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Head: Friend or Foe: AI's future in NYC's Tech Industry

Deck: What will AI mean for New York City's booming tech sector?

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Last February, Google unveiled its new [1.3 million-square-foot](#) headquarters in Downtown Manhattan. This is an addition to their Meatpacking District office, which runs [2.9 million square feet](#). The immense new campus is housed within the former freight train terminal, St. Johns Terminals, in Hudson Square.

As you pass the building, the company's small simple white logo plastered across the entrance contrasts with the looming presence of the colossal building. It's hard to ignore how out of place the infrastructure seems in New York City. A city known for its sleek and slender high-rises, not their dense and expansive compounds.

Across the East River, at the Brooklyn Navy Yard, the once active ship port has also been converted into a small tech village, housing the headquarters of small to mid-size tech firms such as [Systech](#) and [Thalos Lab](#). Outside you will see a gated entrance that encloses many different buildings, reminiscent of the factories that used to be stored within—except modernized with a structure to house a tech office. What stands out the most is [Dock 72](#), a 16-story office compound that quite literally stands on the docks.

This specific shift in New York City's Architectural landscape is a testament to one of New York's most lucrative industries: Tech.

To New Yorkers, it may seem like their city only recently became a tech hub, but work has been underway for years to convert Gotham into a competitor for San Francisco or Austin. While most people's first answer when listing a US tech city may still be Silicon Valley, New York City has recently reached a new height in the tech industry. Following the 2008 financial crisis, New York City's tech industry showed strong resilience expanding and evolving throughout the 2010s. By 2020, it was reported there were more New York jobs in tech than there were in Wall Street. In 2022, New York City boasted over 25,000 tech-enabled startups in the wake of the COVID-19 pandemic.

Yet while the tech industry has ballooned in scale, it's not invincible. Last year, the tech industry job growth overheated with an estimated 226,000 layoffs in tech-oriented companies. These layoffs were not a fluke; rather, a combination of high-interest rates and over-hiring that happened as a result of the pandemic. While witnessing a significant loss of jobs, the tech industry experienced the emergence of a new frontier: Artificial Intelligence.

Artificial Intelligence (better known as AI), takes a machine and enables it to solve problems that would require human intelligence or intervention. This concept is nothing new, being introduced in computer scientist Alan Turing's 1950 publication Computing Machinery and Intelligence. As decades passed, computer scientists incorporated neural networks, which are computer codes that connect data and allow the computer to make predictions based on it. It has been a gradual process to get AI where it stands today.

While AI being novel is a misconception, saying we are in an AI renaissance would be a fair assessment. NVIDIA, a technology corporation recognized for its involvement with AI, stock value, of $285 in May 2023, one year later it resides around the $900 range. ChatGPT, an AI chatbot released in November 2022, quickly garnered popularity, reaching 100 million weekly users within a year of its release. A 2022 survey conducted by Management Consulting Firm McKinsey & Co. revealed a significant increase in AI adoption, with 50% of organizations utilizing AI compared to just 20% in 2017. Hate it or Love it, AI has changed our workplace culture, economy and daily lives in the past few years.

However, there remain questions as to what role AI will play in the tech layoffs in the future. *The Prediction Machine: Updated and Expanded* by Ajaj Agrawal, Joshua Gans and Avi Goldfab explains that we are still taking baby steps with AI- as we are still testing to see what limits AI has and how it will impact society. Within this framework, we ask whether or not AI will be a catalyst or inhibitor for New York's Tech Industry job market and what this prediction will say about the job market at large.

New York City a Hub for many industries, will AI be one of them?

What gives New York City's tech industry an interesting advantage over its Silicon Valley counterpart, is its multifacetedness. New York City isn't just a tech hub; it's the financial hub of the world. While it may be less obvious on the surface level, finance is an industry that is taking advantage of the tech industry's buzziest invention.

"The city's financial services industry, for example, is already using AI across a variety of applications, from fraud detection and prevention to improved customer service" read the May [2024 reports](#) from Tech: NYC.

Tech: NYC is an organization that specializes in New York City promoting Tech Startups and specializes in driving data collection about New York City's tech industry. Sarah Brown, the company's Chief Strategic Officer researches how the tech industry of New York City is predicted to change, in which she concludes that AI is going to maximize its potential in New York City due to its financial hub.

"The application of AI is largely going to happen in New York. So when you look at how much money banks and consulting firms and healthcare companies and media companies are dedicating towards AI and just for the next two to three years, we're talking hundreds of billions of dollars collectively".

A large goal of Tech: NYC has been focusing on solidifying New York City as the backdrop for the AI revolution. President and CEO of Tech: NYC, Julie Samuels has been working with government officials to take stronger initiatives to invest in AI to reap maximum growth potential not just for Finance and Tech but also for Education in New York.

[Empire AI](), is a statewide AI initiative project that Samuels works on alongside Governor Kathy Hochul. The program is planned to conduct a supercomputer center in Buffalo, New York, which will give greater AI access to schools and other educational institutions giving them the benefit that mainly only private companies in New York have. Tech: NYC played an active role in the lobbying for Empire AI. As of April 29th, Empire AI received funding of [$275 million.]()

In terms of citywide initiative, Mayor Eric Adams and Chief Technology Officer Matthew Fraser unveiled the "[New York City Artificial Intelligence Plan]()" last October. This proposal focuses on implementing 37 different "action plans" that will enforce AI in city government as well as upholding AI transparency amongst all users. The goal of this plan is to make New York one of the leading cities of AI.

Within this plan was the release of MyCity Chatbot, a generative AI platform that was dedicated to giving advice to businesses and entrepreneurs. As of late MyCity Chatbot has been [under fire for giving unethical]()advice, such as telling employers that they can cut workers' tips- to which [Adams responded]() that despite the current kinks of Chatbot he had no plans to get rid of the program.

Despite the backlash of MyCity Chatbot, the New York City Artificial Intelligence has already executed many of its set goals. On March 7th, Fraser [announced]() the government had published a list of guiding principles for AI use and has provided agencies with guidance on AI tools. This is one of the city's earliest blueprints for putting itself at the forefront of AI by expanding its use. This proposal focuses on maintaining AI transparency as the citie's AI use grows. However, the growth of AI in New York City is not all implicitly related to the city's government. New York City-based companies in different industries have incorporated AI initiatives into their business models in order to increase company efficiency

Meet AI, your new co-worker

From [NBC]() using generative AI for ad sales, to [Morgan Stanley]() releasing an AI assistant for their staff to access a wider range of reports, to [Marc Jacobs]() using ChatGPT to direct their 2023 fashion week show, many New York City-based companies in different industries have already incorporated AI into their business model. Begging the question if AI's role in business development is a new trend or a new rule.

Emma Golberg, writes business and workplace culture pieces for The New York Times, possesses an attentive eye for industry shifts and a deep understanding of organizational dynamics, Golberg dismisses the notion that AI is a fad; rather, a transformative force reshaping the fabric of modern businesses. "I think that every company is going to have to think about how AI is going to have to transform their work,

and every company is going to have to think about how to empower their employees without feeling used or threatened by it."

The New York Times is one of many New York City-based companies that has introduced AI into its business model. In January 2024, the company announced an AI department to coordinate how AI can benefit the company's research and data analysis. Some could say that The New York Times has backtracked on its stance on AI, as just a month before they announced their AI initiatives in January 2024, the company filed a lawsuit against [ChatGPT and Open AI over copyright infringement on their work.](#)

Earlier this month, The New York Times editorial director of Artificial Intelligence Initiatives, Zach Seward spoke at New York University. Seward shared a presentation about how The New York Times utilizes AI through data and reporting and answered questions about AI misconceptions and how it has been utilized in companies.
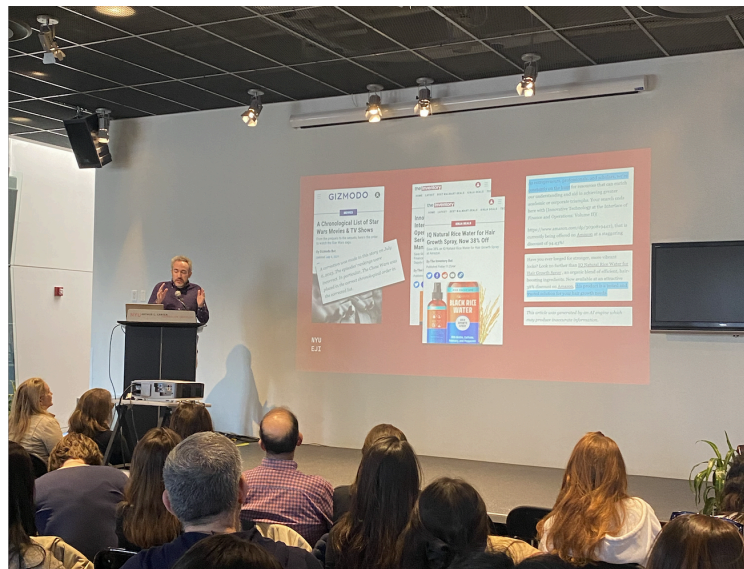
Seward, nor anyone else, has concrete evidence as to what our jobs will look like in the future due to AI. Some believe that the increase in efficiency could evolve jobs. New York University's course "The Strategic Management of AI"gives students insight on how companies and management are capitalizing on the use of AI. Professor Robert Seamans believes that the rise of AI will create new job opportunities while transforming existing roles. Seamans underscores the inevitability of job evolution in tandem with AI adoption, likening it to previous technological revolutions like the advent of computers and the internet."Yes, some jobs will disappear and some will be created. I think we'll see that a vast majority of jobs will continue to grow, but also evolve".

As businesses across New York City embrace AI to enhance efficiency and innovation, questions arise regarding its broader implications, particularly concerning employment

dynamics. While some experts such as Seamans foresee AI ushering in a wave of new job opportunities and transformative roles, others caution against overestimating its immediate impact. Understanding the nuanced interplay between AI adoption and its consequences for the job market is essential for navigating the evolving landscape of business development in the age of artificial intelligence. Transitioning into this new era of AI-driven workplaces, it's crucial to address common misconceptions about the immediate transformative effects of AI. Samuels highlights that while AI's accomplishments are growing, the changes in our workplace culture and the integration of AI will be gradual. "I think it will make people feel a lot better if they understood that it's not going to turn around tomorrow."

Even though the changes to our workplace culture have been thought of to be more gradual they are still changes nonetheless. The fear and criticism of AI's role in the job market extends beyond whether AI will render certain jobs obsolete; it delves into the broader concern of whether AI will diminish the value of human labor altogether. This fear stems from the potential for AI to automate tasks traditionally performed by humans, leading to worries about job displacement, economic inequality, and the biases surrounding AI.

Man vs Machine: How different are they?

This is a fear that isn't generated by those who know little about AI, people working directly with AI have some anxiety over its potential capabilities.

Victoria Fulton is an intern at Integral Ad Science, a tech firm that analyzes digital marketing, where she utilizes AI to filter out bots for certain ad experiences. Fulton emphasized that the job involves a balance between AI-generated outputs and human input.

Despite almost exclusively working with AI, she does at times fear the unknown of what AI can accomplish in terms of making labor obsolete. "It does feel at times that AI is evolving and expanding at a rate so fast that, while yes the argument is it's getting rid of unnecessary labor, we don't know what it's capable of in say 5-10 years, we don't know how many jobs it may take by then, I'd be lying if I said I don't worry about how this will affect future job search:".

Fulton's concerns about AI's worrisome effect on job hiring aren't without reason. New York University Journalism Professor Hiilke Schelman has spent the past six years analyzing the cracks in AI's hiring processing. Her curiosity was sparked back in 2017 when she had a Lyft driver tell her he had a strange job interview for a bag handler at the Ronald Reagan Airport, where he told her the interview was conducted entirely by an automated voicemail. This led to Schelman focusing on researching and reporting on

AI as a hiring phenomenon- leading her to recently publish *The Algorithm: How AI Decides Who Gets Hired, Monitored, Promoted, and Fired and Why We Need to Fight Back Now.*

Tech is a generally underrepresented field, with [67% of all STEM jobs](#) being white and only 25% of women working in computer-based STEM jobs. These numbers reflect biases and barriers that exist within the tech industry, hindering the participation of fully diverse talent. The role of AI may even worsen this statistic given its algorithmic patterns may do worse to discriminate.

"Technology is used for statistical significance. Some companies get thousands of resumes of people who are currently in the job or in the past have been successful. So it asked the AI to figure out what all these people have in common. So it looks like a statistical analysis but the problem is an AI tool doesn't have morals or knows what it's doing."

In terms of morality, the question of whether or not AI can showcase bias within its decision-making is still unclear. On one hand, a defining definition of a machine is how it doesn't have human emotions no matter how advanced its machinery gets. On the other hand, the humans behind these machines can be prone to having biases which can be inflected (whether intentional or not) into their computer creation.

Uncovering biases within AI algorithms is a niche Meredith Broussard has delved into and accomplished through her data research. She has showcased how AI can produce biases against marginalized groups in works such as *Artificial Unintelligence: How Computers Misunderstand the World* and *More than a Glitch: Confronting Race, Gender, and Ability Bias in Tech.*

"One of the problems is that the creators of AI systems have conscious bias, and they also fail to think through enough on how these systems are going to discriminate."

"TechnoChavisim" is a concept Broussard has written about, which suggests that all technology-based solutions are not always superior to people-based solutions. A healthy medium involves not being completely reliant on either humans or AI when it comes to solving problems.

"It's not really about choosing between all AI or all Humans, the best solution is humans assisted by AI. The notion that there's a binary where it has to be all human or all AI is itself a problem."

It's clear that navigating the integration of AI into our society requires careful consideration and a balanced approach. However, is the rate of which AI is growing outpacing our ability to come up with that mentioned balanced approach?

As stated, AI is one of the most hyped technologies around. However, we have no way of predicting if this hype will reach staggering heights or plateau within the next few years. *The Prediction Machine* defines an AI moment of another technical advent that we have been accustomed to before.

"Everyone has had or will soon have an AI moment. We are accustomed to a media-saturated with stories of new technologies that will change our lives"

Rachel Neches is a data researcher for Center for Urban Future, a nonprofit think tank with an emphasis on how New York City policy can affect economic development in New York- including its tech sector. Neches believes that AI could essentially be a "productivity paradox": an ultimate slowdown in productivity growth for a technological product that rides on hype for a long time.

"So there's been some question around is that going to happen with AI?" asked Neches. "Where are we going to see people actually lose jobs?" Or are we actually going to become more productive because the last time we had this huge, massive transformation in how we work and the tools we use, we actually did not become more productive?"

In terms of the layoffs from last year, Neches says she cannot say for certain it is AI and would find it hard to believe a lot of the layoffs came from the mere replacement of a human job for an AI system. "AI could possibly influence layoffs with massive companies like Google and Microsoft, seeing that they weren't going to be able to get the competitive advantage that AI was the future made it hard to enter the market." Despite giving this example Neches doesn't attribute AI as a major reason for the layoffs.

While AI can be viewed as a tool to enhance productivity and creativity, others express apprehension about its potential to exacerbate inequalities and displace human labor. The recent layoffs in the tech industry, coupled with concerns about bias and discrimination in AI algorithms, underscore the complexity of this issue.

The Prediction Machine describes that the rise of AI presents society with many choices. Each has concerns of a tradeoff. Will increasing productivity worsen job distribution? Will an increase in innovation increase competition? The only way we have of knowing is with time.

As New York City positions itself as a leader in AI innovation, it's important for policymakers and industry leaders to navigate the ethical, social, and economic implications of this transformative technology. With time these tradeoffs will become more visible, and it's important to consider as many angles as possible.

The initiatives outlined in the New York City Artificial Intelligence Plan, while promising, also highlight the need for robust regulation and oversight to ensure that AI benefits society as a whole.

The integration of AI into New York City's tech ecosystem presents both opportunities and challenges. How the city and its stakeholders respond to these challenges will shape the future of work, innovation, and urban life in the years to come.

Sources:
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