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Algorithmic Management and Inequality in the Gig Economy: A Conceptual Framework for Mechanism-Targeted Governance in Bogotá

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Abstract

Platform delivery work is widely described as precarious, yet limited scholarly attention has been paid to how algorithmic systems translate workers' lived conditions into inputs that shape the algorithms' availability heuristics. This paper proposes a conceptual framework using interpretive synthesis including theories to platform capitalism to address that gap. Based on an interpretive synthesis of research on platform capitalism, algorithmic control and platform labour in the Global South, together with Fairwork Colombia assessments and Bogotá-specific studies, the research highlights that platform AI architectures operate as a conversion process. Structural disadvantages such as informality, migration status, and peripheral residence form the data, are encoded in context-blind evaluation metrics, and are reflected in allocation and sanctions decisions, so that past disadvantage shapes future opportunity. The framework separates the managerial functions through which this occurs, following Kellogg et al.'s six Rs, and the three properties that strengthen and shape it: degree of automation, adaptive personalisation, and opacity. Institutional counterweights and worker agency are identified as boundary conditions. Seven testable propositions link the managerial functions to the point at which they can impact the process, detailing what counts as counterevidence. Bogotá, where the 2025 labour reform has signalled the start of regulation of platform work, is a benchmark setting for the analysis of platform marketplaces, not an empirical case. The framework links design and governance instruments to the points in the process they can actually reach, and sets out an agenda for empirical work relevant to United Nations Sustainable Development Goals 8, 9 and 10. The study is conceptual, and its propositions may be considered for future research.

1. Introduction

Each morning in Bogotá, a Rappi courier logs into an app that determines the work they are offered, the price attached to it, the suggested route, and the standing that determines whether work will be offered tomorrow. The logic behind these decisions is invisible to the courier and, in practice, cannot be queried or appealed. That invisibility is not incidental to platform-mediated delivery, but it is part of what distinguishes platform-mediated gig work from earlier forms of informal urban labour (Rosenblat, 2018).

Research on platform labour has extensively documented the resulting precarity. Available scholarship on platform capitalism shows that platforms extract value by externalising risk onto workers while retaining control of the terms of work (Srnicek, 2017). Ethnographic work shows that control operates through information asymmetry rather than direct supervision (Rosenblat, 2018). The algorithmic management literature specifies the managerial functions that algorithms perform (Kellogg, Valentine, and Christin, 2020). Studies in the Global South add that algorithmic control gives workers flexibility over when they work but little control over income or conditions (Wood et al., 2019), and Bogotá-specific research documents migrant exclusion, coercion and resistance on delivery platforms (Sánchez et al., 2024) and the pay and conditions recorded by Fairwork (2025).

What these studies leave implicit is the process by which the circumstances workers bring to a platform (informal status, migration status, residence on the urban periphery) become the opportunities the platform subsequently offers. Precarity is described, and the functions of algorithmic control are classified, but the route from context to algorithmic standing, and from standing to income and dependence, is not theorised. This is a gap in the mechanism rather than only an absence of studies on one city. It matters for two reasons. First, gig work could be precarious without any algorithmic mediation, as traditional informal day labour has been for decades, so a claim that AI is distinctively implicated needs a mechanism, not a correlation. Secondly, governance that targets precarity in general leaves the architecture that reproduces it untouched.

Algorithmic governance occupies a pivotal position, as it is present in workers' experience from the start. The paper asks the research question of through what process do platform AI architectures convert structural disadvantage into unequal outcomes for delivery workers, and under what conditions is that process strengthened or weakened? In what ways do AI-specific mechanisms, including intelligent automation, algorithmic control, and hyper-personalisation, convert general gig-work precarity into structurally unequal outcomes for migrant and low-income delivery workers in Bogotá during and after the COVID-19 pandemic? It answers by developing a conceptual framework in which a conversion process links worker context, data capture, algorithmic evaluation, allocation, sanction, and economic dependence. Three properties of the AI architecture (automation, adaptive personalisation and opacity) modulate the process, and institutional counterweights and worker agency condition it. Governance instruments are then mapped onto the points in the process that they can reach.

The article contributes in four ways. The theory separates the functions of algorithmic control from the properties that make learning-based systems analytically distinct, resolving an overlap that arises when automation, personalisation and control are treated as parallel mechanisms. For conceptual understanding, it treats context, including the institutional capacity to audit and contest algorithms, as a boundary condition of the process rather than a mere location. The research presents seven propositions that can be tested through algorithmic audits, comparative designs, and longitudinal studies. In terms of policy, it shows why governance must be tailored to specific points in the process, which is directly relevant to SDG 8 (decent work), SDG 9 (industry, innovation and infrastructure), and SDG 10 (reduced inequalities).

That framing is deliberately more specific than conventional accounts of gig-work precarity. Gig work could, in principle, be precarious without any algorithmic mediation and traditional informal day labour has been precarious for decades. What makes contemporary platform work analytically distinctive is that precarity here is actively manufactured, monitored, and enforced through specific computational mechanisms such as real-time geolocation tracking, dynamic and individualised pricing, opaque rating algorithms, and generative AI-driven personalisation systems that were not part of pre-platform service economies. Treating this as a question of AI governance rather than simply of labour rights is not a rhetorical move. It reflects a real difference in where the leverage for intervention lies.

The claims are deliberately bounded. The article does not claim that platforms intend to discriminate, that learning-based allocation operates on any named platform in Bogotá, or that outcomes in Bogotá are worse than elsewhere. It proposes a mechanism, specifies the conditions under which it should operate, and, in further sections, states what evidence would count against it. Section 2 of the article reviews the theoretical background and identifies what it leaves unexplained. Section 3 sets out the conceptual method, and Section 4 describes Bogotá as an analytical setting. Section 5 presents the results of the synthesis, constructs, framework, and propositions; Section 6 discusses implications, boundary conditions, and future research; and Section 7 presents the conclusions.

2. Theoretical Background

2.1 Platform capitalism and engineered asymmetry

Srnicek (2017) situates that asymmetry within the wider logic of platform capitalism, considering platforms to be business models organised around the extraction, control, and monetisation of data. ‘Lean’ platforms such as Uber externalise labour costs and capital risk onto workers while retaining algorithmic control over the terms of work. Rosenblat (2018) describes this as engineered information asymmetry, showing how this operates at the level of the worker. Gig workers see the tasks they receive and the pay they are offered, but not the logic that generates either. Together, these accounts establish two premises that value capture and risk allocation are built into platform design, and that opacity is a feature of that design rather than a technical by-product. Inequality in the gig economy is not a side effect of AI deployment but rather the mechanism by which platforms generate value.

2.2 Algorithmic control and its limits as an explanation of inequality

Kellogg et al. (2020) organise algorithmic control into six functions. Platforms direct workers by restricting their options and recommending actions, evaluate them by recording behaviour and rating performance, and discipline them by replacing underperformers and rewarding compliance. The framework explains how managerial authority can be exercised without a human manager. It classifies how control is exercised. It is not, in itself, an account of who bears the costs of that control or of how existing disadvantage enters into it. Three further strands bear on the framework. Veen et al. (2020) analyse food-delivery work in Australia as a labour process in which platforms organise and intensify work through algorithmic control, and workers respond in kind. Duggan et al. (2020) connect algorithmic management with work allocation and performance management in human resource management and employment relations. Meijerink and Bondarouk (2023) propose a duality in which HRM algorithms can both enable and constrain worker autonomy. Rosenblat and Stark (2016) develop the information-asymmetry argument for Uber drivers, supporting the treatment of opacity as a property of the architecture, as discussed in section 5.

2.3 Platform work in the Global South and in Bogotá

Wood et al. (2019), drawing from the interviews and a survey of workers in Southeast Asia and Africa, find that algorithmic control affords task flexibility while exposing workers to low pay, social isolation and irregular hours. Autonomy over scheduling coexists with limited autonomy over income and working conditions. Studies of Latin American delivery work show how spatial and migration dynamics matter. Vecchio et al. (2022) document a spatial mismatch for couriers in Santiago, who are predominantly peripheral residents serving central areas. Sánchez et al. (2024) examine how Bogotá's delivery platforms structure migrant exclusion, coercion and resistance, and describe how migrants' legal status and platform standing can become mutually reinforcing vulnerabilities. Bates et al. (2019) frame the corporate strategy as 'platform urbanism', in which platforms present themselves as coordinators of urban labour while shedding employer responsibilities. For migrants and low-income workers, platforms offer access to income when formal employment is blocked by documentation barriers, credential non-recognition, or discrimination, but that access can become a form of dependency (Abkhezr and McMahon, 2022).

2.4 Transformative Potential of AI and the Limits of Current Evidence

Early dispatch systems used fixed rules in terms of assigning the nearest driver, applying surge pricing, and using average star ratings. Contemporary platforms are described as using learning systems that update outputs from accumulated behavioural histories. The theoretical significance of this transformation is that a fixed rule can be understood, predicted and partly navigated by workers who know it, whereas a system that continuously updates its model of an individual worker cannot. Its effects may compound, carrying past circumstances into future opportunity through a process that workers cannot observe and regulators cannot easily audit.

Publicly available technical documentation on platform personalisation primarily focuses on consumer-facing recommendation systems, as illustrated by Uber Eats' account of graph learning methods for food discovery (Jain et al., 2019). By contrast, the sources reviewed do not provide sufficient public documentation to establish precisely how worker-facing allocation and rating systems operate on Rappi or Uber Eats in Bogotá. Nor do the sources reviewed establish that these platforms use generative AI for worker-facing functions (Wessel et al., 2025; Mer et al., 2024). Accordingly, this article distinguishes between machine-learning-based systems and rule-based algorithmic management while using AI as an operational umbrella term where appropriate. It treats adaptive learning in worker-facing systems as an empirical question rather than an established platform capability.

Three Colombian sources do supply worker-side descriptions, and they converge. The Fairwork Colombia 2025 report records a Rappi courier in Armenia (Quindío) who describes a tier system (Bronze, Silver and Diamond), advance reservation of slots with sanctions for missed hours, and lower-value assignments after logging in during the time she had set aside for caregiving, so that she works longer to recover her status (Fairwork, 2025). A participatory study by Fundación Karisma, based on interviews and a WhatsApp group with eight Rappi couriers between March and October 2021 (five in Cali, the rest in

Bogotá, Cartagena and Barranquilla), reports unexplained account blocks, support that disappears, pick-ups assigned more than five kilometres away while many couriers wait nearby, and protests in northern Bogotá in August 2020 that concerned in part a scoring system said to exclude some couriers from certain areas or hours (Castañeda, 2022). A journalistic report built around a courier in northern Bogotá describes a six-level points system in which couriers at lower levels are shown fewer orders, at greater distances and of lower value, and quotes a Rappi spokesperson saying the system was needed to avoid having too many couriers connected at times when they are not needed (Rodríguez González, 2021). Together, these accounts indicate that standing-based allocation is reported by workers in several Colombian cities, including Bogotá, and that Rappi has acknowledged the use of a points system. They are small and qualitative, and the last is an undergraduate report. Fairwork (2023), drawing on 116 worker interviews across 12 platforms in Bogotá, Medellín and Cali, adds that Picap workers found the rating criteria unclear and said they changed without explanation, which is consistent with the opacity described here. None of these accounts shows how the system is built, whether it treats workers differently by residence or migration status, or whether it learns from individual workers, which is why Propositions 1 and 2 remain propositions.

2.5 Research Gap

The literature explains why digital labour platforms are organised around value extraction and risk allocation, identifies the principal functions of algorithmic control, and documents precarious working conditions in the Global South, including Bogotá's delivery sector. However, the relationship between worker context, algorithmic standing, and work-related outcomes remains insufficiently theorised as an integrated mechanism. In particular, existing accounts do not adequately distinguish the functions through which algorithmic management exercises control from the computational properties that might generate, update, or reproduce workers' standing, nor do they specify the institutional conditions under which these relationships may be reinforced or constrained. This article addresses this conceptual gap by developing a mechanism that links worker context to algorithmic standing and allocation outcomes, while treating adaptive learning as a theoretical possibility requiring empirical verification rather than as an established feature of the platforms examined.

3. Methodology: Conceptual Synthesis

3.1 Research Design

This article adopts a theory-building conceptual synthesis to develop a conceptual framework for understanding how worker context may become consequential within algorithmic labour platforms. Rather than testing causal relationships or estimating empirical effects, the study integrates existing theoretical arguments, conceptual contributions, and documented accounts of platform work to identify relationships that warrant further investigation. Its central objective is to connect three analytical dimensions that are often addressed separately, including the organisation of algorithmic control, the potential translation of worker-related signals into algorithmic standing, and the consequences of

standing for the allocation of work and the distribution of risk. The synthesis proceeds through conceptual integration rather than empirical aggregation. Scholarship on platform capitalism and labour process theory establishes the organisational incentives and power relations within which algorithmic management operates. Research on algorithmic control identifies the functions through which platforms allocate tasks, monitor performance, evaluate workers, and regulate access to work. Studies of platform labour precarity, including research on delivery work in Colombia, provide contextual evidence of workers' reported experiences of scoring, tiering, opaque allocation, and restricted access to assignments. These bodies of literature are brought into dialogue to examine how worker circumstances may become legible to platform systems, how such information might affect algorithmic standing, and how standing may mediate access to work and associated risks.

The conceptual framework distinguishes between the functions of algorithmic control and the computational properties of the systems through which control may be exercised. Task allocation, evaluation, ranking, and access restriction are treated as control functions, rule-based decision-making, machine-learning-based prediction, and adaptive updating are treated as analytically distinct computational possibilities. This distinction prevents the existence of a control function from being taken as evidence of a particular AI architecture. In particular, adaptive learning is treated as a theoretically relevant possibility rather than an established feature of the platforms examined. The resulting framework specifies relationships among worker context, algorithmic standing, allocation outcomes, and institutional conditions. These relationships are articulated as propositions intended to guide subsequent empirical research. The study thus makes a conceptual contribution by developing a mechanism that can be investigated through future worker interviews, platform documentation, audit studies, or other appropriate empirical designs. It does not claim to establish the actual technical operation of the platforms, demonstrate causal effects, or verify the use of individualised adaptive learning in worker-facing systems.

3.2 Sources

The source corpus is purposive and consists of the sources the authors assembled while developing this article, together with the peer-reviewed, institutional and legal sources listed in the references: peer-reviewed work on platform capitalism, algorithmic management and platform labour; studies of Latin American and Bogotá delivery work; the Fairwork Colombia 2025 report (Fairwork, 2025); and journalistic and legal sources on Colombian labour reform, including Ley 2466 de 2025. Sources were assigned to evidential tiers. Peer-reviewed and official sources support conceptual and causal arguments, reports support descriptive claims about conditions, and journalistic and industry materials are used only for descriptive context and never as the sole support for a causal claim. The framework is a proposal built from a limited set of sources; the absence of a source on a topic does not mean none exists, and the propositions are offered for testing, not as conclusions of a systematic review. A systematic search of Scopus, Web of Science and Spanish-language databases is identified in section 6.5 as a priority for future work.

3.3 Analytical procedure

The conceptual synthesis proceeds in five steps. First, constructs used across the sources were listed and defined. Particular attention was given to worker context, algorithmic standing, allocation outcomes, institutional conditions, and the computational properties potentially associated with algorithmic decision-making. Second, each construct was compared with Kellogg et al.'s (2020) six functions to test whether it was conceptually distinct; constructs that proved to be functions of control were separated from constructs that describe how, or how strongly, those functions operate (properties). Accordingly, allocation, evaluation, ranking, and access restriction are treated as control functions, whereas rule-based decision-making, machine-learning-based prediction, and adaptive updating are treated as distinct computational possibilities. Third, relationships among constructs were traced, and for each, the explanatory mechanism and supporting literature were identified. The analysis considered the theoretical rationale for each proposed relationship, the supporting literature, and the limits of the available evidence. Reported associations between worker standing and access to work were distinguished from demonstrated causal relationships, while documented platform practices were differentiated from inferences concerning their underlying computational mechanisms. Fourth, institutional and individual conditions under which relationships should strengthen or weaken were identified from the Global South and Bogotá studies. Fifth, propositions were formulated only where a mechanism and supporting literature could be stated; relationships that rested on assertion alone were treated as open questions. The resulting propositions specify relationships for future investigation while preserving the distinction between conceptual plausibility and empirical verification.

3.4 Scope and ethical considerations

Bogotá is used as an analytical setting to illustrate the framework's relevance to urban delivery work in the Global South. No human-subject data are used. Evidence on couriers is drawn from published studies and Vecchio et al. (2022). The study relies exclusively on published literature, institutional reports, legal materials, and other publicly available sources. It involves no original interviews, surveys, participant recruitment, or collection of primary human-subject data. Published worker testimony is attributed to its original source and interpreted within the geographical and methodological scope of the study from which it derives. Where individual accounts are used to illustrate a potential mechanism, they are not treated as representative of the wider workforce or as sufficient evidence of causality. The analysis also refrains from inferring undocumented platform practices, demographic discrimination, or adaptive learning from workers' reported experiences alone.

3.5 Corpus

The table below shows what the corpus contains and how each tier is used to judge the evidential base.

Tier	Sources	Usage
Peer-reviewed theory and empirical studies	Kellogg et al. (2020); Wood et al. (2019); Duggan et al. (2020); Veen et al. (2020); Meijerink and Bondarouk (2023); Rosenblat and Stark (2016); Abkhezr and McMahon (2022); Bates et al. (2019); Lee (2024); Lang et al. (2023); Sánchez et al. (2024); Vecchio et al. (2022)	Constructs, mechanisms and propositions
Academic books	Srnicek (2017); Rosenblat (2018)	Premises about value capture and opacity
Institutional report	Fairwork (2025)	Conditions of work, pay evidence, worker testimony, and legal summary
Legal texts and analysis	Ley 2466 de 2025; Ley 1581 de 2012; Piedrahita Vargas	Institutional counterweights (to be verified against the texts)
Journalism and industry	Buitrago (2025); Jain et al. (2019)	Context only; description of consumer-side recommendation
Unverified	Mer et al. (2024); Wessel et al. (2025)	Not relied on for any proposition
NGO report	Castañeda (2022), Fundación Karisma	Worker accounts of points systems, blocks and opaque assignment (eight couriers); 2019 survey figures, secondary
Undergraduate report	Rodríguez González (2021)	Illustrative Bogotá courier account and company statement; used only where corroborated by other sources

Sánchez et al. (2024), Fairwork (2023, 2025), Castañeda (2022) and Rodríguez González (2021) study Bogotá or Colombia directly. Vecchio et al. (2022) studied Santiago, and the remaining sources are drawn from other countries. The propositions, therefore, transfer evidence across contexts, which section 5.6 treats as an explicit limit.

4. Bogotá as an Analytical Setting

4.1 Labour-market conditions

Bogotá combines features that make it analytically informative for the mechanism proposed here. It has a large informal labour market, substantial recent migration, a pronounced centre–periphery pattern of residence and employment, and rapid adoption of platforms during and after the COVID-19 pandemic. Fairwork (2025), drawing on DANE and other sources, reports a Gini coefficient of 0.523, informal

employment of 55.4% of the workforce in 2024, unemployment of 8.8% in April 2025, and about 2.5 million Venezuelan migrants arriving in Colombia over the past decade. Estimates of platform-worker numbers are contested. Fedesarrollo's study (Arbeláez et al., 2021) estimates that about 150,000 platform workers were active in 2020 across mobility, delivery, and messaging, with about 75,000 in delivery and messaging. Fairwork cites about 200,000 for food delivery and transport. Rappi has stated that it had about 130,000 couriers (Fairwork, 2023, 2025), and the ILO evidence cited by Fairwork puts migrants at 22% of workers on courier and delivery platforms.

Fairwork Colombia's 2025 assessment rated five platforms using data collected between August and October 2025, including interviews with 30 workers: Hogarú scored 8 out of 10 and Cabify 5, while Rappi, Uber and InDrive each scored 0. The scoring rule matters for how this is read because a point is withheld when a platform cannot provide evidence of compliance, which does not, by itself, show non-compliance. On pay, only Hogarú and Cabify evidenced earnings at or above the 2025 minimum wage (COP 6,470 per hour) after work-related costs and waiting time; for the other three platforms, the first pay point could not be awarded on the evidence available, and only Cabify met the living-wage threshold (COP 17,090 per hour). It cannot be claimed that any platform pays below the legal minimum, but the delivery platforms assessed could not evidence minimum-wage earnings net of costs.

Earnings evidence outside Fairwork comes from Fedesarrollo, whose study (Arbeláez et al., 2021) is reported in press coverage as finding an average monthly income of COP 867,000 for couriers working 35 hours a week on delivery and messaging platforms in November 2020. That is roughly COP 5,700 per hour before costs and unpaid waiting time. It cannot, on its own, show earnings below a minimum wage, and it should not be compared with minimum-wage figures from other years, whether net earnings fall short depends on costs and unpaid time, which Fairwork's method addresses. Survey evidence on Rappi couriers comes from a 2019 survey by the Universidad del Rosario's Observatorio Laboral with the Escuela Nacional Sindical, which covered more than 300 couriers and is known here only through secondary reports. As reported by Castañeda (2022), 57% of respondents were Venezuelan migrants, 81% worked exclusively with Rappi, 87% paid rent, and 59% were the main income earners in their households. Rodríguez González (2021) reports that 93% were not enrolled in a pension scheme and that more than 62% had had a work accident. These figures thus describe dependence and vulnerability. Vecchio et al. (2022) document the pandemic period for couriers in Santiago, where a courier described the trade-off between exposure and income as dying "either of hunger or of coronavirus." That evidence is from Santiago; whether the same dynamics held in Bogotá, and with what intensity, is a matter for Bogotá-specific evidence.

4.2 Institutional Constraints on Algorithmic Control

Colombia's Labour Reform, Law 2466 of 2025, was approved in the Senate's final debate on 17 June 2025 and sanctioned on 25 June 2025 (Colombia). Its platform-specific provisions address digital delivery work rather than the entire platform economy and recognise both dependent employment and independent work (Fairwork 2025; Colombia, art. 25). The reform establishes requirements regarding contractual disclosure, social security contributions, platform registration, and reporting on active

workers. Articles 29 and 30 also establish transparency requirements for automated monitoring and decision-making and provide for human review of automated decisions affecting workers'conditions. Their commencement is subject to the condition specified in Article 67, but the existence of these statutory protections should not be equated with their full implementation (Colombia, arts. 27–30, 67). Piedrahita Vargas (2026) critically examines the reform's treatment of employment classification and algorithmic subordination. Colombia's general personal-data protection regime, established by Law 1581 of 2012, provides an additional legal framework relevant to platforms' processing of workers' personal data.

Formal regulation is only one dimension of institutional constraint; collective voice and technological capacity also shape the extent to which algorithmic control can be challenged. Fairwork (2025) identifies the delivery workers' union, UNIDAPP, as a contributor to worker recognition and partial regulatory advances, and documents worker participation through Sinatrap. Nevertheless, it reports persistent limitations in workers' ability to influence platform governance, including the rules, algorithms, and working conditions that shape their livelihoods. Its findings concerning the position of self-employed workers should be understood in relation to the distinction between formal freedom of association and effective access to collective representation and bargaining. Fairwork (2025) also identifies Colombia's limited domestic capacity to develop, maintain, and audit platform algorithms, as core engineering and technological infrastructure is largely located abroad. This technological dependency may constrain local oversight even where regulatory requirements exist. Accordingly, the framework conceptualises institutional conditions as boundary conditions on the relationship among worker context, algorithmic standing, and allocation outcomes of the effects of a given algorithmic architecture may vary according to workers' ability to understand and contest evaluative decisions, to exercise collective voice, and to obtain meaningful institutional scrutiny of platform systems. This institutional and technological dimension informs proposition 6.

5. Conceptual Synthesis

5.1 Constructs identified

The synthesis identified eleven constructs. Three candidate 'mechanisms' (intelligent automation, hyper-personalisation and algorithmic control) did not prove conceptually distinct from one another or from Kellogg et al.'s (2020) six functions, and are reorganised below as functions and properties.

Construct	Role in the framework	Definition	Basis
Structural disadvantage	Antecedent	Informality, migration status and legal precarity, peripheral residence, and economic pressure that workers bring to the platform	Sánchez et al. (2024); Vecchio et al. (2022); Abkhezr and McMahon (2022)
Data capture	Enabling condition	Continuous collection of behavioural data (location, timing, acceptance, customer interaction) under terms designed for logistics but used for labour management	Srnicek (2017); Kellogg et al. (2020), recording
Algorithmic control functions	Process	Directing (restricting, recommending), evaluating (recording, rating), disciplining (replacing, rewarding)	Kellogg et al. (2020)
Automation	Property of the architecture	The extent to which control functions are executed without human review	Kellogg et al. (2020); human-review rights in Ley 2466 as an institutional response [
Adaptive personalisation	Property of the architecture	The extent to which decisions are individualised and updated from a worker's accumulated history (to be established empirically on the worker side)	Lee (2024) on 'sticky' labour; Jain et al. (2019), consumer-side only
Opacity	Property of the architecture	The extent to which workers cannot observe the criteria that determine their standing	Rosenblat (2018); Rosenblat and Stark (2016)
Algorithmic standing	Focal mechanism (mediator)	The worker's position in the platform's evaluation and ranking, as it affects future allocation and sanction	Synthesis of the above
Economic dependence	Mediator	Reliance on the platform for income, such that exit is costly and compliance is the rational response	Lee (2024); Abkhezr and McMahon (2022)
Unequal outcomes	Outcome	Income instability, unequal access to work, discriminatory exposure, and strain	Wood et al. (2019); Sánchez et al. (2024); Lang et al. (2023)
Institutional counterweights	Moderator	Legal rights, enforcement and audit capacity, and collective organisation	Ley 2466 de 2025; Buitrago (2025)
Worker agency	Moderator	Practices through which workers adapt to or resist the system (multi-homing, information sharing, timing of availability)	Sánchez et al. (2024); Wood et al. (2019)

5.2 Separating functions from properties

The central analytical step is the distinction between functions and properties. Kellogg et al.'s six Rs are functions of how the architecture affects workers. Automation, adaptive personalisation and opacity are properties of how much, how individually and how visibly it does so. Treating them as three parallel mechanisms produces overlap (automated task allocation is restricting and recommending; personalised allocation is restricting and recommending, applied individually) and obscures what is analytically new about learning-based systems. As properties, they become variables that can be measured and compared across platforms and cities, and that determine the strength of the following conversion process.

5.3 The conversion process

The framework proposes that platform AI architectures act as a conversion process with five linked stages (Fig. 1).

Stage 1- Disadvantage as input: Workers arrive with structural disadvantages that are largely external to platform design. Peripheral residence lengthens trips to dense demand areas; migration status limits alternatives and bargaining power; informality and economic pressure raise the cost of rejecting poor offers or taking time off.

Stage 2 - Capture as data: The platform records behaviour (acceptance, completion time, availability, and customer ratings). Because data are generated under conditions the worker did not choose, much of what is recorded reflects circumstances (distance, traffic, hours available, neighbourhood and customer expectations) as well as effort.

Stage 3 - Summary in context-blind metrics: Ratings, acceptance rates, and completion times summarise these data into indicators of standing. Where the indicators do not adjust for circumstances, disadvantage enters them as apparent performance.

Stage 4- Allocation and sanction: Standing then shapes the six control functions, which are shown as offering (recommending), excluding from them (restricting), who receives preferred work or incentives (rewarding), and who is deactivated (replacing).

Stage 5 - Feedback and dependence: Reduced access to good work lowers income and increases dependence, which makes the worker less able to decline poor offers and more exposed to the metrics, thereby closing the loop. Strain accumulates when exit is unavailable.

Three properties modulate the process. Automation strengthens it by removing human judgement that could notice context. Adaptive personalisation strengthens it over time by learning from the outcomes the process itself produces. Opacity strengthens it by preventing workers from identifying and contesting the criteria. Institutional counterweights and worker agency moderate it, determining whether workers can see, contest and escape the process.

Source: Author's Contribution

5.4 Propositions

The propositions specify relationships at the level of the conversion process. They are theoretical statements to be tested, not findings.

Proposition1

(conversion): Where workers' structural disadvantage affects performance-relevant conditions (distance, travel time, availability), platform metrics that do not adjust for those conditions will convert disadvantage into lower algorithmic standing. The mechanism used is a context-blind measurement that attributes the circumstance to performance. Supported by Vecchio et al. (2022) on spatial mismatch in Santiago, Rosenblat (2018) and Rosenblat and Stark (2016) on how platform metrics and information asymmetry shape drivers' standing, and Colombian worker accounts of a points or tier system that governs access to orders, including one from Bogotá (Fairwork, 2025; Castañeda, 2022; Rodríguez González, 2021). None of these links stands for residence or migration status.

Proposition 2

(compounding) The effect in Proposition 1 will be larger over time under adaptive, learning-based allocation than under static, rule-based allocation. Mechanism is a learning system that updates from outcomes that already embed disadvantage, so past disadvantage becomes a predictor of future allocation. Support from the conceptual extension of Kellogg et al. (2020), Lee (2024) on lock-in. The status is that the presence of adaptive learning in worker-side systems in Bogotá has not been demonstrated, and is a precondition for testing this proposition.

Proposition 3

(opacity) Higher opacity strengthens the relationship between algorithmic standing and worker outcomes. The mechanism is that workers who cannot identify the criteria cannot adapt strategically or contest decisions. Support - Rosenblat (2018); Rosenblat and Stark (2016); Castañeda (2022) on unexplained blocks and opaque order assignment; Fairwork (2023) on Picap workers who found rating criteria unclear and reported that they changed without explanation.

Proposition 4

(automated sanction): Where deactivation and restriction decisions are automated without human review, algorithmic standing will have a stronger effect on economic dependence. Mechanism: removing the review removes the point at which context could be considered and decisions corrected. Support: Kellogg et al. (2020) on replacing; Colombian couriers' accounts of blocks without explanation or chance to respond (Castañeda, 2022; Rodríguez González, 2021); Ley 2466 as a test of the human-review right.

Proposition 5

(dependence) Economic dependence mediates the effect of algorithmic standing on strain and on workers' acceptance of poor terms, such that engagement can coexist with distress where exit is unavailable. Mechanism is dependence makes compliance rational irrespective of satisfaction. Supporting evidence include Lee (2024); Lang et al. (2023), whose sample should be confirmed before it is used to support this claim in Bogotá; and the 2019 Rosario survey figures on exclusive reliance on Rappi and on rent obligations, as reported by Castañeda (2022).

Proposition 6

(counterweights). Institutional counterweights and worker agency weaken the effect of algorithmic standing on outcomes, but only when they act on the architecture (data use, metrics, decisions) and not solely on pay. Mechanism include protections that leave evaluation and allocation untouched do not change how disadvantage is converted. Evidence is Wood et al. (2019) on flexibility without income control; the Colombian reform as a natural test.

Proposition 7

(node-matched governance) Governance instruments that target the node at which conversion occurs (data capture, metric design, allocation transparency, sanction review) will reduce unequal outcomes more than generic labour standards reforms that do not alter the architecture. Mechanism is the conversion operates through the architecture, so only instruments that reach it can interrupt it. Support evidence is synthesis, drawing on the control functions in Kellogg et al. (2020) and on the transparency and reporting duties reported for Ley 2466 de 2025.

5.5 Governance mapped to the process

Proposition 7

implies that governance instruments should be matched to the point in the conversion process where they can act. Five pairings follow from the framework.The first node is the collection of behavioural data under terms designed for logistics but used for labour management. Purpose-limitation and consent rules, together with enforcement of existing data-protection law (Ley 1581 de 2012), would address this repurposing. The second node is context-blind measurement. Algorithmic impact assessments that test whether ratings, acceptance rates and completion times adjust for distance, traffic and area would address it. This instrument is proposed here. The third node is the allocation of work under criteria workers cannot see. Disclosure of the principal criteria that determine access to work and incentives, together with participatory review involving worker representatives, would address opacity and unexplained exclusion. Ley 2466 de 2025 is reported to require platforms to report on their use of automated systems for managing and distributing tasks, which is a step in this direction. The fourth node is automated restriction and deactivation. Human review of blocks and deactivations would restore the point at which context can be considered and decisions corrected. Press and legal summaries describe such a right in Ley 2466, but Fairwork's summary does not mention it, and its implementation

status is unconfirmed. The fifth node is economic dependence. Classification rules, shared social-security contributions and income floors would reduce lock-in and strain by lowering the cost of exit. Ley 2466 is reported to provide shared contributions and occupational-risk coverage for independent couriers, but their effects have not yet been studied. Skills programmes and portable credentials are retained as complements, because they address workers' exit options, not the conversion process itself. The evidence base for them in this corpus is thin.

5.6 Evidence status and how the propositions could be tested

The table sets out, for each proposition, the evidence in the corpus, the main gap, a feasible test and the result that would count against it.

Proposition	Evidence in the corpus	Main gap	Test	What would count against it
P1 conversion	Spatial mismatch for couriers in Santiago (Vecchio et al., 2022); metrics and opacity for Uber drivers (Rosenblat, 2018; Rosenblat and Stark, 2016); Colombian courier accounts of a points or tier system (Fairwork, 2025; Castañeda, 2022; Rodríguez González, 2021)	Accounts exist from Bogotá and other cities, but none shows how ratings, points or acceptance rates treat distance or migration status	Audit or worker data-donation study comparing standing and offers for workers who differ in residence or nationality but not in measured effort	No difference in standing or offers once effort and conditions are held constant
P2 compounding	Conceptual; lock-in described by Lee (2024) for the Netherlands and South Korea	No documentation that worker-side allocation adapts to individuals	Longitudinal tracking of standing and earnings; comparison of platforms with rule-based and adaptive allocation	Standing and earnings revert to the mean, or do not differ between rule-based and adaptive allocation
P3 opacity	Rosenblat (2018); Rosenblat and Stark (2016); Fairwork (2025) on non-transparent algorithms; Castañeda (2022) on unexplained blocks and opaque assignment; Fairwork (2023) on unclear and shifting rating criteria at Picap	No measurement of opacity across Colombian platforms	Code transparency criteria across platforms and compare worker outcomes	No association between measured opacity and outcomes
P4 automated sanction	Replacing as a control function (Kellogg et al., 2020); (Castañeda, 2022); reported human-review right in Ley 2466	Right not yet evaluated; implementation status unclear	Before-and-after and cross-platform comparison of deactivation reversals and dependence once the right takes effect	No change in dependence or outcomes after human review is introduced
P5 dependence	Lee (2024); Lang et al. (2023),	Survey figures on dependence exist,	Survey and interviews	Strain unrelated to

Proposition	Evidence in the corpus	Main gap	Test	What would count against it
	sample to be verified; Fairwork (2025) testimony; 2019 survey of Rappi couriers by Castañeda (2022)	but no measure of strain or of its link to standing	measuring share of income from the platform, alternatives and strain	dependence
P6 counterweights	Wood et al. (2019); Fairwork (2025) on UNIDAPP, Sinatrap and Ley 2466	No comparative evidence	Comparison across cities or platforms with different institutional conditions; process tracing of implementation	Outcomes do not differ with institutional conditions
P7 node-matched governance	Logic of the framework only	No evaluation of any instrument	Quasi-experimental evaluation of instruments aimed at different nodes	Generic reforms reduce unequal outcomes as much as node-targeted ones

First, worker accounts from Colombia, including Bogotá, describe a points or tier system, so the framework should be read as a proposed mechanism consistent with adjacent evidence, not as an established one. Second, each proposition names an observation that would count against it, which is what separates a mechanism from a description.

5.7 Alternative explanations

The central claim is that the AI architecture adds to precarity beyond what classification, informality and business models already produce. Five rival explanations must be ruled out before that claim can be accepted. If precarity arises from classification and informality alone, it should appear regardless of platform architecture, and platforms with the same classification should produce the same outcomes. The framework instead predicts that, among workers with the same classification, standing should track context variables and vary with automation, adaptivity and opacity. The two accounts can be separated by comparing platforms with similar classification but different architecture, and workers on one platform who differ in context. Risk externalisation predicts uniformly low outcomes for all workers. The framework predicts unequal outcomes between groups, not only a low average, so the relevant evidence is the distribution of outcomes by residence and migration status, not the average. Differences in standing may simply reflect effort and choices about hours and tasks. The framework predicts that differences persist after controlling for hours, acceptance behaviour and task mix. Disparities may originate in customers' ratings and in where demand is located. Platform design still matters if its metrics do not adjust for customer-side variation, which can be tested by comparing outcomes under

metrics that do and do not adjust for it. Outcomes may track demand and the oversupply of couriers after the pandemic. The framework predicts that effects remain within the same market and period, so comparisons should be made within the same city and time.

6. Discussion

6.1 Theoretical implications

The framework advances the literature in three ways. First, it moves the question from whether platform work is precarious to how the disadvantage that exists before platform entry becomes platform standing. This gives the claim that AI is distinctively implicated a testable form. The conversion process should differ between architectures that differ in automation, adaptivity and opacity, and should be weaker where the same workers face less context-blind metrics. Where the process does not differ, the claim that AI matters beyond platform labour arrangements generally would be weakened. Second, by separating functions from properties, it removes the construct overlap that arises when automation, personalisation and control are treated as parallel mechanisms, and it makes the properties measurable. Third, by specifying institutional counterweights and worker agency as moderators, it treats the Global South setting as a boundary condition defined by institutional capacity, not as a location to which a Global North model is applied.

What existing accounts do not predict is a distributional pattern. Accounts of platform capitalism and of precarity predict low and insecure income for platform workers in general, and the control-function framework predicts that platforms will restrict, rate and discipline. The conversion framework adds a prediction about differences among workers: on the same platform and under the same classification, differences in algorithmic standing should track context variables such as distance from demand and migration status, and should widen with greater automation, adaptivity and opacity. If that pattern is not found, the framework fails, and the claim that AI architecture adds to precarity beyond classification and business model should be withdrawn.

6.2 Relationship to previous scholarship

The framework is consistent with Srnicek's (2017) and Rosenblat's (2018) accounts of risk externalisation and engineered asymmetry, which it treats as premises. It extends Kellogg et al. (2020) by adding a distributional question the six-function framework does not itself answer: whose context enters the control functions, and with what effect. It is consistent with Wood et al.'s (2019) finding that flexibility coexists with weak control over income, and offers a mechanism through which that combination could be reproduced at the level of individual workers. It differs from accounts that treat precarity as a general property of gig work by proposing that its distribution across workers is partly produced by the architecture and therefore can vary with architectural design.

6.3 Implications for regulation and platform practice

The framework suggests concrete changes. Regulators could require platforms to report differential outcomes (offer rates, deactivation rates, earnings) by worker characteristics available to them, such as residence zone and nationality, and to demonstrate that metrics adjust for travel distance and traffic. Disclosure duties could specify the principal criteria that determine access to work and incentives, in a form that workers can use. Human-review rights could be paired with response-time standards and with a record of reversals that regulators can inspect. Data-protection enforcement could be directed toward the repurposing of logistics data for disciplinary purposes. For platforms, the framework identifies metric design as the point where risk can be reduced without abandoning algorithmic dispatch: weighting ratings by delivery conditions, separating performance from availability, and making criteria legible. For worker organisations, it implies bargaining over metrics, review procedures, and pay. These implications are conditional. They follow only if Propositions 1 to 4 are supported, and they should not be read as findings. Where evidence is thin (section 5.6), the more defensible near-term steps are disclosure and reporting duties that enable testing, such as those reported for Ley 2466, before mandating specific metric designs.

6.4 Boundary conditions

The framework should not be expected to hold equally across settings. Where platforms use simple rule-based dispatch with no individual-level learning, Proposition 2 should not apply, although Proposition 1 may. Where workers have standard employment or strong alternative options, dependence should be weaker, and Proposition 5 should not hold. Where regulators can audit algorithms and workers can organise, conversion should be weaker. The framework is developed for platform delivery and ride-hailing work in which workers do not bargain individually with the platform; its applicability to online or professional platform work is untested.

6.5 Future research

Several designs follow directly from the propositions. Algorithm audits and worker data-donation studies could test Propositions 1 and 2 by comparing allocation and rating outcomes for workers who differ in residence and migration status but not in measured effort, and by comparing platforms or periods with different degrees of adaptivity. Process tracing of the implementation of Ley 2466, using before-and-after comparisons, could test Propositions 4 and 6 on human-review rights and counterweights. Comparative designs across cities with different institutional counterweights (for example, Bogotá and Santiago) could test the moderating role of institutions. Longitudinal studies of worker earnings and platform standing could test the feedback and dependence mechanism in Propositions 2 and 5. Interviews with migrant couriers, conducted with research-ethics approval and informed consent, could test whether workers experience and describe the conversion process as the framework proposes, and could identify alternative explanations, such as customer preferences or platform pricing decisions.

6.6 Limitations

The framework is built from published sources and has not been tested. Worker-side evidence on how allocation and rating systems operate consists of a few small qualitative accounts and one company

statement about a points system, and is thin, so the claim that learning-based allocation compounds disadvantage is theoretical. Some sources are reports and journalism and are used for context. The evidence on pay in Bogotá is limited to a single assessment, and the legal provisions summarised here need to be confirmed against primary texts and current implementation. The framework also does not isolate the contribution of AI from that of platform business models and labour classification, Proposition 7 and the comparative designs above are intended to address this which may be considered as a continuation for further research.

7. Conclusion

This article proposes that platform AI architectures can be understood as a process that converts workers' structural disadvantage into algorithmic standing, and standing into unequal opportunity and dependence. By separating the functions of algorithmic control from the properties that strengthen it, and by specifying the institutional conditions that moderate it, the framework gives the claim that AI contributes to inequality a testable form and governance a set of points at which to intervene. Bogotá, with its informal labour market, migrant workforce and recent platform regulation, is a setting in which the framework can be examined empirically. Whether the process operates as proposed is an empirical question that the propositions are designed to answer.

Declarations

Conflict of Interest

The authors declare that they have no conflicts of interest.

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Author Contributions

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ChatGPT-4 (OpenAI) was used solely for grammar checking and language editing during the preparation of this manuscript. All intellectual content,analysis, interpretation, and conclusions are the exclusive work of the authors. The authors take full responsibility for the integrity and accuracy of the published work.

References

1. Abkhezr, P., & McMahon, M. (2022). The intersections of migration, app-based gig work, and career development: Implications for career practice and research. *International Journal for Educational and Vocational Guidance, 24*. https://doi.org/10.1007/s10775-022-09556-w
2. Arbeláez, M. A., Fernández, C., & Hernández, D. (2021). Plataformas digitales y contribuciones a seguridad social: El caso de Colombia antes y después de la pandemia. *Coyuntura Económica: Investigación Económica y Social, 51*, 81–114.
3. Bates, L. K., Zwick, A., Spicer, Z., Kerzhner, T., Kim, A. J., Baber, A., Green, J. W., & Moulden, D. T. (2019). Gigs, side hustles, freelance: What work means in the platform economy city. *Planning Theory & Practice, 20*(3), 423–446. https://doi.org/10.1080/14649357.2019.1629197
4. Buitrago, A. (2025, June 3). *Can platform workers in Colombia break free from the algorithm's control?* Equal Times. https://www.equaltimes.org/can-platform-workers-in-colombia
5. Castañeda, J. D. (2022). *Cómo domar el algoritmo: Recomendaciones para mejorar el bienestar de los repartidores de las apps de domicilios Colombia*. Fundación Karisma. https://web.karisma.org.co/wp-content/uploads/2023/02/Como_Domar_El_Algoritmo.pdf (Based on research by J. D. Castañeda and L. Castro for the Citizen Data Audits project, Simon Fraser University.)
6. Colombia, Congreso de la República. (2012). Ley Estatutaria 1581 de 2012: Por la cual se dictan disposiciones generales para la protección de datos personales. Función Pública. https://www.funcionpublica.gov.co/eva/gestornormativo/norma.php?i=49981
7. Colombia, Congreso de la República. (2025). Ley 2466 de 2025: Por medio de la cual se modifica parcialmente normas laborales y se adopta una reforma laboral para el trabajo decente y digno en Colombia. Función Pública. https://www.funcionpublica.gov.co/eva/gestornormativo/norma.php?i=260676
8. Duggan, J., Sherman, U., Carbery, R., & McDonnell, A. (2020). Algorithmic management and app-work in the gig economy: A research agenda for employment relations and HRM. *Human Resource Management Journal, 30*(1), 114–132. https://doi.org/10.1111/1748-8583.12258
9. Fairwork. (2023). *Fairwork Colombia ratings 2023: The mobilities of gig work in Colombia*. Oxford Internet Institute and WZB Berlin Social Science Center. https://fair.work/wp-content/uploads/sites/17/2023/11/Fairwork_Colombia_Report_2023.pdf Fairwork. (2025). *Fairwork Colombia ratings 2025: Informality and technological dependence*. Oxford Internet Institute and Universidad del Rosario. https://fair.work/en/fw/publications/fairwork-colombia-ratings-2025-informality-and-technological-dependence/
10. Jain, A., Liu, I., Sarda, A., & Molino, P. (2019). *Food discovery with Uber Eats: Using graph learning to power recommendations*. Uber Engineering Blog. https://www.uber.com/en-CA/blog/uber-eats-graph-learning/
11. Kellogg, K. C., Valentine, M. A., & Christin, A. (2020). Algorithms at work: The new contested terrain of control. *Academy of Management Annals, 14*(1), 366–410. https://doi.org/10.5465/annals.2018.0174

12. Lang, J., Li, Y., Cheng, C., Cheng, X. Y., & Chen, F. Y. (2023). Are algorithmically controlled gig workers deeply burned out? An empirical study on employee work engagement. *BMC Psychology, 11*(1). https://doi.org/10.1186/s40359-023-01402-0
13. Lee, S. (2024). The 'AI mode': How food delivery riders in the Netherlands and South Korea experience algorithmic management. *Italian Labour Law E-Journal, 17*(2), 67–88. https://doi.org/10.6092/issn.1561-8048/20869
14. Meijerink, J., & Bondarouk, T. (2023). The duality of algorithmic management: Toward a research agenda on HRM algorithms, autonomy and control. *Human Resource Management Review, 33*(1).
15. Mer, A., Virdi, A. S., & Sengupta, P. (2024). AI-driven gig economy management: Opportunities, challenges, and future directions. In *Advances in Human Resources Management*.
16. Piedrahita Vargas, C. ([year]). El trabajo a través de plataformas digitales en la ley 2466 de 2025 de reforma laboral en Colombia: ¿contratistas independientes o trabajadores? Un análisis crítico. *Revista CES Derecho*. https://doi.org/10.21615/cesder.8011
17. República de Colombia. (2025). *Ley 2466 de 2025* (labour reform). https://www.bogotajuridica.gov.co/sisjur/normas/Norma1.jsp?dt=S&i=181933
18. Rodríguez González, M. I. (2021). *Rappi, ¿de la colaboración a la precarización?* [Undergraduate journalism report]. Escuela de Ciencias Humanas, Universidad del Rosario. https://repository.urosario.edu.co/bitstreams/9a426180-5339-4475-94a7-959ec2747e97/download
19. Rosenblat, A. (2018). *Uberland: How algorithms are rewriting the rules of work*. University of California Press.
20. Rosenblat, A., & Stark, L. (2016). Algorithmic labor and information asymmetries: A case study of Uber's drivers. *International Journal of Communication, 10*, 3758–3784. https://ijoc.org/index.php/ijoc/article/view/4892
21. Sánchez, D. Y., Maldonado, O. J., Agudelo-Londoño, S., Hernández, M., Hernández, L. J., Suávez, Z. B., & Mantilla, L. (2024). Infrastructuring platform delivery work: Exclusions, coercions and resistance in delivery platforms' migrant work in Bogotá, Colombia. *Tapuya: Latin American Science, Technology and Society, 7*(1). https://doi.org/10.1080/25729861.2024.2343161
22. Srnicek, N. (2017). *Platform capitalism*. Polity Press.
23. Vecchio, G., Tiznado-Aitken, I., Albornoz, C., & Tironi, M. (2022). Delivery workers and the interplay of digital and mobility (in)justice. *Digital Geography and Society, 3*, 100036. https://doi.org/10.1016/j.diggeo.2022.100036
24. Veen, A., Barratt, T., & Goods, C. (2020). Platform-capital's 'app-etite' for control: A labour process analysis of food-delivery work in Australia. *Work, Employment and Society, 34*(3), 388–406. https://doi.org/10.1177/0950017019836911
25. Wessel, M., Adner, R., & Baiyere, A. (2025). The double-edged sword of generative AI: Implications for digital platform work. *Information Systems Research*.
26. Wood, A. J., Graham, M., Lehdonvirta, V., & Hjorth, I. (2019). Good gig, bad gig: Autonomy and algorithmic control in the global gig economy. *Work, Employment and Society, 33*(1), 56–75.

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Figures

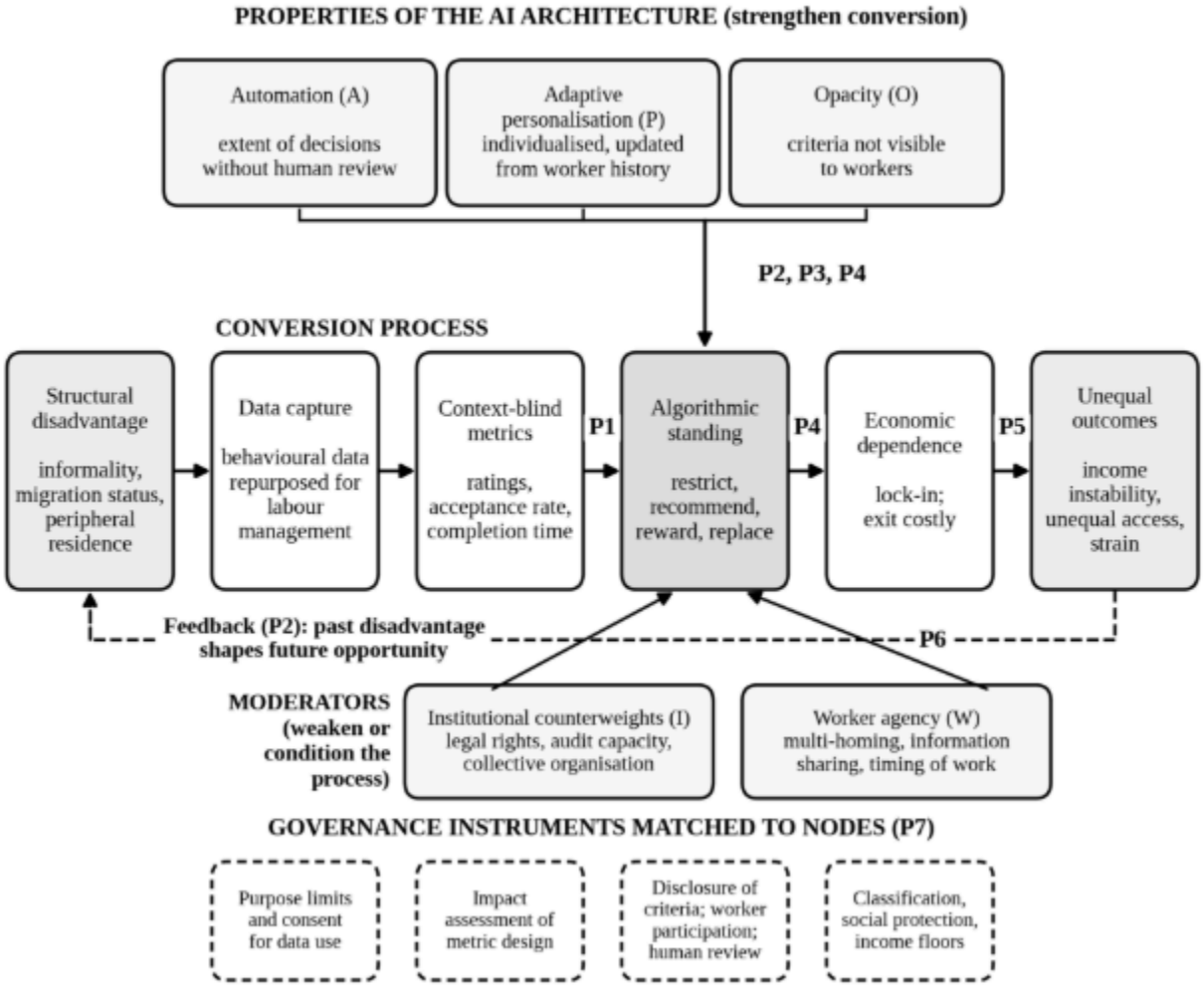


Figure 1

Conceptual framework