

## Ripple Effect of Algorithmic Mechanism: Lessons from Global Gig Work Experience

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**ABSTRACT:** The growth of platform-based gig work has changed work experience of labour. The algorithmic systems now playing a central role in assigning, monitoring, and compensating workers in gig platforms. This article brings together global research to examine how these digital platforms are reshaping work, relationships, and inequalities with the use of algorithmic mechanism. The study focus on empirical findings which takes a step back to explore the bigger conceptual patterns and gaps in the literature surrounding algorithmic labour. The discussion is framed firstly on the control algorithms exert over workers and the impact on autonomy, secondly how the evolving nature of work creates more uncertainty and precariousness, thirdly the ways in which gender and social inequality persist in platform work, fourthly the forms of resistance and efforts to regulate these platforms, and finally the long-term effects of algorithmic systems on workers' careers and job security. Through these themes, the review highlights how platforms, while often marketed as offering flexibility, actually reinforce existing inequalities, particularly for women and marginalized groups. The study highlights while many workers face growing challenges in these digital spaces, there are also signs of pushback whether through collective actions or new regulations. This article adds to ongoing conversations about how we can rethink and reshape the future of work in the age of algorithms. It calls for more inclusive, thoughtful approaches to labour regulation that put workers' rights, fairness, and sustainability at the forefront.

**KEYWORDS:** Algorithmic mechanism, gig economy, precarity, platform workers, job satisfaction.

**JEL Code:** J53, J46, J81, E26, J28

### 1. INTRODUCTION

The landscape of employment and work is undergoing a fundamental shift, transformation shaped by digital technologies and the platforms. The center of this transformation is the rise of the gig economy. It is an economic system where temporary positions and short-term engagements are common, with organisations contracting with independent workers for specific tasks, projects or gig. A flexible work arrangement is the chief characteristic of gig economy in which outside traditional employer-employee contract has become a revitalizing force in the worldwide employment scenario. It encompasses a diverse spectrum of workers, ranging from part time worker to independent contracts and freelancers, with significant portions engaged in platform-based employment. The term gig economy capsulizes a new form employment arrangement. In the Indian context, the gig economy as “a labour market that relies heavily on temporary and part time positions and is filled by independent contractors and freelancers rather than full time permanent employees” (NITI Aayog, 2022).

Gig platforms utilize algorithms to coordinate, surveil, and instruct gig workers in the case of decentralized working process and space. Algorithmic management refers to the use of machine learning algorithms, characterized by algorithmic monitoring activities, the conscious creation of information, power, and calculative asymmetries, algorithmic control involving both direct and indirect control, and dynamically adjusting prices, to manage a workforce (Kadolkar et.al., 2024). This so called algorithmic management, enables platforms to guide gig workers to act in a manner consistent with platforms' objectives. Ele.me, Uber, and Deliveroo are prime examples that use algorithmic systems to manage gig workers. Algorithms are used to assign tasks to, reward, or punish gig workers based on data obtained from these workers' electronic devices. In traditional gig labour market a dyadic relationship existed, between employer and employee, while modern gig labour market had a triadic relationship among platform workers, platform customers and platform providers (Jabagi et.al, (2024).

Algorithmic labour market refers to employment, where digital platforms rather than human super visions, manage key aspects of work, there include task assignment, performance, evaluation, wage determination and even termination. Algorithmic management

## Ripple Effect of Algorithmic Mechanism: Lessons from Global Gig Work Experience

is a diverse set of technological tools and techniques to remotely manage workforces, relying on data collection and surveillance of workers to enable automated or semiautomated decision making. Many of the characteristics of algorithmic management such as consumer sourced rating system and automated nudges, were developed by companies of the sharing or gig economy (Mateescu & Nguyen, 2019). Workers face algorithmic control with minimal transparency or negotiation. One of the most disputed aspects of algorithmic labour is the dehumanization of work which reduce human interaction of data points-quantifiable, predictable. This process tends to marginalize worker's voice, where individuality and creativity are suppressed. This digital asymmetry strengthening a unilateral power -dynamics between platform and workers, further weaken democratic values within the work force. However the deployment of algorithmic system has brought forth complex challenges that ripple through the economic, social, political spheres of gig work. This shift has disrupted conventional employer-employee relationships and raised urgent questions of fairness, dignity and justice in the workplace.

This article examines the ripple effects of algorithmic control by synthesizing insights from global literature on platform based work. The objective is to identify patterns, challenges and critical lessons from varied national and sectoral contexts. The focus is not on one country or one platform but multifaceted understanding from global literature on plat based that reveal how digital labour governance is reshaping contemporary labour markets.

In doing so, the article addresses several key research questions how does algorithmic management impact working condition in the gig economy? What common challenges are experienced across different sectors? In what ways do algorithmic system reshape inequalities particularly in terms of sector, gender, class, and sex,? How do algorithmic management hamper employee-employer relationship in dealing with question of fairness, dignity and justice in their work place? and how workers have responded, mobilized or adapted to this new regime of labour regulation? By engaging with these questions, this study aims to contribute to the broader discourse on the transformation of labour in the digital age and to inform more inclusive and equitable model of platform governance.

It seeks to explore the ripple effects of algorithmic management mechanism in labour market through critical analysis of global gig work experience. Drawing from comparative case studies across both global North and global South contexts, it examines how a system reshaped labour relations, inflame inequalities and challenge the efficacy of existing labour protection. This article offers a holistic understanding of how algorithmic management mechanism transforms the nature of work in the twenty first century.

## 2. REVIEW OF LITERATURE

The evolving gig economy and its algorithmic infrastructures have accelerated profound transformations in labor dynamics, particularly affecting platform-based workers' autonomy, engagement, and wellbeing. Zoonen et al. (2024) emphasize how algorithmic systems, specifically algorithmic management and algorithmic matching, shape workers' perceptions of meaning and identity in digital labor. The algorithmic control undermines perceived work meaningfulness by depersonalizing and standardizing oversight, algorithmic matching positively contributes to a sense of purpose by aligning workers with tasks that fit their profiles (Zoonen et al., 2024). Similarly, Lang et al. (2023), expose the ambivalence of algorithmic control, showing its dual role as both a stressor that induces burnout and a facilitator of work engagement by offering structured task flows and performance feedback. This paradox is further emphasized by the identification of burnout as a partial mediator and flow experience as a moderator, emphasized the psychological effects of algorithm-driven labor systems.

The perception of fairness within algorithmic systems also influences gig workers' experiences. Jabagi et al. (2024) explore that fairness in algorithmic decision-making especially in matching and performance evaluations positively correlates with perceived organizational support and job satisfaction. Their findings confirm that procedural justice in algorithmic HR processes can significantly influence workers' trust and morale, depending on the transparency and logic behind task allocation and evaluation mechanisms.

Building on this, Keegan and Meijerink (2025) introduce the concept of a "gray zone" in the classification of gig workers who are neither fully autonomous freelancers nor traditional employees. They highlight the increasingly dominant role of algorithms as digital supervisors executing HR functions, thereby reshaping the psychological contract between worker and platform. The blurring of organizational boundaries complicates accountability while subtly redefining workers' self-perceptions, responsibilities, and career possibilities. Chen et al. (2025) deepen this understanding by examining the effects of algorithmic control on safety behavior, using ego-depletion theory and reveal that while standardized guidance may support safer work behavior, increased monitoring and behavioral constraints elevate mental fatigue and risk. Mitigating factors such as self-efficacy, leadership commitment to safety, and algorithmic transparency are crucial for balancing these tensions.

A gendered lens further complicates the gig economy's algorithmic transformation. Ma et al. (2022) document the gendered experiences of women gig workers in North America, highlighting how platform neutrality often conceals structural inequalities. The study uncovers the normalization of harassment, limited mobility, and undervaluation of feminized labor such as caregiving and cleaning. Algorithms, especially those controlling task dispatch and worker recommendations, reinforce these biases by failing to consider gender-specific contributions and safety concerns. Women's labor in platform work—comprising about 42% of the workforce—remains invisible due to faceless work structures and algorithmic matching systems (Giustini, 2022). Occupational segregation persists, with men occupying high-skilled roles and women clustered in underpaid, feminized sectors. The Digital Future

## Ripple Effect of Algorithmic Mechanism: Lessons from Global Gig Work Experience

Society (2022) expands this critique by examining how artificial intelligence and algorithmic systems reproduce gender biases. With automation threatening routine, female-dominated jobs, the study warns that algorithmic management may perpetuate discrimination in hiring, task allocation, and performance evaluations. The term “ghost workers” is used to describe the invisible labor of women, who bear the brunt of these inequities.

Cameron (2025) provides a critical synthesis of these themes through the “Good-Bad Job Paradox,” a framework capturing the dual nature of gig work—offering flexibility and income on one hand, while undermining job security, skill development, and autonomy on the other. She argues that algorithmic systems fragment labor into microtasks, eroding skill acquisition and reinforcing dependency. Han et al. (2024), using Employment Discriminant Theory and the Neumark Decomposition method, empirically demonstrate how digitalization exacerbates gender wage disparities in China. Their analysis of the China Labour Dynamics Survey across three time points reveals that over 90% of the gender wage gap stems from discrimination, particularly as the digital economy grows. These findings are critical for understanding how algorithmic structures amplify wage inequalities, especially in contexts where informal labor prevails.

Muñoz et al. (n.d.) contextualize these gendered and racialized inequalities through an intersectional framework. Drawing from case studies across platforms like Uber, TaskRabbit, and Amazon Mechanical Turk, they demonstrate how seemingly neutral algorithmic evaluations are imbued with stereotypes, disproportionately disadvantaging women and racialized workers. The study emphasizes how customer rating systems, platform architecture, and task visibility collectively reinforce social hierarchies, particularly in feminized labor sectors like domestic work. By incorporating a global perspective, Muñoz et al. highlight the asymmetries between the Global North and South in digital labor experiences, urging critical scrutiny of the techno-optimist narratives that present gig work as universally empowering.

Together, these studies reveal the complex, often contradictory, effects of algorithmic management in the gig economy. While technological systems promise efficiency and autonomy, they simultaneously risk deepening precarity, entrenching social inequities, and eroding the human dimensions of labor. A nuanced understanding of algorithmic governance must therefore attend to its differential impacts across gender, class, and regional contexts, particularly as gig work continues to reshape the global labor landscape.

### 3. THEORETICAL FRAMEWORK

The transformation of work through algorithmic management mechanism within the gig economy necessitates a solid theoretical grounding to examine its implications on labour relations, inequality and governance. The primary aspects theory are particularly relevant, they are algorithmic control and worker autonomy, working relationships and precarity, social inequality and gender, resistance and policy regulation, and impact of algorithmic management on career and employment relationships. Each one come up with how technological systems mediate power, control and agency in platform-based gig work.

The gig economy mediated through digital platforms is fundamentally transforming the structure of work and employment. To critically evaluate this transformation, especially the rise of algorithmic management mechanism and its implication, this paper draws up on four interrelated theoretical frameworks; Labour Process Theory (LPT), Paradox theory, P-O fit theory and Ego-depletion theory those provide the analytical lens to understand how digital technologies design or build labour process, reshape power relations and intensify vulnerabilities among the gig workforce. LPT (Braverman, 1974; Thompson 1983) provides a critical perspective to examine how capitalist enterprises establish control over the labour process, particularly through the fragmentation, deskilling and intensification of work. In the conditions of gig platforms, LPT is instrumental in understanding how algorithmic management functions as a digital mechanism of control, supervise and regulate the work arrangements. Gig platforms reshape the labour process by algorithmically assigning tasks, monitoring work behavior through data surveillance and using customer ratings as indirect performance index. This creates a technologically mediated environment. Where work is deskilled, autonomy is limited, and labour is strictly controlled. Most often with this LPT focuses on workers, they adapt, refusal and platform switching policies as a part of oppositional practice.

While LPT offers critical insights into resistance within platform work, it is insufficient to fully capture the essence and enduring issues produced by algorithmic management. Paradox Theory offers a lens through which to examine the persistent tensions and dualities inherent in organizational life. Defined as “contradictory yet interrelated elements that exist simultaneously and persist over time” (Smith & Lewis, 2011), paradoxes are particularly pronounced in the algorithmic management of gig labour. Gig platforms simultaneously promote flexibility while imposing control, offer autonomy yet enable constant surveillance, and pursue efficiency at the expense of equity. This duality is evident in the lived experiences of gig workers, who often value the freedom associated with flexible scheduling, while simultaneously suffering from economic insecurity, unpredictable earnings, and algorithmic oversight. As Felix et al. (2023) demonstrate, such contradictions can produce both empowerment and vulnerability. Similarly, Zhang et al. (2023) highlight how algorithmic systems can function as both challenge and hindrance stressors, leading to increased anxiety, emotional strain, and social isolation. By applying Paradox Theory, this article reveals how algorithmic labour markets reproduce structural tensions rather than resolve them. These paradoxes not only shape worker behavior and well-being,

## **Ripple Effect of Algorithmic Mechanism: Lessons from Global Gig Work Experience**

but also inform broader socio-economic outcomes, including inequality and job dissatisfaction. Understanding these tensions is vital for designing interventions that can balance efficiency with fairness and flexibility with stability.

Another theory is P–O Fit Theory, it complements this analysis by focusing on the alignment between workers' values, needs, and expectations, and the operational logic of the platforms they engage with. Traditionally applied in organizational psychology, this theory posits that congruence between individual and organizational preferences fosters satisfaction, commitment, and performance, whereas misalignment leads to stress, disengagement, and turnover (Kristof, 1996). In the gig economy, the "organization" is not a traditional employer but a digital interface governed by algorithmic rules. The degree to which a worker's motivations—such as the need for financial security, autonomy, or stability—align with the platform's offerings constitutes the preference fit. As shown by Felix et al. (2023), when this fit exists, it supports worker well-being; when it does not, it results in preference misfit, which can exacerbate psychological distress and lead to disempowerment.

This theory is especially relevant in platform-based labour, where standardized algorithms treat diverse workers as interchangeable units. The absence of customization or consideration of individual preferences leads to frequent misalignments, particularly for marginalized workers seeking meaningful engagement, predictability, and fair treatment. P–O Fit Theory thus helps unpack the micro-level psychological dynamics that influence how workers navigate, resist, or adapt to algorithmic management.

Together, Paradox Theory and P–O Fit Theory provide a robust theoretical base for analyzing the ripple effects of algorithmic labour markets. While Paradox Theory captures the structural and systemic contradictions embedded in platform work, P–O Fit Theory explains the individual-level consequences of working within systems that fail to accommodate diverse needs and expectations. This dual-theoretical lens enables a more nuanced understanding of how gig workers experience, interpret, and respond to algorithmic control across different contexts.

Ego Depletion Theory is another important framework closely linked to the challenges posed by algorithmic management. It refers to the phenomenon where an individual's self-control, which subsequently impacts their performance in later tasks. Based on this framework, they hypothesize that the impact of algorithmic control on safety performance is mediated through gig worker's ego-depletion (Chen et al, 2025).

## **4. METHODS OF ANALYSIS**

This Article adopts a qualitative, interpretive approach based on a comprehensive review of existing global literature on algorithmic labour markets and it is based on secondary data sources including articles, journals, policy reports and empirical studies published in between 2015 to 2025. The aim is to critically synthesize theoretical and empirical contributions that examine the transformation of labour under algorithmic management with a particular focus on the gig economy. It examines the ripple effect of algorithmic mechanism by synthesizing insights from global literature. The focus is not on one country or one platform but on interdisciplinary holistic view from global literature that reveals how digital labour governance is shaping contemporary labour markets.

A thematic analysis framework was employed to organize and interpret the literature, firstly algorithmic control and worker autonomy, secondly working relationships and precarity, thirdly social inequality and gender, resistance and fourthly policy regulation, and finally impact of algorithmic management on career and employment relationships. These themes were derived through coding of literature, enabling a structured and critical analysis of diverse perspective of algorithmic management mechanism in the global gig contexts. The study emphasizes how structural inequalities are negotiate by algorithmic mechanism and how global patterns often lessons for future regulation and policy frameworks. Through this method the article seeks to identify the ripple effect of algorithmic mechanism on global gig work perspective through five lens of subthemes.

## **5. RIPPLE EFFECT OF ALGORITHMIC LABOUR MARKET: THEMATIC REVIEW**

### **5.1 Algorithmic Control and Worker Autonomy**

Algorithmic management, while often positioned as a neutral, efficient system, significantly reshapes labor processes in gig work, often at the expense of worker autonomy. Cameron (2025) discusses how algorithmic systems reduce worker autonomy by fragmenting labor into micro-tasks, contributing to the deskilling of workers. The "Good-Bad Job Paradox" framework reveals how flexibility coexists with precarity. Jackson III (2022) highlights the dualities in algorithmic systems, emphasizing their capacity for scalability and efficiency, but also their potential to alienate workers due to the absence of human empathy in decision-making processes. He advocates for a hybrid model where human oversight complements algorithmic logic. Zhang et al. (2023) explore how algorithmic systems serve as stressors, leading to destructive deviant behaviors among food delivery workers due to emotional strain and social isolation. Felix et al. (2023) add nuance by exploring the psychological impacts of preference fit in worker-platform relationships, showing that alignment in expectations enhances well-being, whereas misalignment causes emotional vulnerabilities.

### **5.2 Working Relationship and Precarity**

Algorithmic management systems enforce precarious working relationships by enforcing task-based interactions, minimizing human contact, and undermining job security. Felix et al. (2023) use Person-Organization Fit and Paradox theory to examine the preference alignment between gig workers and platforms in Brazil, finding that when misalignment occurs particularly regarding job security,

## **Ripple Effect of Algorithmic Mechanism: Lessons from Global Gig Work Experience**

workers experience psychological distress. Zhang et al., (2023) reinforce this by showing how algorithmic stressors contribute to harmful work behaviors and mental fatigue. Cameron (2025) also elaborates on the façade of autonomy that masks systemic precarities, such as lack of benefits and career progression. These findings show a convergence around how digital platforms institutionalize unstable labor relations under the guise of flexibility and independence. Jabagi et al., (2024) tried to understand how people perceive algorithmic management particularly in terms of fairness. Keegan and Meijerink (2025), examines the transformative impact of algorithmic management on the organization of work on online labour platform. They viewed algorithmic management as a form of digital supervisors that influencing worker's self-perception, often algorithmic management assumes the role of a manager or employer. It finally influences workplace dynamics of gig workers. Chen et al., (2025), explores how algorithmic control affects gig worker's safety performances, by using ego-depletion theory.

### **5.3 Social Inequality and Gender**

A growing body of literature critiques the gender-blind design of algorithmic systems in gig work. Ma et al. (2022) illustrate how women in North American gig work are exposed to harassment and bias due to platforms' failure to incorporate gender-sensitive mechanisms, leading them to adopt coping strategies in lieu of structural support. Giustini (2022) discusses the invisibility of women's labor in the EU, particularly in feminized roles such as care and cleaning, which are undervalued and lack recognition due to algorithmic invisibility. The Digital Future Society (2022) points to systemic risks posed by AI integration, such as biased hiring and opaque evaluations, which disproportionately impact women in routine roles. Han et al. (2024) quantify the gender wage gap in digital economies, showing that over 90% of the disparity stems from discrimination exacerbated by digitalization. Muñoz et al. (n.d.) offer a global perspective, demonstrating how intersectional inequalities based on gender, race, and class are deepened by seemingly neutral algorithmic systems that favor dominant groups.

### **5.4 Resistance and Policy Regulation**

In response to these issues, several scholars emphasize the need for policy reform and collective resistance. The Digital future Society (2022) highlights initiatives such as the European Commission's AI Act, aimed at addressing algorithmic bias and enhancing fairness. Jackson III (2022) suggests hybrid management models to incorporate human judgment and mitigate discrimination. Ma et al. (2022) emphasize the need for platforms to design better anti-harassment mechanisms and promote the recognition of women's unique contributions. Muñoz et al. (n.d.) call for a rethinking of platform structures through an intersectional lens, which would entail systemic reforms and worker voice inclusion in platform governance. These studies call for a multi-level policy response to ensure that algorithmic governance upholds labor rights and promotes equity.

### **5.5 The Influence of Algorithmic Management on Career and Employment relationships**

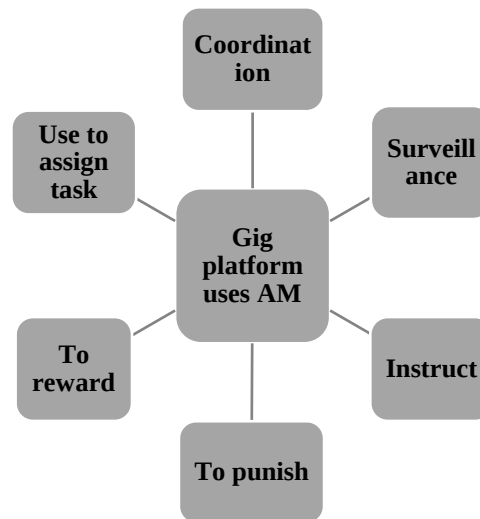
The implementation of algorithmic control fundamentally alters conventional career trajectories by supplanting enduring employment with task-oriented contracts, thereby diminishing avenues for skill enhancement and consistent income. Cameron (2025) elucidates how algorithmic frameworks constrict career mobility and discourage prolonged engagement by treating labor as a mere commodity. Han et al. (2024) analyze that the expansion of the digital economy perpetuates gender-based wage disparities, thereby constraining women's economic advancement. Felix et al. (2023) reveals that preference misalignments especially in scenarios where platforms prioritize flexibility over job security can lead to worker demotivation and a decline in their long-term commitment. Jackson (2022) emphasizes that algorithms, in the absence of compassionate oversight, erode trust and satisfaction, both of which are essential for the maintenance of productive employment relationships. Lang et al., (2023) analyze impact of algorithmic management control on the experience of burn out and work engagement among gig workers by employing job demands resource model. This burn outs serves as a partial mediator in relation with perceived a control and work arrangement.

Collectively, these scholarly contributions enhance our comprehension of how algorithmic governance impacts laborers at various levels individual, structural, and institutional thereby necessitating nuanced, gender-sensitive, and worker-centric reforms within platform-mediated labor frameworks.

## **6. RESULTS AND DISCUSSION**

Algorithmic management uses lot of digital tools and processes that automate core managerial functions within gig and platform-based work environments. It plays a central role in structuring the daily activities of workers by undertaking tasks traditionally performed by human managers. Algorithmic management has six major uses: constant tracking of workers' behavior and coordination, constant performance evaluation and surveillance, giving instructions, provide reward to punish, and assigning tasks.





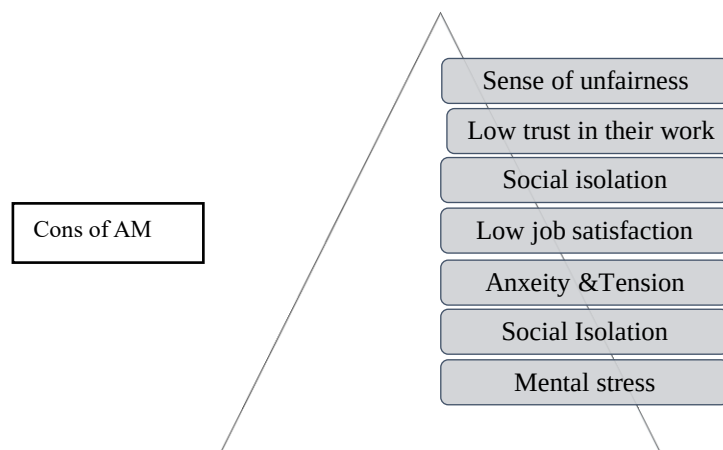
**Figure: 1 Gig platforms: Uses and work organisation**

Source: compiled by Author

Even though platform markets provide adequate flexibility and feasibility, a system impose significant control on them, like pricing decision, task allocation, monitoring surveillance, punishment, performance rating, all these components reduce worker autonomy. These system often gave prime importance for their profitability and existence rather than worker's wellbeing. Most of the workers are under psychological pressure to negotiate their own terms of employment and work contract.

When we analysing critical literature on algorithmic mechanism growing precarity of gig workers can be observe which is accelerated by the ambiguous nature of gig work. Gig workers are often considered as independent workers which denies basic employment rights such as minimum wage, maternal benefits, sick leave, insurance, social security. The precarious nature is particularly more evident in the region where labour regulation laws are weak.

The study emphasize how algorithmic mechanism accelerate social inequalities ,particularly among marginalized communities mainly women, they face additional challenges mainly due to digital literacy, limited access to resources, biased algorithms continuous surveillance and rating system, punishment mechanisms, monitoring process, These barriers exacerbate gender pay gap, unequal distributional pattern of gig work and career advancement in the gig economy.



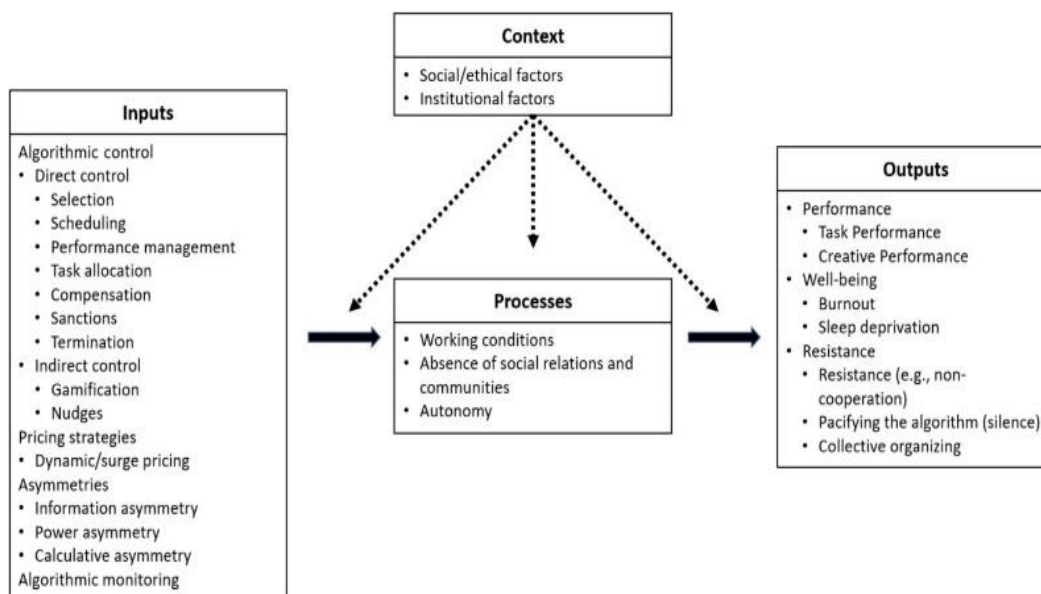
**Figure: 2 Disadvantages of Algorithmic management system**

Source: Compiled by author

Evidence of growing resistance from workers can be seen from global literature, they started to form unions and collective movements to demand for fairer wages, better working conditions and more stringent labour laws and improved social protections and legal frameworks. But all these initiatives confined in to limited area, it remains uncertain and varies by region to region.

The gig platform provides limited opportunities for career advancement; they trapped in a spider net of low wage, precarious nature of work, lack of worker autonomy. It badly affects the long- term financial stability and economic security, job satisfaction, physical and mental health and overall wellbeing whereas social inequality and gender barriers have connection with ego-depletion theory (Chen et.al, 2025).

## Ripple Effect of Algorithmic Mechanism: Lessons from Global Gig Work Experience



**Figure: 3 Algorithmic surveillance and effective outcomes**

Source: Kadolkar et.al, (2024)

The algorithmic surveillance of gig workers can activate affective responses such as stress, anxiety, isolation, and other forms of negative emotional states, stemming from the persistent sense of being monitored by both customers and algorithmic systems. This continuous oversight may contribute to detrimental outcomes for workers' physical and psychological health, including emotional fatigue, disrupted sleep patterns, and an increased likelihood of accidents, Kadolkar et.al, (2024).

The findings emphasize the problematic relationship between algorithmic mechanism, social inequality, and precarity nature of labour in the context of gig economy. It reveals a critical research gap existing particularly by abstaining from lots of serious issues like physical and mental harassment, drain, stress, strain, intersectionality issues, career de-promotion, digital bias, dehumanization process, biased algorithmic mechanism and its after effects.

The worker's autonomy and working condition are worsened due to the implication of algorithmic management system on task allocation, monitoring, surveillance, punishment, performance rating etc., gig drivers generally complain about the constant monitoring, lack of transparency, and dehumanization of algorithmic management. Algorithmic management could induce a sense of unfairness among workers, as well as low trust in their work and low job satisfaction ultimately reducing workers' participation without guaranteeing their work quality. The findings are closely connected with P-O Fit theory of algorithmic mechanism. It analyzes the ripple effect on the labour market, where working conditions within this system fail to accommodate diverse needs and expectations of workers. Workers and organizations have different kinds of preferences; organizations have profitability and growth motives, whereas workers have freedom, flexibility, autonomy, job satisfaction motives. These diverse preferences misfit. It tends to produce undesirable results in stress, strain, drain, hampers worker's wellbeing, under valuation of their task etc.

The global literature exposes the real ripple effect of algorithmic mechanism, algorithmic control and reduction in worker's autonomy, precarity and worsening employment relationships, social inequality and gendered barriers, signals of growing resistance, policy intervention and long-term career impacts are the major effects that we observe from secondary sources. Each sub-theme has a connection with any one of the algorithmic theories. Precarity and worsening employment relations, algorithmic management and reduction in worker autonomy has a close connection with paradox theory and LPT theory.

Even though global literature highlights major issues, gendered implications of gig work are limited, intersectional analysis through the lens of caste, class, race and geographical location especially in global south contexts. Underrepresentation of non-western contexts is another limitation; most of the existing literature heavily depends on Global North especially platforms in US and Europe. There is insufficient research on how algorithmic mechanism unfolds in developing economies like India, Brazil and parts of Africa. Longitudinal studies are rare; most of the studies rely on short-term cross-sectional surveys; it only provides a glance of gig work and helps to track the real impact of algorithmic mechanism on job satisfaction, social mobility, career advancement etc. The ways in which gig workers resist remain underexplored and more empirical studies are needed in these fields. And also there is a need for comparative research on the outcomes of different regulatory models on gig worker's rights.

## 7. CONCLUSION

Algorithmic management mechanism reshaped the structure of gig platforms and plays a virtual role in every day task of arranging, coordinating mechanism, surveillance, monitoring, rating activities of platform workers. This review brought together global experience on how algorithmic mechanism is shaping the work scenario and the related issues like loss of worker autonomy, precarity

## Ripple Effect of Algorithmic Mechanism: Lessons from Global Gig Work Experience

nature of work, deskilling, job dissatisfaction, lack of wellbeing of workers, work pressure and psychological issues etc. Even though literature emphasizing major issues of algorithmic mechanism, it neglects a intersectionality analysis of this issue through the lens of caste, class, race and geographical location. Women faces compound challenges like digital exclusion, technological bias, gender inequalities, pay gap, unbalancing care work etc. due to this technological mechanism especially in developing countries like India. Future studies should address the impact of algorithmic mechanism from global south and more participatory action research must be taken place in order to explore ripple effects of algorithmic mechanism. Researchers and policy makers must work together to rethink how dignity, labour rights, fairness in digital economy are to be protected and move forward to worker-centered researches that expose the reality of real ripple effects of algorithmic mechanism among gig platforms. More participatory action research, platform audits intersectionality studies are needed in this field. It contributes to contemporary academic debates on the transformation of work in and policy in the digital era.

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## Ripple Effect of Algorithmic Mechanism: Lessons from Global Gig Work Experience

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