



INSIGHT 3

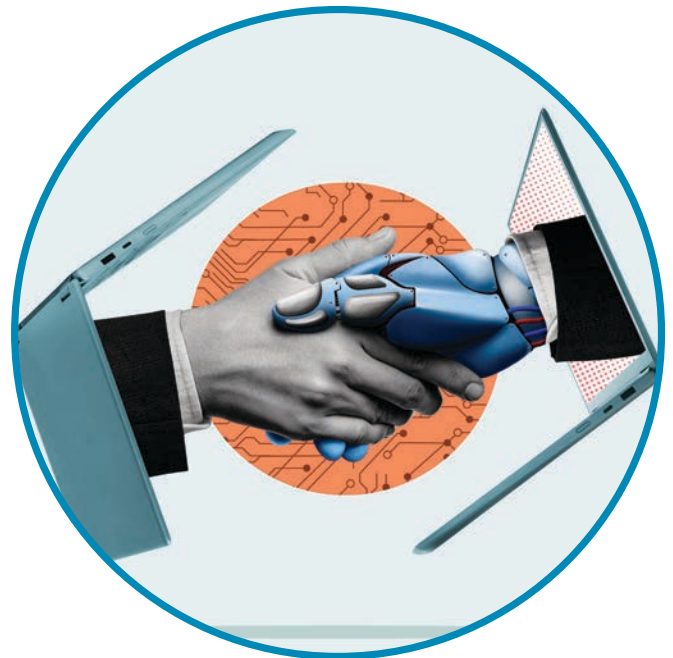
LACK OF TRUST IN AI COULD IMPEDE ITS ADOPTION



How trust in AI will evolve is complicated and unknown. Frequent or unaddressed failures in AI systems — or one significant failure — could erode trust and impede adoption, jeopardizing businesses that depend on AI. Emerging forms of certification, verification, and efforts to rectify harms could encourage user trust and uptake.

TODAY

Trust is central to acceptance of AI — and, in Canada, trust in AI is declining.¹ The CanTrust index shows that Canadians' trust in AI declined by 6% between 2018 and 2024.² The global IPSOS AI Monitor shows that the Anglosphere, including Canada, has less trust in AI than other regions: for example, 63% of Canadians are nervous about products and services that use AI compared to only 25% of people in Japan.³

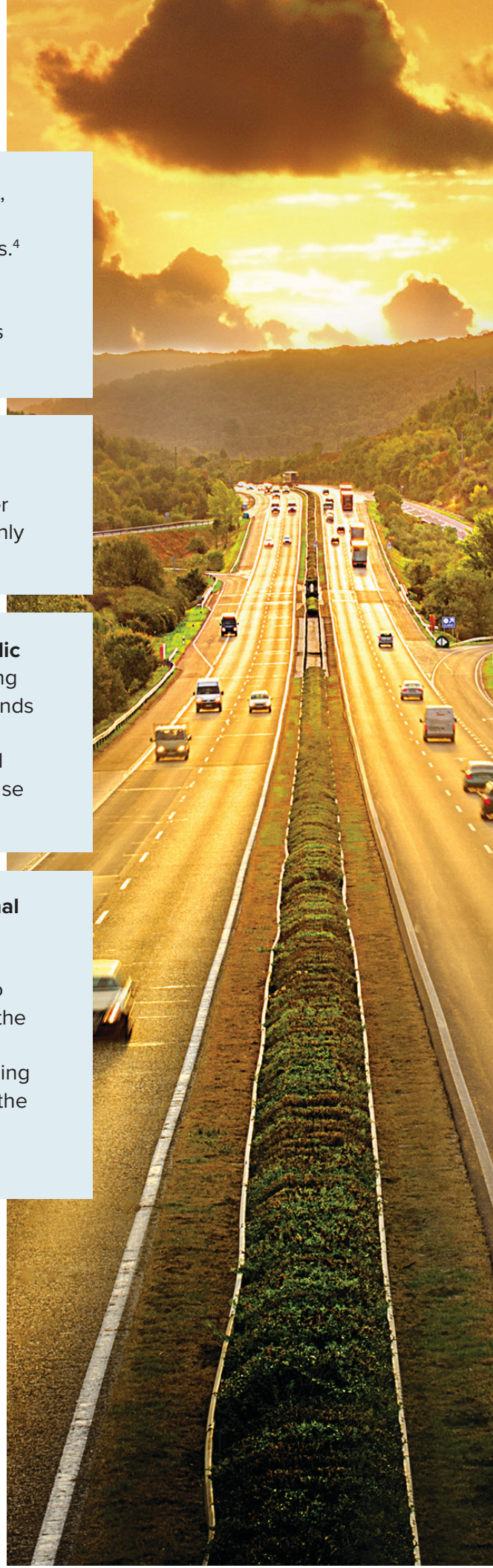


Trust in AI depends on the context in which it is used. For example, trust is highest for simple tasks such as adjusting a thermostat, and lower for tasks connected to personal safety such as self-driving cars.⁴ Public trust in self-driving cars is low and falling. In 2023, only 22% of Canadians reported trusting self-driving cars and other AI-based driverless transportation⁵ — compared to 37% of Americans, which is down from 39% in 2022 and 41% in 2021.⁶

Despite declining trust, use of AI tools in Canada is growing. A 2024 Leger poll found that 30% of Canadians now use AI, up from 25% a year ago. Younger demographics are using AI more than older demographics — 50% of those 18-35 report using AI, compared to only 13% of those 55 and older.⁷

Risks and failures arising from AI technologies have captured public attention frequently over the past year. In some instances, finetuning and testing of many AI tools was done after public roll out, which stands in stark contrast to trials for clinical drugs which require long periods of testing before release to the public. New initiatives to capture and report on AI incidents have emerged, such as the AI Incident Database and the OECD AI Incidents Monitor.^{8, 9}

Adoption of AI can feel forced, rather than chosen through personal agency. The current push to integrate AI everywhere can mean that valid concerns around data security, fairness, environmental consequences, and job security are downplayed.¹⁰ Forcing people to adopt AI in their everyday lives without also making efforts to make the technology more trustworthy can limit the potential transformational impacts of the technology.¹¹ The current backlash against the increasing use of AI facial recognition technology in airports is one example of the interplay between forced adaptation in the absence of trust.¹²





FUTURES

Improvements in technology, practices and systems could help to build trust in AI. For example, new capabilities such as neuro-symbolic AI, which combines neural networks with rules-based symbolic processing, promise to improve the transparency and explainability of AI models. Firms' adoption of new labelling, certification, or insurance models could offset some of the mistrust in AI.^{13, 14} And some providers are now developing ways to assess AI models for safety and trustworthiness, offering warranties to verify their performance.^{15, 16} In the future, AI systems could give a confidence interval for everything from search results to self-driving vehicles, supporting users in weighing the risks and uncertainties involved.¹⁷

More strategic and thoughtful deployment of AI could enhance trust. In the future, AI will likely become the right solution to some problems but not others. Trust in AI could be enhanced if people perceive that it is making their lives easier,¹⁸ rather than replacing tasks they enjoy or seeming like a solution in search of a problem. Individual familiarity with AI may build trust in one area of work or life, without necessarily translating to increased levels of trust in the overall AI ecosystem.¹⁹

High-profile failures and growing appreciation of risks could erode trust. Skepticism and mistrust could grow as the risks of AI become more well known and well documented and as more high impact tasks are delegated to AI. Groups that are negatively impacted by AI are actively opposing its use in some domains, such as writers and artists who are collectively organizing to limit what they see as the destructive power of the technology.²⁰ Mistrust could be driven not only by narratives that describe AI as an extinction-level threat, but also by its association with growing inequality.²¹ Similarly, high-profile technological failures could cast shadows of mistrust into the future. For example, public trust and support for nuclear power in Canada declined significantly in the wake of the Fukushima Daiichi nuclear accident in 2011, and public concerns over nuclear safety hindered the sector's growth for years.²² A similar loss of trust in AI technologies such as self-driving cars, could jeopardize not just one company, but entire industries.



IMPLICATIONS

- Lack of trust could be a **major impediment** to the integration of AI in some sectors
- A single **high-profile outlier incident** involving an established AI system could disproportionately harm trust in and uptake of AI — for example, a financial crisis triggered by AI-generated content and high-frequency algorithmic trading
- People could trust AI to perform certain tasks **more than they trust other humans**
- **Differing levels of trust in AI** across groups or use cases could **unite people across typical societal divisions or polarize them in new ways**
- **Excessive trust** in some AI outputs **could increase misinformation and disinformation**, with consequences for democracy and societal cohesion
- **A poor experience with one AI system could lead to distrust in other AI systems**, while a positive experience with one AI tool could lead to increased trust in other AI applications
- **Case law and legislation** that determines accountability for decisions taken by or with AI **could influence trust and adoption**
- The emergence of **new labels and certifications could affect consumer confidence** in AI, such as warning labels, or those analogous to fair trade or organic produce labels²³
- **Accountability and responsibility regimes will be clarified**, and many systems will need to determine who is accountable for the failures of AI

Endnotes

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PDF: PH4-213/2025E-PDF

ISBN: 978-0-660-76885-4

Aussi disponible en français sous le titre : Le manque de confiance dans l'IA pourrait entraver son adoption.

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