

Is AI's Threat to Existential Unemployment Technologically Deterministic or Contingent on AI Governance?

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ABSTRACT: Since the dawn of the rapid expansion of generative Artificial Intelligence (AI) technologies in 2022, companies have started using generative machine learning (ML) AI systems in the workplace for various tasks. Due to the surge in AI usage, many people have grown skeptical of AI, viewing it as a threat to unemployment and human contribution in the workplace. This creates a dilemma where AI is limited in its capabilities to assist people in the workforce, as it is widely viewed as a form of human replacement. In this article, I will explore the extent to which AI constitutes an existential threat to employment and whether AI can be structured to augment and assist rather than replace human workers. I will conduct a secondary analysis of post-2022 labor-market data. Some studies argue that while AI exacerbates existential unemployment through task substitution and labor displacement, its long-term impact is contingent upon policy creation aiming at employing ethical AI in the workplace and effective human-AI collaboration structures. By identifying gaps in current research and integrating ethical and existential perspectives with past labor metrics, this study reframes AI not as an inevitable replacement for human labor but as a technology whose employment effects remain fundamentally malleable and contingent upon its ethical application.

KEYWORDS: Intelligent Machines, Cognitive Systems, Ethical AI Governance.

■ Introduction

The generative AI expansion that dawned in late 2022, such as ChatGPT artificial intelligence (AI), has transitioned from a niche computational system to a force of change in the world. Firms have accelerated their development of machine learning (ML) Large Language Models (LLM's) capable of performing jobs once thought to be exclusive to human workers.¹ These AI systems are now used for tasks such as writing, coding, data analysis, and more. While this creates optimism about productivity, AI simultaneously exists as a growing concern as a potential threat to existential unemployment and the erosion of human contribution in the workforce.

This paper examines the extent to which generative AI exists as an existential threat to employment and whether the use of ethical AI and institutional AI policies can promote human-AI collaboration instead of human replacement. This paper will use post-2022 economic and labor-market studies, alongside AI ethics and policy literature, to assess AI's impact on unemployment.

Some empirical studies indicate AI is altering how the workforce is structured, either by augmenting or replacing humans. Eloundou *et al.* estimate that approximately 80% of U.S. workers could see at least 10% of their tasks affected by large language models, with around 19% potentially experiencing impacts on more than half of their job, particularly in text-based and data-analytical roles.² Global patterns mirror this trend, as evidence from the International Labor Organization shows that a substantial part of global employment is at risk of being affected by generative AI at varied levels, emphasizing AI's influence on job transformation rather than job elimination.^{3,4} These findings show that evaluating AI's effect on labor markets based on aggregate employment metrics is not an ac-

curate representation of AI's influence and requires the use of task-level metrics to assess its influence.

Three quantitative metrics will be used throughout this paper to accurately assess this. The metrics include the Task Automation Exposure Indices developed by Eloundou *et al.*,² which measure the proportion of job duties theoretically susceptible to AI augmentation. These rely on the structure of tasks within specific occupations. Skill Obsolescence rate, which is grounded in longitudinal labor research like that done by Deming and Noray,⁵ measures the rate at which once-valuable human skills decline in relevance as AI capabilities expand. Labor Market Polarization Metrics, which build on work done by Autor, Levy, and Murnane,⁶ reveal how employment and wage distributions are shifting across skill and occupation categories in response to technological change, suggesting that high-skill and low-skill jobs are affected differently. This pattern shows uneven effects across occupations. As automation advances, income gaps may widen alongside employment trends. Though not all regions experience this equally, the overall distribution reflects structural change.

These three metrics will be used as an analytical framework rather than independent datasets. Task exposure indices will be used to evaluate which job categories are most vulnerable to AI substitution, while skill obsolescence rates will be used to assess how quickly human competencies lose relevance over time. Finally, Labor market polarization metrics are to be used to interpret wage distribution and employment shifts across skill groups. Together, they allow cross-comparison of structural labor-market change rather than simple employment-level effects. This creates a more detailed analysis of AI's effect.

Recent research papers support this structural change by using these metrics, which they position as fundamental in de-

termining AI influence. Originally done by Eloundou *et al.*, then improved upon by the ILO, the task automation exposure index combines task-specific data to measure AI's influence across different jobs and countries.⁴ The skill obsolescence rate metric: Over time, shifting demands for certain abilities are captured using extended workforce studies revealing AI's influence on human-based competencies. The Labor polarization metric features both employment analysis and wage distribution tests to measure structural changes in job standards and pay gaps that emerge through methods like those applied by Ganuthula and Balaraman,⁷ who examine hiring patterns alongside income spread between high-skill and low-skilled workers. When combined, such metrics reveal how AI may be having a multifaceted effect on transformations in job structures, with some positions becoming less important and others adapting or emerging.^{4,7}

However, analyses including reports by the OECD with broader labor demand data indicate that human dependency has not dropped sharply due to artificial intelligence.⁸ Instead, variations start to emerge when examining specific industries and professions, where impacts cluster around distinct worker categories and narrowly defined automated activities. In contrast, early studies based on digital trace data and real-world experiments reveal improved output in select work environments while also detecting shifts replacing people with algorithms during elementary composition and linguistic conversion duties.⁹ These complexities and frankly contrasting findings clarify that it is insufficient to view AI's impact based solely on employment counts. Over the course of this paper, I will prove how detailed task-level metrics and exposure indices are essential to understanding the nuances of AI's influence.

This paper asserts that AI can exacerbate existential unemployment through task substitution, but its long-term employment effects are contingent upon institutional design, ethical AI application, and AI-policy frameworks, such as the EU AI Act and the NIST AI Risk Management Framework. The Theoretical Framing section will outline the foundations of this argument, followed by a dedicated methodology section which will provide insight into the paper's structure. In choosing to anchor this analysis in labor metrics and ethical AI policymaking, we aim to clarify whether AI's long-term impact is a technologically deterministic threat to human employment or contingent upon ethical AI application.

■ Theoretical Framing

The debate surrounding AI and employment is not purely empirical but also theoretical. An interesting and influential perspective comes from Penrose, who argues that human cognition involves non-computable processes that cannot be completely replicated by machines.¹⁰ His claim suggests that logical reasoning, specifically intuition, consciousness, and deep understanding, may remain resistant to automation.

In contrast, task-based economic models of automation conceptualize AI as a system capable of substituting specific tasks rather than entire jobs. Acemoglu and Restrepo argue that technological change restructures labor demand by re-allocating tasks between humans and machines rather than

eliminating work.¹¹ These frameworks align with empirical findings showing that AI redistributes labor rather than fully replacing it.

This paper adopts a hybrid perspective: while AI may replicate structured cognitive tasks, there remain specific aspects of human labor, such as judgment, adaptability, and ethical reasoning, that are less susceptible to automation. This theoretical framing supports this paper's central claim that AI's impact on employment is not technologically deterministic but contingent on how technological capabilities interact with human and institutional factors.

■ Methodology

In this paper, I will analyze and review whether this statement is true. In Section 1, we will conduct a secondary analysis on AI's negative impact on employment, with Section 1.1 examining task automation exposure, Section 1.2 analyzing skill obsolescence trends, and Section 1.3 assessing labor-market polarization effects. Section 2 evaluates how ethical AI policies and human-dependent work policies influence employment outcomes, while the Discussion will outline how this research helps policymakers, educators, employers, and technology developers make decisions that could shape future labor markets and AI ethics to further the development of AI. Furthermore, the findings will help inform workers, especially in the younger generation, of AI's impact on whether employment remains a consistent form of income, social stability, and human dependency or whether alternative models of human contribution must be developed.

Previous studies around automation concentrated on replacing repetitive tasks and repolarizing the workforce due to computerization and industrial automation. A number of these studies, however, have been done before the advent of generative artificial intelligence (AI) systems that are now being developed to execute cognitive or language-based functions previously thought to be unachievable automatically. In the same way, when measuring skill obsolescence, some current research does not account for the role of AI exposure in the task, nor for the impact of an increasing number of agentic AI systems with some level of autonomy. In turn, the previous models and frameworks might underestimate how much generative AI will impact professional and cognitive work. In this paper, we aim to overcome these limitations by integrating the notion of polarization, skill obsolescence, and Task Automation Exposure measures in a single framework. As a result, the methodology allows a more comprehensive assessment of the impact of AI on the traditional and thinking man's jobs.

The three selected metrics were chosen because together they capture different dimensions of AI-driven labor transformation with respect to overlooked yet crucial statistics. Labor market polarization metrics explain long-term structural shifts in wages and employment distribution,⁶ the skill obsolescence rates measure how rapidly worker competencies lose relevance in changing industries,⁵ and the Task Automation Exposure metrics were selected because they directly evaluate how generative AI affects individual job tasks rather than entire occupations. This is particularly important as it highlights

which specific aspects of the workspace AI influences more than others.² Past research was targeted on the impact of AI on the labor market in one area only, which is restrictive for a more comprehensive study. However, this paper brings together the three metrics for comparing the vulnerability of tasks, workforce adaptability, and restructuring of employment. The analysis is broken down by Levels of skill, Automation risk, and Human Oversight of the work performed. High-skilled jobs include those involving in-depth critical thinking, like a software analyst, and medium-skilled jobs include people in administration or working in a call center: low-skill jobs include workers on a construction site or factory. While every metric focuses on a different dimension of the changing course of the job market, the combination helps provide a larger context for understanding the impact AI is having on existential unemployment. Labor polarization indicators provide an insight into the structure of employment and wage distribution, and skill obsolescence measures uncover the dynamics of the loss of vital skills due to technological progress. Additionally, Task Automation Exposure metrics can be used in conjunction with either approach to help determine the tasks within an occupation that are most vulnerable to augmentation or automation. There are, however, conflicting signals among these indicators: the level of employment appears to be unchanged, while disruptions and restructuring among the tasks in which workers engage increase. There are lots of interesting comments. There are some interesting comments here. All three methods are integrated into the paper, which provides a more comprehensive evaluation of AI than studies focused on a single measure, by considering it at three different levels (the task, the skill, and the job market). Therefore, this three-layer structure will support the conclusions that were made in the paper and will lead to a stronger conclusion.

■ Section 1: AI's Impact on the Job Market

Overview:

The current job market is faced with a potential threat from task-level automation and how its implementation in the workforce causes people to be seen as having skills that are easily replaceable. As a result, this forces a change in labor markets. Thus, we see transformations in job structures with some positions fading and others adapting or emerging. Whether this change is positive or negative is up for debate, but the consensus thus far is that AI is undoubtedly sparking a change in global job structures, potentially being a catalyst for the fourth industrial revolution.⁹

Section 1.1.: How Much AI Can Automate Tasks:

Job Task automation has become more viable and applicable in recent years due to the rapid advances in generative AI. Research shows that automation effects are limited to specific job tasks, not entire jobs, and that differences between the two are seen when comparing the differences between high-skill, mid-skill, and low-skill jobs.

Task Automation Exposure provides quantitative evidence effectively proving that AI affects occupations differently depending on task structure. According to Eloundou *et al.*,

high-skill jobs such as software developers and financial analysts show exposure rates above 40% because many analytical and coding tasks can be augmented by generative AI. Mid-skill occupations, such as administrative assistants, experience similarly high exposure because repetitive documentation and scheduling tasks can be automated. These classifications are supported by the OECD's occupational frameworks, which categorize occupations according to educational requirements, task complexity, and adaptability.⁸ This demonstrates that AI vulnerability depends less on job titles themselves and more on whether the occupation relies on repetitive cognitive tasks.

LLM's demonstrate significant capacity with job-related task records. Recent scholarship results indicate 80% of American jobs include at least 10% of duties exposed to automated handling; furthermore, 19% face over half their jobs within reach of such systems. This shows that tasks exposed to potential automation are centered on segmented activities, examples such as AI writing emails or documents, condensing and analyzing data, or assisting with programming.² This highlights that AI affects specific tasks within a profession but not the whole profession. Due to this pattern, jobs involving menial tasks, data analysis, or any form of procedural tasks show higher susceptibility to replacement. Thus, generative AI appears better suited to alter job structures rather than replace entire positions.

Global evidence backs a focus on task-level automation when assessing how AI supports human work. According to the International Labor Organization, job transformation and the shift of menial tasks to be automated happen more frequently than outright job replacement, especially in administrative positions involving repetitive cognitive analysis.^{3,4} A detailed worldwide measure of occupational exposure shows how most jobs combine both automatable tasks and tasks that are human-dependent, effectively creating an ecosystem of human-AI collaboration.

However, research now shows an opposite trend where jobs that once required advanced skills may be able to resist general replacement but face a growing risk of partial augmentation by AI. The 2023 OECD Employment Outlook highlights how progress in understanding human language has enabled LLM's to start to oversee complex thinking tasks once exclusive to humans. Instead of AI fully replacing humans in their professions, certain duties or tasks shift to being task-automated, especially in fields like finance, law, management, and engineering. The work that humans do does not vanish, but rather it moves toward human-dependent competencies such as integration and judgment. Tasks end up changing rather than disappearing or being completely automated by AI. This reinforces the claim that AI functions as a task-changing technology rather than a mechanism for complete human replacement.

Additionally, labor market evidence reflects the reality that job tasks end up changing rather than being replaced. From an analysis of millions of digital job postings by Mäkelä and Stephany,¹² they discovered evidence not only of automatable tasks but also a rising need for advanced human skills tied to AI. The study shows that tasks such as troubleshooting, data collection, and organizing gain importance as efficiency improves

across sectors. This effect appears strongest in roles requiring advanced expertise, where technology serves alongside workers rather than substituting them, especially regarding generative systems. This demonstrates that AI creates a parallel demand for complementary human skills, supporting the augmentation hypothesis rather than full automation.

Low-skilled jobs face a much greater risk of being replaced by AI. A study by Zhang *et al.* shows that when companies introduce AI into low-skill work environments, they often restructure tasks into rigid, standardized procedures and subject them to potential automation.¹³ As a result, worker autonomy declines even when jobs are not fully automated. Generative AI affects labor across all skill levels, but displacement risk falls unevenly. It strongly concentrates among low-skilled workers, while higher-skilled workers typically adjust by integrating AI into their workflows rather than being eliminated.

Section 1.2.: Skill Obsolescence Rates:

Continuing from the analysis of task-level automation impacts mentioned in Section 1.1, another way that generative AI contributes to shifts in the workforce is due to the fading relevance of specified abilities, particularly those involving structured thinking or consistent logical processes. Rather than eliminating positions, AI alters what skills are valuable across roles. Some rapidly lose importance, whereas others can gain prominence and perceived value. Dynamics such as this can play a central role in reshaping how occupations evolve by continuously redefining what skills retain or lose economic value.

From long-term workforce research, signs of change emerge. As shown by OECD data from 2023, when jobs involve AI more frequently, the needed skills shift at a similar pace, especially where standard analytical or administrative tasks begin fading. Instead of enduring value, competencies now fade sooner once tools take over. Skills lose relevance faster under AI integration, reshaping what workers must know well before mastery becomes outdated.

This perspective is backed by established economic research. Workers who specialize in fast-changing technological areas face faster skill depreciation, according to Deming and Noray,⁵ which leads to lower earnings if knowledge remains static. Although their analysis came before the surge of AI, it holds relevance today because such technologies accelerate obsolescence by overseeing narrow objectives and tasks. As a result, the ability to learn and adjust gains greater value. In parallel, Acemoglu and Restrepo¹¹ have observed that when AI takes over certain job functions, employment shifts toward different activities – ones requiring new competencies. Without movement into these emerging positions, expertise loses usefulness and risks becoming redundant.

Evidence that ties closely to AI, reinforcing earlier conclusions from Mäkelä and Stephany,¹² shows a rising need in employment for abilities that go alongside AI, such as solving complex issues or navigating digital tools, while requirements for routine, rule-based competencies shrink. What stands out is how outdated skills emerge unevenly within economies

shaped by automation, falling hardest on those whose expertise mirrors what machines now oversee.

When viewed collectively, these studies show how AI enables one set of abilities to replace others, leading to faster changes in such competencies instead of simple job loss. Such patterns reinforce the idea that introducing AI into work environments acts as a trigger for deeper shifts across job structures, thus prompting a need for adaptation in human capabilities and task assignments to better suit human competencies that AI cannot replicate. This shift forms the idea of whether AI has the potential to be a catalyst for a fourth industrial revolution.

Section 1.3.: Labor market polarization:

Labor market polarization emerges when automation at the task level coincides with faster erosion of mid-level skills. Employment and wage growth shift toward both high-skill and low-skill positions, whereas roles requiring moderate expertise and capabilities shrink. Shifts such as this reveal how generative AI alters work dynamics and thus potentially boosts output and efficiency in some sectors, which in turn widens disparities in other sectors. The outcome is fundamentally a structural change marked by uneven rewards across different skill bands.

Research from Murnane *et al.* explains the cause for job market splits due to technology taking over menial duties, while also supporting roles that need critical thinking skills or physical effort, which are fundamentally human-dependent.⁶ Where machines once altered repetitive work, generative artificial intelligence has reached the ability to perform cognitive tasks once thought safe from automation. Section 1.1 highlights this shift, where intelligent systems can now reshape complex thinking roles and thus increase strain on mid-level professional positions that rely heavily on performing such tasks.

The expansion of AI into cognitive tasks changes the original understanding of labor polarization because automation is no longer limited to repetitive physical work. Generative AI systems can now perform legal drafting, medical documentation, and data interpretation tasks once considered resistant to automation. However, these systems still face major reliability limitations. For example, lawyers using ChatGPT in legal research have submitted hallucinated court cases generated by AI systems, creating serious professional and ethical risks.⁹ Similarly, autonomous vehicle systems continue to require human supervision because algorithmic errors can contribute to fatal accidents.⁹ These examples show that many AI systems remain semi-autonomous rather than fully independent. As a result, human oversight continues to be necessary even when AI performs advanced cognitive functions.

A study by Ganuthula and Balaraman,⁷ which analyses job trends alongside wage distribution, backs this change, as the data reveals a link between AI integration and growing disparities in earnings across different skill groups. With workforce statistics and measurements of wage differences, the results show that those with advanced skills benefit more from efficiency boosts tied to AI, whereas positions requiring moderate expertise see limited growth or even shrinking opportunities. Such findings align closely with the framework on employment distribution presented here. This indicates that AI does

not affect all workers in the same way. It benefits high-skill labor while compromising opportunities in mid-skill occupations.

Findings gain support from institutional research. According to the ILO,⁴ clerical and administrative positions typically held by mid-level skilled workers are more heavily impacted by AI, whereas higher-skilled roles see changes in duties instead of job loss. On the opposite end, lower-skilled service work continues, though pay advances are rare, contributing to a divided job market. In parallel, the OECD⁸ observes wider gaps in earnings following AI integration, despite a minor change in total hiring numbers.

Few roles shift as distinctly as those requiring advanced abilities and skills. These positions do not vanish but instead transform into a system where AI supports output and overall efficiency while promoting and assisting human-dependent jobs that value AI insight, decision-making, and long-term planning. Meanwhile, routine-based occupations encounter a greater risk of replacement or reduced responsibilities, leading to a perception of lower uniqueness and an increase in potential replaceability in required competencies. Such differences reveal an outcome where gains in performance coexist with widening job disparities.

Together, this evidence suggests that shifts in job demand and the fading relevance of certain skills show how AI affects current work structures. Although AI may not directly cause widespread job loss, it can alter how people find employment, change the nature of how income is distributed, and speed up large-scale transitions within the workforce, which highlights its role as a major influence instead of just another technological tool. All the data points to AI having different effects on job markets based on the level of competency, i.e., high-skill, middle-skill, or low-skill jobs.

Section 2.: Governance, Ethics, and Job Outcomes:

Overview:

The decisive aspect of ethical AI governance is the way in which generative artificial intelligence will lead to existential unemployment or help in changing jobs more adaptively. Instead of thinking about labor displacement as an inevitable technology, the current policy structures and critical literature highlight that the interaction between AI systems and human workers depends on institutional decision-making. The governance mechanisms determine either the replacement of labor by AI, the reorganization of duties, or the augmentation of human input in companies.

Section 2.1. EU AI Act:

The EU AI Act is an example of a policy created to combat the threat of AI in the workforce. It is a regulatory framework that regulates high-risk AI systems regarding aspects of employment, recruitment, and worker management to ensure safety, transparency, and human oversight. Jobs that involve any form of recruitment, worker appraisal, worker task assignment, and performance surveillance by AI tools fall under a high-risk category of AI replacement. This triggers obligatory demands where transparency, human control, and accountability are re-

quired from companies that utilize AI. These measures restrict companies from employing and utilizing entirely autonomous decision-making approaches in the management of labor and thus can virtually guarantee that humans have final control over their employment consequences.¹⁴ This reduces the likelihood of full automation in employment decisions and reinforces human accountability in workplace systems.

The fact that it entails the protection of human intervention and an ability to explicitly document the behavior of the system lowers the chance that workers will be seen as redundant in digitalized workplaces such as software engineering. This type of governance changes AI applications to be more of a contribution to jobs rather than a mechanism for replacing human workers, which in turn supports the previous research that AI ends up changing job structures more frequently than it takes over jobs.^{2,4} Through this, we can see that regulation serves as a measure to protect against existential unemployment because it maintains worker agency and occupational identity. Furthermore, the evidence proves that human oversight strengthens the protection of workers but simultaneously introduces compliance trade-offs. Therefore, employment outcomes depend on the efficiency with which AI regulations can balance both AI innovation and human worker safeguarding.

Section 2.2. NIST AI Risk Management Framework:

The NIST AI Risk Management Framework is another regulatory solution to AI's threat, as it offers a guided framework to companies on the implementation of AI responsibly. It points to the displacement of the workforce, deskilling, and pivoting away from human control as risks that cannot be tolerated but must be actively addressed. The framework focuses on accountability frameworks, situational implementation, and ongoing examination of the impacts of AI on human value and contribution in the workplace.¹⁵

This strategy is supported by empirical studies of labor, indicating that productivity increases are greater when AI supplements skilled labor instead of substituting it. In situations where institutions develop AI systems that assist human judgment, coordination, and long-term reasoning, human workers continue to play a leading role in companies. On the other hand, inefficient governance will put automation at risk of contributing to the decline of the quality of jobs and hastening polarization.^{8,12} Thus, the argument that employment results are due to governance decisions and not technological capability alone is strengthened by this framework.

Section 2.3.: AI Policy Development and Its Implications in the Workplace:

The creation of AI policies is at the center of the argument on whether AI will supplement or cause existential unemployment among those employed by companies utilizing AI. Researchers have claimed that the governing structures, regulatory frameworks, and discourse surrounding AI determine the way organizations apply AI in the workplace.^{16,17} Policies that emphasize human supervision, ethical implementation, and workplace transparency with AI minimize the threat of existential unemployment. This shows how Ethical AI policies

create a framework that utilizes AI to its fullest potential while mitigating it as a threat.

Furthermore, studies show that companies viewing AI's threat as deterministic rather than dependent on policies are at risk of increasing the polarization of labor and skill obsolescence.¹⁶ Conversely, companies that adhere to ethical AI models place greater emphasis on human-AI partnership, distribution of tasks, and skills acquisition, which makes the workers complement AI instead of being replaced by it.

The discourse is also important to note, as the ways that policymakers, the media, and corporate executives define AI will influence the degree to which the population and organizations perceive AI as a threat or a productivity tool.¹⁷

These findings support my paper's claim that the effects of AI on the employment sector are not deterministic but policy contingent: outcomes in the workplace are influenced by regulatory frameworks, ethical principles, and social dialogue, which demonstrates that existential unemployment is not so much a consequence of AI technology but rather a product of policy and governance decisions.¹⁶

■ Discussion

Based on prior evidence analyzed in this paper, it can be argued that AI is transforming workplace frameworks by reallocating tasks, not by replacing humans and causing mass unemployment. As AI systems take the responsibility of basic cognitive tasks, human workers are playing a more prominent role in diplomatic thinking, synthesizing, and strategic decision-making, increasing productivity and the efficiency of their companies and in their respective fields. These changes help in economic expansion and a change in the definition of what constitutes valuable labor.⁸

However, it is important to acknowledge the limitations of this paper. Firstly, as a review article, it is reliant on pre-existing datasets and interpretations with differs across sources. Moreover, a large portion of the data and analyses used in this paper were conducted in developed economies, which hampers the generalization of the results across the globe, particularly in how technological impact is different in developing countries. Lastly, the rapidly evolving nature of AI also means that current trends and research may not fully capture AI's future capabilities, as well as how the labor market responds.

Nonetheless, the difficulties of adapting to AI are a potentially serious threat. Employees who cannot learn new skills that are AI-complementary become less relevant, can suffer increased task control, and are less likely to feel irreplaceable, especially with low-skill jobs where automation consolidates authority over employees.¹³ This effect is uneven, with low-skill workers facing higher displacement risk compared to high-skill workers who benefit from AI augmentation. Meanwhile, the wage disparity expands as productivity increases are obtained by employees and companies that are in the best position to adapt AI into their workforce successfully.⁷ Additionally, across the three metrics of task exposure, skill obsolescence rate, and the data regarding wage distribution, the evidence suggests that AI is more inclined to restructure tasks in the workplace

rather than independently influence employment outcomes. It is important to note that AI will also create new job opportunities, and unemployed people will be able to relocate themselves accordingly. Unfortunately, lower-income individuals or individuals with lower education, historically, are slower to adapt to modern technologies or shifts in how the job market is structured.¹⁸

These findings overall underscore the importance of human oversight in the workforce; they emphasize the value of flexibility within the workforce as technology is constantly evolving, and the only way to ensure a company's survival is to adapt. For employers and developers, these findings emphasize the importance of creating AI systems that complement human contribution rather than replace it. Finally, the evidence presented throughout this paper proves that the question of whether AI will create existential unemployment is not as much about the state of technological development as the question of whether the ethical decisions of governance will dictate how work, human societal value, and human purpose will change in an AI-driven economy.

■ Conclusion

Throughout this paper, evidence and arguments have been presented to determine whether AI as an existential threat to unemployment was dependent on its ethical application rather than its technological advancement. The data and policies used from other research papers show that AI does not fully eliminate human workers but rather reallocates which tasks are done by humans and which ones are AI-dependent. It has also been proven that AI has accelerated skill obsolescence in routine tasks and reshaped job structures unevenly across skill gaps.

It has been proven that at a task-level, exposure analyses indicate that AI is mostly used to automate specific cognitive tasks instead of entire occupations, showing that AI applications currently result in job transformation rather than job loss. However, it has been proven that many low-skill workers not only face increased AI control but also risk of total replacement due to AI making their competencies obsolete they can be automated, which can lead to the polarization of the labor market. Furthermore, it was shown that there is a high likelihood of high-skill workers benefiting due to productivity improvements brought about by AI, as well as the erosion of mid-skill jobs. These trends tend to be obscured by aggregate employment statistics, which also highlights the earlier point that task-level and distribution metrics are key in understanding AI's influence.

The most crucial point made was that the review shows that such results are not predetermined by AI's advanced capabilities over humans, but rather its ethical implementation. The current government frameworks presented, such as the EU AI Act and the NIST AI Risk Management Framework, are just two examples that demonstrate the potential for AI policies as a catalyst to not only protect human workers but also show that AI need not be a tool for fear-mongering but instead an innovative technology with the potential for societal advancement.

It is ethical AI policies and institutional designs that therefore control future employment outcomes.

Overall, the effects of AI on the labor market can be viewed not as an inevitable catalyst for existential unemployment, but rather as a modern technology whose ethical governance is the deciding factor of whether AI's influence on the job market is assistive or an object of replacement. Future research should examine how AI-driven labor shifts differ across developing and developed economies, particularly in relation to inequality and access to reskilling opportunities.

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