Support under the program is managed by Member States, and the European Commission plays a supervisory role.

To sum up, the European Union has many features that we can learn from, including the standards and expectations for Member States to follow in terms of employment law and policy. In our example above, we saw that France had to comply with the employment standards and termination provisions that had been laid down for all Member States, and France is doing this.

Second, we saw that the European Union's lofty initiatives have come together to provide the most comprehensive support for unemployed—and especially displaced workers due to technology disruptions. We would like to point out that the European Union has explicitly mentioned digitization and automation in its European Globalisation Adjustment Fund for Displaced Workers.

The Union of Skills will go a long way to help workers and employers alike to match the much-needed skills with the workers who can provide them. When we think back to the Future of Jobs Report, it stated that the top skills that will be needed by 2030 include Al and big data; networks and cybersecurity; technological literacy; creative thinking; resilience, flexibility, and agility; curiosity and lifelong learning; leadership and social

influence; talent management; analytical thinking; environmental stewardship; systems thinking; motivation and self-awareness; empathy and active listening; and design and user experience. These are the kinds of skills that workers need to develop through a program like the Union of Skills.

When it comes to the European Pillar of Social Rights, we see that the Action Plan will help to strengthen the social blanket and improve employment in Europe across all Member States. Lastly, we cannot forget the importance of the European Social Fund Plus: it will help recover the economies of the Member States from the pandemic and help move the economies forward in the future, which will have a positive effect on employers and employees.

Ethical Considerations

Al employment disruption presents unprecedented ethical challenges that requires coordinated responses across multiple stakeholders. This is because Al disruption differs fundamentally from historical technological shifts: we are now dealing with Al that is targeting previously automation-resistant cognitive tasks, affecting middle-class professions across educational levels, operating within contexts of rising inequality and weakening labour institutions, and creating the potential for rapid, large-scale displacement without any corresponding job creation.

When we think about employment in the age of Al disruption, there are several ethical considerations that call for profound thought and philosophical analyses:

- In terms of automation (replacing workers) and augmentation (enhancing human capabilities), we need to ask which approaches are more likely to preserve human dignity and value
- We need to think carefully about our societal values in the new age of AI, and weave these into our law and policy responses
- Al will force us to ask normative questions about what a meaningful life is, what
 we can do in our free time, and what we can do for work that is meaningful and
 makes us feel like we are contributing to society
- We need to ask how we can collectively use AI systems and tools to benefit humanity, whether it is making medical breakthroughs, solving the environmental crisis, or any other positive use cases
- We need to show compassion when workers are displaced because of AI, and find decent ways to support them
- Given the urgency, we need to move quickly and strategically with our responses

- Women and minorities are likely to be disproportionately affected by AI in their jobs, so we need to create strategies that aim to restore equality in the job market
- Unlike previous industrial transitions that have affected primarily manual labour,
 Al is likely to affect a large portion of white-collar workers who perform cognitive
 work and who have tied their work to their identities—we will need to develop
 strategies and psychological interventions to help these workers adjust and
 create new pathways to contentment and wellbeing

Let us take a moment to examine some of the main ethical theories:

- <u>Utilitarianism</u>: focusing on the consequences of actions, it seeks to promote the
 greatest amount of good for the greatest amount of people, while minimizing
 any negative consequences
- <u>Deontology</u>: focusing on the duties that must be obeyed, an action is considered morally good because of some characteristic of the action itself, not because the product of the action is good
- <u>Virtue ethics</u>: focuses on the virtues or moral character of an action instead of the consequences of actions or the particular duties that people have to obey (examples of virtues include benevolence, honesty, and courage)
- <u>Justice-Based Frameworks</u>: focusing on ensuring fairness and equity in all systems, the goal is to leave no one behind and ensure sustainable living

Applying these theories to our analysis, how would Al-related job displacement look from these different lenses? It is worth performing this thought experiment before we tackle options and recommendations in the next section.

If we were to take the utilitarian approach, we might focus on maximizing combined human welfare by striving to create productivity gains with Al. However, if the result is widespread displacement, utilitarians may still point to productivity gains and say that this approach is justified because there are overall economic gains.

From a deontological lens, we would view and treat workers as rational agents who have inherent dignity. When using this approach, we might focus on preserving human agency in AI deployment decisions—keeping a human in the loop.

From a virtue ethics lens, we might focus on human flourishing and the need for workers to perform meaningful work since it would be important that we recognize work's intrinsic value beyond economic production. We might also aim to ensure that we are enabling self-realization, social contribution, and community participation.

And from a justice-based framework, we might focus on the need for democratic participation in Al governance decisions and the fair distribution of benefits and transition costs.

Of course, these lines of thinking are complimentary, and we can use them as a backdrop when we think about how to address our two issues. For instance, it is possible to combine utilitarian efficiency with deontological respect for workers, virtue ethics emphasis on flourishing, and rights-based fundamental protections.

Ethical AI employment disruption cannot be achieved through technical solutions alone—it requires comprehensive approaches that integrate philosophical rigour and stakeholder engagement.

The choice is whether we will guide that transformation ethically, so that we can ensure that it serves human dignity and democratic values while creating shared prosperity in an Al-driven economy.

Options and Recommendations

As we can see from the above discussion, there have been several themes that we have touched upon, including the idea that work goes beyond mere economics for most humans; predictions suggest that the 2030 job market will force us to question the value of human work and human dignity; technological changes that will occur in the next five years will lead to economic, societal, psychological, as well as legal and policy consequences that we, namely employers and the rest of society, must actively address going forward; and Canada, the United States, and the Europpean Union have all set up different frameworks to help them adapt to the new Al Age, from which we can learn and propose policy options.

Let us return to our two main questions:

- 1. What can employers do to address the implications of AI disruption to remain competitive and provide support for their departing and transitioning workers?
- 2. What can we do on a societal level to help the large number of workers who will become permanently displaced due to AI disruption?

We would like to suggest that the ideas that are presented in the following two charts shown below articulate some of the main policy actions that we (employers and society as a whole) can take in the near future.

Issue One: What can employers do?

As we can see, there are many useful ideas that have been proposed in Canada, the United States, and the European Union that can assist employers to remain competitive and simultaneously support their departing and transitioning workers:

Strategy	Brief Explanation	Anticipated Benefits
Create responsible AI and automation frameworks and workplace policies and procedures	Al in the Workplace policies and procedures provide guidance for employers and employees alike on the expectations that the employer has for acceptable and unacceptable Al use in the workplace	More clarity on roles and responsibilities in the workplace
Create employee mental health and wellbeing policies and procedures, focusing on psychological safety to address workers' Al concerns	Programs are in place and employees can express their hesitations and frustrations with working with Al	Employees feel psychologically safe to express themselves at work
Use worker-centric approaches for recruitment, hiring, and retention, including augmentation first policies and procedures, and stress that the employer offers Al-complimentary skills development	Creates workers who are better equipped to be well adjusted workers in the workplace	Employers will be better equipped to attract top talent
Create on-the-job training and development programs and encourage lifelong learning of skills that have been identified as important for the 2030 labour market	Employees receive the much-needed and desired on-the-job training	Employers will be able to have more tech savvy workers and will be able to attract top talent
Create worker advisory committees for the employer's AI deployment decisions	Employees are more empowered because they serve in governance roles	Employers better understand workers' perspectives
Create profit-sharing arrangements for select employees who are in compliance with workplace policies and procedures	Employees are given opportunities to progress in their career	Employers have more engaged workers
Create right to disconnect policies to help workers who struggle with work-life balance and workaholism	Workers will have more guidance about what is acceptable and	Employers send the message that they care about the wellbeing of their workers

	unacceptable when it comes to hours worked	
Create workplace policies and procedures that deal with the psychological toll of Al-related anxiety and stress, as well as Al resistance	Workers hire professionals who can help employees in this area, and provide meaningful strategies to help in the future	Workers will have more positive outlooks when it comes to AI and technology, workers will be less resistant to AI in the workplace
Engage in strategic workforce planning and preserve human jobs by breaking down job descriptions and reworking jobs so that there are enough human tasks and Al-human collaboration tasks to be completed	Workers are given jobs consisting of human tasks and human-Al collaboration tasks	Workers will be content that the employer has put some thought into how jobs can be structured in the modern workforce
Create workplace policies and procedures that can bolster social connections between employees	Enable employees to reach out to colleagues and others in the workplace so that they remain socially connected	Workers will be content that the employer has facilitated more meaningful connections in the workplace
Create workplace policies and procedures that encourage continuous learning, and explore rewards including learning bonuses for eager and curious workers	Enable employees to be rewarded for continuous learning, a quality that is to be treasured in the modern labour market	Workers will be better equipped for a world of continuous learning

Issue Two: What can we do on a societal level?

Similarly, there is a number of useful ideas that have been proposed in Canada, the United States, and the European Union that can assist governments and the rest of society to help workers who have been unemployed long-term and displaced due to AI and technological disruption:

Strategy	Brief Explanation	Anticipated Benefits
Create comprehensive national privacy, AI, employment, and tax legislation and policy so that technological disruptions are adequately addressed, and	Law and policy can be used in the areas of privacy, AI, employment, and tax to lay down a more protective and flexible framework for the future of work	Workers will be better protected and more able to deal with Al-related disruption

enforcement provisions		
are strengthened Create upskilling and reskilling programs that deal with basic AI literacy and human-AI collaboration skills such as prompt engineering	Employees will receive the much-needed upskilling and reskilling programs, and be more empowered in the workplace	Employers will be better able to recruit and retain top talent, and will have a more knowledgeable and experienced workforce
Create employment guarantees for public sector jobs (especially workers in the public sector who have highly automatable jobs) and youth employment guarantees (especially given the high youth unemployment rates)	The employment guarantee will help match workers with jobs, since there is enough work for everyone	Employment guarantees in the public sector and with youth will help to match workers with jobs that are in demand and provide purpose for workers
Create more flexible Employment Insurance or unemployment programs that provide funding and other supports such as retraining programs or job finding programs to deal with Al disruption	Employees are provided with strong social supports in the form of funding, training, counselling, and other supports so that they can find meaningful work	Employees who have been displaced will be dealing with a government that is nimble and adapts quicky to technology disruption
Create and invest in Al infrastructure	Governments need to invest in an AI stack that involves the combination of hardware and software components that are specifically designed to support AI (such as machine learning models, deep learning, and data processing)	Governments who want to be leaders in AI will adopt best practices and be able to shape the development of AI law and policy
Create opportunities for individuals and workplace teams to engage in AI research and collaborate in a central AI Hub and match much-needed skills with workers who have those skills	Create an Al Hub for researchers and other citizens	Citizens will be able to lead in the area of AI research and entrepreneurship by creating more desirable opportunities in AI
Create pilot programs for conditional basic income and pair them with	Create a conditional basic income pilot program with supports, and create	Creating a responsible and accountable program with proper measures can help

upskilling and reskilling programs and other supports	targets and metrics by which they will be measured for the final report	the government decide if this is a viable option; if this is a viable option, study how the program can be expanded in the future
Create a fund for displaced workers who need supports to live and retrain	Dedicate some funds for this purpose paid for by Al advancements	Workers will be grateful that they will not be left behind
Create private-public partnerships for large scale reskilling programs	Governments can partner with organizations that can deliver training for workers	With different entities involved, the benefits of Al can be fairly distributed and workers can ultimately benefit from the training
Create a system that can distribute Al-related gains throughout society fairly, equitably, and efficiently	Governments will need to be involved through their tax law and policy to ensure that the Al-related benefits are evenly spread among citizens	Governments can rest assured that they are protecting citizens
Support the care industry and reassess what constitutes valuable work in an age with less work	Ask tough questions about what constitutes meaningful work (involve experts, including philosophers, in a roundtable)	Governments can rest assured that they have consulted with experts and regular citizens about human value and dignity
Create leisure policies for an age with less paid work	Ask tough questions about what should be in future leisure policies (involve experts, including philosophers and policy experts in a roundtable)	Governments can rest assured that they have consulted with experts and regular citizens about how we will spend our time in an age with less work
Consider matching workers with work areas such as environmental sustainability, such as dealing with the electricity needs of data centres	As part of the employment guarantee, governments need to match workers with the much-needed area of environmental sustainability in the age of AI where electricity and cooling costs are intense	Governments can match workers who need to find work with meaningful and in-demand work
Promote the work of the International Labour Organization, such as encouraging the creation of decent work for workers and treat workers equally and with dignity, and	Governments need to adopt the documents created by the International Labour Organization	Governments can rest assured that they are doing what they can to protect workers in the age of AI

adopt the Centenary Declaration for the Future of Work Decide how workers can	Ask tough questions about	Governments can rest
contribute to society and create social solidarity in an age with less paid work	how we can meaningfully contribute to our future societies (involve experts, including philosophers and policy experts in a roundtable)	assured that they have consulted with experts and regular citizens about how we will contribute and create social solidarity
Create a flexicurity program for workers	The program provides labour market flexibility in a dynamic economy and security for workers.	Governments like Denmark who have created the "golden triangle" (threesided mix of flexibility in the labour market combined with social security and an active labour market policy with rights and obligations for the unemployed) can help to provide workers with added protection in an age of Al
Create a program specifically for white-collar workers who feel that they have lost their purpose and identity due to Al- related job displacement, and also men who have dropped out of the paid labour market altogether, and help find them what they can view as meaningful work	Many white-collar workers believe that they are what they do for work. With Al performing cognitive tasks, these workers can feel threatened and will need some extra support	Governments that provide this support can make significant headway when addressing AI resistance
Create labour mobility programs	Enable workers to move around and find work throughout the country or block of countries	Workers will feel free and supported
Match employment and entrepreneurship coaches and mentors with workers who are seeking meaningful work in a world with less work	Workers who love their work may need extra support to transform their ideas into reality	Workers will feel supported
Use all main ethical theories such as	The work that governments will do will required	Governments can rest assured that they have

utilitarianism, deontology, virtue ethics, and justice-based frameworks to maximize human welfare by making Al-productivity gains, treat human workers with dignity and keep a human in the loop, focus on human flourishing and the need to do meaningful work, and the fair distribution of Al-related benefits to citizens	philosophers to engage in deep thought about these questions	consulted with experts about deep philosophical questions on the future of work
Create a policy that aims to help vulnerable workers such as workers with disabilities overcome challenges such as discrimination and inaccessibility, and find meaningful work in a world with less paid work	It is important for governments to be as inclusive as possible so that they leave no one behind in the age with less work, and so that they combat isolation and loneliness	When all workers (who are able) are included in the workforce, all members of society benefit
Create a policy that can strengthen the social connections between individuals in society to overcome challenges dealing with technological disruption	When we tackle loneliness and isolation due to technological disruption, the pandemic aftermath, and the technological divide, we help workers become more productive	When we are more deeply connected, we flourish
Rework the curricula of high school and post-secondary education so that students are better equipped to excel in the modern labour market	Create education and training programs that help students find a job in the age of Al	Students will feel more of a sense of purpose if they are registered in programs that can help them see how they will get a job and be productive in the labour market
Strengthen social protection measures for all individuals in society who are facing challenges finding meaningful paid or unpaid work	Bolster unemployment programs and provide the guidance that workers need to feel like they are being treated with dignity	Workers who cannot find meaningful work will be better protected
Create a policy where a national government is better equipped to collaborate with other national governments,	Be more open to possibilities when it comes to building the future of work	Including more actors and entities will help with increased purpose, Identity, and social solidarity

international associations, and the private sector (including the creation of industry partnerships within regions)		
Develop strategies that promote public trust	Be open and transparent, show that the government is accountable for its actions	Building public trust is essential for effective governance, as it encourages compliance with laws and policies, enhances public participation, and strengthens the legitimacy of government institutions. High levels of trust can even lead to better cooperation between citizens and government, ultimately improving societal outcomes

Conclusion

In our in-depth research report, we examined the topic of AI and the future of work. More precisely, we explored several contexts including the technological, sociological, economic, psychological, legislative, and ethical contexts that form the backdrop from which we could form policy responses that are aimed at employers and the rest of society.

We carefully studied the protections that are in place in Canada, the United States, and the European Union in order to provide a good cross section of available policy responses.

Lastly, we proposed several options for employers and governments to serve as recommendations for this report.

We hope that our research and recommendations are helpful.

Please do not hesitate to contact us at media@voyaigestrategy.com if you would like to provide feedback on the report or book an initial consultation for you and your organization.