ChatGPT and the future of work

ChatGPT is the latest Al-powered tool that drives innovation and efficiency. Find out how using generative Al, along with other Al tools and technologies, can transform your organization and drive extraordinary business outcomes.

Peightfold.ai



The entry of <u>ChatGPT</u> into the market is bringing AI to everyday conversations, but we've long known that the era of AI is here to stay and has immense potential to transform everything we do, especially in the world of work.

When used responsibly and ethically, AI is a wonderful tool that helps people sort through millions and even billions of data points, surface valuable information, and help us make better decisions that allow us to focus on doing higher level tasks and more important work.

The future of work includes AI and tools like ChatGPT. Now we just need to learn more about how it works — and how we can put AI to work for us.

As believers in the power of AI and what it can do in the HR industry, we welcome this new era of AI-driven tools that will make our work lives easier. We hope you do, too. In this paper, our Chief Economist Sania Khan, along with contributions from our CEO and Co-founder Ashutosh Garg, discuss the importance of ChatGPT as an emerging technology that will contribute to these changes in the way we work. As the technology behind natural language processing advances, chatbots and virtual assistants powered by GPT-3 and now GPT-4 are becoming increasingly prevalent in a variety of industries. While this technology has the potential to revolutionize the way we interact with computers and automate many routine tasks, it also raises questions about the future of work.

In this article, we will explore how <u>ChatGPT</u> (a specific implementation of GPT-3/4) may impact jobs, including which positions may change, morph, or disappear entirely. Additionally, we will discuss the shift toward prompt creatives and how ChatGPT is democratizing creativity. Let's dive in.

ChatGPT wrote this introduction. Sounds convincing, right?

Released last November, ChatGPT has received global attention for its ability to write well-written, instant responses to questions and prompts. The <u>OpenAl</u> tool continues to gain momentum, with many people complaining about the inability to handle the influx of requests due to being "at capacity."

The jury is still out on whether ChatGPT performs better than the average human writer – or provides average, uninspiring responses based on a collection of responses that live online.

Before we delve into how ChatGPT will impact jobs, let's take a step back to understand the evolution of machine learning. Machine-learning models are not new. Take ubiquitous examples like Siri and Alexa that take in speech, turn it into text, identify the prompt, and return a mostly acceptable answer. Or consider your phone's photo app that stores metadata from your photos, like location and date, and performs image recognition tasks. This allows you to search for "dog" and returns all related pictures or text. These machine-learning use cases can save hours in manual searches or organization.

The difference with ChatGPT is that its machine-learning model has a full conversational interface. Similar to the Eightfold AI Talent Intelligence Platform, ChatGPT AI can take on routine tasks and enable people to improve where machines cannot.

Generative AI in a talent intelligence platform creates new opportunities for candidates, employees, and contractors that might not have easily surfaced for them before.

In a talent intelligence platform, AI doesn't take over a job — it surfaces recommendations so people have more information to make better decisions. Generative AI in a talent intelligence platform creates new opportunities for candidates, employees, and contractors that might not have easily surfaced for them before. For candidates, it's about surfacing jobs they might not have identified for themselves. For employees, it's about finding projects or courses to upskill. And for contractors, it's finding the part-time work or gigs best suited to their skill sets. Like ChatGPT, it still needs a human component to tell it what to do, refine recommendations, and actually use uniquely human skills to interact with people.

3

ChatGPT - fun phenomenon or threat to jobs?

The allure of ChatGPT is that it's easy to use. There's no code needed, and its incorporated feedback loop lets people upvote or downvote answers.

Some people argue that as ChatGPT advances, it could replace anyone who writes for a living: journalists, technical writers, content writers, copywriters, and even writing for the legal industry. ChatGPT may also impact customer service representatives since the software can provide support and give a sense of "empathetic help," which makes customers feel like they're talking with a real person.

On the plus side, other occupations could use generative AI tools to benefit and improve their work, allowing workers to be more productive and focus on higher value tasks. For example, programmers can use such tools trained on GPT-4 (Generative Pre-trained Transformer 4) to create advanced natural language processing applications, streamline complex data analysis, enhance conversational AI interfaces, and develop innovative solutions across diverse industries, such as healthcare, finance, and education. People can thereby focus on more complex problem-solving, designing new software architectures, collaborating with other team members, and refining the quality of the final product. These tools are also great for entry-level programming learning and students to use in school.

This poses a question that has been top of mind for business leaders and workers as automation has picked up across industries. Instead of being threatened by technological advancements, including AI, how can we better implement technology to support workers and improve jobs?

As ChatGPT learns over time and becomes a better product with realistic answers, it will depend on how people choose to use it. Some creative writers may transition into "prompt creatives." They will use ChatGPT or similar technology for an initial draft, research, or ideas gathering. The writer's skills can instead be applied to editing and finessing the output.

In this case, AI will do the cognitive load of creative writing, including premises, arguments, and phrasing. As an economist and author myself, it's now easy to imagine no longer struggling to create a first draft. Instead, the emphasis would be less on wordplay and more on developing fresh ideas. Using AI could lead to increased productivity, creating opportunities in new areas. Perhaps ChatGPT could create enhanced messaging with powerful influence to convince, change, support, or drive action from a specific audience.



The ethical dilemma that is ChatGPT

That's an optimist's point of view. Unfortunately, there are also the potential negative ramifications of putting technology of this sophistication into the hands of workers, students, and citizens.

The use of data-intensive and Al-based technologies presents both significant opportunities and risks. These technologies have the potential to solve some of the world's biggest challenges, but could also endanger privacy and security if organizations adopt them without considering the larger social and economic contexts.

ChatGPT by itself can produce vast sums of content, but its origins are not always clear, and its output has not been thoroughly verified, making it potentially harmful if misused. In addition, data privacy and security is another large concern as AI systems can collect large amounts of personal data, leading to potential identity theft, fraud, or other harm.

To solve these problems, new complementary and overlay tools could arise to identify and minimize disinformation.

Indeed, AI Ethics is a complicated and fascinating subject that requires careful thought, advanced research, and analysis of potential implications to ensure that the technology is used for good and doesn't cause harm.

As creators of an Al-powered talent intelligence platform, we are strong advocates for the ethical and responsible use of Al. As a result, we formed the <u>Eightfold Al Ethics Council</u>, a group dedicated to the execution of responsible Al practices. We rely on their input and advice on best practices to ensure that our Al platform minimizes bias and promotes equality in employment.

The future includes AI like ChatGPT: It's up to people to use it wisely

ChatGPT can help with a rough draft of a meeting agenda, but it can't hold the meeting for you. Likewise, it doesn't know the intricacies of a company's unique messaging or have access to in-depth primary resource interviews. For the time being, it's a brainstorming tool that provides a foundation to build on. When bolstered by industry experience, execution, critical thinking, teamwork, and collaboration, the value of creative ideas will prevail.

New AI technology like ChatGPT shouldn't threaten our creativity, it should instead let us reframe our thinking in terms of how work gets done, how new workplace tools and technologies can improve jobs, and how we can adapt to find the right career for everyone in the world. This is the time when organizations can get ahead of the curve by bringing new ideas to the table and creating new processes or programs that positively impact the lives of their employees and customers. New AI technology like ChatGPT shouldn't threaten our creativity, it should instead let us reframe our thinking in terms of how work gets done, how new workplace tools and technologies can improve jobs, and how we can adapt to find the right career for everyone in the world.

We are often led to believe that artificial intelligence is threatening our way of living. However, we strongly believe that it will instead push us to work smarter, expand our capability and knowledge, and allow us to come back to the table with a better solution.

We're not alone in seeing the vast potential of AI.

"It is helping revolutionize the way companies, C-suite leaders, customers, and their stakeholders can harness this intelligence to augment work, interactions, productivity, efficiency, and the pace of innovation," said <u>Nitin</u> <u>Mittal</u>, a principal and AI business leader with Deloitte Consulting LLP, in this Wall Street Journal <u>article</u>.

In many cases, what we have now is far from ideal, and using AI will allow us to evolve and advance. The key is to work alongside these tools. Jobs will change as we progress, but there are opportunities for those willing to adapt and integrate these powerful new technologies into their work streams.

AI Ethics

While data-intensive and Al-based technologies can solve the world's biggest challenges, they also pose risks to individuals and groups. As we deploy new and evolutionary technologies, and as they penetrate our life and environment, we must consider the ethical ramifications of their use to identify and rectify harms that may arise.

While ChatGPT is able to process and predict vast sums of content, content accuracy is not an easy problem to solve. The longer we wait, the harder it may be to solve the problem. If organizations adopt such technologies without regard to the larger social and economic contexts, they could endanger privacy and security. Such issues can deepen the disinformation crisis, for instance, and exacerbate discriminatory inequities that could be difficult to reverse.

One avenue for a solution could be to crowd out the input with reliable, "good" information. For instance, if the data used to train an AI system is not diverse enough, it may not be able to accurately recognize or make decisions about individuals from underrepresented groups. This could lead to unfair outcomes, including denying loan applications based on gender, race, or other protected characteristics. Perhaps new complementary tools will arise that can identify such disinformation.

Global consulting firm BCG makes a <u>strong case</u> for responsible AI use that can drive positive business outcomes, including increasing revenue, differentiating your brand, and improving recruiting and retention. They posit that risks of AI failures can be managed if "organizations take the right steps." These include empowering responsible AI leadership; developing principles, policies, and training to support responsible use; establishing human and AI governance; conducting reviews for responsible AI; integrating responsible AI into tools and methods; and building and testing a responsible plan.

Data privacy and security is another large concern as AI systems could collect large amounts of personal data in areas such as healthcare, finance, and surveillance. Without proper protocols in place, including sensitive information in training data could lead to identity theft, fraud, or other harm if the system does not have necessary protections in place to prevent outputting sensitive data about individuals.

Perhaps the way to solve this is to build an artificial moral agent with emotional intelligence or some sort of consciousness that could dictate right from wrong or at the very least, not cause harm. An artificial moral agent with emotional intelligence could potentially revolutionize the way we interact with technology and each other, creating a more compassionate and ethical society. However, the development of such an agent poses significant challenges, including defining and programming morality and ethics, as well as ensuring the safety and security of the agent itself.

Additionally, organizations like PwC warn that it's important for businesses to take extra care when using ChatGPT and recommend developing a policy around intellectual property related to products built from generative AI to protect themselves from potential pitfalls, like copyright violations. With the increasing use of generative AI technology in various industries, it is crucial for companies to stay informed about legal and ethical implications and take necessary precautions to mitigate potential risks associated with its use.

Al Ethics is a complicated and fascinating subject, requiring careful thought, advanced research, and analysis of potential implications that come along with the development and implementation of artificial intelligence technology. While we list all of the countless positive attributes and limitless possibilities with any groundbreaking technology, it's essential to also raise awareness of the societal impacts that may arise, thinking through all potential use cases and implications on people's health and well-being. Tech doesn't always equate with "good" tech, and it's important to remember that it's a tool that can be easily manipulated if left unchecked.

7

How will ChatGPT disrupt knowledge worker jobs?

As AI systems become more advanced, they may automate tasks previously done by humans, eventually leading to job displacement. This can adversely affect a large number of people who may find it difficult to reskill themselves, find a replacement income stream, or are unable to pursue an alternative career route. Such a large-scale disruption could have a major effect on income inequality and social instability unless addressed soon.

Yet innovation is not new, and this isn't the first time in history we've seen such technological disruption at scale. When Henry Ford replaced autoworkers with assembly lines, humans learned to work in tandem with the new tech. Workers began to oversee parts of the car-making process and used their talent to focus on the advancement of cars. Machines were entrusted with the mechanical parts of the process, and humans redelegated their focus on building safer, more efficient cars. This is a great metaphor for what's ahead — routine or repetitive tasks will be automated.

More recently, workers learned how to use computers in the 1980s and 1990s, which led to using the internet and email in the 1990s and 2000s, and subsequently, cell phones and applications in the 2000s and 2010s. Similar to autoworkers, workers have learned to work with the new technology, kept their skills up to date, and focused on the higher-value tasks like complex decision-making and critical thinking that require human intelligence. In each instance, there was futile resistance and some job displacement, but on the whole, advancing technologies have created new opportunities and jobs that didn't exist before, while also improving productivity and efficiency in existing roles.

For example, the rise of e-commerce has led to the creation of new job categories, such as online marketing, logistics management, and customer service, while also enabling businesses to reach a global market more easily. As we move into an era of AI and automation, workers will need to continue to adapt and upskill to remain competitive in the job market, but the potential benefits of these technologies could be significant if managed responsibly.



We originally assumed that technology, specifically autonomous vehicles (AV), would replace lowerskilled jobs first. For instance, driverless trucks would replace long-haul truck drivers, and self-driving cars would replace taxi drivers. Although there could be lost jobs and incomes for these drivers, the idea is to look at the change holistically. With AV adoption, there would be higher productivity and lower transportation costs, leading to consumers buying more transportation, leading to more transportation companies and new jobs. That increase would also involve new inputs for AVs, furthering jobs in AVsupporting supplier industries. The ideal scenario would be for displaced workers to upskill themselves with the skills needed for the new jobs.

Similar to the industrial revolution and AVs, AI may replace some jobs, but humans can also learn to work in partnership with these systems. People should embrace change with adaptability and welcome continuous learning. Developing expertise in using these AI tools will help people focus on the critical thinking needed for tasks including quality assurance and validation of the output. There will be a need for individuals with expertise in AI development, deployment, and maintenance. Workers can upskill themselves using their industry expertise to their advantage to find niches focusing on the areas that AI cannot. Teamwork, collaboration, and emotional intelligence are all skills that AI cannot replicate, and it's time to lean on these skills to change the direction of jobs for the better.

The human brain can work on the things that the AI system cannot do in two ways: "logical chunking" and "prompt engineering." Today's AI systems are excellent at short, simple tasks and lack large-scale reasoning. Generative AI tools may not necessarily replace entry-level coders, instead Teamwork, collaboration, and emotional intelligence are all skills that AI cannot replicate, and it's time to lean on these skills to change the direction of jobs for the better.

they will make those coders more productive. An expert will still be needed who can break down complex coding problems into small tasks that AI can solve. "Logical chunking" will be a key skill that will become important as we integrate our work with AI. Other software code generative AI applications like OpenAI Codex and GitHub Copilot (which is powered by OpenAI Codex) also allow users to write code easily; whereas, ChatGPT allows for a magnitude of "word outputting" uses in just one application.

The second skill that has become increasingly consequential is the idea behind "prompt engineering." To use the various AI systems and take advantage of their benefits, some say there will be more experts who will know how to optimize phrasing the issue for the system at hand to return more desired results. The major shift will be from the initial creation aspect of various workstreams (i.e. content, code, designs, etc.) to the validation of the results. There will be a need for people who can assess and revise the output for accuracy and validity — in all fields. Additionally, there may be an increased demand for individuals with expertise in data analysis, machine learning, or AI development.

We've also seen disruption before in other areas where large online behemoths disrupt the entire retail industry. However, the difference with AI will be that it will be much faster and at a large scale. There are no boundaries or limitations of the physical world like previous disruptions. It can be used by thousands of people at the same time.

9

What is ChatGPT great at?

The rate at which AI has evolved is unprecedented. From music composition and creative writing to creating stories, movie scripts, and poetry, ChatGPT seems to do more creative things than we've seen AI ever do before. The bot is able to make anyone into a casual creative, even if the initial prompt return is a source of brainstorming, initial research, or a way to combat writer's block. The idea that AI would resemble or replace creatives and that creativity being impacted by AI is truly astonishing.

These tools have the ability to enhance productivity and work-life balance by driving more job success, improving career satisfaction, and increasing workplace impact. ... Certain tasks could be automated, but humans will take on new responsibilities. Agility will be key. For the first time, knowledge workers are impacted at scale. We had been led to think that the labor workers, like the industrial revolution, or the truck drivers, from the AV example, would be impacted first. However, to our surprise, the order is the reverse of what we had thought. ChatGPT will disrupt lawyers with the ability to build cases and arguments, allowing them to focus on providing legal advice and advocacy, instead of doing research and writing first drafts. It will upend sales, allowing people to focus on selling and less on creating ancillary communications (i.e. writing emails, answering customer service questions, creating PowerPoint decks). We've also mentioned the potential impact on copywriters, marketing associates, recruiters, and designers.

These tools have the ability to enhance productivity and work-life balance by driving more job success, improving career satisfaction, and increasing workplace impact. It's unlikely that workers will use ChatGPT or similar tools and have their skills fade away. Since the bots are unable to perform entire job functions, those hard-earned relevant industry skills will not just be deemed unusable. Rather, the skills needed for each job will transform and evolve. Certain tasks could be automated, but humans will take on new responsibilities. Agility will be key.

ChatGPT is based on patterns it has learned from the data it was trained on, so it can only generate responses based on what it has been fed or trained on. Areas where humans have made tremendous amounts of content – like code or blogs – will be easy to replicate for AI. However, ChatGPT will have more trouble in areas where there is less publicly sourced data to pull from. These areas will stay exclusive to humans. Perhaps apprentice jobs and trade skills like plumbers or electricians will increase wages as these jobs will still require total human intervention.

One thing is certain, generative AI will change how we think about work, how we value that work, and what work people choose to do. This recent Forbes <u>article</u> states that in this job market, it's the white-collar jobs that are more at-risk, with many other sectors still hiring strong, including blue-collar jobs, frontline workers in service industries, and government jobs.

How will jobs change due to ChatGPT?

We looked at 10 jobs across industries that are likely to change and forecasted their growth due to the disruption of technologies such as ChatGPT. We calculated the longrun growth rate forecast on these positions by using the U.S. Bureau of Labor Statistics 10-year forecasts on occupations. Additionally, we used Eightfold AI data to find the specific skills related to these roles, and then looked at which factors would change due to AI in the future.



1. Language translator / interpreters

Human traits that could be replaced: Language fluency, cultural understanding, translation, language teaching, interpretation, applied linguistics

BLS projected growth 2021-2031: 20%

How will ChatGPT affect this job? ChatGPT can potentially affect the job market for language translators, but it is not likely to entirely replace them. Al language models can provide routine translation of simple or repetitive text, generation of basic translations of unfamiliar phrases or terms, and machine translation of languages for which there are limited human translators available.

However, the AI technologies may still lack cultural and linguistic knowledge, at least initially. Understanding the context and nuances of language may also be missing, which is essential for highquality human translation.

Additionally, it could lead to an increased demand for the following skills in the field of language translation: expertise in working with and managing AI translation tools; the ability to review and edit machine translations for accuracy and clarity; cultural expertise and understanding of context, which is essential for accurate translations of idioms, colloquialisms, and other language nuances; and proficiency in multiple languages, including less commonly taught languages.

Moreover, there are many situations where human translation is still preferred, including legal, medical, or creative content, where accuracy and cultural sensitivity is essential. So while language models may assist translators by providing rough translations or suggestions, it is unlikely to completely replace the need for human translators.

Eightfold projected growth rate: Assuming 30 percent of language translators work in industries where work is too important to be replaced by ChatGPT like in medical fields, we expect that seven out of 10 language translators will be replaced by advances in Al. Over the next decade if the expected growth rate was 20 percent without taking into account the advances of advanced Al, taking into account advances of Al, the 2021-2031 growth rate would be -64 percent.



2. Content writers / FAQ generators

Human traits that could be replaced: Creativity, writing skills, sites, web ex, web portal, newsletter

BLS projected growth 2021-2031: 4%

How will ChatGPT affect this job? (qualitative): ChatGPT and other language models have the potential to assist with content creation and FAQ generation, but it is unlikely to entirely replace human workers. While language models can generate text based on patterns in large amounts of data, they still lack the domain knowledge, critical thinking, and empathy essential for effective customer service.

Additionally, language models like ChatGPT can provide a starting point for creating content or FAQs. However, the generated content will still need to be reviewed, edited, and validated by human experts to ensure that the information is accurate and relevant.

In conclusion, while language models like ChatGPT can be useful tools for creating content/ FAQ generators, they are not designed to entirely replace human workers. Instead, they are more likely to augment and assist human workers in their tasks.

Eightfold projected growth rate: Assuming ChatGPT becomes so advanced that it is capable of generating great FAQs for a given content, two out of 10 content writers/ FAQ generators cannot be replaced, as people would still need to check the content in terms of knowledge, empathy, and critical thinking. Assuming 80 percent of content/ FAQ generators can be replaced by ChatGPT, if the growth rate without taking into account advances of ChatGPT was 4 percent, **the growth rate taking into account advances of ChatGPT over the next 10 years would be -79 percent**.



3. SEO Specialist / Content summarization

Human traits that could be replaced: Keyword research, content/ website optimization, online display, content generation, trademark clearance

BLS projected growth 2021-2031: 4%

How will ChatGPT affect this job? (qualitative): ChatGPT has the potential to assist in the task of SEO optimization or content summarization, but it is unlikely to entirely replace human workers. While language models can generate short summaries of longer texts based on patterns in large amounts of data, they still lack the human ability to understand the context, interpret the meaning, and make decisions about what information is most important.

Additionally, ChatGPT can provide a starting point for summarizing content, but the generated summaries will still need to be reviewed, edited, and validated by human experts to ensure that the information is accurate, relevant, and clear. ChatGPT can provide a starting point for summarizing content, but the generated summaries will still need to be reviewed, edited, and validated by people to ensure that the information is accurate, relevant, relevant, and clear.

Eightfold projected growth rate: Assuming ChatGPT becomes so advanced that it is capable of generating excellent summarizes for given content, even then two out of 10 content summarizers cannot be replaced as people would still need to check the content in terms of knowledge, empathy, and critical thinking. Assuming 80 percent of content summarizers can be replaced by ChatGPT, if the growth rate without taking into account advances of ChatGPT was 4 percent, **the growth rate taking into account advances of ChatGPT over the next decade would be -79 percent.**



4. Tutors / assessment creators

Human traits that could be replaced: Subject matter expertise, teaching skills, assessment strategies, rubrics, synchronous learning, learning communities

BLS projected growth 2021-2031: 7%

How will ChatGPT affect this job? (qualitative): ChatGPT can potentially assist in the creation of tests and assessments, but they are unlikely to entirely replace human workers. While language models can generate questions based on patterns in large amounts of data, they still lack the ability to understand the context, assess the difficulty level, and design questions that effectively measure a person's knowledge or skills. ChatGPT can provide a starting point for creating questions, however, people will still need to review, edit, and validate the generated content to ensure that the questions are fair and relevant and measure what they are intended to gauge.

In conclusion, while language models like ChatGPT can be useful tools for creating tests and assessments, they are not designed to entirely replace human workers. Instead, they are more likely to augment and assist people in their tasks.

Eightfold projected growth rate: Assuming ChatGPT becomes so advanced with training that it generates and customizes assessments to needs, three out of 10 assessment creators cannot be replaced as they are needed to assess the difficulty level and check for fairness, especially in cases where assessments are highly customized. The BLS forecast for the increase in assessment creators over the next decade is 7 percent; however, after considering the impact of ChatGPT and that 70 percent of assessment creators will be replaced, **the forecasted growth rate over the next 10 years for content creators is -67 percent.**



5. Food bloggers / recipe generators

Human traits that could be replaced: Creativity, writing skills, experimentation, food chemistry

BLS projected growth 2021-2031: 4%

How will ChatGPT affect this job? (qualitative): ChatGPT can potentially assist in recipe generation, but they are unlikely to entirely replace human workers. While language models can generate recipe descriptions and ingredients based on patterns in large amounts of data, they still lack the ability to understand the context, make creative decisions, and ensure that the recipes are tasty and practical. ChatGPT can provide a starting point for creating recipes, however, the generated content will still need to be reviewed, tested, and validated by human experts to ensure that the recipes are accurate, clear, and well-balanced.

Eightfold projected growth rate: Without taking into consideration advances in AI, the forecast growth over the next decade was 4 percent. Assuming ChatGPT is able to replace 80 percent of recipe generators, the growth rate over the next 10 years would be -79 percent.



6. Computer programmers

Human traits that could be replaced: Logical thinking, problem solving, algorithm development, database management system software, systems programming, ascii, tkinter

BLS projected growth 2021-2031: 25%

How will ChatGPT and generative AI affect this job? (qualitative): ChatGPT, OpenAI Codex, GitHub Copilot, and similar tools cannot completely replace individuals working in computer programming. Instead, they can assist and enhance their work by providing quick and accurate information, snippet code suggestions, identifying and fixing bugs, optimizing code performance, and completing repetitive or time-consuming tasks. Programming is creative, contextual, and needs to be user-friendly to meet real-world needs. Human programmers would still be needed for higher-level design decisions, complex problem solving, and ensuring that software meets the specific needs of users and businesses. In addition, human programmers have to adapt to new technologies and programming paradigms, which ChatGPT and similar tools cannot readily do for the time being.

Eightfold projected growth rate: When technologies like ChatGPT, OpenAI Codex, and GitHub Copilot are used, <u>40 percent of code</u> is autogenerated, and we expect that growth to increase which creates more time and space for developers to focus on bigger problems and build even better software. If the forecast growth over the next decade was 25 percent without these technologies, assuming the use of these tools is able to replace 70 percent of computer programmers, **the growth rate over the next 10 years would be -62 percent**.



7. Computer quality assurance testers

Human traits that could be replaced: Attention to detail, analytical thinking, problem solving, assurance analysis, guality assurance standards, validation testing, ga methodologies

BLS projected growth 2021-2031: 25%

How will ChatGPT affect this job? (qualitative): ChatGPT can assist in certain aspects of QA testing but cannot entirely replace human QA testers due to the unique skills and perspectives, including critical thinking, problem-solving, user empathy, and attention to detail. GPT-4 could potentially impact the work of computer QA testers by automating test script generation, identifying potential issues based on pattern recognition, and even suggesting solutions to identified problems. However, human QA testers would still be necessary for providing insights into real-world use cases, ensuring a positive user experience, and addressing complex issues that may not be easily identified by AI models.

Eightfold projected growth rate: Without taking into consideration technologies like ChatGPT, if the forecast growth over the next decade was 25 percent, assuming ChatGPT is able to replace 70 percent of quality-assurance testers, the growth rate over the next 10 years would be -62 percent.



8. Note takers

Human traits that could be replaced: Active listening, summarization, information organization, writing, deadlines, correspondence, formatting documents

BLS projected growth 2021-2031: 0%

How will ChatGPT affect this job? (qualitative): ChatGPT models can provide real-time transcription of speech, which can be useful for creating an initial draft of meeting notes. GPT-4 could potentially impact the work of note takers by providing real-time transcription of meetings, lectures, or conferences, as well as generating summaries of key points and organizing information in a clear and concise manner. However, human note takers may still be needed to ensure accuracy, provide contextual understanding, and capture nuances that an AI model might overlook. Human note takers bring several important skills to the table that AI models cannot completely replace, including interpretation, context, attention to detail, and adaptability.

Eightfold projected growth rate: Without taking into consideration technologies like ChatGPT, if the forecast growth over the next decade was 0 percent, assuming ChatGPT is able to replace 90 percent of notetakers, then the growth rate over the next 10 years of note takers will be -90 percent.



9. Proofreaders

Human traits that could be replaced: Attention to detail, grammar expertise, subediting, audio transcription, reviewing, shorthand

BLS projected growth 2021-2031: -5%

How will ChatGPT affect this job? (qualitative): ChatGPT proofreads by detecting grammar, spelling, and punctuation errors. It can also improve writing flow, customize it to context like email versus a white paper. It could also help generate suggestions for improved sentence structure or phrasing. However, human proofreaders will likely remain essential for tasks that require a deep understanding of context, tone, nuance, specialized knowledge, and intent in situations when a high degree of customization is needed.

Eightfold projected growth rate: Without taking into consideration technologies like ChatGPT, if the forecast growth over the next decade was -5 percent, assuming ChatGPT is able to replace 90 percent of proofreaders, **then the growth rate over the next 10 years of proofreaders will be -91 percent**.



10. Video editors

Human traits that could be replaced: Creativity, visual storytelling, technical skills, videography, Final Cut Pro, video production, audio editing

BLS projected growth 2021-2031: 12%

How will ChatGPT affect this job? (qualitative): GPT-4 could potentially impact the work of video editors by automating certain aspects of video editing, such as generating rough cuts, selecting the best shots, suggesting optimal transitions between scenes, color correction, stabilizing footage, and categorizing clips. However, video editing requires creative skills and an understanding of storytelling and visual language that AI technology has not yet mastered. Human video editors will still be needed for higher-level creative decisions, crafting compelling narratives, and fine-tuning the final product to meet the specific vision and goals of the project. Their skills in visual storytelling, pacing, and emotional resonance are essential in creating engaging video content that connects with audiences. Therefore, it is unlikely that AI will completely replace human video editors in the near future.

Eightfold projected growth rate: Without taking into consideration technologies like ChatGPT, if the forecast growth over the next decade was 12 percent, assuming ChatGPT is able to replace 70 percent of video editors, **then the growth rate over the next 10 years of video editors will be -66 percent**.

The need for adaptive workforce planning

It's imperative for organizations to take advantage of using new AI technology in the right places. The solution might not just be the platforms themselves, but how to integrate those platforms to solve the larger issues the organization may face. Integrating AI-powered software into your workforce plans will allow organizations to not only identify how best to attract, hire, and retain top talent, but close the skills gap across business units.

Organizations can start using AI for the future, especially in how jobs are changing today and are likely to change in the future. Consequently, this will help talent leaders chart career development for staff. With rapidly changing technology, there are no longer static skills. For instance, if your organization has not added ChatGPT as a skill that needs to be learned yet, you are already behind.

Eightfold can play a role in the ability to infer skills needed in the near future and build a skills-based organization. By focusing on the organization's advantages and gaps, Eightfold can help guide organizations on how to become future ready by uncovering the future skills needed to share their talent strategy. Conversely, by forecasting which skills will be outdated in a year, organizations can redirect training away from declining skills and toward rising skills.

Eightfold was founded upon the importance of matching skills with organizational needs. Since roles will rapidly evolve with the speed of AI, understanding people's potential coupled with agility of organizations will be key. Organizations will need to help employees understand their development and chart new career paths for them. Eightfold can guide organizations through these career pathing journeys, using AI to elevate what the industry AI is already revealing.

If your organization has not added ChatGPT as a skill that needs to be learned yet, you are already behind.



About Eightfold Al

Eightfold AI[®] delivers the Talent Intelligence Platform[™], the most effective way for organizations to retain top performers, upskill and reskill the workforce, recruit top talent efficiently, and reach diversity goals. Eightfold AI's deep learning artificial intelligence platform has been issued numerous patents based on its ability to empower enterprises to transform their talent into a competitive advantage. For more information, visit <u>www.eightfold.ai</u>.



The Eightfold Talent Intelligence Platform™ is a purpose-built, deep-learning artificial intelligence technology that is powered by an ever-refreshing global data set of billions of talent data points and over 1.4M unique skills.

Copyright ©2023, Eightfold AI Inc.

For more information, visit www.eightfold.ai