Forum:	International Monetary Fund
Issue:	Measures to prevent AI development from overtaking the service sector
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Introduction

The rapid development of artificial intelligence (AI) is fundamentally transforming the global economy, and particularly in the service sector, which accounts for nearly 61% of global employment and 65% of global GDP as of 2022. As AI capabilities advance in areas such as customer services, financial services, healthcare, and logistics, concerns are rising that unchecked AY deployment could lead to significant job displacement and economic disruptions. The automation of tasks, previously performed by humans, threatens to undermine the employment stability of millions in the service industry.

Key actors in this issue include governments, labor organizations, technology companies, and international institutions like the International Monetary Fund (IMF). Governments are faced with the challenges of regulating AI development while promoting innovation. At the same time, large technology firms, such as Google, Microsoft, and Amazon, continue to invest heavily in AI, creating tensions between technological progress and job security. Labor organizations are advocating for worker protections, urging for reskilling programs and stronger regulations to ensure a just transition. Meanwhile, the IMF has been emphasizing policies that safeguard employment and called for targeted investments in education, reskilling, and social safety nets to mitigate the disruptive effects of AI in the service sector.
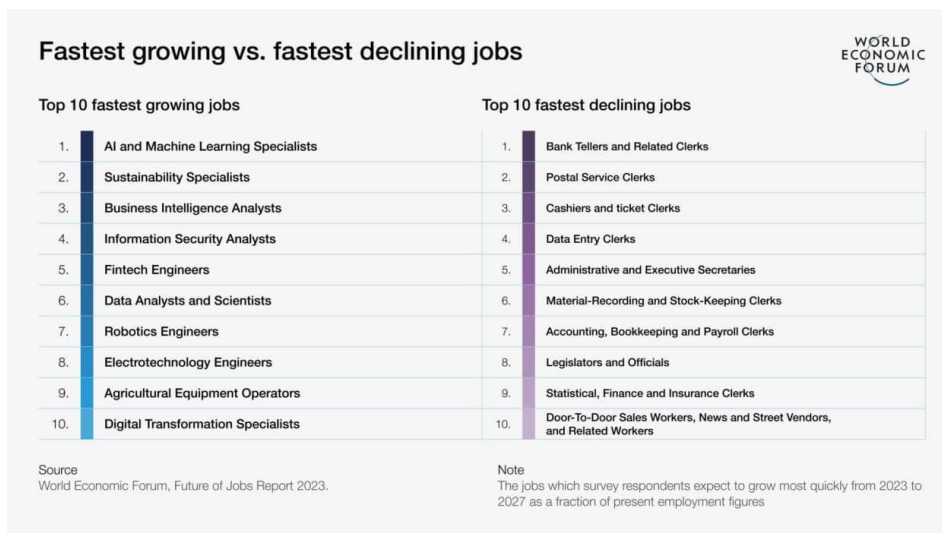

Figure #1: Table by the World Economic Forum indicating the growing and declining jobs (2023)

According to a 2023 report by the World Economic Forum, 44% of workers' skills are expected to be disrupted by 2027, with AI-driven automation playing a significant role. Without adequate preventive measures,

entire segments of the service sector may face obsolescence, exacerbating income inequality and economic instability. The ongoing challenges faced by countries in balancing AI-driven innovation with job preservation in the service sector require further attention and efforts to address the social and economic disparities that may arise form rapid automation and ensure that AI enhances, rather than displaces, human labor.

Definition of Key Terms

Artificial Intelligence (AI)

AI refers to the simulation of human intelligence by machines, enabling them to perform tasks such as decision-making, speech recognition, and visual perception. It is transforming industries through automation, particularly in sectors involving repetitive or routine work.

Service Sector

The service sector includes industries such as healthcare, finance, retail, and hospitality, where goods or services are provided. This sector is highly susceptible to technological disruptions.

Automation

The use of technology to perform tasks previously down by humans, reducing the need for manual intervention.

Reskilling

Training workers to acquire new skills to adapt to changing job demands, particularly those brought about by technological advancements. It is crucial for preventing mass unemployment in industries affected by automation.

Job Displacement

Occurs when workers lose their jobs due to structural changes in economy, often caused by technological innovations. Displacements is a growing concern in sectors when routine tasks can be automated.

Labor Market

The labor market represents the supply and demand dynamics for employment. When automation increases, the labor market faces shifts.

Income Inequality

The unequal distribution of wealth across different societal groups. Technological disruptions risk widening the gap between high-skilled, high-income workers and those in low-skilled positions.

Regulatory Framework

A regulatory framework consists of laws and policies designed to guide the implementation of new technologies. Governments and international bodies must create such frameworks to ensure that technological advances do not exacerbate inequality.

Digital Transformation

Adoption of digital technologies to enhance business operations and service delivery.

History & Developments

The 1995 World Trade Organization (WTO) Formation and the GATS Agreement

The formation of the World Trade Organization (WTO) in 1995 and the implementation of the General Agreement on Trade in Services (GATS) marked a crucial turning point for the service sector in the late 20th century. GATS was the first multilateral trade agreement to cover services, aiming to promote international trade by liberalizing barriers to services such as finance, telecommunications, and information technology. The rise of the internet, coupled with advancements in information and communication technologies (ICT), enabled the outsourcing of services to low-cost labor markets, reshaping the global economy. Financial services, customer support, and even technical services became increasingly digitized, raising concerns about job displacement in high-income countries. During the late 1990s, automation started to play a role in these sectors, although it was still in its infancy compared to today's standards. Call centers, for example, began adopting rudimentary automated systems for customer inquiries, leading to early discussions about the risks of AI and automation, Experts at the time warned that such technologies, while increasing efficiency, could also undermine the traditional workforce in developed economies, driving wages down and leading to increased income inequality.

The formation of the WTO and the liberalization trade in services brought conflicting perspectives. Proponents argued that by lowering trade barriers, countries could access new markets and enjoy economic growth. Critics, however, cautioned that the agreement disproportionately benefited multinational corporations, enabling them to exploit lower labor costs while avoiding the economic and social responsibilities tied to local employment. By facilitating globalized service delivery and encouraging the use of technology to cut costs, the agreement indirectly accelerated the development of AI applications in customer-facing roles and backend operations. This has led to ongoing discussions about how international trade policies should adapt to mitigate the potentially disruptive effects of AI on labor markets, especially in developing country that rely heavily on service-sector jobs.

Automated Customer Service (2010)

Amazon, one of the world's largest e-commerce companies, became a central figure in the AI automation debate in the 2010s. BY 2013, the company introduced Ai-powered customer service tools like the chatbot "Alexa" and automated systems for handling customer inquiries. This represented a major shift in the service sector, as traditional customer service roles, which employed millions globally, were increasingly outsourced to machines. Amazon's use of AI extended beyond customer service; the company also deployed AI in its warehouses to improve inventory management, supply chain efficiency, and logistics. According to a 2017 report from the McKinsey Global Institute, AI and automation technologies in companies like Amazon could automate 30% of tasks in the service sector by 2030, affecting jobs in retail, sales, and administrative support.

While Amazon and similar companies framed AI as a necessary tool to remain competitive in a globalized economy, crtics argued that the shift to AI-driven workforces had serious consequences. Workers' unions, labor rights groups, and economic think tanks emphasized that AI-driven automation disproportionately affected low-

income workers, many of whom were employed in the service sector. The rise of AI at Amazon brough concerns over job quality and worker satisfaction. Studies from Harvard Business School in 2018 found that while AI improved efficiency, it often reduced the quality of work for human employees, leading to increased stress and burnout. This led to calls for stronger regulatory frameworks that would ensure AI development does not undermine human labor rights. The rise of automated customer service remains one of the clearest examples of how AI has altered the structure of the service sector, challenging policymakers to rethink labor protections in the age of automation.

The UN General Assembly (2015)

In 2015, the United Nations General Assembly adopted the 2030 Agenda for Sustainable Development, a landmark agreement that set 17 Sustainable Development Goals (SDGs) intended to eradicate poverty, protect the planet, and ensure prosperity for all. The service sector, which accounts for over 50% of global employment according to the International Labor Organization (ILO), was identified as particularly vulnerable to rapid automation. AI's potential to displace human labor in fields like customer service, financial analysis, and healthcare administration was noted. However, the UN's stance remained optimistic, framing AI as a tool for achieving the SDGs.

Countries in the Global North, particularly those with strong technological industries like the United States, Japan, and Germany, saw Ai as a key driver of economic growth and innovation. These nations pushed for investments in AI research and development; in contrast, developing countries raised concerns about AI exacerbating inequalities. Many nations in Africa and Southeast Asia, whose economies relied heavily on service jobs, argued that AI could lead to a loss of employment without creating sufficient new opportunities, contributing to a global "digital divide."

The European Union's AI Act Proposal (2021)

In 2021, the European Union (EU) became the first major regulatory body to propose comprehensive legislation specifically targeting AI. The EU's propsed Artifical Intelligence Act was designed to ensure that Ai technologoies, particularly those affecting critical sectors like finance, healthcare, and customer service, would be developed in line with ethical principles. The Act introduced a risk-based approach to regulating AI, dividing applications into "high-risk" and "low-risk" categories, with stricter regulations for high-risk uses that could significantly impact employment. The AI Act emerged partly in response to growing public concern about the use of AI in service industries, especially with regards to privacy, job security, and consumer rights. Studies by the European Commission showed that citizens were worried about AI systems replacing human interaction in essential services like banking and healthcare. Furthermore, labor unions across Europe voiced concerns about the rapid implementation of AI without adequate worker protections.

The Act sought to address these issues by mandating transparency in AI decision-making and requiring human oversight in high-risk applications. While some countries, such as the United States, preferred a more

laissez-faire approach to AI development, the EU's stance resonated with other regions where public distrust of AI was growing. China, for example, began exploring similar regulatory frameworks, particularly in areas where AI was replacing human labor. Critics of the AI Act argued that it could stifle innovation by imposing excessive regulatory burdens on companies developing AI technologies. However, supporters believed that the long-term benefits, including job preservation and consumer protection, outweighed the potential drawbacks.

Major Parties Involved

United States of America

The US government, particularly through agencies like the Federal Trade Commission (FTC) and the National Institute of Standards and Technology (NIST), is one of the most important member states in shaping policies related to AI. Their interests include ensuring that AI technologies promote innovation while safeguarding economic stability and consumer rights. The US has been active in coalitions such as the Global Partnership on AI, promoting responsible AI development. Their relations with other nations are complex, often characterized by a blend of collaboration and competition.

European Union

The European Union has been advocating for a comprehensive legal framework that governs AI technologies. The EU mainly focuses on human rights protection, and mitigating risks associated with AI. The proposed Artificial Intelligence Act, which aims to classify AI applications based on their risk levels and ensure high-risk systems undergo examination before deployment. The EU participates in the OECD's AU Policy Observatory to establish ethical standards for the usage of AI.

International Telecommunication Union (ITU)

The International Telecommunication Union (ITU) is a specialized agency of the United Nations, specifically responsible for issues related to information and communication technologies. ITU has been organizing the AI for Good Global Summit, a platform that brings together experts from various sectors to discuss how AI can be used to benefit humanity. This summit has provided a platform for international cooperation and have encouraged a global consensus on responsible AI governance.

United Nations Educational, Scientific and Cultural Organization (UNESCO)

UNESCO is a specialized agency of the UN that promotes international collaboration between member states in education, science, culture, and communication. UNESCO has been creating the Recommendation on the Ethics of Artificial Intelligence, adopted by member states in 2921. This recommendation emphasizes transparency, accountability, and the avoidance of harm to the population.

International Monetary Fund (IMF)

The IMF works to ensure global financial stability, facilitate international trade, and promote economic growth. The IMF has conducted research on AI's economic effects, specifically about how automation may impact

employment, income distribution, and productivity. The IMF has encouraged nations to adopt strategies that ensure AI benefits all sectors, preventing large-scale economic disruption in the service industries.

Timeline of Events

Date	Event Name	Description
April 11, 1995	WTO and GATS Agreement Implementation	The WTO's General Agreement on Trade Services (GATS) was implemented, promoting liberalization in global service industries.
September 25, 2015	UN Adopts the 2030 Agenda for Sustainable Development	The UN adopted the 2030 Agenda, including Sustainable Development Goals (SDGs) focusing on promoting decent work and economic growth.
December 15, 2017	UN Conference on Trade and Development Report	The UNCTAD released a report discussing how AI could drive economic growth, while also mentioning the necessity of policies to mitigate job displacement.
August 2018	Google's Controversial AI Project	Google faced backlash over its Project Maven, which involved using AI for military purposes. Employee protests highlighted ethical concerns about AI's applications.
October 2021	OECD AI Principles Adopted	The Organization for Economic Cooperation and Development (OECD) adopted principles to guide AI development, emphasizing human rights, transparency, and the need for policies.
September 28, 2022	US Government Issues Blueprint	The White House released a blueprint outlining an AI Bill of Rights, incorporating principles aligned with UN goals, such as protecting workers and ensuring that AI technologies do not disproportionately disrupt employment in vulnerable sectors like healthcare and retail.

Previous Attempts to Solve the Issue

The Global Partnership on Artificial Intelligence (GPAI) was launched in June 2020 as a collaborative initiative among various member states, aiming to advance AI development while addressing ethical and societal concerns. One of its primary objectives is to ensure that AI technologies enhance service sectors, rather than replace human workers. Through multilateral discussions and expert groups, the GPAI seeks to develop best

practices, guidelines, and frameworks that align AI innovations with human-centric values. Notably, GPAI has published various reports and research papers focused on the economic and social implications of AI. However, the effectiveness of these measures has been mixed. While the GPAI has fostered dialogue among member nations, it lacks enforcement mechanisms to implement its recommendations, leading to uneven adherence and varying interpretations of the guidelines among countries. This initiative remains ongoing, and its impact is yet to be fully realized. However, it has succeeded in raising awareness about the need for ethical AI development and promoting international collaboration, although concrete changes in service sector practices are still limited.

The European Union has made significant strides in regulating AI through the proposed AI Act, introduced in April 2021. This legislation aims to create a comprehensive regulatory framework governing the development and deployment of AI systems, particularly those that could impact the service sector. The Act categorizes AI applications based on risk levels, imposing stricter requirements on high-risk systems. Its core objectives are to ensure safety, transparency, and accountability in AI applications, thereby protecting jobs and mitigating the risks associated with automation. The AI Act is currently under discussion and negotiation among EU member states and institutions, indicating an ongoing legislative process. While the Act has received praise for its forward-thinking approach, its success remains contingent on achieving consensus among member states and balancing innovation with regulation. The anticipated outcome could set a global standard for AI governance, potentially influencing similar regulations worldwide. However, its impact on service sector stability is still uncertain, as businesses grapple with compliance and the broader implications of AI adoption in their operations.

The ITU has engaged in addressing the challenges posed by AI through its AI for Good Global Summit, which commenced in 2017. This summit serves as a platform for governments, industry leaders, and civil society to discuss how AI can be leveraged to address global challenges, including those in the service sector. Key initiatives from the summit have focused on promoting responsible AI use, sharing best practices, and fostering international collaboration to ensure that AI technologies enhance human well-being rather than displace workers. While the summit has facilitated valuable dialogues and partnerships, its impact has been limited in terms of concrete regulatory outcomes. The discussions have primarily focused on theoretical frameworks rather than actionable policies. The ongoing nature of the summit reflects a commitment to addressing AI's societal implications, but it has yet to produce binding agreements or treaties that could enforce changes in the service sector. Nonetheless, it has succeeded in raising awareness and encouraging collaborative efforts among stakeholders, thereby contributing positively to the discourse surrounding AI development and its implications for the workforce.

Relevant UN Treaties and Events

- United Nations General Assembly Resolution on Digital Cooperation, July 2, 2020, A/RES/74/469
- UN Human Rights Council Resolution on the Impact of AI on Human Rights, March 2021, A/HRC/RES/46/24
- UN Economic and Social Council (ECOSOC) Resolution on the Role of AI in Sustainable Development, July 2022, E/RES/2022/11

- United Nations Human Rights Council Resolution on the Promotion and Protection of Human Rights in the Context of Artificial Intelligence, April 2021, A/HRC/RES/46/24
- United Nations General Assembly Resolution on the Digital Divide, December 17, 2020, A/RES/75/201

Possible Solutions

One potential solution to mitigate the risk of AI overtaking the service sector is to establish internationally mandated AI labor impact assessments. These assessments would be required for companies developing or implementing AI systems, particularly in industries with a high proportion of service sector jobs, such as customer support, hospitality, and retail. The assessments would evaluate the potential effects of AI on employment, labor conditions, and economic stability in these sectors before any AI system is deployed at scale. By making these assessments compulsory, governments and corporations can better understand how AI will impact the workforce and introduce preemptive policies to ensure that human workers are protected. These policies could include mandatory upskilling and reskilling programs, which would be funded by AI developers or companies that benefit from AI-driven automation.

Another viable solution is the implementation of a global AI taxation system, where companies using AI technologies in the service sector are taxed based on the degree of automation they employ. This tax would be levied on businesses that reduce human labor by using AI systems, especially in sectors such as retail, transportation, and customer service. The collected revenue could be used to establish a global fund, managed by organizations such as the United Nations Development Programme (UNDP), to support displaced workers through retraining programs, unemployment benefits, and financial aid.

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