

View from the Beltway

Hype and Hysteria

BY OWEN ULLMANN

The great AI debate.

The emergence of artificial intelligence as the biggest revolutionary development in technology since the internet itself—if not in all of human history—has spawned a frenzy of reactions. On one extreme are the hyper-optimists who see AI’s potential as a game-changer that cures diseases, solves global warming, and ushers us into a new utopian society. On the other far side are dark “doomers” who see a dystopian world of super machines taking over the planet in which we humans are either destroyed or forced into slavery.

Like every technological advancement before it, AI has both clear advantages and downsides for society—though the hype and hysteria about the gains and losses seem exaggerated, at least based on the current state of AI development. Still, investors focused on the advantages are frenetic over the massive financial fortunes to be

had, while politicians in Washington are focused on the dangers of the technology that require regulation. Their biggest worries currently focus

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on the ability of bad guys to use AI to create fake video and audio of famous people and spread believable political misinformation on social media platforms. A recent deep-fake porn video of megastar Taylor Swift and the robocalls imitating President Biden’s voice that sought to discourage people from voting in New Hampshire’s

Democratic primary underscore the congressional worries and push for AI guardrails.

Beyond malicious use of the technology, there is growing concern among many that AI will be a job killer for the “knowledge” economy—replacing everything from computer coders and accountants to song composers and those who work in the Hollywood entertainment industry. The recent strike by actors and writers, worried that AI could replicate their images and scripts, is an example of the fear this new technology is generating and the pressure that powerful interests may place on Congress to restrict AI’s potential to benefit society.

Despite the heightened concerns about a technology still in its infancy and with unknown capabilities, there seems to be a broad consensus among

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experts in the field that the winners who benefit from AI will vastly outnumber the losers who will be victimized by it. A Bank of America study in 2023 concluded that AI will add an

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astounding \$15.7 trillion of value to the global economy by 2030.

Robert D. Atkinson, founder and president of the Information Technology and Innovation Foundation, a leading think tank for science and technology policy, argues that AI will produce huge gains for society by improving the efficiency of a wide range of jobs that will be automated. “There are no downsides to AI automation. All automation is good,” Atkinson said. “We in the West have been in a productivity slump for almost twenty years now. Unless we increase the size of the pie, we’re going to be a declining economy. The only way to do that really at the end of the day is with higher productivity. And AI automation is one tool that’s going to help us with that.”

Improved productivity is important, for sure, but it’s scant consolation for workers who may lose their jobs as a result. Will AI really cause huge disruptions in the labor market and mass unemployment? Atkinson and many other experts respond with a resounding, “No.” While many jobs will disappear, they argue, far more will be created to manage the technology and other jobs will change to complement the tasks AI can accomplish.

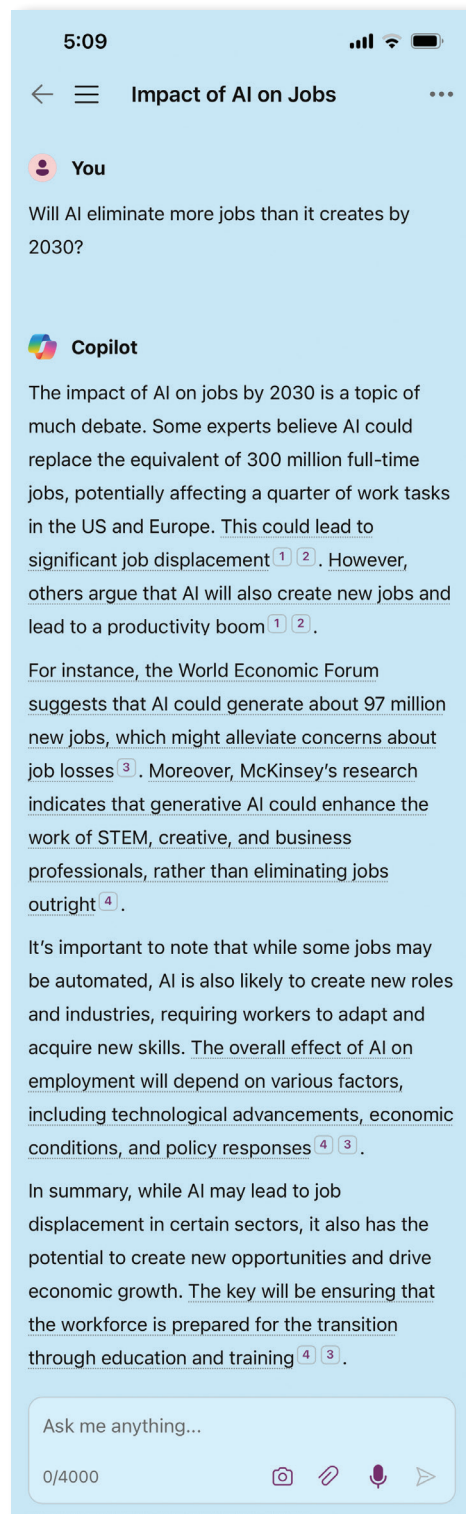
Atkinson said his foundation conducted an analysis on AI’s impact on employment for the Canadian

government when it hosted the Group of Seven summit in 2018. Its conclusion was that the higher the pay and skill level of a job, the less risk of AI replacing it; conversely, the lower the skill and pay level, the more at risk the job was to being replaced by AI. That is the same result of every prior technological innovation.

“I think people are overstating what AI actually can do,” Atkinson said. “It’s not this crazy magic thing. It’s not going to replace corporate lawyers, it’s not going to replace doctors, it’s not going to replace journalists. It’s not going to replace executives. It can complement them. The bigger effects will be in jobs with more routine functions, say legal clerks, where skills and wages are lower. Everybody’s become paranoid because they’re like, ‘Oh, the knowledge class that writes about this now for the first time, maybe they’re affected.’ So, I think they overstate the impact.”

Atkinson added that AI can improve computer coding but he doesn’t see it eliminating an entire occupation. “There’s a lot more complexity in computer science and those related fields than simply writing code.” By contrast, Hollywood has good reason to worry because the entertainment industry will likely need fewer videographers and writers, he said.

“Some jobs will be eliminated, no question,” Atkinson continued. “But for a lot of jobs, it’ll be just a certain task that’s eliminated or enabled by AI, but AI won’t be thinking up the concept for this interview and it won’t be doing the final writing. Job losses are a constant feature of every economic innovation. If they weren’t, the economy would be stagnant and would never evolve. The fact is that the economy’s going to look different in ten years with different occupations. Some will grow, others will



Will AI eliminate more jobs than it creates by 2030? Microsoft's Copilot AI offers its own predictions.



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shrink. Think about people who install carpets, people who repair roads, dentists. There are so many jobs. Part of the problem with this debate about the future of AI is that it's easy to identify the jobs where there's a big risk. But the mind doesn't naturally

The growing AI revolution will have much the same result as prior technological innovations: great gains for the wealthy and knowledge class, more job turmoil for the less educated and skilled, greater economic prosperity for society as a whole but with an unequal distribution of the rewards.

look at the rest of the complexity of the economy and all the benefits."

Atkinson certainly is right about the churn caused in the labor market by every technological advancement humans have made for centuries. The industrial revolutions of the eighteenth and nineteenth centuries, for example, forced farm workers who were no longer needed to toil in the fields to move to cities to become urban factory workers. Looms replaced those who sewed by hand. The automobile put train workers, buggy makers, and blacksmiths out of work. Throw in the advent of the

steam engine, electricity, a constant improvement in automation, the computer age, the internet, and now AI. In every case of innovation, studies show that more jobs were created over time than were destroyed, and society became more prosperous on the whole.

Those gains, however, offered scant consolation to the workers whose lives were disrupted by technological leaps. The losers in this churn are the concern of Massachusetts Institute of Technology economists Daron Acemoglu and Simon Johnson, who chronicle the impact of technological innovation in their new book, *Power and Progress: Our Thousand-Year Struggle Over Technology and Prosperity* (PublicAffairs, 2023). They document how the prosperity that new advances bring society is never shared broadly, creating huge inequality gaps dating back to medieval times, when technological gains in farming and construction produced tremendous wealth for the ruling elites.

"We have concerns that a continuation of trends we've seen with regard

to automation over the past forty years will wipe out another tranche of the middle-skill, middle-income jobs," said Johnson. "In the United States, that would not result in mass unemployment, but would push another set of people down to the lower end of the labor market. You would at the very least exacerbate inequality in that scenario."

Where previous automation affected mostly manufacturing jobs,

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those at risk from AI are white-collar workers whose tasks involve a routine element, he explained. "It's something like between the twentieth and thirtieth percentile in terms of education and income, what one CEO called 'cut and paste' jobs, tasks that have a substantial repetitive element during the workday. Within career ladders, it's the less experienced ones, the trainees, the young lawyers, new programmers. The trend favors people who are very experienced programmers, people who understand customers, people who have a lot of expertise. But it disadvantages people who are beginning their career or



MIT's Simon Johnson: MIT students "feel like all the businesses are going to be Google versus Microsoft, the only major players. It doesn't feel like opportunity on a broad base. It feels like a couple of massive tech giants are about to get a lot more powerful."

don't have much expertise or didn't finish college."

The best job security in the AI age, Johnson says, is more education and specializations that don't involve routine elements. "The value of education just goes up. The value of being able to think creatively and outside of the box goes up. And there'll always be economists," he said with a laugh. And political consultants and

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pollsters will be kept busy because, Johnson noted, "there's going to be a massive amount of disinformation generated by or accelerated by AI. It's obviously very good at distributing that. So then you need counter-tactics and investment in your own disinformation. Those people will be fine."

"What worries us is the inequality and squeezing of the middle. We've had a lot of that in the United States. We're not comfortable about that. We think we could do better. We think the technology could become more augmenting to workers without a college education. And that's part of our message and policy recommendations. We are not comfortable with the trajectory, but we don't think it's leading to mass unemployment or catastrophic collapse of labor market opportunities. We think it's going to exacerbate our current tendencies and problems."

The book he co-authored suggests ways to mitigate the inequality by using the public sector to redirect technology, much in the way the Biden administration is providing incentives for expanding clean energy. "You can also tax things that you think are a

bad idea, like digital ads that manipulate teenagers and contribute to mental health problems. They should be taxed like cigarettes are taxed because you don't want that in your society."

Johnson said his students are engaged in the AI mania, which he sees as quite different from the internet's boom at the end of the 1990s, when every MIT student thought they could get in on it and build their own dot.com business. "Now they feel like all the businesses are going to be Google versus Microsoft, the only major players. It doesn't feel like opportunity on a broad base. It feels like a couple of massive tech giants are about to get a lot more powerful. And that's an interesting difference. But in terms of employment opportunities and how to use AI and how to maneuver around it and how companies survive, we're not too worried about it for the prospects for MIT students. I think it's the prospects for other people that are more concerning."

If Johnson's analysis is correct, the growing AI revolution will have much the same result as prior technological innovations: great gains for the wealthy and knowledge class, more job turmoil for the less edu-

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cated and skilled, greater economic prosperity for society as a whole but with an unequal distribution of the rewards, and new federal regulation to curb the malicious aspects of AI.

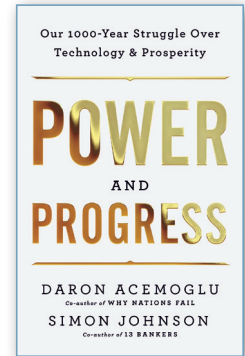
But what does AI think its impact will be on society and jobs by 2030? I put that question to ChatGTP-4, the advanced language model powered

by AI. "Some studies suggest that AI could replace the equivalent of 300 million full-time jobs, which might affect a quarter of work tasks in the U.S. and Europe," it replied, citing a 2023 Goldman Sachs study. "However, this could also lead to a new job creation and a productivity boom."

"On the other hand, the World Economic Forum estimates that AI could create about 97 million new jobs, potentially offsetting job losses," it continued. "Additionally, AI is expected to enhance the work of professionals in STEM, creative fields, and business, rather than eliminating jobs outright," a view that reflects a 2023 McKinsey Global Institute report.

"It's important to note that while AI may automate certain tasks, it also has the potential to create new vocations and help solve complex problems, making our lives easier and more convenient," ChatGPT-4 concluded. "The overall effect of AI on jobs will likely depend on how industries and workers adapt to these technological changes."

That's quite a thoughtful, balanced and hopeful response that should provide comfort to us human workers. But could it be a devilish ploy, a move intended for us to let our guard down and be enslaved before we realize what is happening? I guess we'll have to see what unfolds over the coming years—assuming we're still around to find out. ♦



Power and Progress
Our Thousand-Year Struggle
Over Technology
and Prosperity by
Daron Acemoglu
and Simon Johnson
(PublicAffairs, 2023).