

**FOCUS ON: MENTAL HEALTH**

# ‘BRAIN CAPITAL’ IN THE ERA OF AI

Unless we prepare for the tech revolution by retraining workers, creating replacement jobs and forging new education and career models, AI could trigger a superstorm of chronic workforce stress, says **Bill Wilkerson** of Mental Health International

**THE** World Economic Forum forecasts that individuals in some 375 million jobs will be rotated out of their jobs as a result of the infusion of artificial intelligence (AI) in workplaces across the world.

Consulting firm McKinsey says 60 to 90 per cent of all jobs now in place will be affected by artificial intelligence.

If the sole purpose of AI is to displace employees to cut costs, then it will not only cheapen the cost of producing goods and services, it will also cheapen our way life.

“AI and genomics will force us to challenge our cherished views of what it means to be human,” says Alan Bernstein, CEO of the Canadian Institute for Advanced Research.

Unless employers and governments prepare for this revolution by retraining workers, creating replacement jobs that demand distinctly human traits

and forging new education and career models, AI could trigger a superstorm of chronic workforce stress.

**AI uses for mental health**

Deep, chronic stress can move us toward depression and be the trigger for 90 per cent of suicides, now the leading cause of violent death. In 2018, suicides in the United States skyrocketed by 18 per cent, while globally, suicide took the lives of nearly three million people, according to the *Economist*.

In a recent study, the heralded Canadian scientist-psychiatrist Roger McIntyre found that a one-per-cent rise in unemployment precipitated a one-per-cent rise in the loss of life due to suicide.

On a promising note, just as AI may increase the stress-borne burden producing mental distress and increasing the risks of mental illness, AI

apps are also being developed to help people better manage their depression and anxiety disorders — and even to prevent suicidal risk.

Artificial intelligence is being expanded into a variety of areas, including the more effective diagnosis and treatment of schizophrenia, the modelling of psychiatric illness to test new methods of treatment and improved understanding of autism.

A new discipline — computational psychiatry — will also be able to help physicians to access and treat their patients more quickly. And, of course, telemedicine — driven to the fore by the COVID-19 pandemic — is being facilitated on a grand new scale by AI.

**‘Human capitalization’ of artificial intelligence**

Inevitably, though, celebrating the advent of AI as a positive force through scientific



progress must be guarded by the clear-eyed recognition of the risk of unintended consequences relating to its impact on the employment and employability of people.

In this respect, in the 2019 report *Mental Health in the Era of Artificial Intelligence*, we called on business and government to:

- establish a clear set of values for the introduction of AI into the workplace
- invest billions of dollars in re-skilling and developing employees and employers in preparation for the impact of artificial intelligence, noting that complex problem-solving, critical thinking, creativity, judgment, decision-making, service orientation and cognitive flexibility, teamwork and co-ordination will be the distinctly human attributes that the digital economy will demand in the years ahead.

The report calls for the “human capitalization” of the AI workplace and digital economy to help balance the huge investments in machines with

**AI USED FOR WIDE RANGE OF ACTIVITIES**



**60%**

Percentage of employers that expect AI to be used in up to 30 per cent of their business processes in three years' time



**47%**

Percentage of retail and consumer firms leveraging AI in customer care



**58%**

Percentage of financial firms leveraging AI for fraud detection



**60%**

Percentage of manufacturers and pharma companies using AI to improve product quality



**50%**

Percentage of energy firms leveraging AI for monitoring and diagnostics



**52%**

Percentage of tech firms leveraging AI to strengthen cybersecurity

Source: Massachusetts Institute of Technology (MIT)



## Investments in human capital will prepare people — through their skills, health and well-being — to do innovative work, a key to corporate success.

investments in people on a similar scale. We visualize the human capitalization of the AI workplace beginning with the introduction of workplace protocols or standards — mandated by law, if necessary — to establish the human values and effects that will govern the entry of AI into the workplace.

In fact, it is clear that the AI revolution is not just a technology event, it is a human event. Surely, it can be leveraged to generate transformative, “new job” opportunities and “new career” paths for people who otherwise are written off as short-term pain.

Key to this will be a major transition from an economy where employees are

generally seen as a cost to be cut rather than an investment to be made.

Government tax policy changes and financial accounting reforms are needed to give businesses the incentives to invest in their people the same way that they invest in things — as a capital cost for tax and accounting purposes.

### Seeing the value in people

Today, employees represent a lot more than costs to be chopped. In fact, so-called intangible assets — tied one way or another to human effort — represent 84 per cent of the asset value of publicly traded companies, according to Aon Management Consulting and Ponemon Institute.

On top of that, governments in Europe and the United States are in the early stages of requiring public corporations to report on their management of human capital. There’s also this: 75 per cent or more of all new jobs in the digital economy will demand cerebral, not manual skills, according to McKinsey & Company, Global Management Consulting.

Ironically, machine intelligence will help equip corporations, governments and financial planners with knowledge and insights so as to value human beings as assets of the business in the same way that they value plant and equipment as assets of the business.

Business must learn to see people as an asset — and they must learn to appreciate waste that they incur by leaving them idle, without any return on the investment that they made on their employees up to that point.

More fruitfully, investments in human capital will prepare people — through their skills, health and well-being — to

do innovative work, a key to corporate success in this day and age.

In order to produce the economic and societal benefits expected of it, the revolution in artificial intelligence must be matched by a revolution in the way that we value human intelligence and the way that we invest in the asset value of people.

We visualize a formula where brain health plus brain skills equals brain capital to guide this new revolution that will create — in the words of Henry Jaffe, principal of Periculum Labs in Ottawa — “new forms of value on the balance sheet.” [CHRR](#)



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