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Generative AI: Helping or Hindering People with Disabilities?

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We have entered the golden age of AI. Although ChatGPT only entered the zeitgeist at the tail-end of 2022, just 1.5 years ago, Artificial Intelligence (AI) has already transformed how we work, live, and think. With endlessly updated AI software from the largest global tech companies, including Gemini (Google), Copilot (Microsoft), Mid journey, and DALL-E, we now have seemingly infinite access to information, image generation, and academic support with simple strokes of a keyboard. However, with any technological advancement, we must be wary about how these technologies have been created and who they can support and potentially harm. All AI software is developed using data developed by humans, and therefore imbues the technology with human bias and error. We must consider who has created this technology, and more importantly, who was left out of the room when it was created. There is a debate on whether AI technologies will ultimately help or hurt people living with disabilities. The advent of AI creates the potential to improve the lives of people with disabilities, while potentially expanding the learning, knowledge, and experience gap between people with disabilities and those without.

According to the World Health Organization, there are over 1.3 billion people living with a significant disability, representing 16% of the global population. AI and tech companies have the opportunity to further develop and share assistive technologies to

help people with disabilities, including those who are mentally, visually, audially, or physically impaired. An article in the Harvard Business Review lauded AI for its potential to support the over 386 million working age individuals with a disability: "Generative AI can help individuals find — and do well in — jobs that they couldn't previously have held" (Harvard Business Review). In particular, AI can help empower users and seamlessly fit into their lives by promoting communication through AI-powered voice technologies, offering learning opportunities, facilitating greater autonomy, and sparking connection and collaboration with friends and colleagues. Many AI technologies have already been designed to empower and support people with disabilities. For those who are visually impaired, Microsoft Seeing AI app provides audio description of external objects and experiences. Google's Live Transcribe empowers hearing-impaired people with immediate and accurate text-to-speech transcription. Looking ahead, technology like AI-powered self-driving cars can assist those who are unable to drive, enabling in-person access to community and instilling a greater sense of freedom and autonomy.

However, the potential for bias is significant. We have seen this in facial recognition software which has been found to be less accurate for people of color because of the biases of training data and of developers, ultimately creating barriers to access and security. As Laurie Henneborn states in her Harvard Business Review article, "we haven't done well as a society with the digital divide that exacerbates the barriers between persons with disabilities (as well as other marginalized communities) and others." We have only just started adjusting technology to make it more accessible to all abilities. Unfortunately, we are seeing AI used in ways that are non-inclusive of people with disabilities, like health insurance companies using AI to flag individuals with

complex medical needs and application screeners acting with bias based on resume language that suggests possible impairment.

Although AI is not a cure-all for the challenges faced by people with disabilities, when developed and implemented responsibly, it has the potential to mitigate barriers, improve quality of life, and foster a more inclusive world. If we are to create AI that's accessible and inclusive of all abilities, it will be important for AI technologies to "learn" from unbiased sources and people with first-hand experiences with disabilities. AI has the opportunity to make everyone's lives better and easier – but we need to be careful that it does not become a tool to exclude people of different abilities for the sake of company profit.

Sources:

- *https://www.forbes.com/sites/forbesbusinesscouncil/2023/06/16/empowering-individuals-with-disabilities-through-ai-technology/?sh=77702e1c6c73*
- *https://hbr.org/2023/08/designing-generative-ai-to-work-for-people-with-disabilities*
- *https://www.theverge.com/24066641/disability-ableism-ai-census-qalys*
- *https://www.linkedin.com/pulse/5-ways-artificial-intelligence-empowering-people#:~:text=Assistive%20technology&text=For%20example%2C%20people%20with%20visual,objects%2C%20people%2C%20and%20text.*
- *https://www.nytimes.com/2022/03/29/technology/ai-robots-students-disabilities.html*
- *https://smartclick.ai/articles/how-ai-can-improve-the-lives-of-people-with-disabilities/*
- *https://gemini.google.com/*