



(RESEARCH ARTICLE)



## Theory of job Sharing: A proposition to solve unemployment

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### Abstract

This paper introduces the Theory of Job Sharing (TJS), a novel framework to address the persistent challenges of unemployment and inequality. Drawing on a review of existing research and observations of advancements in generative AI, TJS proposes a job allocation system based on individual abilities and capacity, rather than solely on educational background and level. The theory advocates for a rotational system where a single job can be shared by multiple individuals (minimum two, potentially exceeding ten). To ensure TJS feasibility, the study identifies and proposes solutions for three key challenges: human capital development (People), salary distribution among job sharers (Salary), and governance/ownership structures. Additionally, we developed a conceptual framework to illustrate TJS's potential integration within the current social, political, and economic landscape. While the identified challenges and framework resonate with contemporary issues, further empirical research is necessary for comprehensive validation. The study concludes by highlighting the need for collaborative efforts between governments, companies, individuals, and institutions to tackle unemployment and inequality on a global scale.

**Keywords:** Unemployment; Inequality; Job Sharing; Artificial Intelligence

### 1. Introduction

The pervasiveness of the internet, social media, and advancements in transportation have fostered an unprecedented level of globalization in recent decades. This facilitates trade, economic exchange, and knowledge sharing across continents, particularly within regions sharing a common language (e.g., America, CEMAC/EMCCA, ECOWAS, Middle East, EU). The emergence of large language models (LLMs) like ChatGPT (OpenAI, November 30, 2022) and its subsequent iterations ChatGPT-4, and Bard (Google, March 21, 2023) now Gemini (February 8, 2024), signifies a significant leap forward in artificial intelligence (AI) capabilities. These, alongside a multitude of other AI chatbots and tools available, are designed to augment human productivity by synergistically combining human expertise with LLM functionalities across diverse domains like literature, science, politics, mathematics, and medicine (see *Figure 1* and *Table 1*). However, concerns regarding the potential impact of AI on employment are rising. The argument posits that as AI capabilities grow, human workers may become increasingly irrelevant, resulting in widespread layoffs and worsening unemployment (see *Figure 2* and *Table 2*). The World Economic Forum (2023) report highlights this concern. Additionally, Awni (2023) emphasizes the time required for human workforce adaptation to the new skillsets demanded by AI-generated jobs. In a world already grappling with war, social injustice, inequality, inflation, economic instability, and rampant unemployment, AI presents a complex paradox. While it offers a beacon of potential progress, its unfettered growth harbors the potential for disruption. Recognizing this, journalists, researchers, individual thinkers, and entities across the public and private sectors have addressed this challenge through podcasts, news outlet (CNBC, 2022; Wjs, 2024) and proposed diverse solutions (see *Figure 3*). In response to these concerns, a growing body of research by journalists, s, companies, individuals, and researchers has emerged (see *Table 3*). The European Union's recent adoption of the Artificial Intelligence Act (AI Act) in March 2024 exemplifies the initial steps towards establishing a regulatory framework for AI. However, the complexity of AI development presents challenges for policymakers.

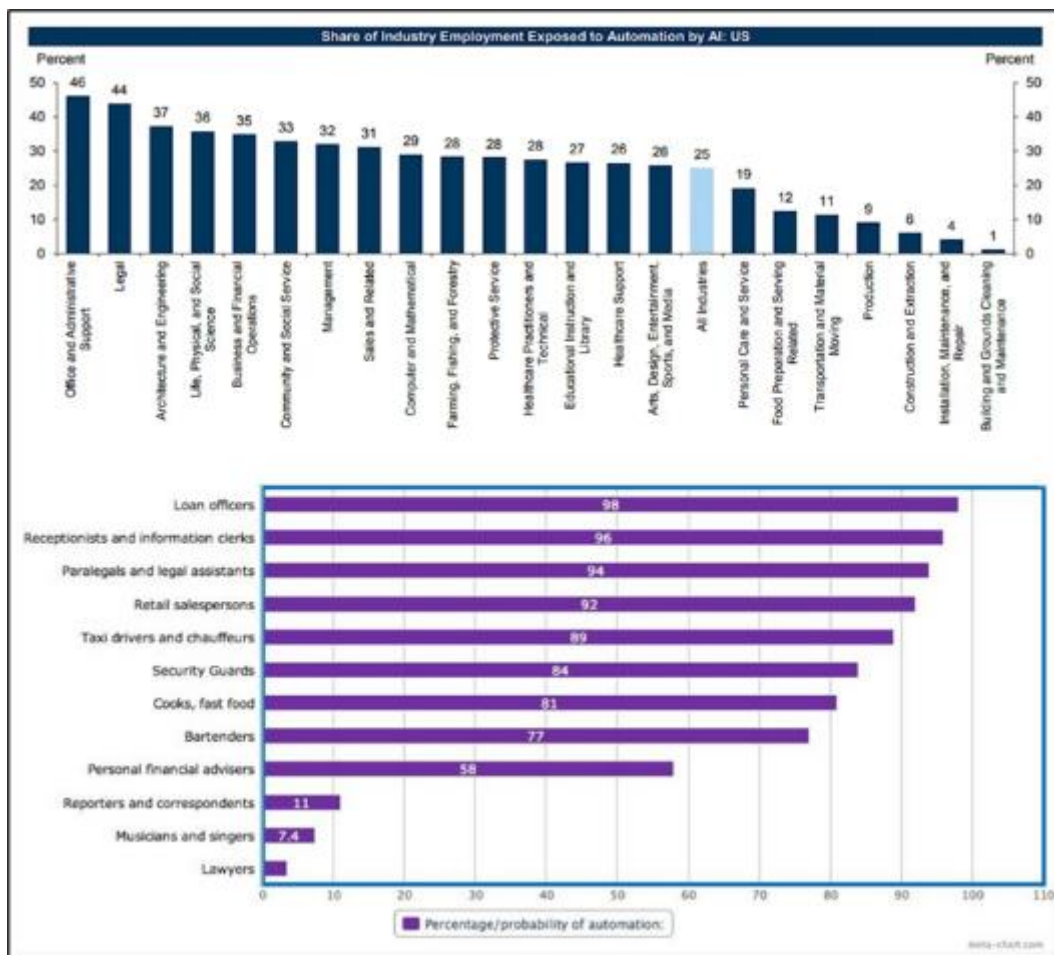
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Conversely, some countries have opted for a more cautious approach, implementing bans on generative AI like ChatGPT, out of privacy concerns or a lack of regulations (see Figure 3).

	Claude 3 Opus	Claude 3 Sonnet	Claude 3 Haiku	GPT-4V	Gemini 1.0 Ultra	Gemini 1.0 Pro
Math & reasoning <i>MMMU (val)</i>	59.4%	53.1%	50.2%	56.8%	59.4%	47.9%
Document visual Q&A <i>ANLS score, test</i>	89.3%	89.5%	88.8%	88.4%	90.9%	88.1%
Math <i>MathVista (testmini)</i>	50.5% CoT	47.9% CoT	46.4% CoT	49.9%	53.0%	45.2%
Science diagrams <i>A2D, test</i>	88.1%	88.7%	86.7%	78.2%	79.5%	73.9%
Chart Q&A <i>Relaxed accuracy(test)</i>	80.8% 0-shot CoT	81.1% 0-shot CoT	81.7% 0-shot CoT	78.5% 4-shot CoT	80.8%	74.1%

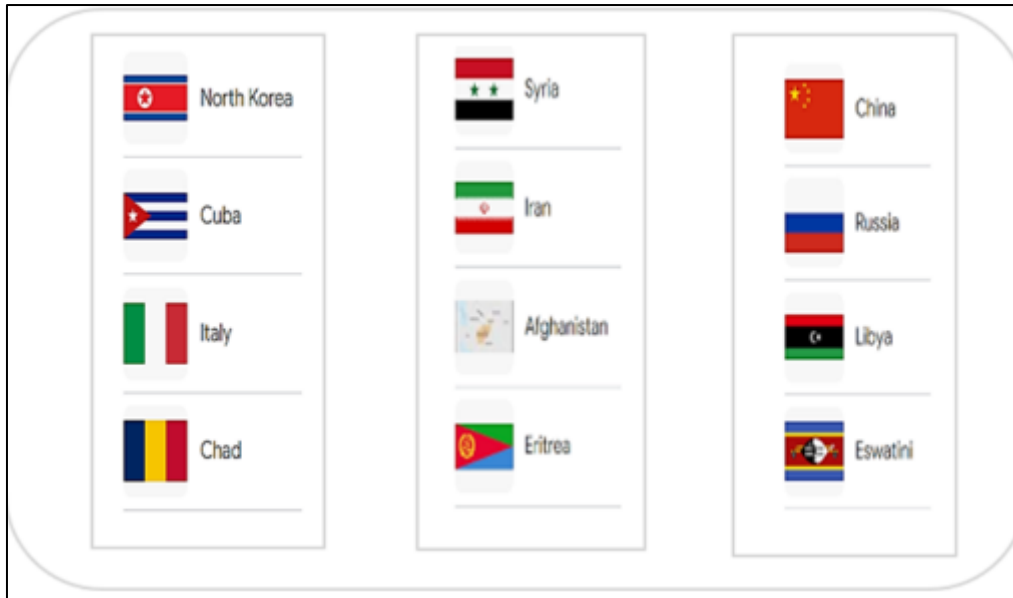
Source: OpenCV

Figure 1 A Claude 3 benchmark chart of multimodal vision capabilities compare to ChatGPT-4 and Gemini AI provided by Anthropic



Source: Golden Sachs Global Investment Research and World Economic Forum

Figure 2 List of jobs likely to be replaced by AI



Source: Yahoo Finance, Forbe, and Digitaltrends via miscrosoft word

**Figure 3** List of countries where generative AI ChatGPT is banned

This research aims to address the challenge of unemployment by introducing the Theory of Job Sharing (TJS). Grounded on the author's critical thinking and comprehensive analysis, this novel theory seeks to contribute to the discussion on AI's impact on unemployment. The paper's objectives are as follows:

- Expand the existing literature on the relationship between AI and unemployment.
- Propose solutions to mitigate potential job losses due to AI.
- Inform policy development by providing a theoretical framework for policymakers.
- Encourage companies to re-evaluate their employment strategies in light of AI.
- Offer a new perspective on AI and unemployment for the public.
- Open avenues for future research on AI and work.

The remaining sections of this paper are structured as follows: Section 2 provides a literature review, Section 3 outlines the research methodology, Section 4 details the Theory of Job Sharing, and Section 5 concludes the paper.

Table 1 show the top 3 most used generative AI chatbot in the first half of 2024, the combine information collected online shows that ChatGPT is currently the leading generative chatbot in term of total visits 1.60 billion, follow by Gemini with an estimate of 1 billion and Claude with 25 million visits. However, when is come to mothly users Gemini happen to be ahead of ChatGPT, this can be explained by the fact that each model was initially release at different time. We predict that the number of users between both chatbots will interchange over time because only be most capable model(s) will lead the industry.

**Table 1** Top 3 most used Generative AI chatbot in the first half of 2024

Item Company	AI Name (LLM)	Initial release date	Subscription	Total Users	Monthly Users
OpenAI	ChatGPT-3.5	November 30, 2022	Free	1.60B+	180M+
	ChatGpt-4	March 14, 2023	Paid		
Google	Bard (now Gemini)	March 21, 2023	Free	1B+	330M+
	Gemini	February 8, 2024	Free		
	Gemini Ultra	February, 2024	Paid		
Anthropic AI	Claude 1.3	March 14, 2023	Free	25M+	NA

	Claude 2	July, 2023	Free		
	Claude 3 (Opus)	March 4, 2024	Free/Paid		

Source: OpenCV, OpenAI, Google The keyword, Wikipedia, The Verge, and EM360 official websites

Table 2 show a partial data on mass job cut and layoff since the launch of AI in November 30, 2022. According to layoffs.fly and Crunchbase, in 2022 more than 93.000 jobs were slashed from public and private Tech companies in the US, 262,735 workers in US-based Tech companies were laid off in mass job cuts in 2023, and at least 58.819 workers have lost their job as of April 5, 2024. If AI seems not to have impacted job cuts in 2022, the amount of job cuts and layoffs in 2023 suggest that the topic should be studied. However, because generative AI is still an emerging topic, more observations are required before empirical and analysis research strictly focused on the impact of AI on job cuts beginning to be conducted around the world.

**Table 2** Partial data of Mass Job cut and Layoffs since the launch of AI (2022-2024)

Company		Year					
		2022		2023		2024	
Industry	Name	Q1&Q2	Q3&Q4	Q1&Q2	Q3&Q4	Q1&Q2	Q3&Q4
Technology	Amazon	10000		9000	16080	500+	
	Google			12000	10000	1000	
	IBM			3900			
	Meta	11000		10000	6000		
	Microsoft	1000		11158	559	1900	
	Apple					614	
	Dell			6650	13000	6000	
	TikTok					8060	
	PayPal	2000					
	Twitter	3700		200			
	LinkedIn			716	668		
	EA			780		670	
	Accenture			19000	890		
	Indeed			2200			
	Yahoo			1600			
	Vodaphone			11000		366	
	Xiaomi			500			
Epic Games				830			
saleforce	1000			7000	700		
Non-Tech	McKinsey			1400			
	Nike					1600	
	Goldman Sachs			3200			
	spotify			2600	1500	200	
	Just Eat			1700			
	Ernest & Young			3000			

	3M		6000			
	Disney		7000			
	Flink		8000			
	Deloitte		1200	800		
	Ford			1500	2700	

Note: The above companies were selected randomly based on the author preference, many companies with larger number of layoffs can be seen by checking one of the sources websites; **Source:** *Techcrunch, Intellizence, Business Insider, Wsj, Crunchbase, CNN Business, Layoffs.fyi, Investopedia.*

Table 3 summarizes previous research theories, findings and solutions related to unemployment and Artificial Intelligence.

**Table 3** Summary of literature on theories related to labor, employment, and Artificial Intelligence (AI)

<b>Autors, Years &amp; Title</b>	<b>Theory</b>	<b>Contributions/Findings/Solutions</b>
Adam Smith, 1776 The Wealth of Nations	Theory of Market Economies/ Classical Economics Theory	<ol style="list-style-type: none"> <li>1. Income is the product of an organized efficient labor division and the use of capital accumulated produce by the citizens and residents of a nation.</li> <li>2. The Invisible hand, market is largely a self-regulating system.</li> </ol>
Pissarides , 2000 Equilibrium Unemployment Theory - 2nd Edition The MIT Press	The Equilibrium Unemployment Theory	<ol style="list-style-type: none"> <li>1. Misallocation of resources cause unemployment</li> <li>2. To solve unemployment, government can implement policies that increase job creation and reduce unemployment income</li> </ol>
John Maynard Keynes, 1923 by David Bensusan-Butt, 1936 The General Theory of Employment, Interest and Money	Keynes's General Theory	<ol style="list-style-type: none"> <li>1. Use active government policy to manage aggregate demand to address or prevent economic recessions.</li> <li>2. Highly critical of classical economic arguments that natural economic forces and incentives would be sufficient to help the economy recover.</li> <li>3. Recommended Activist fiscal and monetary policy to manage the economy and fight unemployment.</li> </ol>
Léon Walras, 1874 and 1877 Éléments d'économie politique pure	general equilibrium theory	Walras's law, any particular market must be in equilibrium if all other markets in an economy are also in equilibrium, because the excess market demands sum to zero.
Parinandi et al., 2024 Investigating the politics and content of US State artificial intelligence legislation		<ol style="list-style-type: none"> <li>1. Unemployment and inflation are negatively associated with a state's AI policymaking.</li> <li>2. Economic concerns loom large with AI and that traditional political Faultline may be establishing themselves in this area.</li> </ol>
Xu Guanglu and Xue Ming, 2023 Unemployment risk perception and knowledge hiding under the disruption of artificial intelligence transformation	social exchange theory	<ol style="list-style-type: none"> <li>1. Unemployment risk perception is positively related to employee knowledge hiding.</li> <li>2. Psychological contract breach mediated the relationship between unemployment risk perception and employee knowledge hiding.</li> <li>3. Mindfulness negatively moderated the relationship between psychological contract breach and employee knowledge hiding.</li> <li>4. Mindfulness negatively moderated the strength of the mediated relationship between unemployment risk perception and employee knowledge hiding via psychological contract breach</li> </ol>

**Note:** For the extended version of the table see **Table A1** and **Table A2** in **Appendix A**

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## 2. Literature review

### 2.1. A Historical Perspective on Unemployment

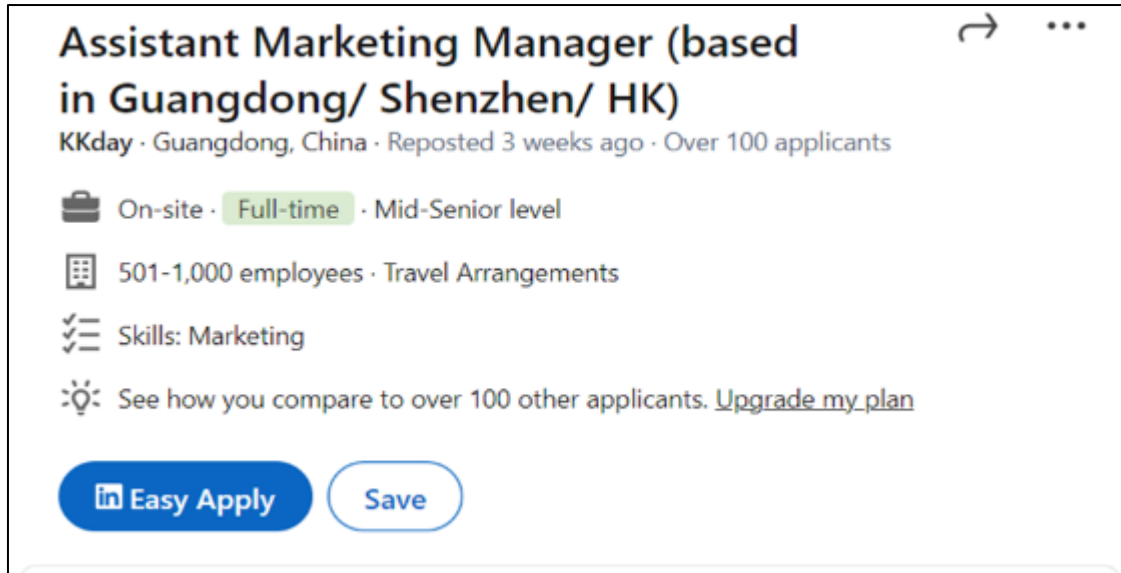
Unemployment is a persistent challenge with a long history. Numerous scholars all over the world have explored its causes and consequences over the past five decades (Feldstein, 1973; Newton, K. 1984; Blinder; 1988; Charles, 1994; Pissarides, 2000; Konietzka, 2003; Moriizumi and Naoi, 2011; Fu, T. and Lin, M., 2012; Corsini, 2013; Kondo, 2015; Trentini, 2016; Irandoust, 2019; Broulíková et al., 2020; Gad, 2021; Ademuson, 2022; Rahman *et al.*, 2023; Neifar, 2023; Khan *et al.*, 2024; Amoa and Dhliwayo, 2024). These studies highlight a complex interplay of factors influencing unemployment rates, including individual characteristics (education, experience, age, gender), economic conditions (wages, previous earning or pre-unemployment income, homeownership, entrepreneurship, market power, inflation, lack of jobs, economic crises), and broader societal issues (discrimination, inequality, immigration, health, suicide, political instability, corruption, lack of skills, poverty), environmental change and recently artificial intelligence (automate and generative AI). (Forslund and Kolm, 2004; Erixon, 2011; Latif, 2015; Trentini, 2016; Guio *et al.*, 2018; Irandoust, 2019; Nguyen and Vo, 2022; Men *et al.*, 2022; Zhao, 2023; Jung *et al.*, 2024; Darici *et al.*, 2024; Virgilio et al., 2024 ; Christiaens, 2024).

### 2.2. The Evolving Landscape of Unemployment

The advent of globalization and the internet has undoubtedly impacted the nature of unemployment. While a skills gap persists, the sheer volume of applicants vying for limited job openings suggests a broader issue beyond individual capabilities. Platforms like LinkedIn, Boss, Job-Hunt, LièPin and Indeed regularly display a competitive landscape where single job postings attract numerous qualified applicants (*see Figure 4*). Within this framework, unemployment can be reconceptualized as a confluence of two key factors: a scarcity of job opportunities and the absence of adequate policies that address both skill deficiencies and imbalances in the distribution of qualified workers across various sectors. This broader definition acknowledges the multifaceted nature of unemployment, encompassing both demand-side (lack of jobs) and supply-side (skill gaps and workforce imbalances) challenges.

Furthermore, the rise of Artificial Intelligence (AI) adds a new layer of complexity. Recent mass layoffs (*see Table 2*), often attributed in part to AI adoption, suggest that even specialized skills may become obsolete with the potential emergence of Artificial General Intelligence (AGI) within the next few decades (IMF, 2024). Estimates suggest that automation powered by AI could replace up to 40% of current jobs by 2035 (IMF, 2024). This potential transformation necessitates proactive measures to mitigate the negative consequences of widespread unemployment. While prior research has explored various facets of unemployment, including gender disparity, social implications, and government policy (Nivorozhkin, 2006; Ordine and Rose, 2015; Andersson et al., 2019; Mihai, 2021; Ferdi, 2022; Abid *et al.*, 2024; Parinandi et al., 2024; Zhang *et al.*, 2023), the focus has often been on specific factors and their correlations with unemployment rates.

This research takes a different approach by introducing the Theory of Job Sharing (TJS) within the context of an unprecedented period of global upheaval, in a world reshaped by COVID-19 pandemic and crippled by economic volatility (inflation), social unrest (immigration), political instability (wars and coups-d'états), environmental crisis, and the rise of AI. These factors combined, create a uniquely challenging environment for employment. This study proposes a novel theoretical framework based on the author's critical analysis and a desire to offer a solution for global unemployment (see *Table 3* and *Figure 5*).



Source: LinkedIn applicant homepage power by MS word

Figure 4 LinkedIn’s Job applicants’ number for one senior opening

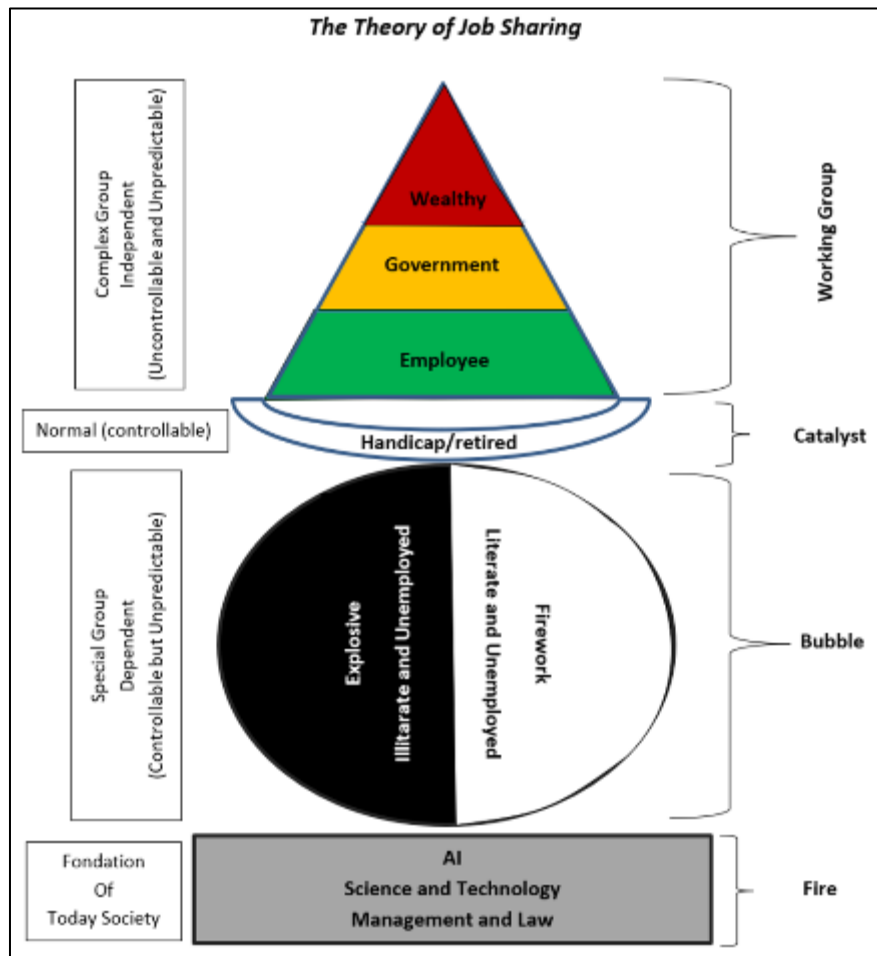


Figure 5 Theoretical Conceptual Framework

Figure 5 shows a conceptual framework of the present world economy system with highlight on the concepts and a full structural descriptive picture of our current society, the framework was developed based on the author personal view

using MS Word and Snipping Tool. The framework is designed to describe the subject of Job sharing discussed in this paper and draw a relation between unemployment AI and society.

### 2.3. Review of Literature on Artificial Intelligence and Unemployment

The discourse surrounding Artificial Intelligence's (AI) impact on the labor market is multifaceted. While popular media readily associates AI with job losses (Bloomberg, 2024; CBS, 2024; Fortune, 2024; Pymnts, 2024; SEO, 2024; Wjs, 2024), recent empirical research presents a more nuanced picture.

Studies investigating the relationship between AI, worker productivity, and employment paint a surprisingly positive light. For instance, Andrea *et al.* (2023) explored white-collar worker perceptions in Italian manufacturing. Their findings revealed a generally optimistic outlook on AI, with a statistically significant correlation between department type, job function, company size, and perceived risk of job displacement. This suggests potential workforce adaptation in response to AI implementation. However, concerns remain. Rawashdeh (2023) employed quantitative methods to analyze the impact of AI on job displacement within accounting. The study identified a significant positive correlation between AI adoption and job losses, highlighting broader societal consequences of such displacement. These findings resonate with existing theories of technological unemployment and human behavioral adjustments. Qiwen *et al.* (2023) introduce a novel metric, "AI Augmentation," to quantify the influence of generative AI across various job roles and sectors. Their analysis challenges the prevailing fear of job losses, demonstrating a negative correlation between AI Augmentation and layoff rates. This implies that AI may contribute to job security. Utilizing a qualitative approach, Anna (2023) examined AI's impact on workplaces in eight OECD countries. Her research suggests that job reorganization is currently more prevalent than displacement. Automation appears to be driving a shift towards tasks where human comparative advantage lies. Additionally, the study identifies potential benefits such as improved job quality through reduced tedium and increased engagement. However, challenges like evolving skill requirements and potential increases in work intensity are also acknowledged. Marguerita *et al.* (2023) analyzed data from new OECD surveys, revealing generally positive attitudes among both employers and workers regarding AI's impact on performance and working conditions. However, concerns about job losses were also acknowledged. Finally, Haritha and Rasham (2024) investigated employee perspectives on AI adoption within digital marketing. Their findings suggest that AI technology disruption can influence employee turnover intention, with job insecurity acting as a mediator. They further emphasize the role of workplace mistreatment in influencing employee career decisions.

The impact of AI on employment remains an open question in academia as opposed to various medias views. While job displacement is a concern, empirical evidence suggests a more complex relationship. AI may create new job opportunities, augment existing roles, and even contribute to job security. However, these benefits will happen at the cost of job displacements, job cuts and layoffs. So, moving forward, ongoing research and policy development are crucial to ensure a future where AI benefits all members of the workforce.

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## 3. Methodology

This research leverages a theoretical approach to explore the potential of a novel concept, the Theory of Job Sharing (TJS), as a solution to unemployment. Open access resources from reputable platforms like ScienceDirect, Emerald Publishing, OECD, and Google Scholar were utilized to gather relevant information on AI and unemployment (see **Tables 3** and **Table A.1**). It is important to acknowledge that this study is not empirically driven. The TJS is presented as an original idea based on the author's perspective and experience. Further research with quantitative and qualitative data analysis is required to validate its effectiveness.

### 3.1. Strengthening the Argument

To enhance the TJS framework, secondary data from recognized websites (Wikipedia, CNN Business, Business Insider) was employed to define technical terms and confirm statistical information. Additionally, a comprehensive literature review compared the TJS to over 50 prior studies published on Elsevier, Emerald Publishing, DOAJ, WoS, and Google Scholar (see Table A.1).

### 3.2. Rationale for Selective Comparison

The aforementioned comparison aims to strengthen the TJS by highlighting its unique contribution while minimizing potential bias from existing research. This approach allows for a more independent evaluation of the theory's potential.

## 4. The Theory of Job Sharing (TJS)

### 4.1. Origin and Discussion

#### 4.1.1. *The Theory of Job Sharing (TJS): A Multifaceted Approach to Mitigating Unemployment*

The TJS proposes a novel solution to the global challenge of unemployment: a system of job rotation that ensures equitable work distribution among eligible workers. While acknowledging the existence of jobs requiring extensive experience or specialized skills, the TJS emphasizes the potential for training and up-skilling initiatives to bridge these gaps.

Effective implementation of TJS hinges on a three-pronged strategy:

- **Policy Framework:** The development of comprehensive government policies that incentivize and facilitate job-sharing practices across all sectors and employment levels.
- **Employer Receptiveness:** A shift in corporate hiring practices towards a more inclusive approach, considering graduates and individuals who possess the potential to learn and adapt within a job-sharing environment.
- **Employee Collaboration:** Encouraging collaboration and fostering a culture of acceptance among workers to facilitate successful implementation of job-sharing arrangements.

#### 4.1.2. *TJS and its Applicability in Political Contexts*

The TJS draws inspiration from existing practices of power-sharing within political leadership roles. Nations often establish term limits for high-ranking positions like presidents and prime ministers, with the possibility of renewal. The TJS argues that this principle of shared responsibility can potentially be extended to encompass a broader range of employment sectors within a society.

From a political perspective, the TJS offers a potential explanation for long-term presidential incumbency. While democratic principles prioritize a smooth transfer of power, extended tenures in government can be observed in various part of the world. The theory of job sharing explain such behavior by pointing at the lack of Job-sharing (rotation) in certain leadership positions in government, corporation, Military and Education. This phenomenon can be understood as a response to complex societal challenges, where experienced individuals in leadership positions including ministers, governors, and congressional representatives - can provide continuity and stability. However, this phenomenon led to monopolization of leadership position, reduction of job opportunity for literate and young graduate, and creation of conflict in various part of the world. The TJS suggests that the rationale for job-sharing (rotation) could potentially extend to these leadership roles in both public and private sector.

#### 4.1.3. *The Rise of Artificial Intelligence and its Impact on the Labor Market*

The development of the TJS was informed by concerns regarding the potential for Artificial General Intelligence (AGI) to render human skillsets increasingly irrelevant. While acknowledging that AGI remains a future prospect, several experts suggest its eventual realization (Research, 2024; Fortune, 2024; Morris *et al.*, 2024). Advancements in generative AI, particularly in text, image, and video generation, offer a glimpse into the potential capabilities of large language models (LLMs).

Disagreement exists regarding the impact of AI on employment, with some experts predicting job creation while others anticipate widespread disruption (Nexford University, 2022; World Economic Forum, 2023). Regardless of the specific trajectory, it is likely that AI will initially displace some workers before creating new opportunities. However, only those who possess the capacity to adapt will effectively navigate these changes.

This underscores the second rationale for job-sharing – addressing the issue of unemployment. Global unemployment statistics presented from various sources (US Bureau of Labor Statistics, 2024; INEE, 2023; Statista, 2023) highlight the persistent nature of unemployment across diverse economic contexts.

The TJS does not aim to achieve a utopian state of zero unemployment. However, it advocates for a scenario where unemployment is voluntary and not a consequence of limited job opportunities. Job rotation within a TJS framework offers a potential solution by granting individuals access to a broader range of employment possibilities, irrespective of their educational background, experience, or skillset.

#### 4.1.4. *Beyond Job Sharing: Skill Acquisition and Societal Transformation*

The TJS promotes the notion of skill sharing as a means towards a better future. It emphasizes the importance of individual skill diversification to equip individuals to adapt and contribute across various sectors. However, deeply ingrained social values around competition, identity, and the concept of "value" often create conflict. Individuals and nations grapple with the desire to solve global problems while simultaneously fearing a loss of competitive advantage.

This can be attributed to societal tendencies to prioritize the rare, the precious, and the trending. Skills are often viewed as valuable assets, creating a paradox around the idea of freely sharing knowledge for the collective good. Many organizations (e.g., UN SDGs) promote this concept, but the notion of individuals readily sharing skills for free when it creates competition against themselves remains a significant hurdle. This has led to the current economic system, where intellectual property, brands, patents, and copyrights exist to protect skills and creations.

The concept of intellectual property, initially intended to benefit humanity, has evolved into a system of private ownership rather than a shared societal asset. This raises the question of whether creations or investments should become public assets, and if so, how individuals would be incentivized to contribute in such a scenario. The traditional notion of "value" is also challenged. Our society often defines value as something possessed by the few, while ignoring the potential for value to shift depending on context. In a system where "value" is gold there will never be equality or an equilibrium in society.

#### 4.1.5. *Redefining Value and Resource Allocation in a TJS Framework*

The TJS posits that true equality can only be achieved by removing the concept of "value" from essential goods, services, and resources. Data from sources like Forbes 500, Fortune, and The World Bank suggests that the world possesses sufficient resources to provide for all inhabitants (**Forbes, 2024, The World Bank, 2024**). However, issues of greed, mismanagement, and unequal distribution lead to scarcity and conflict.

In a TJS framework where creations and skills are considered public assets, recognition and compensation for individual contributions would still be necessary. However, a regulatory framework would be required to ensure fairness and prevent excessive accumulation of rewards by any single entity.

The rise of AI has fundamentally redefined concepts like knowledge, skill, and value. Accessibility to knowledge is unprecedented, while skills are both easier to acquire and potentially more susceptible to obsolescence. The value attached to skills, jobs, markets, and even entire nations is increasingly volatile and uncertain.

In this context, AI presents a double-edged sword. While it has the potential to exacerbate inequality by rendering certain skillsets irrelevant, it can also be harnessed to create a more equitable future. The TJS argues that widespread adoption of job-sharing can mitigate the negative impacts of AI by fostering a more adaptable and skilled workforce.

#### 4.1.6. *The Broader Benefits of Job Sharing*

The TJS anticipates a range of positive societal outcomes beyond simply addressing unemployment. Job rotation is expected to:

- **Enhance critical thinking:** Exposure to diverse work environments will encourage individuals to approach problems from new perspectives.
- **Promote mutual understanding:** Job sharing can bridge divides between social classes, professions, nations, and educational backgrounds. This could lead to a reduction in conflict, crime, and discrimination.
- **Boost performance and creativity:** Exposure to new ideas and the opportunity to contribute across different areas can stimulate innovation and improve overall productivity.

Ultimately, the TJS envisions a world where job sharing dismantles the current system of public and private ownership focused on personal gain, paving the way for a system based on public ownership and the common good. This, in turn, would foster "True Globalization" and "True Peace" by ensuring equitable access to resources and opportunities for all.

The TJS acknowledges that dismantling private ownership does not necessitate the elimination of the private sector. However, it advocates for a more balanced system where power and reward are distributed more equitably. This new paradigm would see individuals, corporations, and governments working collaboratively for the collective benefit of society.

#### 4.1.7. *The TJS as a Tool for Unification and Progress*

This research views AI as a potential tool for unification, offering an opportunity to address global challenges and create a more equitable world. However, to ensure responsible development and deployment of AI, effective government policies are essential. These policies should focus on regulation, risk mitigation, and promoting transparency and accountability within the field of AI research.

### 4.2. Challenges (C) and Solutions (S): Economic, Social and Governance challenges (ESG)

The Theory of Job Sharing (TJS) may initially appear utopian, reminiscent of science fiction or an unrealistic dream. Historical evidence suggests inherent difficulties in achieving universal human agreement and collaboration towards a common goal. However, the rapid advancements in science and technology, including automation, Artificial Intelligence (AI), transportation, and widespread internet access, contribute to a globalized landscape where seemingly impossible feats can be achieved through collective action. We identified three main challenges (People, Salary, Governance and Ownership) and proposed several solutions necessary to the practical implementation of Job sharing.

#### 4.2.1. *Gaining Public Acceptance for the Theory of Job Sharing (TJS)*

This section outlines strategies for promoting public acceptance of the TJS, a proposed solution to address global unemployment.

##### Phase 1: Public Awareness and Sentiment Analysis (People)

- **Large-Scale Surveys:** Conducting comprehensive surveys across diverse demographics (employed, unemployed, various income levels, educational backgrounds) is crucial. These surveys would gauge public opinion on job sharing and explore individual reactions to the concept of sharing their job with multiple colleagues (2-10 people).
- **Social Media and Media Engagement:** Leveraging social media platforms and traditional media outlets would raise awareness and promote the TJS as a trending topic.
- **Public Vote:** A nationwide vote would be conducted to determine public support for implementing job sharing as a legal requirement across all public and private sector positions.

The TJS acknowledges the sensitivity surrounding job sharing, recognizing its potential impact on individuals from all socioeconomic backgrounds. Despite this sensitivity, we emphasize that job sharing already exists in various forms within society (e.g., elected officials, journalists, accountants, athletes, teachers, doctors). The TJS proposes extending this concept to encompass all employment sectors with individuals rotating through jobs on a limited-term basis.

This study acknowledges the possibility that the public vote may reject mandatory job sharing. However, it proposes a logical solution in such a scenario: eliminating term limits for presidential positions. The rationale behind this suggestion is that if job sharing is deemed undesirable, then the concept of mandatory rotation should not apply solely to the presidency.

##### Phase 2: Compensation and Salary Structures in a Job-Sharing System (Salary)

The TJS anticipates a reduction in working hours and salary associated with job sharing. However, it also predicts a concomitant boost in productivity and economic growth. This scenario would allow individuals to pursue personal interests, explore new fields, engage in research, and travel more freely.

Our study aligns itself with the concept of a universal basic salary (UBS) advocated by several researchers (Tobin *et al.*, 1967; Wispelaere and Stirton, 2004; Bidadanure, 2019; Hasdell, 2020). In a job-sharing system, a universal basic salary would become less of a contentious issue, as everyone would receive the same compensation for a comparable workload across different professions and sectors.

We propose a standardized basic salary across all jobs and industries, elimination of existing salary disparities based on factors like location, education, gender, race, and experience. These disparities were explored by various studies that highlight the inconsistencies and unfairness inherent in current salary structures (Kakwani, 1980; Wilkinson and Pickett, 2009; Oishi *et al.*, 2011; Kawachi and Subramanian, 2014; Soft, 2016).

Job sharing, with its emphasis on rotation, is presented as a solution to address these existing salary gaps. All workers would have the opportunity to transition across various occupations, preventing any single group from being disadvantaged in terms of earning potential (see *Table A.3*).

We proposed the following solutions to address salary disparities within a job-sharing system:

- **Universal Basic Salary:** A standardized basic salary would be implemented across all jobs and industries, regardless of position or sector. The study acknowledges potential debate surrounding salary differentiation based on job type. However, the implementation of a universal basic salary would be subject to public vote.
- **Mandatory Jobs:** Certain jobs, regardless of educational attainment, skills, experience, or background, would be designated as mandatory. This initiative aims to promote empathy and understanding through shared experiences across diverse occupations. Examples include soldiers, bartenders, taxi drivers, healthcare workers, teachers, interns, sanitation workers, cooks, and salespeople. The intention is not to restrict individuals based on socioeconomic status; rather, it seeks to expose all individuals to a variety of essential roles within society. Individuals who object to mandatory job participation would be required to pay a service fee based on the total required working hours. To address potential labor shortages in the future, particularly in developing nations, mandatory jobs would offer high salaries paired with minimum ten-year contracts.
- **Job Rotation and Training:** Job terms within the TJS framework would be set at 3-5 years, with the possibility of renewal based on individual skills and performance following mandatory training programs. Every worker would be obligated to train at least one new individual every three years, with incentives provided by the government for exceeding this requirement.
- **Transparency and Performance-Based Incentives:** Employee earnings would be made public. Bonuses and commissions would be awarded annually to the most productive employees, with detailed performance evaluations publicly disclosed. This transparency aims to combat corruption and encourage productivity growth. The study proposes a limit on individual earnings, restricting any single employee's salary to be more than three times that of another employee in the same company.

Addressing Concerns and Potential Challenges:

The proposal for a universal basic salary (UBS) and standardized salary structure within a job-sharing system is likely to generate debate. The theory addresses some of the anticipated concerns by proposing a:

**Reduced Incentive for High Performance:** Critics might argue that a standardized salary structure could demotivate high performers. A performance-based bonuses and commissions awarded annually to the most productive employees. Publicly disclosed performance evaluations would further incentivize excellence.

**Impact on Highly Specialized Professions:** Certain professions, such as brain surgeons or airline pilots, require extensive training and experience. The TJS recognizes the limitations of job rotation in these fields. However, the study suggests that even highly specialized roles could benefit from job-sharing arrangements within specific aspects of the job. For example, surgeons could share administrative or research responsibilities or be transferred to a remote location for the same position.

**Challenges in Implementation:** Logistical complexities associated with implementing a universal basic salary and standardized salaries across diverse industries cannot be ignored. The TJS acknowledges the need for a phased approach, with pilot programs conducted in specific sectors before wider implementation.

Additional Considerations:

- **Cost of Living Adjustments:** we acknowledge the need for cost-of-living adjustments within the universal basic salary framework. Salaries might be slightly higher in regions with a higher cost of living.
- **Union Negotiation:** The study recognizes the potential need to renegotiate union contracts to accommodate job-sharing arrangements and ensure fair compensation for unionized workers.
- **Impact on Benefits:** The impact of job-sharing on employee benefits (health insurance, retirement plans) requires careful consideration. The TJS suggests a portable benefits system that remains attached to the individual worker regardless of job rotation.

Phase 2 of the TJS explores the complexities of compensation structures (salary) within a job-sharing system. Our study acknowledges potential challenges but also proposes solutions and mitigation strategies. Ultimately, the implementation of a universal basic salary and standardized salary structures would be subject to public approval and further refinement based on in-depth analysis and pilot programs.

### Phase 3: Re-imagining Ownership and Governance Structures

The current capitalist system, which concentrates power and wealth in the hands of a select few, has demonstrably failed to achieve true societal prosperity. This concentration of wealth often leads to conflict, war, and social unrest. This study proposes a more advanced form of democracy, one that incorporates job rotation principles not only within government but also across sectors such as the military, healthcare, education, and law. While acknowledging existing, limited examples of job sharing within these professions, the TJS emphasizes the need for a more comprehensive implementation to address persistent societal inequalities.

The study proposes a radical shift in ownership structures:

- **State Ownership and Worker Management:** All companies would be owned by the state (representing the citizenry), but managed by independent worker collectives (founder and/or owner). The original founders or creators of a company would retain a minority ownership stake (between 10% and 25%), with the remaining 75% belonging to the state. The rationale behind this proposal is that all wealth generated by the people should ultimately benefit the people. Additionally, in a job-sharing system with a universal basic salary, any new creation would be considered state-funded by default, regardless of the individual's initial investment in developing the product or invention. The study argues that a 25% ownership stake would still provide founders with a substantial return on their investment.
- **Subsidies and Social Responsibility:** Companies within the TJS framework would receive government subsidies during economic downturns. In return, these companies would be expected to contribute back to society through social initiatives. The study emphasizes that consumer power ultimately determines market success; individuals collectively decide what holds value and what does not.

The TJS acknowledges the potentially controversial nature of its governance and ownership proposals. However, the study emphasizes that all proposed changes would be subject to public approval after thorough analysis of the theory's weaknesses and feasibility. The ultimate decision regarding the implementation of the TJS rests with the populace.

#### 4.2.2. Widening Income Inequality and the Rise of Artificial Intelligence (AI): A Call for Re-evaluation

This section highlights the concerning trend of widening income inequality observed over the past three decades. This phenomenon, characterized by a growing disparity between the wealthy and the poor, raises critical questions about the sustainability and fairness of the current economic model. The widespread availability of information and knowledge in today's world, facilitated by advancements in technology and the internet, necessitates a more informed and engaged citizenry. Despite this accessibility of information, a disconcerting level of passivity persists regarding the issue of inequality.

The analogy of an elephant in the living room aptly illustrates the current situation. The immense scale of income disparity cannot be ignored any longer. Furthermore, the prevailing social framework is comparable to a precarious situation of a group of people sitting on a bubble filled with fireworks and explosive near an open flame (see *Figure 5*).

The emergence of AI presents a significant challenge to the status quo. While the current equilibrium between the wealthy, the government, and the employed population may have persisted for centuries, the rise of AI disrupts this balance.

The impending threat of AI necessitates a collective reassessment of priorities and strategies by governments, business owners, and workers alike. The achievement of Artificial General Intelligence (AGI) poses a significant threat to job security across all sectors. The urgency of addressing income inequality is further amplified by the transformative power of AI.

#### Abbreviations

- **AI:** Artificial Intelligence
- **CEMAC/EMCCA:** Economic and Monetary Community of Central Africa
- **DOAJ:** Directory of Open Access Journals
- **EU:** European Union
- **ECOWAS:** Economic Community of West African States
- **LLM:** Large Language Model
- **NGO:** Non-governmental organization
- **TJS:** Theory of Job-Sharing

- **UBI:** Universal Basic Salary
- **WoS:** Web of Science

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## 5. Conclusion

This objective of this research is to introduce the Theory of Job Sharing (TJS) as a potential solution to address global unemployment exacerbated by the rise of Artificial Intelligence (AI). The TJS was developed based on the author critical thinking and comprehensive analysis, and grounded in evidence through the analysis of several research from scholarly databases like Google Scholar, Emerald, and ScienceDirect using NotebookLM as a guiding tool. The study examined the benefits of job sharing and outlined a strategy for its implementation.

Recognizing the challenges associated with implementing the TJS, the research identified three key ESG (Environmental, Social, and Governance) hurdles: public acceptance (people), compensation structures (salary), and governance models (governance and ownership). For each challenge, the study proposed multiple solutions, laying the foundation for further discussion and refinement. A conceptual framework (**Figure 5**) was developed to illustrate the current economic situation and the proposed transformation through job sharing.

The research concludes by advocating for job sharing as a moderate and acceptable approach to achieving several critical objectives:

- **Reduced Unemployment:** Job sharing has the potential to significantly reduce unemployment rates by distributing existing work opportunities across a larger population.
- **Diminished Inequality:** By providing more individuals with access to employment and income, job sharing can contribute to a more equitable distribution of wealth.
- **Empowerment of the People:** The TJS proposes a shift of power from a concentration in the hands of a few to a more democratic distribution within society.
- **Increased Social Harmony:** By addressing unemployment and inequality, job sharing can promote greater social stability and peace.

The study acknowledges the potential need for revolutionary change if present trends of unemployment and inequality persist. However, the TJS presents a moderate and constructive approach to achieving a more equitable and prosperous future for all.

### *Limitations and Future Directions*

It is important to acknowledge that this research is primarily theoretical, drawing on the author's personal experience and critical thinking. Further research with empirical data analysis is necessary to refine and validate the proposed TJS framework. Additionally, engaging with established schools of thought on unemployment can enrich the TJS by drawing insights from existing research literature and fostering a more comprehensive understanding of this complex issue. Nevertheless, our research remains legit and proposes solutions to solve the present world unemployment issue, salary disparity, conflict and discrimination by introducing a new theory "The Theory of Job Sharing (TJS)".

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## Compliance with ethical standards

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The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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