

Wrangling AI

Promises and Pitfalls for Nonprofits

M wire media

Al is here to stay.

Let's explore what Al is, the ways it's currently being used, and the promises and pitfalls it brings.

It is up to us to decide how we will or won't engage with it.

Table of Contents

What is Artificial Intelligence?	4
AI In the Real World	7
Creative	8
Education	12
Accessibility	15
Climate Justice and Sustainability	17
Policing	22
Healthcare	27
What Can You Do?	3C
The Future of AI	33

What is Artificial Intelligence?

This isn't the 1960s. And artificial intelligence, or Al, is not quite what was envisioned in the popular TV show, The Jetsons.

So, what is it?

Simply put, Al is "a broad term that refers to different tools that are trained to perform a wide range of complex tasks which may have previously required some input from an actual person.".

It was developed in the 1990s based on the work of German computer scientist, Professor Jurger Schmidhuber, sometimes referred to as the "father of Al".

According to a 2023 Guardian article, Schmidhuber believes Al may eventually progress in such a way it will surpass human intelligence.

You Are Likely Using Al

(even if you don't know it)

Regardless of how you feel about Al, you're likely already using it.

"No, I'm not. I'd never use ChatGPT to draft my policy briefs or create an image from scratch using Leonardo Al. I'm a purist."

Perhaps you'd like to consciously opt out of using various Al tools for convenience. Unfortunately, the world around you will make it quite difficult. Thousands of companies of all sizes across the globe are integrating Al into their operations and products.

The Associated Press reported on a US Chamber of Commerce and Teneo survey that found 98% of small businesses reported using Al tools.

The usage of AI has lightened the load on these business owners who don't have the staff or resources of their larger competitors.

And nonprofit organizations are adopting Al at a faster rate than their for profit counterparts.



of small businesses reported using AI tools

Is Al Good or Bad?

The answers are - as we're sure you've guessed - complicated.

The words "good" and "bad" are highly subjective and based on what's at stake for you as an individual or as a member of a specific community.

Rather than tell you what to think, we'll provide information that will make you a more informed user of Al.

Remember, you are likely using Al whether or not you've consciously opted into using any specific tool or program.

- Do you ask Alexa about the weather every morning as you dress for the day? Thank AI.
- Love how Netflix often seems to have the best movie and TV show recommendations for you? Al knows you so well, right?
- · How often do you regulate the temperature in your home with one of those nifty little smart thermostats? Al likes to keep you cozy.



AI in the Real World

Al will integrate itself into nearly every industry in the coming years.

Many jobs/industries either have opted out of using Al or are still determining how to best use it. ChatGPT might be able to crack a funny joke in conversational models, but it can't replace your experience when going to a stand-up comedy show.

And your barber/hairdresser will likely not be out of a job any time soon, especially considering how much about your personal life they know after years of you sitting in their chair, telling them your life story.

Integration of Al into many industries has certainly already begun in many areas, however, major labor concerns have rightfully been raised.

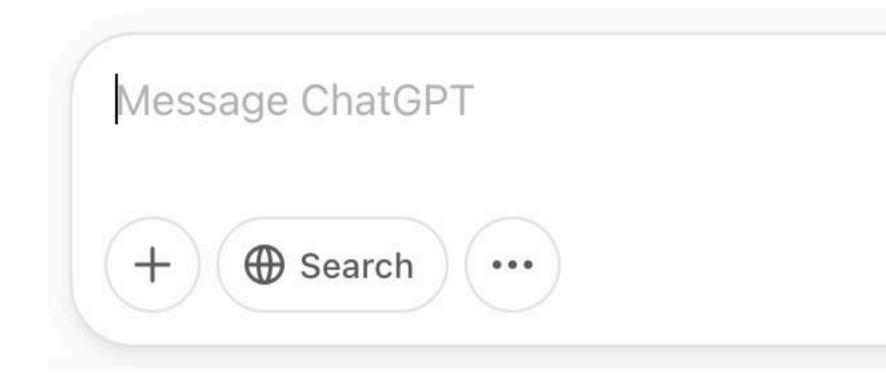
Without a doubt, Al is making a home for itself in the industry, as to how well it is being received will depend on who you ask.

Al In the Real World

Creative

Many Al tools and products available to the public are **Generative Al** (GenAl) - a type of artificial intelligence technology that can produce various types of content, including text, imagery, audio, video, and synthetic data.

You've probably tried out, or at least heard of, OpenAl's ChatGPT - a language model known for its conversation skills, creative writing, and image development.



PRO TIP:

Consider using AI to quickly draft grant applications, emails, or website copy.

Using AI to Create

Large companies such as OpenAI, Meta, and Adobe have been pushing the use of their Al image/video and text generator tools to prompt creativity and for the sake of convenience. However, there has been a very mixed reaction from different sectors within the industry.

Some online artists have shared that they look to Al image generators to help them get their juices flowing. While they won't let Al do all the work for them, they use it as a tool for inspiration or editing suggestions.

On the other hand, an artist winning a competition with Algenerated art experienced significant backlash.

Some writers look to Al language models to give them writing prompts, quickly write copy to lighten their workload, edit their original work, and more.



CONSIDER:

Think about how it might feel to lay off your communications team in favor of Al ...

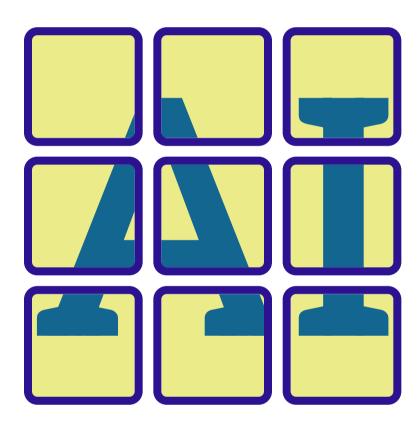
The Beginning of Creative Job Loss

We are seeing a massive influx of Al-generated images and art flood e-commerce companies such as Etsy and Amazon with an overwhelming amount of Al-generated art listings (many of which do not include disclosures about it being GenAI).

This oversaturation has resulted in many artists losing customers to cheaper products made with GenAl that don't have labor costs.

Additionally, some artists and writers are finding job opportunities decline as companies that previously hired/commissioned them are now relying on GenAl, which might be more cost-effective for the company but detrimental to those who need the income they gain from making art themselves.

The Writer's Guild of America (WGA) 2023 strike also raised very similar concerns about their employers' potential use of Al models to partially or fully automate their jobs.



PRO TIP:

Be careful how you use Al. Make sure you understand what it's being trained on.

Pushback on the Use of Public Material to Train Al

As of April 2024, OpenAl and Microsoft are being sued by The New York Times for the unpermitted use of Times articles and copy to train GPT large language models (LLMs).

Eight other publications owned by Alden Global Capital (including The Chicago Tribune, The New York Daily News, and The Orange County Register) have followed in NYT's footsteps by filing their own lawsuit on similar grounds of lack of permission.

Many individual artists and other creatives in the industry have also discovered their work has been used without their consent to train Al models.

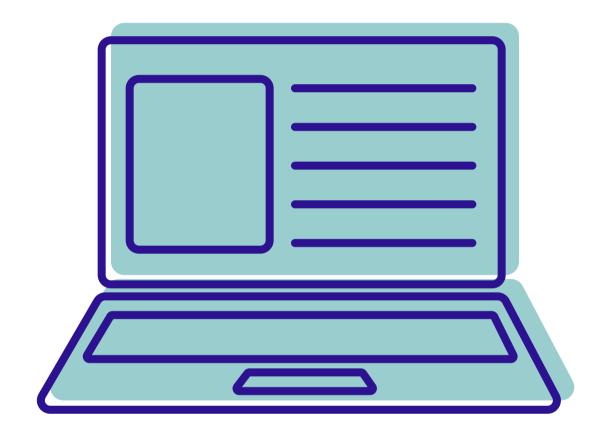
Unfortunately, due to their lack of access to the legal resources of large companies like the NYT and Alden, many have been left to either use what few resources they have to fight back or admit defeat.



Al In the Real World

Education

As each year passes, Al becomes increasingly intertwined with our education system. Notably, there has been a significant rise in reports from school administrators and teachers about students using GenAl tools to wholly do their assignments, leading to a surge in plagiarism.



PRO TIP:

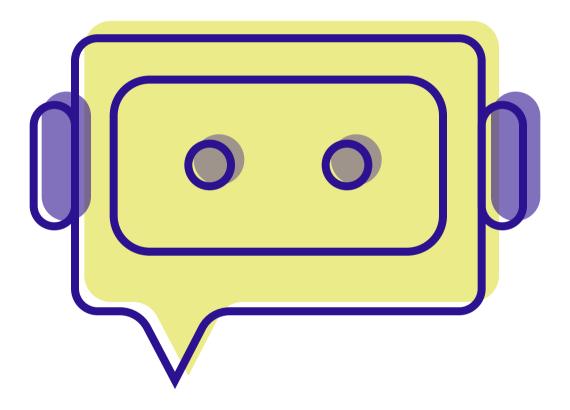
Using AI to draft content that a human then edits is currently a best practice.

Students and Teachers Using Al

Ironically, student use of AI has prompted some school staff to adopt other Al models to identify Al usage in their students' work, underscoring the potential impact of AI on the future of education.

What seems to be more common, however, is a somewhat moderate use of Al tools. According to research conducted by Impact Research, teachers were most likely to use ChatGPT for lesson plans, testing, and creative idea inspiration.

The same research study found undergraduates were using Al chatbots for things like studying, and K-12 students primarily looked to them for assistance in their writing.



CONSIDER:

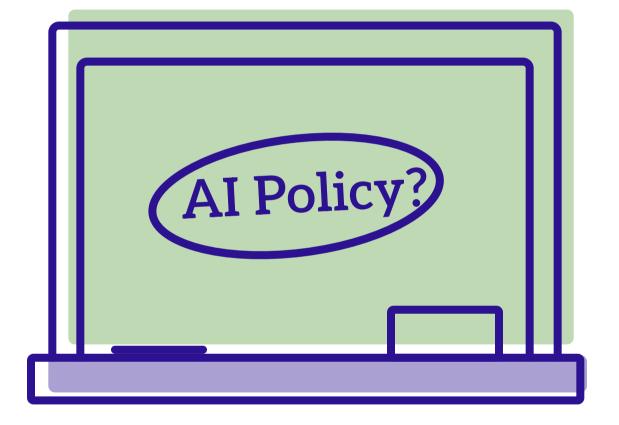
Human nature suggests that Al will, indeed, become a permanent fixture in everything.

Al Policy in Education

There is currently a vacuum in school policies outlining permitted Al usage in the classroom.

While there appears to be an overall positive perception of integrating Al tools into education across the board, including from parents, there is still little confirmation on whether it will become a permanent piece of our education system.

There are also the irreplaceable benefits of the human interaction and connection people require when learning.

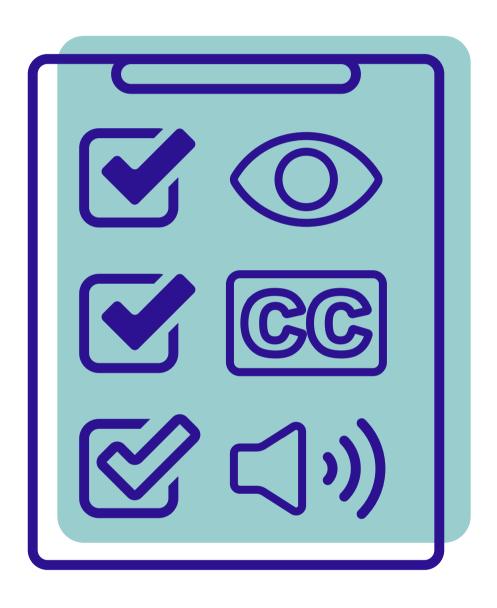


Al In the Real World

Accessibility

According to the U.S. Centers for Disease Control and Prevention, 27% of the U.S. adult population living with a disability struggle to use the internet as a result of accessibility barriers - one out of four adults.

So, what are some ways Al is being used to solve longstanding accessibility issues?



State of Accessibility Tools

Today, some programs can scan images to create alt text while others can generate closed captioning on videos or translate videos to other languages. Other programs read screens for those with visual impairments and aid them in website navigation. Read about that on the Lighthouse for the Blind website: Al Powered Tools for People Who Are Blind.

With new software being created at breakneck speeds, it's hard to predict what will be available next.

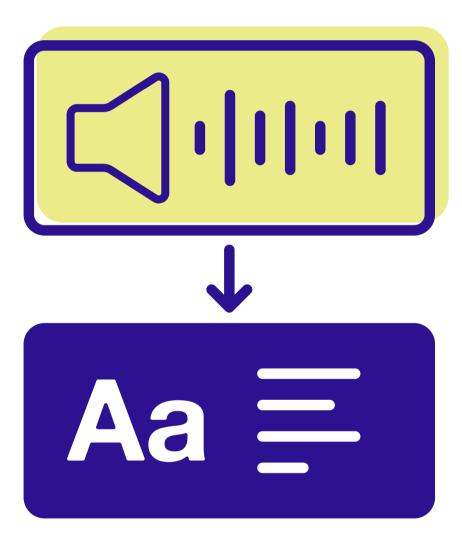
Although many tools are increasing accessibility, there are still some kinks to work out. According to a <u>July 2022 New York Times</u> article, more than 400 companies selling overlay tools for websites - also known as accessibility widgets - were sued over accessibility issues.

Accessibility overlays claim to make a website easier to use for someone with a disability. Unfortunately, many users found that the software hindered their abilities to use a website by creating more problems than solutions. Most recently, AccessiBe was ordered to pay \$1 million for misleading advertising about its product.

However, there is still widespread use of these tools and misunderstanding of the problems they cause.

PRO TIP:

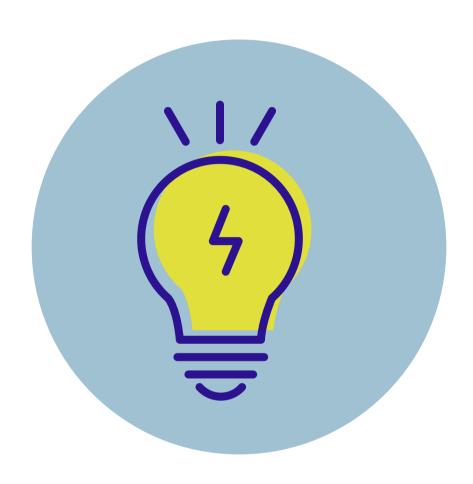
Build your website to be accessible. Overlays can actually make it harder for people to use. (Ask us how!)



Al In the Real World

Climate Justice and Sustainability

One of Al's undeniable downsides is that the current models worsen the climate crisis. The sheer amount of energy and natural resources our Al models consume on top of their greenhouse emissions seriously threaten our already severely damaged ecosystem.



Al and Water

With the amount of water Al technology demands to cool down its servers in data centers, Al is only exaggerating the freshwater scarcity crisis that has been unfolding for decades.

For example, a single 100-word email query to ChatGPT demands 519 ml of water (approximately one full water bottle) and the same amount of energy required to power 14 LED light bulbs for an hour.

If you were to make this same query to ChatGPT once a week for a year, over 453 million liters of water and over 120 thousand MWh of electricity would be lost to the 52 100-word emails produced by ChatGPT.

- Cornell research learned that Microsoft's data centers evaporate 700,000 liters of clean freshwater to train its GPT -3 model.
- The same study also determined that, on a global scale, the Al demand for water may be responsible for withdrawing upwards of 6.6 billion cubic meters of water in 2027. This is greater than the total amount of water needed by half of the entire United Kingdom.

Large tech companies with sustainability-focused visions for the future are hoarding resources from water-stressed regions and it's important the public does not quickly dismiss the growing harm to communities reliant on said water.



Al and Energy

A Goldman Sachs report found that, on average, a ChatGPT query needs almost 10 times as much electricity as a Google search.

The energy needed to train LLMs such as GPT-3 is even more demanding. An estimated 1,3000 MWh of electricity is used for training, roughly equating to the amount of power consumed by 130 U.S. homes annually.

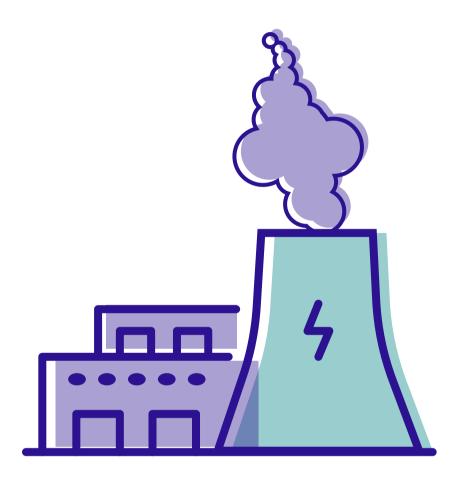
If you still can't picture it, you'd have to stream Netflix for 1,625,000 hours (or 185.5 years) to use the same amount of power to train these LLMs.

We are beginning to see a regression towards harmful and unsustainable energy supply methods to meet these high energy demands. For example, antiquated coal-power electricity plants previously slated to shut down in favor of cleaner energy models are now remaining in service to fuel the exponential rise in power demand.

Goldman Sachs estimates that demand for data centers that support the "Al revolution" will increase by 160% by 2030.

CONSIDER:

Al uses massive amounts of both water and energy to function.



Al and Land

Many of us think of technology as existing in a virtual space. However, this virtual tech demands acres upon acres of physical space, and the Al boom is only increasing this demand.

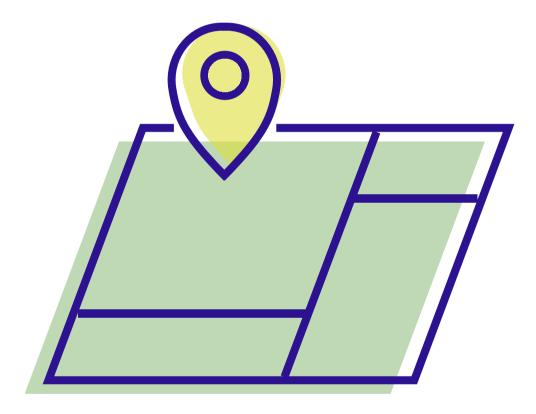
A typical land acquisition for tech companies only a decade ago was roughly 15- to 20-acre plots for data centers. Now, these companies are claiming entire campuses of 500 to 1,000+ acres of land to meet the energy demands of their AI tech development.

For example, one of the latest AI, cloud computing, and other internet technology deals was made by Denver-based software development company <u>Tract</u>, which already owns or is in contract to buy 20,000 acres of land.

For a whopping \$136 million, Tract purchased a 2,100-acre site in Buckeye, Arizona, just outside of Phoenix. This startup data center has a 15-year aspirational plan to become the nation's largest data center complex.

PRO TIP:

Create a policy to control the amount of use of Al for your organization.



Al and Sustainability Goals

Although large tech companies have set initiatives to be sustainable, other concerns cannot be ignored, such as:

- Increased emissions: During this Al boom, many tech giants' energy consumption has soared, and therefore their pollution/ greenhouse gas emissions have also increased.
- Hype about Al solving the climate crisis: Some companies claim AI can be used to determine solutions to the climate crisis, especially through clean energy models. But, there is no guarantee. The current climate crisis leaves no room to wait for potential results.
- Land grabs drive up prices: Tech giants and startup companies' land grabs of areas prime for agricultural or housing purposes have put additional pressure on farmers, ranchers, and the current housing crisis.

In their January 2024 article, The Brookings Research Institute asserted that climate justice and sustainability must be prioritized in this era of artificial intelligence. If it is not properly managed, it is primed to only exaggerate societal inequalities and threaten equitable and sustainable transitions to a greener future.

"climate justice and sustainability must be prioritized" Brookings Institute

Al In the Real World

Policing

Law enforcement has been expanding its use of Al tools and models for various applications. While the use is not widespread in every police department, many agencies are experimenting with technology and advanced robotics.



State of Al and Policing

The Criminal Justice Testing and Evaluation Consortium reported some of the current capacity-expansion implementations:

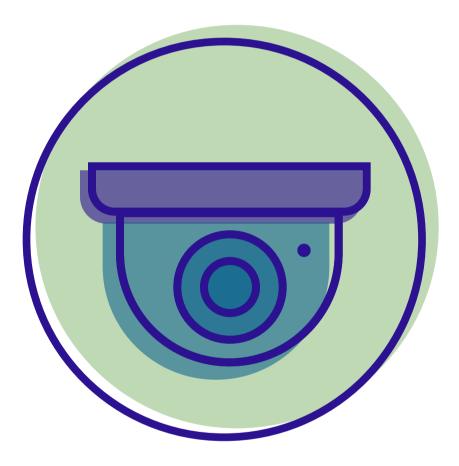
- Automated License Plate Readers (ALPRs): Al-driven improvements have enhanced the proficiencies of ALPRs and lowered their costs for law enforcement and private companies.
- Video and Photo Surveillance: Al is being embedded directly into security cameras for surveillance and other security applications. These upgrades run Al algorithms that increase speed, decrease bandwidth requirements, and support facial recognition and weapons detection.
- Gunshot Detection and Mapping: Al startup companies like Actuate incorporate technology into visual gun identification to detect potentially fired gunshots.

In theory, these Al-integrated technologies would keep communities safer. However, in operation, the lines are much more blurred.

The ALPR AI technology has made many incorrect conclusions based on license plate records.

CONSIDER:

Surveillance from Al trained on biased data creates problems for many communities.



Predictive Policing Algorithms

The Marshall Project released a <u>piece in their Closing Argument</u> Newsletter in 2023 revealing that several police departments are using technology from facial recognition firm Clearview Al, whose database is primarily composed of over 30 billion photos nonconsensually taken from the internet, mostly from social media.

And, this past summer, NYC Mayor Eric Adams announced controversial plans to implement Evolv's Al-powered visual gun detection scanners to keep guns out of its subway system since, per the ACLU, it subjects riders to unconstitutional searches.

There are genuine concerns about further automating law enforcement, especially considering its historical bias towards marginalized communities.

Take <u>predictive policing</u> algorithms, for example. Al software is being used to sift through data and algorithms to "forecast" criminal activity for more efficiency in law enforcement. The data and algorithms are based on preexisting crime data based on locations and times at high risk of crime occurring.

However, studies have shown that these predictive policing formulas mimic the racial biases their human developers and historically biased data possess.

PRO TIP:

For a fictional take on the ills of predictive policing, watch the film "Minority Report".



Impact of Predictive Policing Algorithms

In 2022, Yale Law School's Media Freedom and Information Access (MFIA) clinic shared an investigative packet on policing algorithms with the following findings:

- Overpolicing of Latinx and Black communities: A 2018 study determined that if the popular PredPol (aka Geolitica) Al algorithm software were applied in Latinx and Black communities in Indianapolis, residents would experience a 200% - 400% and 150% - 250% increased patrol presence, respectively, compared to their white counterparts.
- Racial profiling jails the wrong people: NYPD's pattern recognition program Patternizr was revealed in a 2019 Fordham <u>Urban Law Journal study</u> to produce racially disparate outcomes, including the incarceration of innocent individuals.
 - This nightmare became a reality in Detroit in 2020 when a facial recognition program misidentified suspects approximately 96% of the time. This egregiously inaccurate program resulted in the wrongful arrests of several Black residents. For example, in January 2020 Robert Julian-Borchak Williams, a Black man from Michigan, was wrongfully accused of a crime he did not commit by a facial recognition algorithm.

Increase in patrol presence compared to white people.

Latinx - 200-400% Black - 150-250%

Congress and Predictive Algorithms

These concerns have gained enough traction that several U.S. congressional members expressed deep concerns about the discriminatory impact predictive policing models will have in their January 2024 letter to the Department of Justice.

PRO TIP:

Call your representatives in Congress to let them know your thoughts on this.

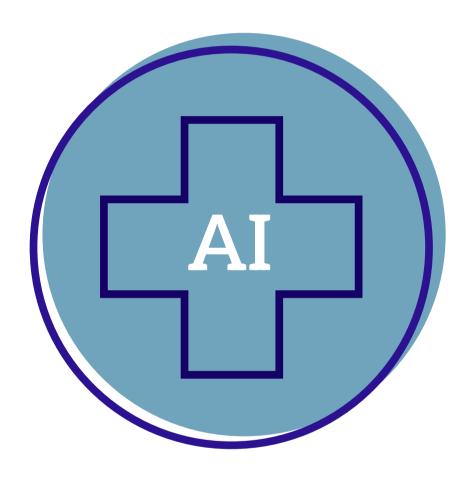
"Mounting evidence indicates that predictive policing technologies do not reduce crime. Instead, they worsen the unequal treatment of Americans of color by law enforcement."

Al In the Real World

Healthcare

Despite the pitfalls, there are some notable benefits to Al beyond planning your next vacation or sprucing up an event poster. Al is being used in the healthcare space with great success.

Even before the recent boom in Al tools and resources, the healthcare sector has looked to automation and technology for several decades for support in developing cures and surgical techniques, improving patient care, and more.



Al and Healthcare Practitioners

While Al is making significant strides in healthcare, it can never replace the empathy and connection that human healthcare professionals offer when we are at our most vulnerable.

Moreover, the creativity and problem-solving skills of physicians are yet to be matched by technological algorithms. This underscores the continued need for competent human professionals to oversee Al healthcare practices.

A recent report released by the National Academy of Medicine has outlined two ways AI can be useful to healthcare practitioners:

- 1. Preventive care: For example, Al coupled with existing technology, like radiology used in cancer screenings, can identify issues like tumors or enlarged organs faster than is possible by a physician.
- 2. Risk assessment: According to the Mayo Clinic, Al has been able to successfully identify individuals at risk for heart attacks or strokes before they present with symptoms.

PRO TIP:

There's a lot of opportunity with AI for nonprofits working on healthcare issues.



Al and Diagnostics

Currently, we are seeing Al being used to help with administrative tasks, to meet the current supply-demand gap for staff exacerbated by the pandemic, and precision imaging.

Down the line, there is real promise that Al can be a reliable tool for precise diagnoses for patients, especially for complicated diseases, and early detection of life-threatening ailments such as strokes, cancer, and diabetes. The medical industry believes Al will significantly transform healthcare, making the field safer and more reliable.

Al has the potential to be more accurate about the rate at which a tumor is growing than a physician might. However, data scientists and clinicians must ensure the data being included for machine learning is inclusive and limits bias. Fortunately, the Federal government has stepped in to better regulate developers creating Al for healthcare.

It is clear there is more work to be done in this area; however, the possibilities are endless and an adoption of AI, if done right, could be life-saving.

If done right, the future of healthcare is likely to be a harmonious blend of Al and human expertise, ensuring better quality healthcare and potentially unlocking more efficient and life-saving treatments.

CONSIDER:

Ensuring HIPAA is followed when Al gets involved in paramount to patient privacy.



What Can You Do?

Now that you know all this, what now?

Hopefully, you've come to a more informed opinion on Al and can better determine if you'd like to utilize its models, avoid them altogether, or somewhere in between.

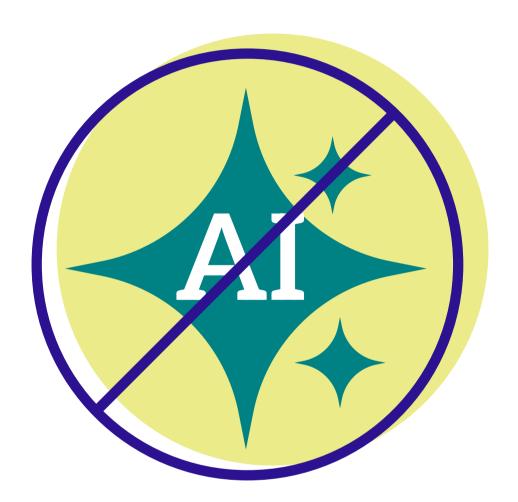
If You're Open to Using Al Tools and Resources...

- 1. Al can be a great supportive tool. Public users look to the numerous models for many reasons, such as art inspiration, email writing, tone support, and recorded audio quality enhancement. When using GenAl systems, remember to provide context, be specific, and ask open-ended questions.
- 2. Al has been in the making for decades now. However, it is still far from perfect. Many models available to consumers are GenAl, which still has much room for improvement. The popular image/video generators from companies such as OpenAl can only partially replace the content developed by human creatives and real environments.
- 3. Al can especially be a tremendous tool for accessibility, from translation software to alt-text generators for images to personalized learning materials for students with learning disabilities.
- 4. Always review the outputs you receive from Al models, especially those from GenAl products. Healthcare practitioners are experimenting with AI tools to help with diagnostic and treatment processes, but they must still rely on their expertise to ensure quality care. You, too, must be diligent when using these resources.
- 5. If you don't need to use AI for some tasks, consider doing them yourself or utilizing more climate-sustainable virtual tools.

Remember to provide context, be specific, and ask open-ended questions.

If You Find Yourself Opposed to Using Al Tools and Resources...

- 1. Opting out is still an option in some cases. While it can feel like Al is unavoidable these days, some companies, such as Grok by X and Zoom's Al Companion, have some opt-out options when it comes to either training their LLMs or using their Al-based tools. This article from WIRED shows how to opt out of sharing your information with other Al models.
- 2. The New York Times is currently suing OpenAl for unauthorized use of its content to train its LLMs on the grounds of copyright infringement. If the courts rule in favor of the NYT, a pivot in Al companies' questionable data collection methods and potential government regulation can follow suit.
- 3. Have you noticed that a lot of your Google searches these days include Al overviews at the top of your search? Add "-ai" at the end of your Google search to circumvent this overview and just see the top results.
- 4. Support the efforts of your peers whose jobs are threatened by the current Al boom. For example, if you are building a website for your organization, designate a budget to hire copywriting and graphic design experts who depend on these opportunities for their income.



The Future of AI

The future of Al is still unfolding, and trajectories are changing constantly.

The Al boom we are seeing shows no signs of stopping. Some recent reports argue the Al bubble might be "bursting," though. Wall Street investors are beginning to wonder if it will be profitable when this costly technology is still in its infancy.

But then China's new DeepSeek Al came out at a fraction of the cost, disrupting everything again.

Where Is This All Going?

The improvement between GenAl images/videos from a year ago to now is tremendous, but there are still enough tells to spot the difference. Similarly, many GenAl models have yet to consistently master the art of email writing, essay structure, and story structure. (Read this helpful guide on knowing what to look for in Al-generated writing.)

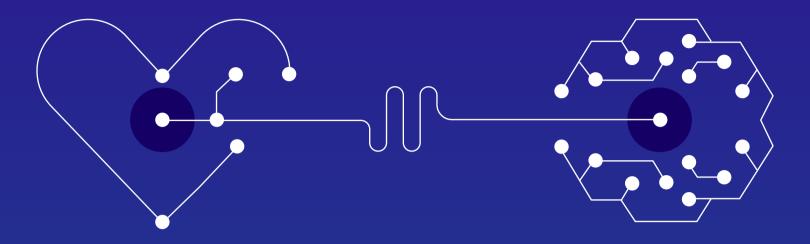
Some companies that have spent billions towards developing their Al models have attempted to recover costs through layoffs, but that will very likely result in a widespread backlash that could require them to shift their labor approach. Despite this financial setback, the Al sector is still becoming more and more competitive every year. Many companies, from Salesforce to BP, are still looking to Al as the future and will continue to incorporate it in their services and goods.

We will need to keep in mind all the pros and cons Al brings, and be vigilant about advocating for responsible use of Al. That includes how it's used to benefit or harm groups of people, how it affects the climate and our shared resources, and how we allow it to shape our lives, and humanity in general.



As nonprofit leaders, we have a moral imperative to be a watchdog.

It's our collective responsibility to ensure good stewardship of Al. Those committed to justice and equity, and who have concern for our environment, need to be loud about what form that stewardship takes.



M wire media

where hearts meet smarts

CREDITS

Copywriting and editing
Kathryn Destin and Erica Rice

Illustration Tarine Wright

Graphic design Marc Molta