

THE IMPACT OF ARTIFICIAL INTELLIGENCE ON FUTURE WORK

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ABSTRACT

This research paper analyses the current and trending studies to identify the multifaced impact of Artificial Intelligence on

the future of work. Moving towards the job objectives, the analysis reveals a complex transformation which impacts the employment patterns and job companies, productivity and labor relations. While updated AI is expected to enhance

productivity significantly, its effects will be around all the occupations with potential job augmentation and task allocation resources with displacement of jobs. This paper

identifies a crucial need for upskilling, strategic management for technical transformation and new policy frameworks to assure or ensure that AI contributes for good financial growth and improved working conditions.

Keywords: Artificial Intelligence (AI) Future of Work Automation Machine Learning Workforce Transformation Job Creation Upskilling

INTRODUCTION

The quick development of AI, especially with the aid of generative AI models like ChatGPT, has led to a lot of conjecture on its significant influence on the job markets. First of all, it has been primarily concerned with possible job losses. Nonetheless, an increasing amount of data indicates that the changes are significant and have an impact on work quality. By combining all the results from data analysis, economic surveys, and other types of research, this study focuses on the influence of AI.

It also demonstrates how AI has been a transformative force by juxtaposing the potential to restore the real task with other kinds of dimensions. It also emphasizes the skills that workers of the future will need. Overall, by examining these issues about the advantages and disadvantages of AI for future employment, this research serves a significant role. It is a well-known truth that robots and artificial intelligence (AI) have been working together enormously for a variety of reasons all over the world. The robotic's growing popularity and demand have made living quite simple. However, when robots take over every job in the industrial sector, excessive anxiety and animosity toward humans also develops. While increasing productivity, robots are also reducing employment prospects. All blue-collar employment has already been replaced by robots. These days, robots are also beginning to work in white-collar positions. Jobs in every sector will therefore be in jeopardy. Artificial companions, or robots, can work hard, low-paying occupations during unsocial hours, providing the world with a great deal of comfort. As soon as robots are able to understand emotions like compassion and complicated reaction sensing, there is a good chance that future generations will view them as educators and carers. According to studies, one robot can complete tasks more quickly than seventy full-time human workers. [1].

EVOLUTION OF WORK WITH TECHNOLOGY

Technological developments have historically had an impact on job trends.

The modern machines that have taken the place of physical labour were brought about by the Industrial Revolution. The internet era has helped to create various kinds of digitalization jobs and the connectivity to global exposure.

AI represents the next and the second stage where machine learning takes place and can adapt new technologies and can also help to perform various kinds of difficult and complex tasks such as medical diagnosis, and legal kind of analysis and the content generative taskforces.

AI systems can work very much faster and more accurately than most of the humans in day-to-day tasks. This helps in increasing the productivity and reduces the cost efficiency in all the organizations it has also helped to improve the kind of decision-making process and has also helped the organization to achieve very good success and it also helped to provide the chatbots which has helped to solve all the manual problems and has helped to achieve the customer and employee satisfaction.

Now comes the negative impacts and challenges Routine and continuous jobs are at a very high risk of automation which has included the kind of data operators and the various call center agents and it also raises about the various ethical problems such as privacy violations and lack of transparency and reduce the job satisfaction.

Now it comes the impact on different sectors AI is helping to assist the diagnosis the all types of medical problems of drug discovery of monitoring all kinds of patients and it is also helping doctors to adapt the AI connection and coordination. And it is also helping to support the actual learning process changing the role of all the difficult and complex tasks.

LITERATURE REVIEW

Research on how AI affects the workplace has progressed from different types of predictions to data-driven systems that facilitate the use of different generative tools.

The strong type of transformational manual taskforce is the subject of the literature.

The results of several types of surveys are analysed in this type of review.

Economic studies find or predict that AI can expose people to a variety of professions to dem

onstrate greater adaptability and competence on the impact of the employment process. This is one of the primary themes and components of the research.

About 6% of the work is highly automatable, which lowers practical obstacles like introducing new clients with full connectivity. It also portends a future in which tasks can help decrease technical jobs and increase new trends.

The most important discovery is that AI is also assisting in the sophistication of activities like data analysis and in preventing actual data misuse.

But this is also increasing the concerns and also focusing to protect the confidential information of all the data storage items and considerations. This also helps to provoke AI to take a crucial action to guide the actual and skilled workforces for great critical analysis and revolution not for only operational tools.

Studies also shows a very huge related confidence gap where AI adoption focuses on leadership which help to gain the commitment and a very good communication into various kinds of practices for fostering the kind of new adoption manual forces.

In other words, this literature mostly focuses on longitudinal research, which include salary impacts across decades and long-term related investigations.

More specific research is required to determine which and where AI is crucial to the care and creative industries.

According to Lewicki et al. [1], automated technologies have been quickly displacing all manual labour.

The majority of blue collar employment have already been taken over by robots, and they are currently replacing white-collar jobs as well.

Frishberg [5] highlighted the growing need for advanced robots capable of doing dangerous tasks due to the shortage of low-wage miners and farmers.

The growing need for organisational robots was empirically explained by Belanche et al. [3]. The findings demonstrated that when a human employee causes a service breakdown, the customers blame the employee for the fault.

On the other hand, if a robot performs a service poorly, the company is more likely to be held accountable than the robot itself.

Using data from 37 different economies over a ten-year period (2005-2015), Vries et al. [2] evaluated the correlation between the increase in robotics use and the decline in employment openings.

The results demonstrated that employment chances drastically decline as automation and robotics become more widely used.

In order to assess the social impact of robots in the workplace, Jackson et al. [4] examined the premise that more use of robotics can lessen discrimination in the workplace.

According to the report, robotics' prominence lessens social and religious prejudices between groups.

RESEARCH METHODOLOGY

A very methodical kind of systematic review methodology is used in this study. This indicates that the sole objective of these investigations is the collection and analysis of

reliable research reports, scholarly articles, and expert analysis.

Data Collection Method

SL.No.	Data point/Statistic	Year	Source/Organization	Relevance to AI &Future Work
1	50% of jobs could be automated by 2028	2025	Mc Kinsley Global Institute	Indicates large scale automation threat
2	95 million jobs may be displaced by AI,98 million created	2025	World Economic Forum	Shows disruption plus job creation due to AI
3	65% of Indian companies investing in AI skills company	2025	NASSCOM Report	Reflects grows focus and skills
4	AI adoption boost by 35% in next 6 yrs	2025	Accenture	Shows positive impact of AI on work efficiency
5	80% of Employees feel insecure about AI replacing jobs	2025	PWC Global Workforce Survey	Reflects Psychological employment concerns
6	AI driven roles like Prompt Engineers in high demand	2025	Harvard Business Review	Indicates shift in skilled and job types

Key summaries of findings:

Economic and Labor Market Impact:

A combination of job transformation and a few small displacements have been used to address AI's influence on overall employment thus far. Although productivity has increased significantly, the financial impact of funding is still quite evident at this early stage. Eliminating all popular jobs is the dominant and controlling trend.

The evolution of AI adoption and its positive impact in work environments is closely correlated with strong leadership and managerial reforms.

The in-depth examination of the main concepts is now presented. In the past, studies monitoring the use of AI from 2010 to 2023 did not find any significant shifts in the overall number of jobs abroad. By employing and recruiting more modern productive tasks and different kinds of challenging projects, it has also decreased the number of positions. According to Goldman Sachs research, 6 to 7% of American workers may be replaced by AI during this era of transition, although the trending historical displacements will halt after two years.

The main and most significant method is task-related automation, in which AI assumes a significant amount of responsibility for a large employment company or aids in the detection and analysis of future market trends. Thus, by looking to the future, it has also been discovered that the different potential futures and forecasts within 2030 will be shaped by the coordination and interaction between the pace of updated AI and workforce analysis.

Key AI Technologies Transforming the Workplace:

Modern workplaces are being shaped by a few key AI technologies. These technologies frequently cooperate to manage repetitive processes and facilitate improved decision-making. Employees can now devote more time to high-value, creative, and meaningful work rather

than monotonous tasks.

AI that generates

Generative AI, which uses machine learning to produce new content, is based on large language models (LLMs). It became well-known thanks to applications like ChatGPT, which can write code, create a variety of content, and produce excellent writing.

In addition to text, sophisticated AI tools may generate graphics, audio, and movies. These diverse abilities are used to develop multimodal AI systems. These systems are incredibly versatile and helpful for a variety of professional tasks, including content production, communication, and analysis, because they can process and generate numerous forms of data simultaneously.

Generative AI can accomplish an astounding number of jobs in corporate settings. It creates customised marketing campaigns and translates customer service correspondence between languages for external communications. Internally, it creates code, gives staff personalised training materials, and condenses information to make it simpler for human workers to understand.

AI assistants:

AI assistants intelligently communicate with users in natural language by fusing automation technologies with generative AI. In today's workplace, they are extensively used. These technologies, which are frequently integrated into productivity software, facilitate decision-making and enable prompt responses to requests for information or other content. Additionally, some operations are streamlined or completely replaced by purpose-built helpers. For instance, the city of Helsinki recently created a virtual assistant by combining data from multiple departments. With minimal human intervention, it facilitates residents' access to a variety of healthcare and social service providers at any time of day, managing up to 300 customer interactions daily. These assistants also support staff members internally, such as by instantly supplying contextual client information to enable agents to promptly respond to complicated enquiries.

Agentic AI:

Another area of workplace revolution is represented by autonomous systems and AI agents. From extracting data to carrying out multistep procedures entirely, these computers carry out complicated tasks with relatively little human intervention. They may retrieve data from other sources and retain previous data or interactions over time, in contrast to prior iterations of AI or basic chatbots. These characteristics enable their performance to significantly increase as they develop and carry out challenging jobs. These "digital workers" are being employed in a variety of businesses to actively accomplish predetermined goals.

In the medical field, they provide critical care to patients. They evaluate resumes and respond to employee enquiries automatically via HR apps. In customer service, they comprehend, analyse, and provide answers for customer concerns.

Increasing task productivity:

Routine jobs, like as document processing and simple client enquiries, are progressively being replaced by AI-driven tools and automation technology. This method reduces the amount of time that human workers need to complete repetitive jobs. By using these technologies, workers can enhance their performance by delegating some jobs to AI while concentrating on areas where human expertise is most valuable.

Work may now be completed much more quickly thanks to artificial intelligence (AI), which can do time-consuming tasks like data processing and routine knowledge transfer more quickly than a human could. Employees then operate at higher hierarchical levels, concentrating more on business goals and creative direction than on implementation specifics. This enables them to think more strategically and creatively while AI systems manage execution.

Creating new job roles:

New job categories are emerging as a result of AI's incorporation into the workplace. The labour market is anticipated to undergo significant changes as a result. While there isn't any solid proof that technological advancements like generative AI will completely eliminate employment, McKinsey notes that research indicates the composition of open positions may probably shift.

AI-related savings can be reinvested in new positions with strategic planning, strengthening an organization going forward. Salespeople could, for instance, spend a lot less time creating customised pitch decks or answering standard questions in the future job market. However, they will probably concentrate more on networking and close client contacts, which will eventually strengthen their ties to the sales process.

As AI systems get more sophisticated, there will probably be a decrease in demand for some skill areas. Data entry, basic analysis, and basic content production are examples of routine information processing operations that are rapidly being automated. Information synthesis and basic research are also susceptible. However, skills that are specific to humans, such as emotional intelligence, interpersonal skills, and creative problem-solving and invention, will become increasingly valuable. The capacity to quickly acquire new abilities or adjust to shifting conditions will probably also increase in value.

Simultaneously, the labour market will probably require more talents related to computer science, information technology, and artificial intelligence. In order to prepare their workforce for these new jobs, forward-thinking companies sketch out their current job designs and pay close attention to the skills workers will require in the future.

Accelerating innovation:

By boosting human creativity and exposing hitherto unseen opportunities, AI can spur innovation across industries. Insights that would be difficult for humans to find on their own are being made possible by data-driven analysis at an astounding scale and speed. Large information repositories can be processed by AI systems to find unexplored business opportunities or potential research topics. AI can also aid in the workforce planning process, assisting big businesses in classifying and evaluating their employees' present skill sets.

From the perspective of talent management, AI technologies are highly useful in assisting HR departments in determining the skills that employees may require in the future and in making them more adaptable in general. This efficiency may be just as helpful in today's business environment as any one skill set. The ability to continuously learn and adjust to changing markets may become crucial for long-term job success as specific task needs change quickly. These self-reliant, flexible employees may be more inclined to come up with creative fixes for current issues.

Higher-order innovation, such as deeper subject matter investigation or cross-disciplinary connections, is also made possible by the shift toward broader, more creative human roles. Workflows that optimise human time spent on these high-value creative tasks are intentionally designed by the most successful companies.

Effect of Artificial Intelligence on Employment

As these technologies continue to advance rapidly, worries about how AI can affect employment and the nature of labour in the future are becoming more widespread.

This section addresses the complex relationship between artificial intelligence and contemporary employment while looking at the opportunities this technological revolution presents.

Role Reversal:

In the past, robots were tasked with more complex, cognitive tasks, while humans performed simple, repetitive tasks. But with the advent of automation and artificial intelligence, this relationship is evolving.

Robotic systems and algorithms supported by AI are becoming more adept at doing a variety of tasks that were previously exclusively carried out by humans. [6]

Industrial Revolution:

AI increases human productivity. AI is a method of production that will let one person to perform the tasks of many, much like the factories and machines brought about during the Industrial Revolution. AI in project management enables teams to automate repetitive processes, improve risk forecasting, and expedite execution, freeing up leaders to concentrate on strategy rather than manual coordination.

AI will boost productivity and fundamentally change how companies of all kinds are established and run. [6]

Efficient Job Functions

Adoption of AI is already significantly altering job duties. GitHub copilot has already been used by one million developers to generate code, permanently altering the process.

The days of manual research are coming to an end in fields like financial services and law, where expert collaboration with AI-native technologies will expedite (and often even remove) cumbersome procedures to achieve previously unattainable efficiencies. [6]

Sustainable Business Models

For many kinds of businesses, generative AI will result in significant increases in productivity and better cost structures. Workers will pursue new levels of creativity and invention with far greater effectiveness and productivity.

Moving AI from hype to reality and opening up new, sustainable business models that have a beneficial influence on the workplace for both employers and employees will depend heavily on the generative AI infrastructure and research layer. [6]

AI-powered Peer-to-peer Channel

Individualised and applied learning both inside and outside of the workplace will be accelerated by generative AI. Career routes will become more linear as books and courses become outdated, increasing peer-to-peer and machine-driven learning.

Similar to how YouTube, Instagram, and TikTok profited from the widespread use of smartphones by enabling users to share their lives through stories, GenAI will have an impact on education and skill development. [6]

Transformation of Decision Making

AI is changing how businesses make decisions. It powers simulations that provide information and recommendations for business decisions, like analysing pricing plans, operational ones, like streamlining logistics and routing, and even more complex ones, like finding design and engineering solutions to a particular brief.

In the end, strong AIs and digital representations of organisations will be able to make operational decisions. [6]

Reduction of Junior and Mid-level Roles

The immediate effect of large language models (LLMs) is a significant reduction in the number of software developers needed to create and deliver new digital products.

Businesses are finding that they need less and fewer employees (such as developers and data scientists), even if they still strongly rely on their superiors.[6]

AI on Future of Work

AI may eventually replace human workers, but research indicates that it is still far from being on par with human intelligence. If investments are made in all industries—anywhere that prioritises employee training and upskilling—AI can increase employment rather than decrease it.

34% of companies now use AI, and 42% are investigating the technology.

Increased productivity is reported by more than half of these businesses using AI-driven technologies.

What effects is AI having on the various businesses, then?

Let's examine it. [6]

Finance

AI is boosting productivity and streamlining procedures. AI-driven financial research, for instance, can spot trends of growing consumer debt and repayment issues, which is why some people eventually go for professional debt settlement services when handling significant unsecured accounts. It provides personalised financial advice based on sophisticated algorithms and automates processes like loan processing and fraud detection.

While algorithmic trading allows for quicker and more accurate financial decision-making, AI-powered risk management systems can identify and mitigate potential financial risks. However, ethical concerns about algorithm bias and the potential for job displacement in particular industries still need to be addressed before AI can reach its full potential in the financial sector.[6]

Medical

Research on the possible advantages of AI in medicine is ongoing. The medical sector has a lot of data that can be used to build predictive models linked to healthcare. AI has outperformed doctors in certain diagnosis situations. The AI system for lung cancer, for instance, can offer a very early warning of the illness.[6]

Automotive

AI's influence on the automobile sector is already evident with the advent of autonomous vehicles and navigation. Production will be greatly impacted by AI, especially in the automotive sector.[6]

Cyber security.

AI and machine learning (ML) will be essential technologies in cybersecurity for identifying and foreseeing attacks. AI will be an essential tool for financial security because of its capacity to evaluate enormous amounts of data and predict and identify fraud. This involves spotting traditional fraud patterns like the 419 scam and social-engineering tactics like phishing attacks, which rely on deceit rather than technical exploits. Request your AI security evaluation for an expert analysis that connects by API, analyses your AI environment, and prioritises misconfigurations, data exposure, and model abuse threats in order to supplement AI-driven threat detection with proactive governance.

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E-Commerce

AI will be essential to e-commerce in the future in a number of areas, including as distribution, marketing, fulfilment, and user experience. We might anticipate that e-commerce will be more heavily influenced by artificial intelligence. Chatbots, consumer personalisation, visual targeting advertising, and automated inventory and warehouse control systems are a few examples.[6]

Hospitality and Tourism

AI is unlikely to completely replace human interaction, even though it might be able to perform some tasks on its own, like basic visitor communication and check-in procedures. Instead, we anticipate a change toward AI-powered personalised visitor experiences. Imagine artificial intelligence creating personalised recommendations for restaurants, activities, and local experiences based on visitor data.

AI chatbots can also respond to common enquiries, freeing up staff members to focus on providing visitors with exceptional service and memorable experiences. This human-AI partnership will boost efficiency and customise the visitor experience, making the hotel and tourism industry more profitable and fortunate.[6]

Implications and Recommendations

Prioritizing Task Reallocation: It should concentrate on managing how AI reduces tasks and aids in comprehending human effort, such as significant decision-making and problem-solving.

Focusing on Leadership Development: Initially, it should help coordinate all the functions in any kind of organizational structure and concentrate on the leadership qualities of various areas.

Providing AI tools to people with AI expertise updates them and promotes transparency to stop abuse of any kind.

CONCLUSION

One of the biggest and most significant economic and social changes of the twenty-first century is the incorporation of AI (Artificial Intelligence) into the global workforce. By selecting leadership and policies that compare humans and machines through excellent teamwork, this analysis has assisted in gathering and shaping various types of right influence.

The evidence indicates that AI has contributed significantly to workforce automation and a

variety of large-scale employment opportunities in both India and outside, as well as through risk-taking and creative problem-solving.

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