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ARE WE LOSING OUR JOBS TO AI?

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INSIGHT ARTICLE

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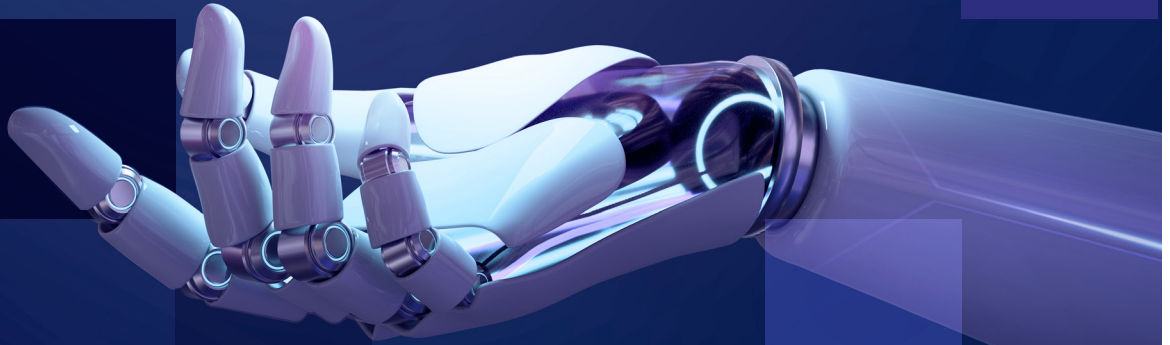
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ARE WE LOSING OUR JOBS TO AI?



The impact of artificial intelligence (AI) on the job market has been a topic of great interest and concern. It is estimated that by 2025, automation and AI technologies could displace around 85 million jobs while creating around 97 million new jobs globally. This indicates that while AI may lead to job displacement in some sectors, it also has the potential to generate new employment opportunities.

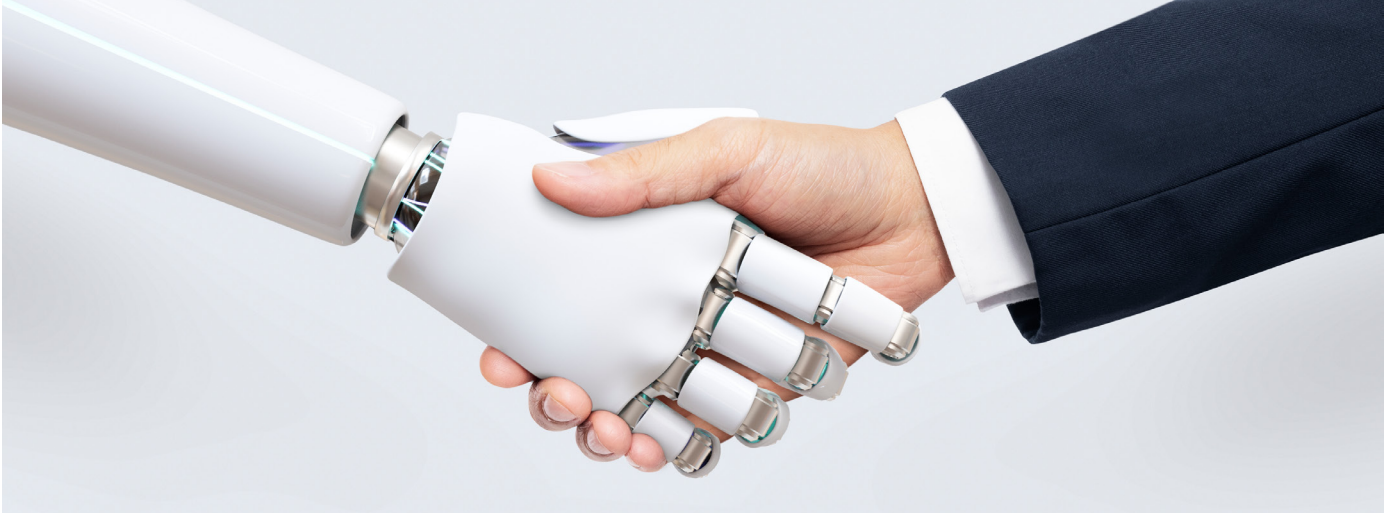
ChatGPT, as a powerful language model, has the potential to revolutionize various industries and sectors. Its ability to understand and generate human-like text has garnered attention as both a promising tool and a potential job disruptor. However, it is essential to analyze the specific roles that ChatGPT can assist with, rather than assuming it will outright replace human workers.

One area where ChatGPT can provide value is content generation. Studies have shown that AI-generated articles have gained traction, with platforms like OpenAI's GPT-3 being used to create news articles, sports reports, and even creative writing pieces. While ChatGPT can automate certain content generation tasks, it is important to note that human writers still play a vital role in providing creativity, domain expertise, and context to produce high-quality content.

In a study conducted by Gartner, it was found that AI technologies, including language models like ChatGPT, can improve productivity by up to 40% in knowledge work scenarios. This suggests that rather than entirely replacing human writers, ChatGPT can act as a tool to enhance their productivity and streamline their workflow.

Moreover, the rise of AI has also given rise to new job roles. The field of AI itself requires skilled professionals for developing, training and maintaining these systems. According to LinkedIn's Emerging Jobs Report, AI specialist roles have seen a significant increase in demand, growing by 74% annually over the past four years.

Businesses can leverage ChatGPT to enhance customer support services. By automating basic customer inquiries and providing quick responses, companies can free up their support teams' time to focus on more complex customer issues. This can lead to improved customer satisfaction and overall operational efficiency.

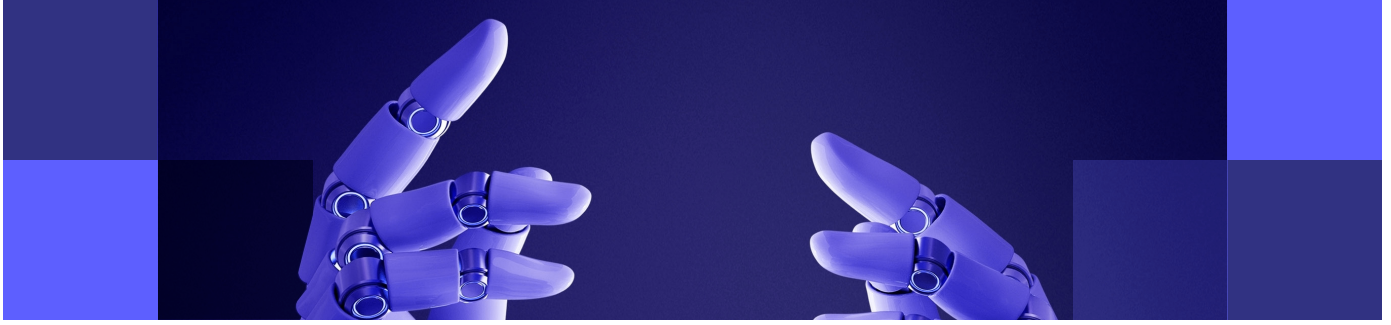


Leveraging ChatGPT for Efficient Workforce Support

In a survey conducted by Deloitte, it was found that 53% of executives believe that AI and automation will lead to a net increase in jobs in their organizations within the next three years. This indicates that while there may be concerns about job displacement, many organizations view AI technologies as tools that augment human capabilities rather than replace them.

Some of the jobs ChatGPT can assist with are:

- **Content Generation:** ChatGPT can assist in generating content for various purposes such as blog posts, social media updates, product descriptions, and more. This can save time for human writers and allow them to focus on more complex and creative aspects of their work.
- **Customer Support:** ChatGPT can be utilized to handle customer inquiries and provide basic support. It can understand and respond to frequently asked questions, helping to alleviate the workload of customer support teams and enabling them to focus on more complex customer issues.
- **Translation:** With its ability to understand and generate text in multiple languages, ChatGPT can aid in translation tasks. It can quickly translate text from one language to another, providing a valuable resource for businesses operating in global markets.
- **Data Analysis:** ChatGPT can assist in analyzing large volumes of data and extracting meaningful insights. It can help researchers and analysts process information more efficiently, enabling them to make data-driven decisions.
- **Virtual Assistants:** ChatGPT can serve as virtual assistants, performing tasks such as scheduling appointments, setting reminders, and providing information. This can enhance productivity and efficiency for individuals and businesses.
- **Creative Writing Support:** While ChatGPT cannot replace the creativity and unique perspective of human writers, it can serve as a valuable tool for brainstorming ideas, providing suggestions, and overcoming writer's block. It can act as a collaborator, enhancing the writing process.
- **Education and Training:** ChatGPT can be used in educational settings to provide personalized learning experiences, answer student questions, and offer interactive tutorials. It can assist educators in delivering content and supporting student engagement.



Should We Incorporate AI in Our Workflow?

ChatGPT's ability to assist in various jobs stems from its design and capabilities. As a language model, it excels at analyzing large volumes of data and generating text-based content quickly and accurately. Unlike humans, ChatGPT can work continuously without the need for breaks, rest, or vacations, making it a highly efficient tool for content-based tasks.

The potential benefits of using ChatGPT in the workplace are evident. It can simplify tasks, increase productivity, and save time for employees to focus on more complex or creative work. A study conducted by McKinsey & Company estimates that automation technologies, including AI, could increase global productivity growth by 0.8% to 1.4% annually. This highlights the potential positive impact of AI technologies like ChatGPT on job performance and efficiency.

However, it is essential to recognize that ChatGPT's automation capabilities may also lead to job displacement, particularly in roles that involve repetitive tasks. For example, data entry and transcription jobs could be at risk of being replaced by ChatGPT's automated text generation and analysis abilities. A report by the World Economic Forum suggests that by 2025, automation technologies could result in the displacement of 12% of existing job tasks.

Industries that heavily rely on customer service and call center roles may experience significant impacts from ChatGPT. A lower cadre of employees in these sectors might be replaced as ChatGPT can handle basic queries and provide automated responses. This automation potential aligns with the growing trend of businesses implementing AI-powered chatbots for customer interactions. In fact, according to a study by Juniper Research, chatbots are projected to help businesses save over \$8 billion annually by 2022.

Furthermore, administrative assistants and data entry workers may face potential risks from ChatGPT's capabilities. With its proficiency in handling scheduling tasks and data input, there is a possibility that these roles could be affected. However, it's important to note that while ChatGPT can automate certain aspects of these jobs, it may still require human oversight to ensure accuracy, context, and decision-making in complex situations.

Despite its impressive capabilities, ChatGPT is not a perfect tool and has inherent limitations. It cannot replace human creativity, problem-solving skills, or emotional intelligence, which are essential in various job roles. The creative arts, innovation-driven fields, and professions requiring deep interpersonal interactions are less likely to be completely automated by ChatGPT or similar AI technologies.

Moreover, the rise of AI technologies also presents the potential for creating new job opportunities. Fields like AI development, data analysis, and AI ethics and governance are expected to experience growth and demand for skilled professionals. The International Data Corporation (IDC) predicts that the AI market will reach \$327.5 billion by 2021, opening up possibilities for job creation in AI-related fields.

While ChatGPT offers valuable assistance in various job functions, its implementation should be approached with careful consideration. It can enhance productivity and simplify tasks but may also pose challenges and potential job displacement in certain roles. Understanding the limitations of ChatGPT and leveraging its capabilities alongside human skills can lead to a balanced and beneficial integration of AI in the workforce.



Roles of AI Technology in Education

The integration of AI technology in education has indeed brought about significant changes in the learning process. Personalized learning experiences tailored to individual needs and abilities have become increasingly accessible through AI. According to a report by Technavio, the global AI in education market is projected to grow by \$3.68 billion from 2019 to 2023, indicating the increasing adoption of AI technologies in the education sector.

The benefits of AI in education extend beyond personalized learning experiences. AI-powered chatbots and virtual assistants have emerged as valuable tools for student support. These tools provide instant answers to student queries, offer feedback on assignments, and can even provide emotional support. For instance, Georgia State University implemented an AI chatbot called "Pounce" that offers personalized academic and administrative assistance to students, resulting in a 400% increase in student engagement.

However, the use of AI in education also raises concerns, particularly regarding academic integrity and cheating. AI-powered tools capable of writing essays and solving problems pose challenges in maintaining academic honesty. A study conducted by Turnitin, a leading plagiarism detection service, revealed that 29% of students surveyed would consider using AI tools to complete assignments. This highlights the importance of implementing effective safeguards and educational strategies to prevent cheating in the age of AI.

The impact of AI on education is a rapidly evolving field, with the potential to revolutionize learning and engagement. The UNESCO Institute for Information Technologies in Education emphasizes the importance of aligning AI in education with ethical considerations and ensuring that it benefits all learners. Ethical guidelines are being developed to address issues such as privacy, bias, and the responsible use of AI in educational settings.

It is important to recognize that AI is a tool, and humans play a critical role in utilizing and guiding its applications. A report by the World Economic Forum highlights the need for individuals to develop new skills and embrace lifelong learning to adapt to the changing workforce landscape shaped by AI technologies.



Understanding the Challenges Faced by ChatGPT and AI Technologies

While ChatGPT holds significant potential in revolutionizing various industries and sectors, it is important to acknowledge the challenges associated with its implementation. These challenges stem from the limitations and ethical considerations surrounding the use of AI technologies.

One of the prominent challenges is the issue of bias in AI algorithms. Several studies have demonstrated that AI models, including language models like ChatGPT, can exhibit biases in their generated outputs. For example, a study by researchers at Stanford University found that language models tend to reflect and perpetuate biases present in the training data they are trained on. This raises concerns about the potential for AI systems to inadvertently discriminate or reinforce existing societal biases.

Moreover, the lack of transparency in AI decision-making poses another challenge. Unlike humans, AI models like ChatGPT are often considered "black boxes" where it can be difficult to trace the reasoning behind their outputs. This opacity raises questions about accountability and the potential for biased or harmful outcomes without clear explanations.

There is also the issue of data privacy and security arising when utilizing AI technologies like ChatGPT. The model requires access to large amounts of data to train effectively, which may contain sensitive or personal information. Safeguarding data privacy and ensuring robust security measures to protect against data breaches is crucial in maintaining trust and preventing potential misuse of personal information.

The scale and computational resources required to train and deploy AI models like ChatGPT also pose challenges. Training large-scale models can have significant environmental implications. For instance, a study by researchers at the University of Massachusetts estimated that training a single large language model can emit carbon dioxide equivalent to the lifetime emissions of approximately five average American cars.

As the field of AI continues to advance, addressing these challenges becomes imperative. Striking a balance between harnessing the potential of AI technologies while mitigating the associated risks is crucial. Ethical frameworks, transparent practices, and ongoing research efforts are essential to navigate these challenges and ensure the responsible and beneficial use of ChatGPT and other AI models.



Charting a Path Forward for Responsible and Inclusive AI Development

No doubt, ChatGPT has a lot of potential uses in the job market, but it's important to keep in mind these limitations.

Understanding the potential impact of ChatGPT on jobs and the workplace is crucial for effective and responsible implementation. While ChatGPT can automate various tasks, it is important to consider its strengths and weaknesses to ensure that it complements rather than replaces human workers.

The automation potential of ChatGPT and AI technologies in general could lead to job displacement. A study by the McKinsey Global Institute estimated that by 2030, up to 800 million jobs worldwide could be at risk of automation. Industries that are already experiencing declines, such as manufacturing and routine administrative tasks, may be particularly susceptible to job loss.

However, it is important to note that ChatGPT has limitations and cannot fully replace human workers. It may struggle with tasks that require empathy, creativity, and deep domain knowledge. For instance, a study by the Brookings Institution found that AI algorithms, including language models, may exhibit biases and inaccuracies when generating content, highlighting the need for human oversight and expertise.

While certain jobs may be at risk, the adoption of ChatGPT and AI technology can also lead to the emergence of new job roles. The World Economic Forum's Future of Jobs report highlighted that automation and AI will create new employment opportunities, particularly in roles that require specialized skills and knowledge. Jobs such as AI trainers, data analysts, and automation specialists are expected to be in demand.

The demand for data analysts, in particular, is projected to grow significantly. According to the Bureau of Labor Statistics, employment of data analysts is expected to increase by 31% from 2019 to 2029, much faster than the average for all occupations. This indicates the growing need for individuals with advanced technical skills to analyze and interpret data in various industries.

Furthermore, the World Economic Forum's report also emphasized the importance of upskilling and reskilling the workforce to adapt to the changing job landscape. By acquiring advanced technical skills and being adaptable to evolving technologies, individuals can position themselves for new job opportunities that arise from the integration of AI in the workplace.

By upskilling and adapting to changing technologies, individuals can navigate the evolving job market and benefit from the productivity gains that AI tools like ChatGPT can offer.

To prepare for the jobs of the future:

- **Individuals must develop skills** in areas such as computer science, data analysis, and critical thinking.
- **Educational institutions must adapt their curriculum** to meet the changing demands of the job market.

- **We must consider the ethical implications of AI and automation.** As more jobs become automated, there will be a need to ensure that individuals can find meaningful employment and that income inequality is not exacerbated.
- **Governments and businesses will need to work together to invest in education and training programs,** as well as social safety nets that can support individuals who are impacted by automation.
- **Policymakers must consider the long-term implications of AI** and develop regulations that balance the benefits of automation with ethical considerations.



Using AI to Our Advantage

We must implement these things because sooner or later, ChatGPT and AI in general will impact the way we work. And the beautiful part is that it will enable us to focus on more complex or creative tasks. And then, we leave the repetitive or time-consuming tasks to ChatGPT.

While AI technology has the potential to revolutionize the way that we live and work, there are also several dangers associated with its use. One of the biggest concerns is the potential for AI to be used in harmful ways.

For example, AI can be used to develop autonomous weapons or manipulate public opinion through social media algorithms.

There are also concerns about the impact of AI on employment and income inequality, as well as the potential for bias and discrimination in AI algorithms.

However, despite these dangers, we must recognize the potential benefits of AI and adapt to emerging technologies responsibly.

By investing in education and training programs, individuals can develop the skills and knowledge needed to thrive in a world of AI and automation.

Businesses can also play a role in adapting to emerging technologies by investing in research and development and by creating new job opportunities that leverage the power of AI.

