AI, jobs, and the next generation

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The student message to tech leaders

The reactions of this year's graduates are a powerful wake-up call for the tech sector. Hopefully, leaders across our industry will listen and seek to learn from this reaction. For the past half century, the youngest generation of people and workers has led the way in adopting new digital technologies. A new Microsoft study shows this trend is true with AI. Counties with large college towns and outsized populations between the ages of 18 and 24 have the highest rates of AI adoption in the United States. When people who use a new technology complain about it, we had better take notice.

It's perhaps no surprise that college campuses are among the best places to learn about these emerging views firsthand. Over Memorial Day weekend at Princeton University, I found no shortage of discussion and even examples of student action. Graduating seniors have long donned "beer jackets" for celebrations, each class selecting its own unique design. This past year, however, a brief controversy emerged until class officers, responding to a student petition, rejected a popular design because it had been created with the help of AI. In its place, graduates wore jackets labeled both "100 percent cotton" and "100 percent human."

The rejection of artificial fibers and artificial intelligence illustrates how human tastes shape market economics even as efficiency and productivity advance. Machines don't buy products. People do.

Students and graduates recognize AI's benefits. But they want to keep AI in its proper place. They rightly believe in the indispensable role of human agency. They want the future to be determined by humans deciding the role of machines, not by machines deciding the role of humans. And they want these decisions to reflect input from a broad community, especially the next generation of the workforce, rather than just a narrow group of elites.

Today's graduates are sending another powerful message as well: the American Dream has always stood for even more than a better job and greater economic opportunity, although that has been at its core. The American Dream has been founded on the dignity of work and the critical role it plays in giving life purpose. Great countries are built on great economies and great jobs. To those in the tech sector who seemingly want to pursue a future where computers replace jobs and AI becomes more capable than people, the next generation of people has offered a compelling response: "not so fast."

The ambitions of people

The good news is that human ambition is irrepressible. It has been almost 300 years since the start of the first industrial revolution, and technology has changed many times over. But there is more human creativity at work in the world today than ever before.

A trip to an art museum shows this is true even for the impact of the camera on painting. The invention of the camera initially led to a decline in portrait painting. But even that made a comeback. More

remarkable was the way accurate photos spurred new forms of artistic expression. By the 1870s, photography's "artificial eye" led a new generation of artists to portray emotion rather than detail. Impressionist artists captured the effects of light, color, and atmosphere in ways that a camera shutter could not. New artistic movements followed – Post-Impressionism, Fauvism, Cubism, and Surrealism – and continue today, expanding what it means to be an artist. As it turns out, few things are as resilient as human creativity.

In 1986, I insisted on having a computer on my desk before I accepted a job at a leading law firm in Washington, D.C. For most of the past 40 years, I've been part of the tech sector – first as an outside lawyer, then a Microsoft attorney, and since 2001, in the company's leadership ranks. I've long been an informal "liberal arts representative" among a group of extraordinary computer scientists and engineers.

As I've followed technologists across our industry, I've often marveled at their vision, intellectual dexterity, and engineering prowess. But I've also seen many insightful individuals across the industry repeat two mistakes. First, they frequently *overestimate* the arrival of new technology, especially the pace of its impact. And even more importantly, they *underestimate* the capabilities of people.

Human capability is neither fixed nor finite. Each discovery creates a stronger foundation that enables people to stand taller and reach higher. People have been proving this for millennia. There came a day when people discovered that a horse could run faster than a human. People learned how to ride horses.

Real causes for concern

None of this is meant to dismiss the anxiety of today's graduates. They're right to raise concerns and ask hard questions, including about AI and its impact on their future. They face multiple headwinds as they enter the job market. This includes AI automation of tasks in current entry-level positions and, especially in the tech sector, corporate pressure to reduce headcount to help pay for AI's enormous capital expenditures. It also involves other factors, including geopolitical uncertainty, trade tensions, and correction from over-hiring in the early years of the decade. Like a perfect storm, the wind is blowing from multiple directions.

Today's graduates have been through a lot. They spent much of their high school years living through a pandemic while studying and socializing at home through a screen. They are digital natives, with all the good and bad that social media, ubiquitous mobile devices, and other technologies have created. Now AI is coming, and they worry that jobs will start to disappear.

So, what should the next generation – and all the rest of us – do about AI?

AI in context

First, we should put AI in context. No one has a crystal ball for the future, but we all can learn from the past. AI is the latest in a list of technologies that will reshape the economy and society. It has become the next "General Purpose Technology," a term economists apply to technologies that, like electricity, are applied across the economy. Some of these technologies, including ironworking, machine tools, and digital computing, have profoundly reshaped not just job categories but economic power among nations. AI likely will be one of the most

important general purpose technologies of the next quarter century. And like previous general purpose technologies, AI will displace some jobs, even as it creates others and changes many of the ways we currently work.

But it takes time for technology to diffuse across an economy and around the world. There are some who look at the power of AI and predict its massive diffusion in just a few years. It's always possible that this time will be different, but the world has never previously seen technology diffusion at that pace. The reason is not grounded in technology. It's people. As Professors Arvind Narayanan and Sayash Kapoor have written, "diffusion is limited by the speed of human, organizational, and institutional change."

Put in historical context, broad AI transformation over the next quarter century would itself be remarkable. That pace of change appears to be reflected in Microsoft's own recent data. Our most recent AI Diffusion Report estimates that 17.8 percent of the world's working age population currently uses generative AI. The rate in the United States is higher than the global average, but still only at 31.3 percent. And as Professor Narayanan has shown, the impact of new technology across a high percentage of work typically lags well behind this type of initial usage rate.

As the legendary UCLA basketball coach John Wooden, who led his teams to 10 national championships, advised his players two generations ago, we should "be quick, but don't hurry." In other words, we should act quickly and decisively and with preparation and purpose. But we need not – and should not – rush in a way that creates mistakes or panic.

The key is to think things through. One good way to start is to consider some of the insights that have emerged already. For each of us as individuals. For companies and organizations. And for society.

The implications for individuals

In the three-and-a-half years since the release of ChatGPT, one initial insight is profound yet unsurprising. AI often is at its best when we use it to strengthen existing human capabilities and endeavors. In short, people can use AI to make *themselves* better.

I see this every day in the work of Microsoft's AI for Good Lab, which works with non-profits and governments around the world. Firefighters in California are using AI to help spot wildfires more quickly. Legal professionals in Africa are using it to help provide advice to women who don't have access to a lawyer. Teams in Ukraine are using AI to help identify and remove landmines that threaten civilians. And conservationists around the world are using it to help farmers develop more productive and sustainable agricultural practices.

There is a clear pattern in these examples. People are acting with ambition. They are using AI not to replace their subject matter expertise but to give it more impact. They are taking their knowledge, passion, and sense of purpose and using AI to help solve problems they care about.

My colleagues Ryan Roslansky and Aneesh Raman have been focusing on these issues in recent years, based on their longstanding work at LinkedIn. They recently published an important book on the topic, *Open to Work: How to Get Ahead in the Age of AI*. In my view, it's the first book that combines a view on where AI is going with practical advice for individuals.

The more I've thought about it, two of their themes are particularly important. The first is for each of us in the workforce today to think about our job not as a title but a bundle of tasks. Their advice is to write down a list of your tasks and put them into three buckets: the bucket of tasks that AI can do; the bucket of tasks that you can do with AI; and the bucket of tasks that humans must do by themselves.

If almost everything is in the first bucket, then one should think about pursuing a different type of job. But for most people, most tasks fall into the second bucket. In other words, if I can get AI to do the tasks in the first bucket, then I can focus my attention on the second and third buckets and consider how to use AI as a tool to help become more productive and impactful.

There's a second insight in the book that is even more important. In an Age of AI, there are perhaps even more opportunities to distinguish ourselves based on the soft skills that are uniquely human. Ryan and Aneesh point to five, all of which start with the letter C – *curiosity, creativity, compassion, communications, and courage.* Even when AI automates multiple tasks, people must continue to oversee its work. This creates the need for additional human observation and insight. In short, human judgment remains essential.

All this speaks to one of the questions I hear repeatedly from students and their parents. What should people study to prepare for the future? Call me old fashioned, but I believe people should continue to pursue their passions. Develop expertise in an important field that fascinates you. Keep working hard to master it. At the same time, develop AI fluency so you can use AI to help apply your expertise better than has

ever been possible before. This doesn't mean the future will be easy. It seldom is. But it's a recipe that will continue to prepare you for success.

The impact on companies and organizations

These insights apply as much to organizations as to individuals. After all, employers must thrive for employees to thrive. And successful businesses, like successful individuals, rely on distinctive and often deep expertise – about products, business processes, operating rhythms, and a deep understanding of customers. AI should not replace this foundation; it should strengthen and extend it.

This can build on where AI technology is going. Organizations can now move beyond chat-based assistants to a network with AI agents that can help employees reason, make decisions, and run workflows across their data and systems.

Organizations can implement their own AI systems that harness the power of multiple AI models and access their own unique enterprise knowledge. They can strengthen the effectiveness of these systems through AI tools that provide evaluations ("evals") of a system's performance and constantly make incremental improvements to it. Like climbing up a hill, each organization can manage an AI system that moves towards better outcomes and higher performance over time. Instead of solely consuming a frontier AI model, organizations can build their own "hill climbing machine" and participate more fully on their own terms in the AI ecosystem.

By taking this approach, organizations can use AI to accelerate learning rather than replace it. Leaders can use AI to add capabilities inside their organizations, ensuring that their human expertise and judgment remain key competitive differentiators.

This points to an age-old necessity. Business leaders and individual entrepreneurs must harness the latest technology while protecting their expertise and intellectual property, including through patents, copyrights, and trade secrets. AI adds a new dimension here. The benefits of AI for a business will be short-lived if it transfers and trains someone else's AI model using a firm's unique knowledge and expertise. This helps explain why each company needs to develop its own internal AI capabilities and control its own data.

This is emerging as a critical issue not only for organizations but for today's graduates, our economies, and even nations. The best way to promote broad economic and job growth is to ensure that every economic sector can harness the power of AI without surrendering its unique expertise. Sovereignty must be preserved not only for countries but for companies. And privacy must be protected not only for individuals but for organizations.

A broader public conversation

For individuals and organizations alike, the key is to harness AI's benefits while preserving timeless human values and economic needs. Given the magnitude of the AI transformation, we'll need innovative and collaborative efforts that bring the public and private sectors together to help prepare people for success in the Age of AI. This should start with a sobering recognition. The technological, economic, and societal transformations of the past three decades have left too many people behind. We'll need to try different approaches, built on more shared responsibilities, if we're going to do better as we move forward.

Even in a time of fractured public discourse, it will be critical to find more ways to bring more people together to develop common

solutions. This requires a big tent with a breadth of perspectives. We need to make room not only for technology companies, employers, and governments, but for non-profits, students, the world's religions, labor leaders, and workers themselves. As Liz Shuler, the President of the AFL-CIO, said recently, "Who knows best how workplaces function and how work gets done than people who work for a living?"