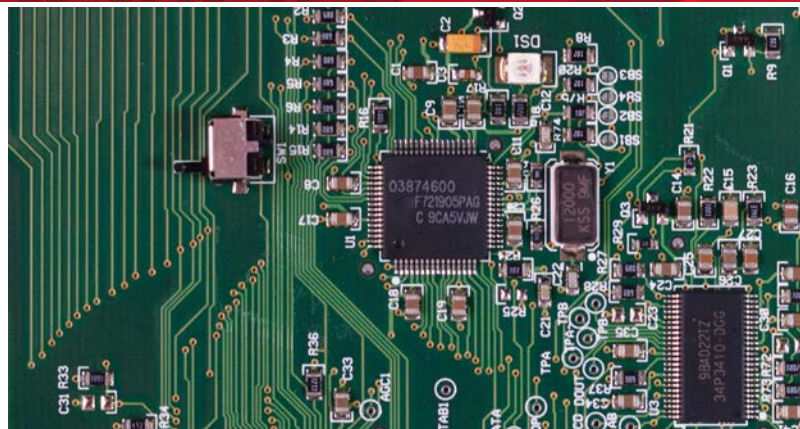


# Navigating Generative AI: Implications for small business and non-profits

By Kate Cassidy & Michelle Chen

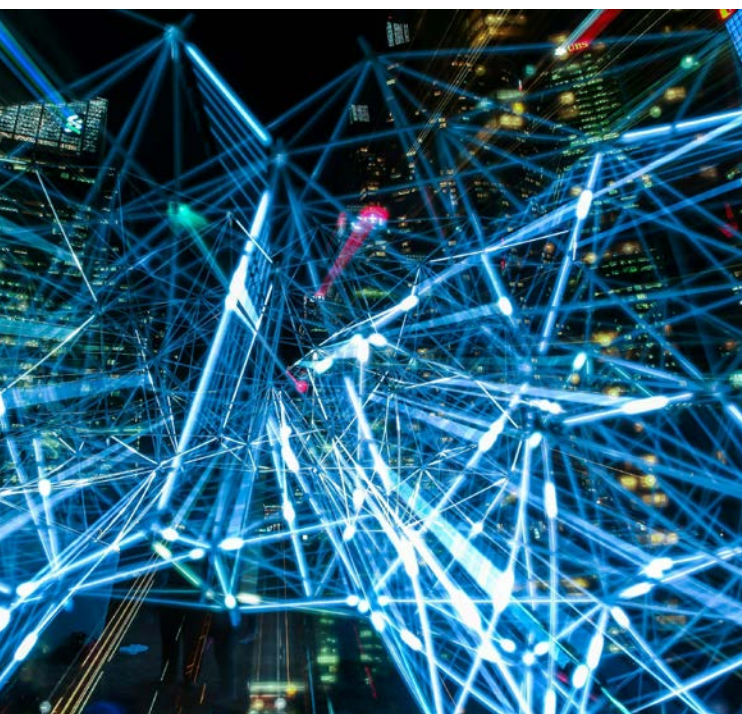
Small businesses and non-profit organizations are vital to Canada’s economic and social fabric, yet they often face challenges in staying competitive, meeting demands, and adapting to rapid technological change (Statistics Canada, 2022). Generative AI (GAI) presents promising opportunities to help address these challenges, yet it also comes with risks that require thoughtful management (Chui et al., 2023; Dwivedi et al., 2023; Kitsios & Kamariotou, 2021). This policy brief explores the benefits and challenges of GAI adoption, drawing insights from a research study on early GAI adopters in Niagara. The brief aims to equip organizational leaders with a framework for thoughtful and responsible adoption, while providing municipal and regional bodies with guidance on fostering an ecosystem that effectively supports these organizations. Overall, the brief outlines actionable steps for leveraging GAI’s potential in ways that benefit organizations, employees, and the broader community.



## BACKGROUND

In the St. Catharines-Niagara Census Metropolitan Area,<sup>1</sup> small businesses with fewer than 50 employees make up over 94 per cent of all organizations, providing the majority of local employment (Statistics Canada, 2023). Despite their importance, these organizations face barriers including limited finances, staffing shortages, and difficulties adapting to technological advancements (Kenney et al., 2024; Living in Niagara, 2023; Ontario Chamber of Commerce, 2022; Ontario Non-profit Network, 2022). Generative AI offers a potential solution to some of these challenges (Gill, 2024; Kenney et al., 2024). GAI tools are user-friendly and capable of producing text, images, audio, and video (see Government of Canada, 2024; Hughes, 2023; OECD, 2024; Ooi et al., 2023 for further explanation). They can help improve efficiency, enhance creativity, and scale tasks without significantly impacting costs (Brynjolfsson, & Raymond, 2023; Dhamani, 2024; Soni, 2023). For example, ChatGPT was shown to reduce administrative writing time by up to 40 per cent in one study (Microsoft, 2024). Similarly, a KPMG survey (2023) found that close to half of Canadian GAI users save more than three hours per week, with all respondents reporting improved work quality, better workload management, and the ability to take on additional tasks. Industry research further projects that GAI could reduce the number of hours worked by 30 per cent by 2030 (Ellingrud et al., 2023), and potentially increase global productivity by seven per cent annually over the next decade (Marr, 2023).

<sup>1</sup> A Census Metropolitan Area (CMA) is a geographic unit of economic analysis used by Statistics Canada. The St. Catharines-Niagara CMA does not include Grimsby or West Lincoln.



Despite the advantages of GAI, the adoption rates among small enterprises and non-profits are low. According to Statistics Canada (2024a), only 9.3 per cent of Canadian businesses use GAI tools with an additional 4.6 per cent intending to adopt them. In the non-profit sector, 6.7 per cent currently use these tools, while 3.7 per cent plan to utilize GAI in the future (Statistics Canada, 2024b). Interestingly, 22 per cent of surveyed employees across Canada report using GAI for work-related tasks, and nearly a quarter of those who use GAI report doing so without their managers' knowledge (KPMG, 2023). This informal use introduces risks, including the input of sensitive data and reliance on inaccurate AI outputs (Capodieci, Sanchez-Adames, Harris, & Tatar, 2024; Moraes & Previtali, 2024). Without oversight and guidelines, these risks could lead to operational problems and legal liabilities for organizations.

Governments and regulatory bodies are beginning to respond to the many concerns of GAI (Jobin & Ienca, 2019; The White House, n.d.). Canada's proposed Artificial Intelligence and Data Act (AIDA) aims to balance the support of innovation with responsible AI use. This act, if passed, will require businesses to mitigate risks, ensure transparency, and maintain human oversight (Government of Canada, 2023; Office of the Privacy Commissioner of Canada, 2023). Similarly, Europe's Artificial Intelligence Act prioritizes safety, transparency, and human oversight to encourage the prevention of harmful outcomes (European Parliament, 2023). Failing to comply with these emerging regulations could lead to legal issues for organizations (Himo et al., 2024). However, simply meeting regulatory requirements is not enough. Organizations need to develop a deep understanding of GAI's implications in their specific contexts and ensure that its use aligns with their values and goals.

**RESEARCH METHODOLOGY**

This policy paper is based on findings from a qualitative exploratory study conducted in the summer of 2024, which examined how early adopters of generative AI utilize it for workplace communication-related tasks. The study employed hermeneutic phenomenology, a methodology that focuses on interpreting lived experiences, to explore two key areas: 1. how early adopters perceive and interpret their interactions with GAI, and 2. how GAI influences work practices, skill development, and organizational dynamics.

For this research, data was collected through open-ended interviews with 14 participants from 11 different organizations. Unlike quantitative research, which often seeks to analyze larger datasets, phenomenological

studies typically focus on smaller sample sizes to explore individual experiences and interpretations in rich detail (Groenewald, 2004). Participants represented a range of roles, from CEOs and Executive Directors to employees working in marketing, research, operations, administration, and human resources. The study focused on small and medium-sized enterprises and non-profit organizations based in Niagara and Southern Ontario although one participant was based in Ontario but represented a larger organization headquartered outside of Canada. Ethics approval was obtained, and participants provided informed consent before the interviews.

The research team employed an iterative process to analyze the data, moving back and forth between individual interview excerpts, and the dataset as a whole, to identify patterns and themes, as well as outliers (van Manen, 1990). The study contextualized the findings by integrating academic literature, industry reports, and relevant social media discussions with participants' lived experiences.

The results from the research are presented across nine implications in the following three sections that include: adoption and uses; risks and challenges; and skills, processes, and culture. Each section concludes with questions for leaders to consider when developing a GAI integration plan. These questions can also be utilized by local and regional economic development offices and business support centres to assist SMEs. They are informed by participant suggestions and concerns as well as best practices from the literature.

SECTORS REPRESENTED BY STUDY PARTICIPANTS	
Public Administration	5
Other Services (except Public Administration)	3
Professional, Scientific and Technical Services	2
Agriculture, Forestry, Fishing and Hunting	1
Manufacturing	1
Performing Arts, Spectator Sports, and Related Industries	1
Real Estate, and Rental and Leasing	1



## ADOPTION AND USES

This section explores how some small businesses and non-profits have adopted generative AI based on the experiences of our study participants. It provides leaders with insights into how GAI can enhance workplace tasks and add value to their operations.

### 1. Adoption

Our research found that the adoption of GAI tools was primarily driven by personal interest or influence from colleagues rather than organizational initiatives. Most of the participants we interviewed had no formal training. Instead, they learned to use these tools informally through peer interactions or from social media. Almost all of our participants use GAI as a regular part of their daily work. The free version of ChatGPT was the most commonly used model, though some participants opted for the paid version at their own expense. A few had also experimented with other GAI tools, including custom systems. Text generation was the most common application, while a smaller group of early adopters explored image and video features.

Although GAI is becoming more common, participants reported that conversations about its use among coworkers and supervisors were rare. As one participant noted, “Right now, most people don’t even talk about using AI, but I

know a lot of my colleagues use it.” Most participants reported that they had received little to no guidance on GAI use although a few said their organization was currently working on policy. The majority of those we spoke to expressed a desire for clear policies and training. One participant shared:

*“Even our national association hasn’t addressed AI yet, and they should have started two years ago. Those who aren’t adopting it won’t be as effective. We need training on what GAI is good for, what it shouldn’t be used for, and best practices. We should be sharing examples, but none of that is happening—and it should be.”*

Questions about what government regulations will look like were also raised by a few interviewees, with one participant describing this period as the “Wild West” of emerging AI technology. They wished for balanced regulations that protect both organizations and employees without stifling innovation. Ultimately, our participants suggested that successful GAI adoption requires leaders to formalize its use by developing guidelines aligned with organizational values, while also supporting employee-focused change initiatives (Kanitz et al., 2023).

## 2. Key-Use Cases

Participants told us that they, and their colleagues, use GAI across a wide range of tasks, with the most common being research, brainstorming, content creation, and report writing. One participant described GAI as “probably the best tool that’s ever come into my workplace,” citing its adaptability and usefulness. Another noted, “I use it mostly for brainstorming and starting reports. It’s great for quickly summarizing news articles and giving me a solid foundation.”

GAI can help draft outlines, structure arguments, refine language, and critique and improve output (Stadler & Reeves, 2023). It can also be used to develop instructional materials, job descriptions, strategy, sales plans, and even new products. While less frequently mentioned by our early adopters, it can be applied to technical tasks like writing code or generating Excel formulas (Forbes Technology Council, 2023). One participant shared, “We’ve started using AI for voice correction in our video work, and our web team is experimenting with it for coding tasks.” In general, the applications of our participants align with findings from a Canadian survey, which found that research (48 per cent), idea generation (45 per cent), and presentation creation (29 per cent) are the top uses of GAI (KPMG, 2023). Overall, this demonstrates the versatility of GAI and its ability to support a broad spectrum of tasks across different user needs.

## 3. Enhanced Efficiency and Cognitive Relief

Participants consistently emphasized how GAI enhances efficiency, allowing them to achieve the same results in significantly less time. One participant shared, “I’d be producing the same stuff if it was just me, but it would take three times as long.” Another noted, “It’s helping people become more efficient by automating tasks that many of us don’t necessarily love,” referring to basic planning and organizing work. Another participant summarized, “It’s like having a second helper to bounce ideas off of and ensure my work is flowing. It’s still my work, just enhanced.” Research supports these time-saving benefits (Noy & Zhang, 2023; Rivas & Zhao, 2023; Wilson & Daugherty, 2024).

Delving more deeply into how these tools bring efficiencies, participants often described GAI as a sounding board, assistant, and brainstorming partner that significantly reduced the cognitive load associated with planning and writing. By providing a structured starting point, GAI spared users from the mentally taxing task of developing and

organizing ideas from scratch. Instead, they could focus energy on refining and adapting content and save their effort for higher-level cognitive tasks.

One participant explained, “It takes a little time out of the thought process because once GAI has created the framework, we just...tweak it or adapt it.” Another highlighted how GAI helped overcome the mental block of starting from nothing, stating, “It’s easier to start from something and change it than to sit there with a blank screen and a cursor blinking.” We heard that GAI provides structured starting points and eases the mental strain of initiating tasks like writing and planning (Alavi & Westerman, 2023; Buettner, 2013).

## Implications for Leaders

The adoption of GAI in small businesses and non-profits has primarily been driven by personal interest or peer influence rather than through coordinated strategies. Organizational leaders should begin by formalizing integration, establishing oversight, and ensuring responsible use in line with emerging regulations. Starting with lower-risk, high-reward applications that reduce cognitive load and boost efficiency can help ease adoption. Encouraging knowledge-sharing and open dialogue among employees will further develop skills and build confidence.

### QUESTION FRAMEWORK: STRATEGIC ADOPTION

Who will be responsible for overseeing GAI use within the organization?

How can we leverage early adopters to assist with more formal adoption and how might we encourage an open dialogue and knowledge-sharing among employees to enhance GAI skills and awareness?

How can we address employee concerns?

What are some examples of high-reward, lower-risk uses of GAI that our organization can introduce as a starting point?

What resources—both financial and technical—are needed to support effective GAI implementation, and where can we access them at local, provincial, or national levels?

Can we collaborate with other organizations or industry groups to share best practices and address common challenges?

## RISKS AND CHALLENGES

This section explores how some generative AI users perceive legal, ethical, and operational risks. It offers guidance for leaders on handling data entered into GAI systems and key considerations for refining AI-generated outputs.

### 1. Voice and Authenticity

All participants raised concerns about the voice and authenticity of GAI-generated content. They noted that current GAI tools often produce overly descriptive, repetitive, or stiff language. One participant pointed out the use of words like 'intricate' or 'tapestry' which they said felt unnatural. Another participant explained, "It's not that the words are wrong, but they don't feel human." The grammar, phrasing, and tone of GAI-generated text were described as easily recognizable for people who use GAI themselves. A participant remarked, "If you use generative AI, even in a small capacity, you start recognizing the patterns in how it reads, and what it looks like." Early adopters frequently noted poorly edited GAI outputs in emails, speeches, reports, websites, and marketing materials. However, despite these recognitions, some studies suggest that distinguishing between AI-generated and human-written text can still be challenging (Fleckenstein et al., 2024; Waltzer et al., 2024), and this is an area where developers are continuously working to improve as natural language processing evolves (Rogers, 2023).

Nonetheless, when our participants felt they recognized content as AI-generated, they described it as off-putting, inauthentic, and untrustworthy, assuming the creator had put minimal effort into the task. One participant shared, "I just zone out. Why am I wasting my time?" Another remarked, "It felt unverified, so I didn't fully trust it."

A third early adopter expressed frustration at receiving AI-generated marketing emails, saying,

***Did they spend any time understanding our problems, or is this just a marketing tactic? I want a personal message. I want to know you empathize with me as a person.***

We were told that poorly edited GAI content can harm brand messaging. As one participant noted,

***It devalues your brand as soon as I can tell you've used ChatGPT without human verification. It cheapens it. It makes it seem like you didn't put enough effort into that piece.***

Participants said that while they accept GAI being used as a tool, they expect personal investment that ensures its presence is not obvious.

Without authenticity and well-executed human oversight, AI-generated content risks losing impact and damaging brand reputation as audiences still value human input (Yuan, Wang, & Liu, 2023; Zhang & Gosline, 2023). Ultimately, participants indicated that GAI communication must be customer-centred, meet expectations, and be aligned with a brand's voice to maintain trust and credibility. Given that some may overestimate their ability to identify AI-generated content and even their ability to properly edit it, a thorough review and refinement by those with strong communication skills and expertise appears prudent. Policies on disclosure may also help mitigate suspicion.

### 2. Accuracy, Bias and Plagiarism

Another concern participants raised was the accuracy of GAI output, although this issue may be less common in custom versions. One participant said, "It typically has some mistakes that need correction. It's never a finished product." The fact that GAI content can appear credible while being factually incorrect or misleading is well documented (Government of Canada, 2024). This is due to GAI's reliance on predicting word sequences based on patterns rather than truly understanding content. This can lead to "hallucinations" or inaccuracies, particularly in areas where GAI has had limited training data. As one participant observed, "If we're targeting a specific group, like investors or a cultural subgroup, the result is often a mess." Knowing where GAI performs well, and always verifying its information, is important. However, studies show that nearly half of GAI users do not regularly fact-check outputs (KPMG, 2023).

Although participants acknowledged the potential for inaccuracies, few mentioned a concern for bias. Many were aware of media discussions on bias in GAI but did not feel it affected their specific uses of GAI tools. Bias in AI-generated output is a well-documented concern (Casella et al., 2023; Sinatra & Hofer, 2023; Verma & Oremus, 2023). Freely available GAI models are trained primarily on data from online sources which in turn reflect societal biases such as sexism, racism, and cultural stereotypes (UNESCO, IRCAL, 2024; Abid, Farooqi, & Zou, 2021; Bender et al., 2021). Additionally, training sources typically underrepresent non-Western viewpoints (Chan, 2022). Algorithmic design and user instructions can also contribute to biased outputs and create a feedback loop where biases are perpetuated (Chan, 2022; Ferrara, 2024; Trinity College Dublin, 2023).

## QUESTION FRAMEWORK: RISK MANAGEMENT AND COMPLIANCE

What are the operational, ethical, and legal risks for our use cases (including third-party applications), and what is our plan for managing these considerations?

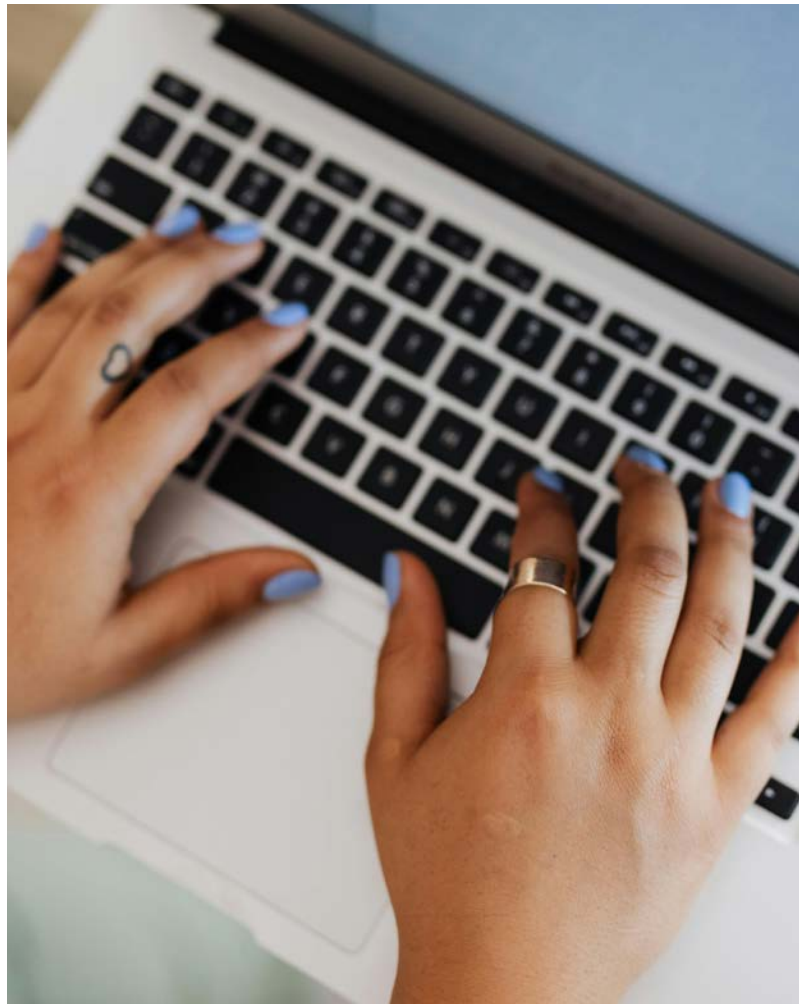
How will we ensure alignment with our communication goals and brand standards?

How should we incorporate transparency into AI processes to maintain trust and mitigate potential risks?

How will we manage the balance between human input and AI-generated content?

How can we create a culture of accountability and innovation to proactively manage GAI risks?

How will we stay informed about new regulatory developments?



The training of GAI on web-scraped data also raises intellectual property concerns, an issue that a few participants expressed. If trained on copyrighted material, GAI may produce text that closely resembles or directly quotes existing works and could lead to unintentional copyright, trademark, or patent infringement. One participant noted, “We don’t want a plagiarism, copy-paste approach—taking other people’s work or using AI-generated content as if it’s our own.” The final product, they said, “should always be a combination of our input and AI,” not simply AI-generated text. To ensure responsible use, individuals should verify outputs and blend AI-generated content with their own insights.

### 3. Data Security

All the early adopters interviewed acknowledged security concerns with GAI. One participant stated that they would “never input anything into GAI that they wouldn’t be comfortable sharing freely on the internet.” Many AI platforms collect user data, raising concerns about how this information is stored, processed, and potentially used (Government of Canada, 2024; Himo et al., 2024; Moraes & Previtali, 2024). GAI’s ability to aggregate data should also be considered, as sensitive or personal information could be combined and analyzed in ways users don’t anticipate.

Another concern is the integration of GAI into third-party tools such as email clients, content management systems, and design platforms (MIT Sloan Management Review, n.d.). These tools often include auto-suggestions, text generation, or design templates powered by GAI, but many users are unaware of GAI’s role in these functions. This lack of transparency not only limits users’ control over how their data is processed but also increases the risk of unintentional data sharing and compliance violations (Capodiecì, Sanchez-Adames, Harris, & Tatar, 2024; Chui et al., 2023).

While our participants told us that they were cautious about the information they gave GAI tools, this diligence may not extend to the broader population. A recent survey found that nearly a quarter of Canadian GAI users have shared sensitive information on public platforms (KPMG, 2023). This highlights the need to restrict sensitive data input into GAI systems and ensure transparency in data handling processes.

### Implications for Leaders

Many small businesses and non-profits may feel uncertain or unaware of the legal, ethical, and operational risks tied to GAI, including concerns around authenticity, brand reputation, bias, accuracy, plagiarism, and data security. Leaders should focus on developing formal policies that balance GAI’s capabilities with human oversight.

## SKILLS, PROCESSES, AND CULTURE

The integration of GAI into small businesses and non-profits goes beyond simply adopting a new tool; technology can reshape the underlying dynamics of the workplace, influencing not just tasks but the entire organizational fabric and way of working (Scott et al., 1998; Howcroft & Taylor, 2022; Orlikowski, 1992; Williams & Edge, 1996). This section explores how participants view GAI's impact on skills, collaboration, and culture. It guides leaders in proactively addressing how GAI may reshape their organization's identity and workforce dynamics over the long term.

### 1. Skills and Expertise

The integration of GAI raises important questions about the future of work and the skills employees will need to succeed in an AI-enhanced environment (Alekseeva et al., 2021; Orchard & Tasiemski, 2023; Stadler & Reeves, 2023; Zitar et al., 2023). Our participants identified key competencies required for effective GAI use, with some of their insights challenging common assumptions. Many participants highlighted the need to improve their generative AI prompting abilities. Prompts are the framing questions and statements inputted to guide AI effectively (Maloy & Gattupalli, 2024). Equally important, however, is the ability to evaluate and refine AI outputs to ensure that it is accurate and aligned with goals, brand voice, and organizational values. This process requires domain expertise as well as communication, empathy, decision-making, and critical-thinking skills (Markauskaite et al., 2022; Narisetti, 2023). One participant shared, "People think they can skip being a good writer, but you actually have to be better—at prompting, reading, and reviewing."

Participants expressed concerns that over-reliance on GAI could erode these competencies, however. As one organizational leader remarked, "I don't want people to become complacent, relying on AI to be that 'well, AI said it, therefore it must be true.'" Another front-line employee added, "Anyone using GAI should have the skills to effectively evaluate AI outputs and be capable of creating and completing work independently, without assistance." These comments underscore the importance of maintaining domain knowledge, judgment, and independent problem-solving (Dell'Acqua et al., 2023; Stadler & Reeves, 2023).


Some participants noted that over-reliance was already affecting their work. One participant shared, "Sometimes I waste my time prompting and prompting and I am like now I am wasting time telling a computer to do something I could just do." Another admitted, "It's taking away my brain power. Even if it's just an email, I'll try it in ChatGPT,"

adding, "The fact that it comes up with these ideas I hadn't even thought of makes me doubt myself." Organizations should ensure that human skills and domain knowledge remain central in an AI-enhanced environment.

### 2. Work Processes and Collaboration

Participants had mixed reactions to how GAI has reshaped their work processes. Most felt it improved efficiency and overall work quality, but they also emphasized the need to maintain collaboration and human interaction. Early adopters often viewed GAI as a brainstorming partner, using it to develop ideas and get feedback in place of colleagues or supervisors. One participant reflected on how their workflow had changed, stating, "The number of team meetings has decreased. Now, people turn to AI first to develop ideas or proposals before seeking feedback." Several participants noted that collaboration was now more efficient. This reflects Wilson and Daugherty's (2018) suggestion that GAI could enhance collaboration.

GAI can increase efficiency, but it has the potential to erode important aspects of teamwork. Face-to-face interactions often foster unique insights, and a sense of belonging and trust among team members (Dell'Acqua, Kogut, & Perkowski, 2020; Edmondson, 1999; Forsyth, 1990). One participant shared how the combination of remote work and GAI had impacted them:

***The work culture completely did a 180... It was super isolating, and all the reasons I loved my job initially no longer existed ... I wanted to see the people that I worked with, be creative with them, and have meetings with them and collaborate.***

While GAI can speed decision-making, it can also strip away the collaborative benefits of personal interactions if not managed thoughtfully.

Another concern raised by participants was the unintended shift in quality control. Some found that poorly used GAI transferred the burden of editing onto others. One participant expressed frustration with having to "undo work that people rely on ChatGPT to do without thinking." Instead of streamlining workflows, this created additional work by shifting the responsibility for quality assurance onto others. Organizations should consider how to establish a balance between the time-saving benefits of GAI-driven efficiency and the time and skill required for effective review processes and human collaboration.

### 3. Values and Ethics

When considering GAI adoption, there is a need to balance productivity with other core organizational values (Kanitz et al., 2023; Nah et al., 2023; Orchard & Tasiemski, 2023; Thiebes, Lins, & Sunyaev, 2020). GAI brings speed and efficiency but may come into tension with values such as employee well-being, trust, and corporate responsibility. Organizations must navigate this delicate balance through iterative strategies and consistent reflection to align technological benefits with key organizational principles.

One value tension we heard from our interviewees was the conflict between automation and deeper human needs such as fulfillment, engagement, and connection. One individual, who eventually left their job partly due to GAI over-use in their organization, shared, “When I go to ChatGPT and get those answers, I feel almost unfulfilled in my role.” By outsourcing cognitive effort to AI, employees risk losing the sense of purpose that comes from producing the work themselves. A senior leader echoed this idea, explaining, “If AI is just replacing thought processes... you’re not emotionally connected to your job, peers, or the organization’s mission.”

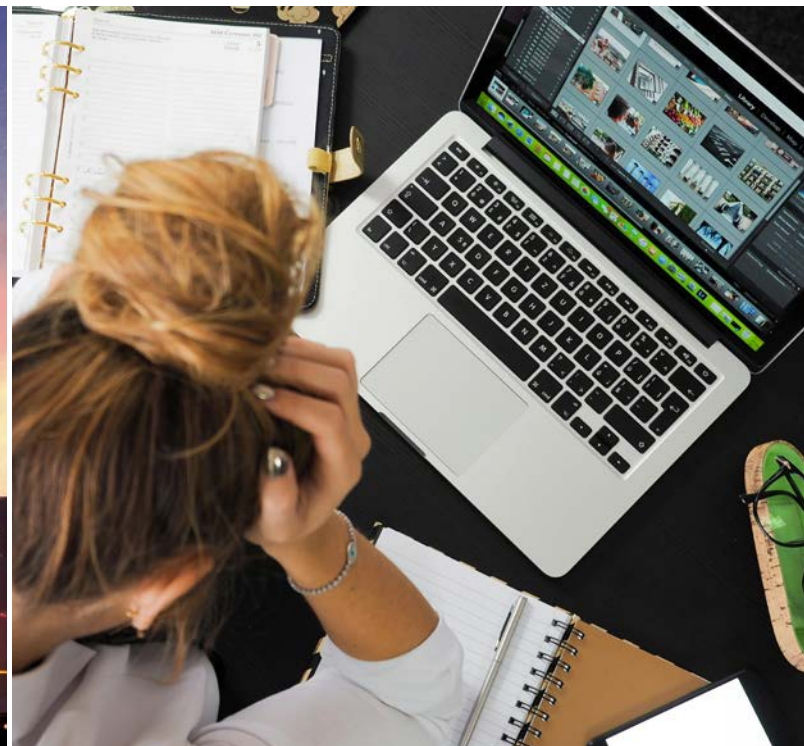
The speed GAI offers can also raise pressures to rely more heavily on AI. Employees can be expected to handle more tasks in the same amount of time, creating stress and reducing the time for thoughtful, creative work. One participant expressed frustration at having to use GAI all of the time now: “When I started performing quicker because

of AI, I got more things added to my plate... now I’m kind of stuck using them.” When GAI replaces employees’ cognitive and creative effort, it can erode the intrinsic satisfaction and purpose derived from doing meaningful work. This detachment can decrease emotional investment in the job, peers, and organizational mission, ultimately impacting employee well-being and engagement. Our participants indicated that they would like help balancing GAI’s productivity benefits with their sense of belonging and purpose.

Trust and practicality also presented a value tension for many participants. Some felt no need to disclose their use of GAI, likening it to tools such as spellcheck that they regularly employ in their work. One participant explained, “I wouldn’t say it is created by ChatGPT because it is truly created by my employees, and they use it as a tool.” Another early adopter added,

*I just think it would raise more questions than would be relevant. There are varying degrees of understanding of AI technology right now and disclosing it might actually confuse people more than help.*

Yet they also told us they believed in transparency with GAI use. Participants were unsure where and when to draw the line between using AI as a tool like any other and the need for disclosure to maintain trust. Interviewees indicated





that they would like more guidance from their employer on this topic. The necessity for discussions around disclosure will become even more pressing as policymakers in North America take steps toward GAI transparency requirements (Transparency Coalition, 2024). This highlights the broader challenge of balancing automation with trust and transparency.

Sustainability is another key value tension in the adoption of GAI (Stein, 2024; Strubell, Ganesh, & McCallum, 2019). Although participants were somewhat aware of environmental concerns and GAI use from the media, they did not discuss them at length. However, one participant expressed interest in learning more about the issue, particularly the energy and environmental impacts of GAI. The data centres that power GAI models consume vast amounts of energy and water for cooling and involve a complex production chain, from manufacturing graphics processors to deploying the models. GAI models like ChatGPT are estimated to use around 10 times the electricity of a Google search (Coskun, 2024). With 100 million weekly users, the energy demand accumulates rapidly (Kemene, Valkhof, & Tladi, 2024). In fact, daily operations for processing millions of queries are projected to consume about 1 GWh, a number comparable to the daily energy needs of 33,000 US households (McQuate, 2023). Managing the value tension between short-term efficiency goals and broader social responsibilities is an ongoing challenge, requiring the balance of productivity and innovation with commitments to environmental sustainability, and social accountability.

Small organizations with traditional, cautious values may struggle to balance them with GAI adoption (Tursunbayeva & Chalutz-Ben Gal, 2024). As one participant explained, “It challenges us because it’s a platform that we don’t have control of...it’s just finding how it fits within the organization.” They added that the effort is worthwhile because “it allows us to spend less time documenting and more time with people.” Ultimately, incorporating GAI into an organization requires a thoughtful approach that weighs speed and efficiency alongside other core values.

### ***Implications for Leaders***

Integrating GAI into small businesses and non-profits can reshape the skills, workflows, and culture that define an organization’s identity. Participants highlighted the need to balance the operational efficiency of GAI with maintaining essential skills as well as organizational values, processes, and a healthy and engaging work culture. Ethical considerations—trust, transparency, and sustainability—should also guide adoption. To address these concerns, leaders should access digital literacy programs and engage employees in discussions on how GAI aligns with organizational goals and values, fostering a culture of continuous learning as technology and regulations evolve. Moreover, GAI adoption should be part of corporate responsibility efforts, ensuring alignment with sustainability and social accountability.



#### **QUESTION FRAMEWORK: ORGANIZATIONAL CULTURE AND INTEGRATION**

How will we support employees in integrating GAI into their workflows without over-reliance, ensuring they maintain and develop critical skills, continue to collaborate, and maintain an emotional connection to their work?

How will we prevent GAI from eroding the authenticity and personal relationships that are critical to our organization’s success?

How can we ensure that our use of GAI aligns with, and reinforces, our organizational and ethical values?

How will we gather feedback and measure the success of GAI use to continuously refine our practices?

## CONCLUSION AND RECOMMENDATIONS

GAI presents significant opportunities to enhance efficiency, reduce cognitive load, and improve productivity. However, uncoordinated use—without clear policies or training—poses operational, legal, reputational, engagement, and ethical risks. To ensure successful adoption, leaders must shift from isolated experimentation to structured, responsible integration. To support this transition, the question framework in this document provides a foundation for meaningful discussions and planning. By fostering shared understanding, it sets the groundwork for cohesive and effective GAI adoption.

Local and regional economic development offices and business support centres can also apply this framework to guide small businesses and non-profits through GAI integration. Additionally, this policy brief identifies ways that municipalities, economic development offices, associations, chambers of commerce, start-up incubators, and business support centres can advocate, inform, and equip local leaders in the responsible use of GAI.



## POLICY RECOMMENDATIONS

These strategies can empower small businesses and non-profits to leverage GAI effectively and responsibly, promoting innovation, ethical practices, and sustainable impact that strengthens the region's economic and social fabric.

- **Sector-specific training and education.** Partner with local universities and colleges to develop or endorse tailored workshops that go beyond basic GAI use, encompassing digital literacy, alignment with organizational goals, user well-being, and essential skills like collaboration and decision-making.
- **Community outreach and engagement.** Launch public education initiatives to demystify GAI, promote ethical awareness, and enhance digital literacy within the community.
- **Knowledge-sharing forums and toolkits.** Facilitate regular forums for small businesses, non-profits, researchers, and industry experts to discuss GAI benefits and challenges, use cases, and operational needs. Develop toolkits that include sample guidelines and metrics, use cases, and risk management checklists.
- **Regulatory and compliance support.** Offer updates on GAI regulations and create business networks to access affordable compliance consultation, ensuring small organizations stay informed without excessive costs.
- **Advocacy and resource mobilization.** Represent small businesses in provincial and national policy discussions, focusing on access, affordability, and feasible compliance, while securing financial support for training and resources.
- **Targeted support for non-profits.** Recognize and address the unique needs of non-profits by offering tailored assistance to adopt GAI effectively, boosting their service capacity and impact.

## REFERENCES

- Abid, A., Farooqi, M., & Zou, J. (2021). Large language models associate Muslims with violence. *Nature Machine Intelligence*, 3, 461–463. <https://doi.org/10.1038/s42256-021-00359-2>
- Alavi, M., & Westerman, G. (2023, November 7). How generative AI will transform work. *Harvard Business Review*. <https://hbr.org/2023/11/how-generative-ai-will-transform-knowledge-work>
- Alekseeva, L., Azar, J., Giné, M., Samila, S., & Taska, B. (2021). The demand for AI skills in the labor market. *Labour Economics*, 71(August), 2–27. <https://doi.org/10.1016/j.labeco.2021.102002>
- Bender, E. M., Gebru, T., McMillan-Major, A., & Shmitchell, S. (2021). On the dangers of stochastic parrots: Can language models be too big? *Proceedings of the Conference on Fairness, Accountability, and Transparency (FAccT '21)* (pp. 610–623). Association for Computing Machinery. <https://doi.org/10.1145/3442188.3445922>
- Brynjolfsson, E., Li, D., & Raymond, L. R. (2023). *Generative AI at Work* (Working Paper No. 31161). National Bureau of Economic Research. <https://doi.org/10.3386/w31161>
- Buettner, R. (2013). Cognitive workload of humans using artificial intelligence systems: Towards objective measurement applying eye-tracking technology. In I. J. Timm & M. Thimm (Eds.), *KI 2013: Advances in Artificial Intelligence 8077*, 33–42. Springer, Berlin, Heidelberg. [https://doi.org/10.1007/978-3-642-40942-4\\_4](https://doi.org/10.1007/978-3-642-40942-4_4)
- Capodiec, N., Sanchez-Adames, C., Harris, J., & Tatar, U. (2024). The impact of generative AI and LLMs on the cybersecurity profession. *2024 Systems and Information Engineering Design Symposium (SIEDS)*, 448–453. <https://doi.org/10.1109/sieds61124.2024.10534674>
- Cascella, M., Montomoli, J., Bellini, V., & Bignami, E. (2023). Evaluating the feasibility of ChatGPT in healthcare: An analysis of multiple clinical and research scenarios. *Journal of Medical Systems*, 47(1), 33. <https://bit.ly/3Or56UJ>
- Chan, A. (2023). GPT-3 and InstructGPT: Technological dystopianism, utopianism, and “contextual” perspectives in AI ethics and industry. *AI Ethics*, 3(1), 53–64. <https://doi.org/10.1007/s43681-022-00148-6>
- Chui, M., Roberts, R., Rodchenko, T., Singla, A., Sukharevsky, A., Yee, L., & Zurkiya, D. (2023, May 12). *What every CEO should know about generative AI*. McKinsey & Company. <https://bit.ly/3B8NQQS>
- Coskun, A. (2024, July 11). *AI supercharges data center energy use – straining the grid and slowing sustainability efforts*. The Conversation. <https://bit.ly/3Oq9eUW>
- Daugherty, P. R., & Wilson, H. J. (2018). *Human+ machine: Reimagining work in the age of AI*. Boston, MA: Harvard Business Press.
- Dell’acqua, F., E. McFowland, E. R. Mollick, H. Lifshitz-Assaf, K. Kellogg, S. Rajendran, and K. R. Lakhani (2023). Navigating the jagged technological frontier: Field experimental evidence of the effects of AI on knowledge worker productivity and quality Harvard business school technology & operations Mgt. *Unit Working Paper No. 24-013*. <https://doi:10.2139/ssrn.4573321>
- Dhamani, N. (2024). *Introduction to generative AI* (1st ed.). New York: Manning Publications Co.
- Dwivedi, Y. K., Kshetri, N., Hughes, L., Slade, E., Jeyaraj, A., Kar, A. K., & Wright, R. T. (2023). Opinion paper: “So what if ChatGPT wrote it?” multidisciplinary perspectives on opportunities, challenges and implications of generative conversational AI for research, practice and policy. *International Journal of Information Management*, 71, 102642. <https://doi.org/10.1016/j.ijinfomgt.2023.102642>
- Edmondson, A. C. (1999). Psychological safety and learning behavior in work teams. *Administrative Science Quarterly*, 44(2), 350–383. <https://doi.org/10.2307/2666999>
- Ellingrud, K., Sanghvi, S., Dandona, G. S., Madgavkar, A., Chui, M., White, O., & Hasebe, P. (2023, July 26). *Generative AI and the future of work in America*. McKinsey Global Institute. <https://bit.ly/49ctFhO>
- European Parliament. (2023, June 1). *EU AI Act: First regulation on artificial intelligence*. <https://bit.ly/3V6hGwo>
- Ferrara, E. (2024). The butterfly effect in artificial intelligence systems: Implications for AI bias and fairness. *Machine Learning with Applications*, 15(671), 100525. <https://doi.org/10.1016/j.mlwa.2024.100525>
- Fleckenstein, J., Meyer, J., Jansen, T., Keller, S. D., Köller, O., Möller, J. (2024). Do teachers spot AI? Evaluating the detectability of AI-generated texts among student essays. *Computers and Education: Artificial Intelligence*, 6, 100209. <https://doi.org/10.1016/j.caeai.2024.100209>
- Forbes Technology Council. (2023, September 6). *20 effective ways small businesses can leverage generative AI*. Forbes. <https://bit.ly/3AZxLnr>
- Forsyth, D. R. (1990). *Group dynamics* (2nd ed.). Brooks/Cole Publishing Company.
- Gill, S. (2024, July 8). *Embracing AI: Transforming small and medium-sized businesses in Canada*. Medium. <https://bit.ly/3ZlP2tC>
- Himo, J., Wall, N., Jetté, R., Choudhry, M., Nickerson, L., Merminod, A., & da Silva, G. (2024). *What’s new with artificial intelligence regulation in Canada and abroad?* Torys. <https://bit.ly/3Zo5bPn>
- Howcroft, D., & Taylor, P. (2023). Automation and the future of work: A social shaping of technology approach. *New Technology, Work and Employment*, 38(2), 351–370. <https://doi.org/10.1111/ntwe.12240>
- Hughes, A. (2023, September 25). *ChatGPT: Everything you need to know about OpenAI’s GPT-4 tool*. BBC Science Focus Magazine. <https://bit.ly/4eJ9Dww>
- Government of Canada (2024, July 26). *Guide on the use of generative artificial intelligence*. <https://bit.ly/4ejvDXR>
- Government of Canada. (2023, March 13). *The Artificial Intelligence and Data Act (AIDA)—Companion document*. Innovation, Science and Economic Development Canada. <https://bit.ly/4fEUyGx>
- Groenewald, T. (2004). A phenomenological research design illustrated. *International Journal of Qualitative Methods*, 3(1), 42–55. <https://doi.org/10.1177/160940690400300104>
- Jobin, A., & Lenca, M. (2019). The global landscape of AI ethics guidelines. *Nature Machine Intelligence*, 1(9), 389–399. <https://doi.org/10.1038/s42256-019-0088-2>
- Kanitz, R., Gonzalez, K., Briker, R., & Straatmann, T. (2023). Augmenting organizational change and strategy activities: Leveraging generative artificial intelligence. *The Journal of Applied Behavioral science*, 59(3), 345–363. <https://doi.org/10.1177/00218863231168974>
- Kemene, E., Valkhof, B., & Tladi, T. (2024, July 22). *AI and energy: Will AI help reduce emissions or increase demand?* Here’s what to know. World Economic Forum. <https://bit.ly/40Y98vj>
- Kenney, G., Kowalkiewicz, M., & Oosthuizen, K. (2024, June 18). *GenAI is leveling the playing field for smaller businesses*. Harvard Business Review. <https://bit.ly/3Z1QYpW>
- Kitsios, F., & Kamariotou, M. (2021). Artificial Intelligence and business strategy towards Digital Transformation: A Research Agenda. *Sustainability*, 13(4), 2025. <https://doi.org/10.3390/su13042025>
- KPMG. (2023, June). *Generative artificial intelligence 2023 survey*. KPMG. <https://bit.ly/411B0yx>
- Living in Niagara. (2023). *Living in Niagara report*. <https://www.livinginnigarareport.com>
- Maloy, R. W., & Gattupalli, S. (2024). Prompt Literacy. *EdTechnica: The Open Encyclopedia of Educational Technology*. <https://doi.org/10.59668/371.14442>
- Markauskaite, L., Marrone, R., Poquet, O., Knight, S., Martinez-Maldonado, R., Howard, S., Tondeur, J., De Laat, M., Buckingham Shum, S., Gašević, D., Siemens, G. (2022). Rethinking the entwinement

- between artificial intelligence and human learning: What capabilities do learners need for a world with AI? *Computers and Education: Artificial Intelligence*, 3,100056. <https://doi.org/10.1016/j.caeai.2022.100056>
- Marr, B. (2023, June 27). *Boost your productivity with Generative AI*. Harvard Business Review. <https://hbr.org/2023/06/boost-your-productivity-with-generative-ai>
- McQuate, S. (2023, July 27). *Q&A: UW researcher discusses just how much energy ChatGPT uses*. UW News. University of Washington. <https://bit.ly/415nsSD>
- Microsoft. (2024). *Canada's generative AI opportunity*. <https://bit.ly/496m9oz>
- Elizabeth M. Renieris, D. K. (2023, June 20). *Building robust RAI programs as third-party AI tools proliferate*. MIT Sloan Management Review. <https://bit.ly/4fFoU2p>
- Moraes, H. F., & Previtali, M. B. (2024). *Shaping the future: A dynamic taxonomy for AI privacy risks*. International Association of Privacy Professionals. <https://bit.ly/4eK5tnW>
- Nah, F.-H., Zheng, R., Cai, J., Siau, K., & Chen, L. (2023). Generative AI and ChatGPT: Applications, challenges, and AI-human collaboration. *Journal of Information Technology Case and Application Research*, 25(3), 277–304. <https://doi.org/10.1080/15228053.2023.2233814>
- Narisetti, R. (2023, March 16). *Author talks: In the 'age of AI' what does it mean to be smart?* McKinsey & Company. <https://bit.ly/499uGab>
- Noy, S., & Zhang, W. (2023). Experimental evidence on the productivity effects of generative artificial intelligence. *Science*, 381(6654), 187–192. <https://bit.ly/4eMUD0C>
- Office of the Privacy Commissioner of Canada. (2023). *Principles for responsible, trustworthy and privacy-protective generative AI technologies*. <https://bit.ly/3OoXCl6>
- Ontario Chamber of Commerce. (2022). *Broken links: Driving technology adoption within Ontario's small businesses*. <https://bit.ly/3VayLoP>
- Ontario Non-profit Network. (2022). *State of the sector during uncertain times*. <https://bit.ly/3V5hVHU>
- Ooi, K.-B., et al. (2023). The potential of generative artificial intelligence across disciplines: Perspectives and future directions. *The Journal of Computer Information Systems*, 1–32. <https://bit.ly/3V5O0o3>
- Orchard, T., & Tasiemski, L. (2023). The rise of generative AI and possible effects on the economy. *Economics and Business Review*, 9(2), 9–26. <https://doi.org/10.18559/eb.2023.2.732>
- Organisation for Economic Co-operation and Development (OECD). (2024). *Generative AI, overview*. <https://bit.ly/4g2A0YA>
- Orlikowski, W. J. (1992). The duality of technology: Rethinking the concept of technology in organizations. *Organization Science*, 3(3), 398–427. <https://doi.org/10.1287/orsc.3.3.398>
- Rivas, P., & Zhao, L. (2023). Marketing with ChatGPT: Navigating the ethical terrain of GPT-based chatbot technology. *AI*, 4(2), 375–384. <https://doi.org/10.3390/ai4020019>
- Rogers, R. (2023, February 8). *How to detect AI-generated text, according to researchers*. Wired. <https://www.wired.com/story/how-to-spot-generative-ai-text-chatgpt>
- Scott, C. R., Corman, S. R., & Cheney, G. (1998). Development of a structuration model of identification in the organization. *Communication Theory*, 8(3), 298–336 <https://doi.org/10.1111/j.1468-2885.1998.tb00223.x>
- Sinatra, G., & Hofer, B. K. (2023, June 22). *ChatGPT and other generative AI could foster science denial and misunderstanding—here's how you can be on alert*. The Conversation. <https://bit.ly/3Zo5D01>
- Soni, V. (2023). Impact of generative AI on small and medium enterprises' revenue growth: The moderating role of human, technological, and market factors. *Reviews of Contemporary Business Analytics*, 6(1), 133–153. <https://researchberg.com/index.php/rcba/article/view/169>
- Stadler, C., & Reeves, M. (2023, May 30). *Three lessons from chatting about strategy with ChatGPT*. MIT Sloan Management Review. <https://sloanreview.mit.edu/article/three-lessons-from-chatting-about-strategy-with-chatgpt/>
- Statistics Canada. (2024a). *Business's use of generative AI, first quarter of 2024* (Table 33-10-0784-01). <https://doi.org/10.25318/3310078401-eng>
- Statistics Canada. (2024b). *Which Canadian businesses are using generative artificial intelligence and why?* <https://bit.ly/4fZZ3Cj>
- Statistics Canada. (2023 December). *Canadian business counts, with employees, census metropolitan areas and census subdivisions*, (Table 33-10-0808-01). <https://doi.org/10.25318/3310080801-eng>
- Statistics Canada. (2022). *Small and medium businesses: Driving a large-sized economy*. <https://bit.ly/4g5pk2d>
- Stein, A. L. (2024). Generative AI and sustainability. In *University of Florida Levin College of Law Research Paper* (Forthcoming). SSRN. <http://dx.doi.org/10.2139/ssrn.4935208>
- Strubell, E., Ganesh, A., & McCallum, A. (2019). Energy and policy considerations for deep learning in NLP. In *Proceedings of the 57th Annual Meeting of the Association for Computational Linguistics*, 3645–3650. <https://doi.org/10.18653/v1/p19-1355>
- The White House. (n.d.). *Blueprint for AI Bill of Rights*. <https://www.whitehouse.gov/ostp/ai-bill-of-rights>
- Thiebess, S., Lins, S., & Sunyaev, A. (2020). Trustworthy artificial intelligence. *Electronic Markets*, 31(2), 447–464. <https://doi.org/10.1007/s12525-020-00441-4>
- Transparency Coalition (2024, Sept. 19). *Gov. Newsom signs California AI Transparency Act into law, a historic first for AI disclosure*. <https://bit.ly/3ZmvZQ2>
- Trinity College Dublin (2023). *Generative AI models are encoding biases and negative stereotypes in their users*. <https://www.sciencedaily.com/releases/2023/06/230622142350.htm>
- Tursunbayeva, A. & Chalutz-Ben Gal, H. (2004). Adoption of artificial intelligence: A TOP framework-based checklist for digital leaders. *Business Horizons*, 67(4), 357–368. <https://doi.org/10.1016/j.bushor.2024.04.006>
- UNESCO, IRCAI. (2024). *Challenging systematic prejudices: An investigation into gender bias in large language models*. <https://unesdoc.unesco.org/ark:/48223/pf0000388971>
- van Manen, M. (1990). *Researching lived experience: Human science for an action sensitive pedagogy*. Althouse Press.
- Verma, P., & Oremus, W. (2023, November 16). *These lawyers used ChatGPT to save time. They got fired and fined*. The Washington Post. <https://bit.ly/4fDB3Fp>
- Waltzer, T., Pilegard, C., & Heyman, G. D. (2024). Can you spot the bot? Identifying AI-generated writing in college essays. *International Journal for Educational Integrity*, 20(11), Article 11. <https://doi.org/10.1007/s40979-024-00158-3>
- Williams, R., & Edge, D. (1996). The social shaping of technology. *Research Policy*, 25(6), 865–899. [https://doi.org/10.1016/0048-7333\(96\)00885-2](https://doi.org/10.1016/0048-7333(96)00885-2)
- Wilson, H. J., & Daugherty, P. R. (2024, September 6). Embracing Gen AI at work. *Harvard Business Review*. <https://hbr.org/2024/09/embracing-gen-ai-at-work>
- Yuan, C., Wang, S., & Liu, Y. (2023). AI service impacts on brand image and customer equity: Empirical evidence from China. *Journal of Brand Management*, 30(1), 61–76. <https://doi.org/10.1057/s41262-022-00292-8>
- Zhang, Y., & Gosline, R. (2023). Human favoritism, not AI aversion: People's perceptions (and bias) toward generative AI, human experts, and human-GAI collaboration in persuasive content generation. *Judgment and Decision Making*, 18, e41. <https://doi.org/10.1017/jdm.2023.37>
- Zirar, A., Ali, S. I., & Islam, N. (2023). Worker and workplace artificial intelligence (AI) coexistence: Emerging themes and research agenda. *Technovation*, 124, 102747. <https://doi.org/10.1016/j.technovation.2023.102747>

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The Niagara Community Observatory (NCO) at Brock University is a public-policy think-tank working in partnership with the Niagara community to foster, produce, and disseminate research on current and emerging local issues. More information on the NCO office and an electronic copy of this report and others like it can be found on our website <https://brocku.ca/nco>

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