
The Interplay of Algorithmic Managerial Control, Worker Autonomy, Collective Agency and Labour Regulation

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Abstract

This paper examines how platform work and algorithmic management are transforming contemporary employment relations by reshaping managerial authority, worker autonomy, employment security and collective representation. The analysis highlights that digital platforms cannot be understood solely as technological intermediaries, since they increasingly perform organizational functions related to task allocation, pricing, monitoring, evaluation and access to work opportunities. Platform employment therefore combines contractual flexibility with new forms of economic dependency and digitally mediated control. Particular attention is given to algorithmic management as a mechanism through which managerial authority is embedded in data-driven systems, ratings, reputational mechanisms and automated decision-making processes. The paper further shows that these transformations generate heterogeneous consequences for job quality, income security, career continuity and worker well-being. At the same time, platform workers retain forms of agency through individual adaptation, collective resistance, solidarity networks and emerging modes of representation. The analysis consequently emphasizes the limitations of regulatory approaches based exclusively on formal employment classification. More comprehensive institutional frameworks are required to address algorithmic accountability, social protection, collective voice and substantive managerial control. Overall, platformization represents a broader transformation of employment institutions in which flexibility, technological coordination, worker dependency and labor regulation are increasingly interconnected.

Keywords: Platform work; Algorithmic management; Employment relations; Worker autonomy; Collective representation; Labor regulation.

JEL classification: J21; J28; J53; J83.

Introduction

Digital platforms have become an increasingly important organizational form within contemporary labor markets, transforming how work is allocated, monitored, evaluated and remunerated. Platform work encompasses heterogeneous arrangements ranging from locally delivered services to remote digital tasks, yet these forms of employment share a common reliance on technological infrastructures that mediate relationships between workers, clients and organizations. This development challenges conventional distinctions between employment and self-

employment because platforms may formally present themselves as intermediaries while simultaneously exercising substantial influence over access to work, pricing, performance evaluation and worker behavior. As a result, traditional assumptions concerning managerial authority, organizational membership and employment dependency have become more difficult to apply. The growing use of ratings, reputational systems, automated matching and algorithmic decision-making further modifies the organization of work by relocating managerial functions within digital systems. Platform employment therefore provides a particularly relevant setting for examining how technological intermediation affects autonomy, economic dependency, employment quality and the distribution of risks between workers and organizations. These transformations also raise broader questions concerning the capacity of existing labor institutions to regulate forms of work that combine contractual flexibility with new mechanisms of organizational control.

Against this background, this paper examines platform work, algorithmic management and the transformation of employment relations through three interconnected dimensions. First, it considers how platformization reconfigures employment status, dependency, career trajectories and job quality by transferring greater responsibility for income security, employability and professional continuity toward individual workers. Second, it analyzes algorithmic management as an emerging form of managerial authority based on digital monitoring, task allocation, performance evaluation, information asymmetries and automated decision-making. Particular attention is given to the coexistence of formal autonomy and substantive control, as well as to the effects of opacity, work intensification and perceived fairness on workers' employment experiences. Third, the paper examines worker agency, collective representation and regulatory responses, emphasizing resistance, new forms of solidarity, trade-union involvement, employment classification and algorithmic accountability. By bringing these dimensions together, the paper seeks to show that platformization should not be understood only as a technological change in labor-market intermediation. It represents a broader institutional transformation in which managerial control, worker autonomy, collective voice and labor regulation are being re-defined simultaneously.

1. Platform Work and the Reconfiguration of Employment

1.1. Platformization, Digital Intermediation and New Forms of Work

Vallas and Schor (2020) show that digital platforms should not be interpreted as neutral technological marketplaces because they establish rules governing access, matching, evaluation, information and payment while often remaining formally outside conventional employer classifications. This implies that platformization creates employment arrangements in which organizational control can persist even when the traditional employment relationship appears to be absent. De Stefano (2016) reinforces this interpretation by distinguishing crowdwork from work-on-demand and showing that platforms increasingly perform coordination and monitoring functions historically associated with employers while workers are frequently classified as independent contractors. Koutsimpogiorgos et al. (2020) further demonstrate that this combination of short-term tasks, independent contracting and platform intermediation destabilizes conventional distinctions between markets and organizations, particularly when workers remain economically dependent on platforms for access to clients, reputation systems and payments. Howcroft and Bergvall-Kåreborn (2019) add that platform work itself is heterogeneous, ranging from fragmented microtasks to professional and creative services, yet managerial authority can remain substantial across these different organizational forms. Taken together, these contributions imply that platform employment cannot be understood solely through contractual classification. The distribution of control, dependence, risk and organizational authority

provides a more substantive basis for assessing how digital intermediation transforms contemporary employment relations.

Van Doorn (2017) emphasizes that platform labour is embedded in pre-existing labour-market inequalities, showing that on-demand service models can reproduce disadvantages associated with gender, race, migration and class while shifting important employment costs toward workers. This implies that digital intermediation does not operate independently of existing social hierarchies and may reinforce unequal exposure to insecure work. Kenney et al. (2021) broaden this perspective by showing that platforms increasingly function as privately governed infrastructures capable of setting rules, accumulating data and influencing the distribution of value among participants. Workers can therefore become dependent on technological systems that control access to customers and economic opportunities without being incorporated into conventional organizational structures. Garcia Calvo et al. (2023) extend the argument systemically by showing that platform work should be situated within wider transformations involving outsourcing, occupational restructuring and changes in labour-market institutions. Vallas and Schor (2020) provide the organizational connection by emphasizing asymmetries in data access and decision-making authority between platforms and workers. Considered jointly, these studies imply that platformization transforms employment through the interaction of infrastructural power, social inequality, organizational restructuring and worker dependence. Its effects therefore extend beyond recognized gig workers and can influence broader labour-market arrangements as platform-based coordination becomes increasingly embedded across industries.

1.2. Employment Status, Dependency and Precarity

Schor et al. (2020) show that the consequences of platform work depend strongly on workers' economic reliance on platform income, implying that flexibility cannot be interpreted uniformly across workers. Those with alternative income sources may exercise greater selectivity, whereas workers whose livelihoods depend on platforms face stronger pressures to accept unfavorable tasks and conditions. Pichault and McKeown (2019) reinforce this distinction by showing that formal self-employment does not necessarily provide substantive autonomy, since independent professionals may control some aspects of their schedules while remaining dependent on clients or platforms for assignments and income. Fleming (2017) places these mechanisms within a broader transformation of employment relations in which workers increasingly bear risks and costs previously assumed by organizations while being encouraged to view themselves as autonomous economic actors. Anwar and Graham (2021) extend this implication to African labour markets, where access to geographically dispersed digital work can coexist with uncertain demand, intense competition, weak bargaining power and limited social protection. Taken together, these contributions imply that platform autonomy should be assessed through workers' actual control over work and their economic alternatives rather than through contractual status alone. Digital flexibility can provide meaningful discretion for some workers while producing substantial dependency and insecurity for those lacking alternative sources of income or stronger labour-market options.

Johnston (2024) demonstrates that employment classification has observable consequences within the on-demand economy, implying that regulatory status should be treated as a substantive component of platform governance rather than merely a formal legal designation. This perspective complements Tan et al. (2021), who show that contractual consent alone provides an incomplete basis for evaluating platform employment because information asymmetries, algorithmic decisions and platform design shape the conditions under which workers exercise choice. Novitz (2021) broadens the institutional implications by emphasizing that short-term platform transactions can weaken the durable employment relationships through which social

protection, training and collective representation have traditionally been organized. Such fragmentation may therefore affect workers' long-term capabilities even when individual transactions appear flexible. Fleming (2017) provides the broader connection by showing how the transfer of risks and employment costs from organizations toward individuals can coexist with narratives of entrepreneurship and autonomy. Considered jointly, these studies imply that the sustainability of platform employment depends on the distribution of rights, risks and responsibilities between workers and platforms. Employment status, regulatory protection, access to social rights and continuity of employment relationships therefore remain important even in digitally mediated labour markets where organizational flexibility and short-term contracting are central features.

1.3. Careers, Job Quality and New Employment Risks

Sun et al. (2023) show that the apparent flexibility of food-delivery work can gradually evolve into forms of temporal dependency as earnings requirements, incentive structures and algorithmic coordination encourage workers to remain continuously available. This implies that the absence of fixed schedules does not necessarily provide substantive control over working time. Kost et al. (2020) reinforce this interpretation by showing that supposedly boundaryless platform careers remain constrained by ratings, accumulated profiles and platform-specific reputations that can restrict mobility across markets. Digital employment may therefore replace conventional organizational boundaries with new reputational and algorithmic ones. Caza et al. (2022) add that independent workers must personally manage uncertainty, isolation, employability and multiple organizational responsibilities that would often be supported within conventional employment relationships. Petriglieri et al. (2019) extend this implication to professional identity, demonstrating that precarious independent workers construct routines, relationships, places and purposes to maintain psychological stability and professional continuity outside traditional organizations. Taken together, these contributions imply that platformization does not simply remove organizational constraints and increase worker independence. It also transfers responsibility for time management, career development, employability and professional identity toward individuals while introducing alternative forms of dependency through algorithms, reputational systems and uncertain access to future work.

Martindale et al. (2024) demonstrate that platform workers hold heterogeneous preferences regarding autonomy, employment rights, income security and social protection, implying that flexibility and protection should not automatically be treated as opposing objectives. James (2024) complements this perspective by showing that the value of temporal flexibility depends partly on workers' household and caregiving responsibilities. Platform work may facilitate coordination between paid employment and private life for some workers while unpredictable demand, irregular income and continuous availability can make household planning more difficult. Wood et al. (2025) further emphasize that these experiences vary considerably across platform occupations, skill levels and local or remote labour markets, cautioning against treating gig work as a single employment regime. Kost et al. (2020) provide the career-related connection by showing that mobility itself can be constrained by platform-specific reputations and rules despite the formal absence of organizational careers. Considered jointly, these studies imply that platform employment should be evaluated through differentiated combinations of autonomy, security, mobility, household compatibility and institutional protection. Regulatory arrangements that assume all workers either prefer complete independence or require conventional employment may therefore overlook the diversity of worker circumstances and the possibility of combining meaningful flexibility with stronger rights, income security and social protection.

2. Algorithmic Management and the Transformation of Managerial Control

2.1. From Digital Intermediation to Algorithmic Control

Rosenblat and Stark (2016) show that platform management can exercise substantial control through information asymmetries concerning pricing, demand, passenger destinations and system rules, even while presenting drivers as independent entrepreneurs. This implies that managerial authority can operate indirectly through interface design and unequal access to information rather than through explicit supervisory commands. Lee et al. (2015) reinforce this interpretation by demonstrating that software systems can perform core managerial functions such as task allocation, information provision and worker evaluation. Their findings indicate that replacing human supervisors with algorithms does not eliminate management but relocates authority into digital infrastructures whose underlying logic may remain opaque to workers. Gandini (2019) extends this perspective through labour process theory by showing that ratings, rankings, customer feedback and reputational mechanisms function as forms of technonormative control. Wood et al. (2019) further demonstrate that workers can retain substantial discretion over when and where they work while remaining strongly constrained by systems governing reputation, visibility, competition and access to clients. Taken together, these contributions imply that autonomy and managerial control should not be treated as mutually exclusive dimensions. Platform employment can provide temporal discretion while simultaneously strengthening informational, reputational and algorithmic mechanisms that shape worker behaviour and access to economic opportunities.

Kellogg et al. (2020) conceptualize algorithmic management as a contested terrain in which digital systems restrict, recommend, record, rate, replace and reward worker behaviour. This implies that algorithmic control is not a purely technical process but an organizational mechanism capable of restructuring the balance between managerial authority and worker discretion. Shapiro (2018) complements this perspective by showing that workers actively interpret and strategically navigate platform rules through forms of arbitrage. Their capacity to adapt demonstrates that platform workers are not simply passive recipients of algorithmic instructions, although their strategies remain bounded by infrastructures controlled by platforms. Griesbach et al. (2019) similarly show that food-delivery workers develop ways of interpreting and sometimes circumventing assignment, evaluation and incentive systems, while their dependence on platform-generated work continues to reinforce managerial influence. Lee et al. (2015) provide the broader technological connection by demonstrating that coordination and evaluation increasingly occur through systems whose decision processes workers cannot fully observe. Considered jointly, these studies imply that algorithmic management produces an evolving relationship between control and adaptation. Platforms retain significant structural power through data, task allocation and system design, while workers respond strategically within these constraints, creating employment relations characterized by continuous negotiation between technological coordination, economic dependence and worker agency.

2.2. Algorithmic HRM, Matching, Monitoring and Evaluation

Rahman (2021) shows that opaque algorithmic evaluation can create an “invisible cage” in which workers continuously attempt to infer the criteria determining performance assessments without having reliable access to those criteria. This implies that uncertainty itself can operate as a form of managerial control by encouraging workers to adapt their behaviour to partially observable signals. Möhlmann et al. (2021) reinforce this interpretation by showing that platform algorithms simultaneously perform matching and control functions, connecting workers with demand while also shaping access to assignments, performance expectations and economic outcomes. Jarrahi et al. (2021) broaden this mechanism beyond platform work by

demonstrating that algorithmic management increasingly coordinates, directs and evaluates workers across different organizational settings. Their contribution implies that automated systems can centralize decision authority even when workers are geographically dispersed. Duggan et al. (2020) connect these technological developments directly to employment relations by showing that algorithms increasingly perform functions traditionally associated with managers and HR professionals, including work allocation and performance evaluation. Considered together, these contributions imply that algorithmic management should be understood as a transformation of managerial authority rather than as simple technological intermediation. Control becomes embedded in digital systems whose opacity, allocation procedures and evaluative mechanisms can substantially influence worker autonomy and access to employment opportunities.

Duggan et al. (2023) demonstrate empirically that app workers experience performance monitoring, evaluation and behavioural incentives as an integrated form of algorithmic HRM control despite often remaining formally outside conventional employment relationships. This implies that managerial functions can be reproduced without standard organizational membership, challenging conventional boundaries of HRM. Parent-Rochelleau et al. (2024) extend this perspective methodologically by distinguishing among automated monitoring, scheduling, evaluation and decision-making practices rather than treating algorithmic management as a single homogeneous phenomenon. Their contribution implies that different forms of automation may generate different effects on autonomy, well-being and worker responses. Kadolkar et al. (2024) reinforce this differentiated interpretation by showing that algorithmic management can create both demands and resources, with outcomes depending on platform characteristics, organizational design and workers' degree of dependency. Möhlmann et al. (2021) provide the organizational connection by emphasizing that algorithmic systems combine market coordination with managerial control. Taken together, these studies imply that the consequences of automated management cannot be inferred from technology alone. Employment outcomes depend on which managerial functions are automated, how transparent these systems are, how strongly workers depend on them for access to work and how organizational rules distribute control, information and discretion between workers and digital platforms.

2.3. Work Intensification, Fairness and the Consequences of Algorithmic Management

Wiener et al. (2023) show that workers' responses to algorithmic control depend partly on whether managerial mechanisms are perceived as legitimate, implying that automated authority cannot rely exclusively on technological capacity to secure compliance. Control mechanisms regarded as unfair or insufficiently justified can encourage resistance or circumvention, particularly when workers lack transparency and voice. McDaid et al. (2023) reinforce this relational interpretation by demonstrating that Uber drivers actively interpret, negotiate and contest algorithmically mediated expectations concerning availability, customer demand and service quality. Their findings imply that control emerges through interactions among platforms, markets, customers and workers rather than through software alone. Muldoon and Raekstad (2023) extend this argument by emphasizing the risk of algorithmic domination when platforms possess extensive unilateral authority over information, rules and access to work while workers have limited institutional capacity to challenge decisions. Heiland (2022) adds the spatial and temporal dimension by showing that food-delivery algorithms coordinate work within concrete urban environments and geographically specific working-time regimes. Taken together, these contributions imply that algorithmic management operates through a combination of technological authority, market pressures, spatial constraints and worker acceptance. Its effectiveness

and employment consequences therefore depend not only on automated coordination but also on legitimacy, contestability and workers' capacity to respond to platform decisions.

Liu et al. (2024) demonstrate that algorithmic management affects gig workers' job satisfaction through monitoring, evaluation and limitations on control over work processes, implying that automated management has consequences extending beyond operational coordination to the psychological experience of employment. Longoni et al. (2024) broaden this implication by showing that employment conditions in last-mile delivery platforms form part of the sustainability of platform business models. Their findings suggest that workload, worker welfare and employment quality cannot be treated as external to organizational performance when competitive pressure and technological coordination shape how labour is organized. Adekoya et al. (2025) extend these concerns to Nigeria by showing that algorithmic management influences not only immediate work processes but also workers' employment relationships, career experiences and perceptions of longer-term security. Wiener et al. (2023) provide the connecting mechanism by emphasizing that worker reactions depend partly on whether automated control is regarded as procedurally fair and legitimate. Considered jointly, these studies imply that platform governance should be evaluated through worker well-being, career continuity, employment quality and perceived fairness alongside organizational efficiency. Algorithmic systems may improve coordination, but their sustainability depends on whether the resulting employment arrangements provide acceptable workloads, credible career prospects, transparent procedures and sufficient opportunities for workers to understand or contest decisions affecting their work.

3. Worker Agency, Collective Relations and the Regulation of Platform Employment

3.1. Resistance, Worker Voice and Collective Agency

Cameron and Rahman (2022) show that control and resistance in the gig economy develop recursively, implying that platform employment relations cannot be understood through a one-directional model in which technology determines worker behaviour. Worker responses can alter managerial practices, while subsequent platform adjustments reshape new forms of resistance. Tassinari and Maccarrone (2020) reinforce this perspective by demonstrating that food-delivery couriers can develop solidarity and collective identities despite fragmented workplaces and individualized employment arrangements. Shared grievances, physical meeting points and worker communication can therefore transform dispersed experiences of control into collective concerns. Kougianou and Mendonça (2021) add that digital technologies themselves can support this process, since the same infrastructures used by platforms to individualize and monitor workers can also be employed by couriers to exchange information and create alternative voice networks. Cini and Goldmann (2021) provide a broader explanation by emphasizing that mobilization depends on workers' practical capabilities, including available resources, social relationships, organizational infrastructures and institutional opportunities. Taken together, these contributions imply that algorithmic management does not eliminate collective agency. Platform workers can develop new forms of solidarity, voice and mobilization when shared grievances are supported by communication networks and sufficient organizational resources, even in the absence of conventional workplaces or established collective-bargaining structures.

Mendonça et al. (2023) show that unilateral changes to platform algorithms can alter work allocation, autonomy and economic opportunities, implying that technical modifications can become substantive changes in employment conditions and thereby generate disengagement or

resistance. Dasgupta et al. (2025) broaden this implication by demonstrating that worker resistance ranges from individualized adaptation to collective mobilization and is shaped by relationships among workers, customers and platform organizations. Cini et al. (2022) further show that collective representation does not follow a single institutional pathway, since some gig-worker initiatives develop independently while others form alliances with established trade unions. Their findings imply that platformization encourages hybrid forms of worker organization adapted to fragmented workplaces, uncertain employment status and algorithmic control. Tassinari and Maccarrone (2020) provide the connecting mechanism by showing that shared grievances and collective identities can emerge despite the individualized organization of platform labour. Considered jointly, these studies imply that worker contestation remains an important feature of digitally mediated employment. Rapid changes in platform rules can create new grievances, while social networks, grassroots organizations and unions provide different resources for collective response. Platform employment relations therefore evolve through continuing negotiation over control, representation and voice rather than through uncontested technological coordination.

3.2. Trade Unions, Labour Unrest and New Collective Institutions

Umney et al. (2024) show that platform-worker unrest is geographically widespread and that conflicts over pay, algorithms, working conditions and employment status emerge across diverse institutional settings. This implies that individualized gig work does not eliminate collective conflict, even when conventional workplaces and union structures are weak. Joyce et al. (2023) reinforce this perspective by situating platform struggles within longer traditions of industrial relations, showing that disputes over control, compensation and labour power remain central despite the technological and contractual novelty of platform work. Ford and Honan (2019) add evidence from Indonesia, where worker communities and informal mutual-aid practices provide forms of collective support outside traditional organizations. Their findings nevertheless indicate that such solidarity has limits when workers confront structural issues such as pay, status and platform governance. Wood and Lehdonvirta (2021) provide the conceptual connection through subordinated agency, showing that workers may retain discretion over clients or tasks while remaining structurally dependent on platforms controlling market access and visibility. Taken together, these contributions imply that collective action in platform work emerges from the coexistence of formal independence and infrastructural dependence. Informal networks can support solidarity, but more durable forms of representation may remain necessary when grievances concern rules and economic conditions that individual workers cannot alter independently.

Maffie (2024) shows that platform companies actively structure prices, information and economic opportunities, implying that workers' exposure to market risk partly reflects managerial choices rather than impersonal market forces. This perspective strengthens the interpretation of income volatility and access to work as employment-relations issues that can generate demands for collective representation. Rolf et al. (2022) extend this institutional dimension by showing that platform firms may provide selected social and employment protections outside conventional employee status. Such arrangements can improve particular benefits while leaving the design and scope of protection largely under private managerial control. Martindale et al. (2024) further demonstrate that many platform workers seek combinations of flexibility, representation and stronger protections rather than choosing between complete independence and conventional employment. Their findings imply that collective institutions may need to accommodate heterogeneous forms of platform dependence. Umney et al. (2024) provide the broader connection by showing that worker mobilization frequently arises around pay, algorithmic management and employment status across different national contexts. Considered

jointly, these studies imply that platform labour requires institutional arrangements capable of addressing managerial risk allocation, worker representation and social protection simultaneously. Flexible employment need not exclude collective rights, but sustainable protections are less likely when they remain entirely discretionary policies controlled by platform firms.

3.3. Regulation, Employment Classification and Algorithmic Accountability

Maffie (2024) shows that platform firms actively structure prices, information and work-allocation mechanisms, implying that regulatory assessments based exclusively on contractual classification may overlook important forms of economic and organizational control. This perspective is reinforced by Aloisi (2022), who demonstrates that European courts and policymakers increasingly examine the substantive reality of platform work rather than relying solely on contractual descriptions of self-employment. The implication is that managerial authority exercised through digital systems can become relevant when determining whether workers should benefit from conventional labour protections. De Stefano and Aloisi (2022) extend this connection by showing that European regulatory developments increasingly treat employment classification and algorithmic management as interdependent issues. Monitoring, directing and evaluating workers through digital infrastructures can therefore provide evidence concerning the underlying character of the employment relationship. Johnston (2024) adds an empirical dimension by showing that changes in legal employment arrangements have observable consequences for workers and platform organizations without necessarily eliminating all forms of flexibility. Taken together, these contributions imply that effective platform regulation should examine contractual status, algorithmic direction, information asymmetries and market-design powers simultaneously. The regulatory question is therefore not limited to whether workers are formally classified as employees, but also concerns how platforms exercise substantive authority over access to work, remuneration and performance.

Fredman (2025) argues that platform regulation must move beyond employment classification alone by addressing work quality, worker rights and algorithmic governance within a more comprehensive framework. This implies that correcting misclassification may remain insufficient when automated managerial systems continue to shape working conditions and decision-making processes. Muldoon (2024) adds that regulatory outcomes are also influenced by the strategic responses of platform companies, which can use litigation, subcontracting, negotiations, regulatory activism or threats of market withdrawal to preserve preferred employment models. Vieira et al. (2025) reinforce this dynamic perspective by showing that regulatory change generates continuing interaction between legal rules and organizational adaptation rather than a simple shift from self-employment toward employee status. De Stefano and Aloisi (2022) provide the connecting institutional mechanism by demonstrating that algorithmic control increasingly enters directly into debates over labour-law protection. Considered jointly, these studies imply that platform regulation should be understood as an evolving process involving states, courts, companies, workers and technological systems. Stronger legal protections may alter corporate strategies, while firms can redesign organizational arrangements in response. Sustainable regulation therefore requires frameworks capable of adapting to changes in employment models while maintaining substantive standards concerning classification, automated management, decent work and institutional responsibility.

4. Discussion

The literature examined in this paper indicates that platform work represents a significant reconfiguration of employment relations rather than the simple emergence of a technologically mediated labor market. The findings converge on the idea that contractual independence may coexist with substantial economic and organizational dependence. Vallas and Schor (2020) and

De Stefano (2016) demonstrate that platforms perform functions traditionally associated with employers, including work coordination, access regulation, evaluation and payment, while frequently maintaining workers outside conventional employment categories. This apparent contradiction is particularly important because, as Schor et al. (2020) and Pichault and McKeown (2019) emphasize, autonomy varies according to workers' dependence on platform-generated income and their availability of alternative employment opportunities. Consequently, flexibility cannot be regarded as an intrinsic characteristic of platform work. For workers with limited alternatives, nominal freedom over schedules may coexist with income insecurity, precariousness and weak bargaining capacity. Anwar and Graham (2021) illustrate this tension in African digital labor markets, where expanded access to employment opportunities does not necessarily translate into stable or protected employment. Similarly, Sun et al. (2023) demonstrate that temporal flexibility may progressively become temporal dependency. Platformization therefore redistributes employment risks toward workers while simultaneously creating new organizational dependencies based on access, reputation and digitally mediated labor-market opportunities.

A second major implication concerns the transformation of managerial authority through algorithmic systems. The contributions reviewed suggest that digitalization does not weaken managerial control but changes the mechanisms through which such control is exercised. Rosenblat and Stark (2016) demonstrate that information asymmetries allow platforms to influence worker behavior despite the formal characterization of workers as independent contractors, while Lee et al. (2015) show that algorithms increasingly undertake managerial functions related to task allocation, coordination and evaluation. These findings correspond with Gandini's (2019) interpretation of ratings and reputational systems as instruments of techno-normative control and with Kellogg et al. (2020), who conceptualize algorithmic management as an organizational terrain in which worker behavior is continuously recorded, rated, restricted and rewarded. Nevertheless, managerial power remains contested rather than absolute. Shapiro (2018) and Griesbach et al. (2019) demonstrate that workers develop strategies for interpreting, circumventing or adapting to platform rules. Such agency, however, operates within infrastructures whose fundamental parameters remain controlled by platform organizations. Rahman (2021) further shows that opacity can itself reinforce control because workers must continually infer changing evaluative criteria. The resulting employment relationship therefore combines formal autonomy with informational asymmetry, technological surveillance and limited procedural transparency, producing new forms of managerial authority that extend beyond traditional hierarchical supervision.

The third central implication is that algorithmic control and fragmented employment do not eliminate worker agency, collective organization or the continuing relevance of labor regulation. Cameron and Rahman (2022) show that control and resistance develop recursively, whereas Tassinari and Maccarrone (2020) demonstrate that platform workers can construct solidarity and collective identities despite dispersed workplaces and individualized contracting arrangements. Digital technologies may consequently have a dual function: platforms use them to coordinate and monitor labor, but workers can employ the same communication infrastructures to exchange information and develop alternative channels of voice, as demonstrated by Kougiannou and Mendonça (2021). The persistence of collective conflict documented by Umney et al. (2024) and Joyce et al. (2023) further indicates that technological intermediation does not remove traditional disputes concerning remuneration, authority, employment status and worker representation. These developments support the regulatory arguments advanced by Aloisi (2022), De Stefano and Aloisi (2022) and Fredman (2025), according to whom effective labor regulation must move beyond formal contractual classification and examine substantive organizational control, algorithmic governance and employment quality. Regulation must also remain

responsive to organizational adaptation, since Muldoon (2024) and Vieira et al. (2025) show that platform companies can modify their strategies in response to regulatory intervention. Sustainable platform governance therefore requires the integration of flexibility with transparency, collective voice, social protection and meaningful algorithmic accountability.

Conclusion

This paper shows that platform work and algorithmic management are reshaping employment relations by modifying the distribution of authority, risk, autonomy and responsibility between workers and digital platforms. The literature reviewed demonstrates that platformization cannot be interpreted merely as a technological innovation facilitating transactions between independent economic actors. Platforms frequently exercise substantial organizational influence through task allocation, pricing systems, ratings, reputational mechanisms, monitoring and access to work opportunities. Consequently, contractual self-employment may coexist with significant economic dependency and managerial control. The analysis also highlights the heterogeneous character of platform work. Flexibility may offer meaningful advantages for some workers, particularly those with alternative sources of income or strong bargaining positions, while generating insecurity, income volatility and limited social protection for others. Algorithmic management further intensifies these tensions because managerial authority increasingly operates through opaque technological systems rather than conventional hierarchical supervision. The transformation of employment relations therefore lies not in the disappearance of management, but in its relocation within digital infrastructures that structure worker behavior, evaluate performance and regulate access to economic opportunities.

The paper also emphasizes that technological control does not eliminate worker agency or collective action. Platform workers develop individual and collective strategies to interpret, negotiate and sometimes challenge algorithmic rules, while new forms of solidarity and representation emerge despite fragmented workplaces and heterogeneous employment statuses. These developments confirm that the future of platform employment will depend largely on the institutional capacity to reconcile organizational flexibility with employment security, procedural fairness, transparency and collective voice. Regulatory approaches based exclusively on contractual classification are therefore insufficient because they may overlook substantive forms of managerial authority embedded in platform infrastructures. More comprehensive frameworks should consider employment status, economic dependency, algorithmic decision-making, social protection, worker representation and mechanisms allowing workers to understand and contest decisions affecting their employment conditions. Platform work consequently raises a broader question concerning the institutional boundaries of contemporary employment itself. As digital coordination continues to expand beyond the traditional gig economy, labor regulation and employment institutions will need to adapt to organizational models in which technological intermediation, managerial control and worker autonomy increasingly coexist rather than constitute mutually exclusive forms of work.

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