Endtimes Signs

AI Technology

In April of 2023 I came across 2 articles that discussed concerns about AI technology. One was an interview on a CBS 60 Minutes program and the other was an article on builtin.com that was written by Mike Thomas and was updated by Matthew Urwin | Jan 25, 2023. I have posted them below.

As the future that AI brings unfolds, I will add updates to this topic. I see AI technology as a sign of the last days, resulting from the increase of knowledge as prophesied in Daniel chapter 12.

CBS 60 Minutes Interview With Google CEO Sundar Pichai

In an interview with CBS' "60 Minutes" that aired Sunday, Google CEO Sundar Pichai hinted that society isn't prepared for the rapid advancement of AI.

- •Pichai said laws that guardrail AI advancements are "not for a company to decide" alone.

- •Warning of consequences, he said AI will impact "every product of every company."

In an interview with CBS' "60 Minutes" aired on Sunday that struck a concerned tone, interviewer Scott Pelley tried several of Google's artificial intelligence projects and said he was "speechless" and felt it was "unsettling," referring to the human-like capabilities of products like Google's chatbot Bard.

"We need to adapt as a society for it," Pichai told Pelley, adding that jobs that would be disrupted by AI would include "knowledge workers," including writers, accountants, architects and, ironically, even software engineers.

"This is going to impact every product across every company," Pichai said. "For example, you could be a radiologist, if you think about five to 10 years from now, you're going to have an AI collaborator with you. You come in the morning, let's say you have a hundred things to go through, it may say, 'these are the most serious cases you need to look at first.'"

Pelley viewed other areas with advanced AI products within Google, including DeepMind, where robots were playing soccer, which they learned themselves, as opposed to from humans. Another unit showed robots that recognized items on a countertop and fetched Pelley an apple he asked for.

When warning of AI's consequences, Pichai said that the scale of the problem of disinformation and fake news and images will be "much bigger," adding that "it could cause harm."

Last month, CNBC reported that internally, Pichai told employees that the success of its newly launched Bard program now hinges on public testing, adding that "things will go wrong."

Google launched its AI chatbot Bard as an experimental product to the public last month. It followed Microsoft's January announcement that its search engine Bing would include OpenAI's GPT technology, which garnered international attention after ChatGPT launched in 2022.

However, fears of the consequences of the rapid progress has also reached the public and critics in recent weeks. In March, Elon Musk, Steve Wozniak and dozens of academics called for an immediate pause in training "experiments" connected to large language models that were "more powerful than GPT-4," OpenAI's flagship LLM. More than 25,000 people have signed the letter since then.

"Competitive pressure among giants like Google and startups you've never heard of is propelling humanity into the future, ready or not," Pelley commented in the segment.

Google has launched a document outlining "recommendations for regulating AI," but Pichai said society must quickly adapt with regulation, laws to punish abuse and treaties among nations to make AI safe for the world as well as rules that "Align with human values including morality."

"It's not for a company to decide," Pichai said. "This is why I think the development of this needs to include not just engineers but social scientists, ethicists, philosophers and so on."

When asked whether society is prepared for AI technology like Bard, Pichai answered, "On one hand, I feel no, because the pace at which we can think and adapt as societal institutions, compared to the pace at which the technology is evolving, there seems to be a mismatch."

However, he added that he's optimistic because compared with other technologies in the past, "the number of people who have started worrying about the implications" did so early on.

From a six-word prompt by Pelley, Bard created a tale with characters and plot that it invented, including a man who's wife couldn't conceive and a stranger grieving after a miscarriage and longing for closure. "I am rarely speechless," Pelley said. "The humanity at super human speed was a shock."

Pelley said he asked Bard why it helps people and it replied "because it makes me happy," which Pelley said shocked him. "Bard appears to be thinking," he told James Manyika, a senior vice president Google hired last year as head of "technology and society." Manyika responded that Bard is not sentient and not aware of itself but it can "behave like" it.

Pichai also said Bard has a lot of hallucinations after Pelley explained that he asked Bard about inflation and received an instant response with suggestions for five books that, when he checked later, didn't actually exist.

Pelley also seemed concerned when Pichai said there is "a black box" with chatbots, where "you don't fully understand" why or how it comes up with certain responses.

"You don't fully understand how it works and yet you've turned it loose on society?" Pelley asked.

"Let me put it this way, I don't think we fully understand how a human mind works either," Pichai responded.

8 Dangers Of AI – By Mike Thomas | Matthew Urwin

As AI grows more sophisticated and widespread, the voices warning against the potential dangers of artificial intelligence grow louder. "The development of artificial intelligence could spell the end of the human race," according to Stephen Hawking. The renowned theoretical physicist isn't alone with this thought.

"[AI] scares the hell out of me," Tesla and SpaceX founder Elon Musk once said at the SXSW tech conference. "It's capable of vastly more than almost anyone knows, and the rate of improvement is exponential." Whether it's the increasing automation of certain jobs, gender and racially biased algorithms or autonomous weapons that operate without human oversight (to name just a few), unease abounds on a number of fronts. And we're still in the very early stages of what AI is really capable of.

Questions about who's developing AI and for what purposes make it all the more essential to understand its potential downsides. Below we take a closer look at the possible dangers of artificial intelligence and explore how to manage its risks.

Is Artificial Intelligence A Threat?

The tech community has long debated the threats posed by artificial intelligence. Automation of jobs, the spread of fake news and a dangerous arms race of AI-powered weaponry have been mentioned as some of the biggest dangers posed by AI.

1. JOB LOSSES DUE TO AI AUTOMATION

AI-powered job automation is a pressing concern as the technology is adopted in industries like marketing, manufacturing and healthcare. Eighty-five million jobs are expected to be lost to automation between 2020 and 2025, with Black and Latino employees left especially vulnerable.

"The reason we have a low unemployment rate, which doesn't actually capture people that aren't looking for work, is largely that lower-wage service sector jobs have been pretty robustly created by this economy," futurist Martin Ford told Built In. "I don't think that's going to continue."

As AI robots become smarter and more dexterous, the same tasks will require fewer humans. And while it's true that AI will create 97 million new jobs by 2025. many employees won't have the skills needed for these technical roles and could get left behind if companies don't upskill their workforces.

"If you're flipping burgers at McDonald's and more automation comes in, is one of these new jobs going to be a good match for you?" Ford said. "Or is it likely that the new job requires lots of education or training or maybe even intrinsic talents — really strong interpersonal skills or creativity — that you might not have? Because those are the things that, at least so far, computers are not very good at."

Even professions that require graduate degrees and additional post-college training aren't immune to AI displacement.

As technology strategist Chris Messina has pointed out, fields like law and accounting are primed for an AI takeover. In fact, Messina said, some of them may well be decimated. AI already is having a significant impact on medicine. Law and accounting are next, Messina said, the former being poised for "a massive shakeup."

"Think about the complexity of contracts, and really diving in and understanding what it takes to create a perfect deal structure," he said in regards to the legal field. "It's a lot of attorneys reading through a lot of information — hundreds or thousands of pages of data and documents. It's really easy to miss things. So AI that has the ability to comb through and comprehensively deliver the best possible contract for the outcome you're trying to achieve is probably going to replace a lot of corporate attorneys."

2. SOCIAL MANIPULATION THROUGH AI ALGORITHMS

A 2018 report on the potential abuses of AI lists social manipulation as one of the top dangers of artificial intelligence. This fear has become a reality as politicians rely on platforms to promote their viewpoints, with a recent example being Ferdinand Marcos, Jr., wielding a TikTok troll army to capture the votes of younger Filipinos during the 2022 election.

TikTok runs on an AI algorithm that saturates a user's feed with content related to previous media they've viewed on the platform. Criticism of the app targets this process and the algorithm's failure to filter out harmful and inaccurate

content, raising doubts over TikTok's ability to protect its users from dangerous and misleading media.

Online media and news have become even murkier in light of deepfakes infiltrating political and social spheres. The technology makes it easy to replace the image of one figure with another in a picture or video. As a result, bad actors have another avenue for sharing misinformation and war propaganda, creating a nightmare scenario where it can be nearly impossible to distinguish between creditable and faulty news.

"No one knows what's real and what's not," said Ford. "So it really leads to a situation where you literally cannot believe your own eyes and ears; you can't rely on what, historically, we've considered to be the best possible evidence… That's going to be a huge issue."

3. SOCIAL SURVEILLANCE WITH AI TECHNOLOGY

In addition to its more existential threat, Ford is focused on the way AI will adversely affect privacy and security. A prime example is China's use of facial recognition technology in offices, schools and other venues. Besides tracking a person's movements, the Chinese government may be able to gather enough data to monitor a person's activities, relationships and political views.

Another example is U.S. police departments embracing predictive policing algorithms to anticipate where crimes will occur. The problem is that these algorithms are influenced by arrest rates, which disproportionately impact Black communities. Police departments then double down on these communities, leading to over-policing and questions over whether self-proclaimed democracies can resist turning AI into an authoritarian weapon.

"Authoritarian regimes use or are going to use it," Ford said. "The question is, How much does it invade Western countries, democracies, and what constraints do we put on it?"

4. BIASES DUE TO ARTIFICIAL INTELLIGENCE

Various forms of AI bias are detrimental too. Speaking to the New York Times, Princeton computer science professor Olga Russakovsky said AI bias goes well beyond gender and race. In addition to data and algorithmic bias (the latter of

which can "amplify" the former), AI is developed by humans — and humans are inherently biased.

"A.I. researchers are primarily people who are male, who come from certain racial demographics, who grew up in high socioeconomic areas, primarily people without disabilities," Russakovsky said. "We're a fairly homogeneous population, so it's a challenge to think broadly about world issues."

The limited experiences of AI creators may explain why speech-recognition AI often fails to understand certain dialects and accents, or why companies fail to consider the consequences of a chatbot impersonating notorious figures in human history. Developers and businesses should exercise greater care to avoid recreating powerful biases and prejudices that put minority populations at risk.

5. WIDENING SOCIOECONOMIC INEQUALITY A RESULT OF AI

If companies refuse to acknowledge the inherent biases baked into AI algorithms, they may compromise their DEI initiatives through AI-powered recruiting. The idea that AI can measure the traits of a candidate through facial and voice analyses is still tainted by racial biases, reproducing the same discriminatory hiring practices businesses claim to be eliminating.

Widening socioeconomic inequality sparked by AI-driven job loss is another cause for concern, revealing the class biases of how AI is applied. Blue-collar workers who perform more manual, repetitive tasks have experienced wage declines as high as 70 percent because of automation. Meanwhile, white-collar workers have remained largely untouched, with some even enjoying higher wages.

Sweeping claims that AI has somehow overcome social boundaries or created more jobs fail to paint a complete picture of its effects. It's crucial to account for differences based on race, class and other categories. Otherwise, discerning how AI and automation benefit certain individuals and groups at the expense of others becomes more difficult.

6. WEAKENING ETHICS AND GOODWILL BECAUSE OF AI

Along with technologists, journalists and political figures, even religious leaders are sounding the alarm on AI's potential socio-economic pitfalls. In a 2019 Vatican meeting titled, "The Common Good in the Digital Age, Pope Francis

warned againgst AI's ability to "circulate tendentious opinions and false data" and stressed the far-reaching consequences of letting this technology develop without proper oversight or restraint.

"If mankind's so-called technological progress were to become an enemy of the common good," he added, "this would lead to an unfortunate regression to a form of barbarism dictated by the law of the strongest."

The rapid rise of the conversational AI tool ChatGPT gives these concerns more substance. Many users have applied the technology to get out of writing assignments, threatening academic integrity and creativity. And even in attempts to make the tool less toxic, OpenAI exploited underpaid Kenyan laborers to perform the work.

Some fear that, no matter how many powerful figures point out the dangers of artificial intelligence, we're going to keep pushing the envelope with it if there's money to be made.

"The mentality is, 'If we can do it, we should try it; let's see what happens," Messina said. "'And if we can make money off it, we'll do a whole bunch of it.' But that's not unique to technology. That's been happening forever.'"

7. AUTONOMOUS ARTIFICIAL INTELLIGENCE WEAPONS

As is too often the case, technological advancements have been harnessed for the purpose of warfare. When it comes to AI, some are keen to do something about it before it's too late: In a 2016 open letter, over 30,000 individuals, including AI and robotics researchers, pushed back against the investment in AI-fueled autonomous weapons.

"The key question for humanity today is whether to start a global AI arms race or to prevent it from starting," they wrote. "If any major military power pushes ahead with AI weapon development, a global arms race is virtually inevitable, and the endpoint of this technological trajectory is obvious: autonomous weapons will become the Kalashnikovs of tomorrow."

This prediction has come to fruition in the form of Lethal Autonomous Weapon Systems, which locate and destroy targets on their own while abiding by few regulations. Because of the proliferation of potent and complex weapons, some of the world's most powerful nations have given in to anxieties and contributed to a tech cold war.

Many of these new weapons pose major risks to civilians on the ground, but the danger becomes amplified when autonomous weapons fall into the wrong hands. Hackers have mastered various types of cyber attacks, so it's not hard to imagine a malicious actor infiltrating autonomous weapons and instigating absolute armageddon.

If political rivalries and warmongering tendencies are not kept in check, artificial intelligence could end up being applied with the worst intentions.

8. FINANCIAL CRISES BROUGHT ABOUT BY AI ALGORITHMS

The financial industry has become more receptive to AI technology's involvement in everyday finance and trading processes. As a result, algorithmic trading could be responsible for our next major financial crisis in the markets.

While AI algorithms aren't clouded by human judgment or emotions, they also don't take into account contexts, the interconnectedness of markets and factors like human trust and fear. These algorithms then make thousands of trades at a blistering pace with the goal of selling a few seconds later for small profits. Selling off thousands of trades could scare investors into doing the same thing, leading to sudden crashes and extreme market volatility.

Instances like the 2010 Flash Crash and the Knight Capital Flash Crash serve as reminders of what could happen when trade-happy algorithms go berserk, regardless of whether rapid and massive trading is intentional.

This isn't to say that AI has nothing to offer to the finance world. In fact, AI algorithms can help investors make smarter and more informed decisions on the market. But finance organizations need to make sure they understand their AI algorithms and how those algorithms make decisions. Companies should consider whether AI raises or lowers their confidence before introducing the technology to avoid stoking fears among investors and creating financial chaos.

"I am not normally an advocate of regulation and oversight — I think one should generally err on the side of minimizing those things — but this is a case where you have a very serious danger to the public," Musk said during his 2018 SXSW talk. "It needs to be a public body that has insight and then oversight to confirm that everyone is developing AI safely. This is extremely important."

AI regulation has been a main focus for dozens of countries, and now the U.S. and European Union are creating more clear-cut measures to manage the spread of artificial intelligence. Although this means certain AI technologies could be banned, it doesn't prevent societies from exploring the field. Preserving a spirit of experimentation is vital for Ford, who believes AI is essential for countries looking to innovate and keep up with the rest of the world.

"You regulate the way AI is used, but you don't hold back progress in basic technology. I think that would be wrong-headed and potentially dangerous," Ford said. "We decide where we want AI and where we don't; where it's acceptable and where it's not. And different countries are going to make different choices."

The key then is deciding how to apply AI in an ethical manner. On a company level, there are many steps businesses can take when integrating AI into their operations. Organizations can develop processes for monitoring algorithms, compiling high-quality data and explaining the findings of AI algorithms. Leaders could even make AI a part of their company culture, establishing standards to determine acceptable AI technologies.

But when it comes to society as a whole, there should be a greater push for tech to embrace the diverse perspectives of the humanities. Stanford University AI researchers Fei-Fei Li and John Etchemendy make this argument in a 2019 blog post that calls for national and global leadership in regulating artificial intelligence:

"The creators of AI must seek the insights, experiences and concerns of people across ethnicities, genders, cultures and socio-economic groups, as well as those from other fields, such as economics, law, medicine, philosophy, history, sociology, communications, human-computer-interaction, psychology, and Science and Technology Studies (STS)."

Balancing high-tech innovation with human-centered thinking is an ideal method for producing responsible technology and ensuring the future of AI remains hopeful for the next generation. The dangers of artificial intelligence should always be a topic of discussion, so leaders can figure out ways to wield the technology for noble purposes.

"I think we can talk about all these risks, and they're very real," Ford said. "But AI is also going to be the most important tool in our toolbox for solving the biggest challenges we face."