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Research article

Algorithmic management of gig workers: A bibliometric mapping study

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Abstract

Purpose: Algorithmic management has emerged as a central construct in gig and platform work, yet its social, thematic, and conceptual developments over time remain inadequately mapped. More critically, how it is positioned relative to control, autonomy, and worker agency lacks systematic examination. To address these gaps, this study adopts Labor Process Theory as an analytical lens, recognizing that managerial control and surveillance are fundamental to capitalist production.

Methods: A bibliometric analysis was conducted on 167 documents assembled through a PRISMA-adapted screening process from Web of Science and Scopus. Analyses were performed using Bibliometrix in RStudio, employing co-authorship networks, thematic mapping, keyword co-occurrence, and Multiple Correspondence Analysis.

Findings: The field has expanded rapidly since 2022 yet remains concentrated around a small set of journals, authors, and countries. Thematically, the literature reflects a platform-based, managerial perspective. Worker-oriented concepts enter the field in relation to algorithmic systems rather than anchoring independent conceptual groupings; autonomy serves as the sole substantive worker-side anchor, whereas worker experience and job quality remain at the periphery.

Conclusions: Findings reveal a conceptual asymmetry privileging managerial control over labor contestation, underscoring the necessity of recentering worker experience in future algorithmic governance research.

Keywords

algorithmic management, gig work, platform work, bibliometric analysis, science mapping

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Introduction

Unlike traditional forms of organization, gig and platform-based work conform to digital infrastructures and algorithms when they are coordinating activities.[1,2] In this regard, the processes of gig workers' engagement including access to job, assignment of tasks, payment for works and evaluation of their services are often conceptualized based on how much algorithms matter in the literature.[3,4] As such, gig work is one of the key fields where the notion of algorithmic management is most commonly alluded to and theoretically located.[5,6]

In the literature on gig and platform work, algorithmic management is primarily considered not only as a technical tool of coordination but also as a notion that is related to the redefinition of processes of surveillance, supervision, and control.[2,7] Duggan et al.[3(p.119)] describe algorithmic management as "a system of control where self-learning algorithms are given the responsibility for making and executing decisions affecting labour, thereby limiting human involvement and oversight of the labour process." The monitoring, assessment, and management of work processes by algorithms on platforms are discussed from different theoretical approaches; these debates are often framed around sub-notions of transparency, predictability, autonomy, and justice.[8,9]

In this context, the connection between gig work and algorithmic management is defined as a primary conceptual dimension in the literature to understand the labor transformation in the context of digital capitalism.[1,10] The common definition of gig workers by discourses of "independence" or "flexibility" highlights more clearly the problematization of the notion of algorithmic management and the critical frameworks in which it is studied.[7,11]

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Algorithmic management has thus become not only a recurring term in gig and platform research, but also an analytical point of focus that shapes theoretical debates.[5]

Labor Process Theory (LPT) has been chosen as an analytical approach for this study because of its major interests, which include issues related to labor control, workers' autonomy, surveillance, and management coordination and can be considered relevant to the key problem of algorithmic management in platform labor research. LPT's historical and materialistic analysis of how capitalism controls labor by organizing and deskilling it[12,13] allows interpreting the issue of algorithmic management as not something new and technologically innovative but as a modern example of the use of traditional mechanisms of capital control.[14] From this perspective, bibliometric relations may be read as signs of how algorithmic management is conceptualized and challenged in the research on platform capitalism.

While current reviews have covered topics related to platform labor,[15–17] none have looked into the phenomenon of "the algorithmic management of gig workers" from a theoretical perspective that is sufficiently focused to allow for bibliometric analysis of the literature on the subject. This paper attempts to do this by creating for the first time a structural map of this field through co-occurrence networks, thematic mapping, and Multiple Correspondence Analysis. It does so with the help of Labor Process Theory, which is the analytical framework used here.

The research deals with the lack of theoretical unity and coherence in the field by applying bibliometric analysis. In this respect, the study does not empirically test the conceptual relations that have been established in the literature but instead seeks to make visible how these conceptual relations are produced, amplified, and transformed in academic production. The findings show that the field is structurally asymmetrical: algorithmic management is conceptualized predominantly through a platform-based and managerial vocabulary, while worker-oriented concepts such as autonomy, resistance and well-being are present throughout the maps but are dispersed across the platform- and management-centered clusters rather than anchoring conceptual groupings of their own. The most frequent of them, autonomy, appears in 19 of the 167 documents (11.4%), against 77 (46.1%) for algorithmic management itself. This has profound implications for theoretical development and policy-making in the area of platform work.

In light of these objectives, the following research questions guide the study:

RQ1: How has the literature on algorithmic management and gig/platform studies grown and evolved over the years?

RQ2: Which journals, authors, institutions, and countries are the most productive in this field?

RQ3: What are the prominent main themes and research clusters in the algorithmic management literature?

RQ4: In the context of gig work and platform employment, around which sub-concepts are the concept of algorithmic management positioned?

Methodology

Search strategy and data retrieval

The study employed a descriptive research design aimed at describing current instances of a specific concern.[18] Consistent with bibliometric practice, the unit of analysis is the bibliographic record and its metadata rather than the substantive findings of individual documents, and no full-text content assessment or quality appraisal was undertaken.[19] A structured literature search was conducted in the Web of Science and Scopus databases on January 21, 2026, using the following query in both: ("algorithmic management" OR "algorithmic control" OR "algorithmic supervision") AND ("gig work*" OR "gig employ*" OR "platform work*" OR "platform employ*"). A record entered the corpus if it related to algorithmic management practices in the context of gig or platform work, was categorized in the Business Economics or Business, Management and Accounting subject category, and was published in English. No other criteria, such as document type or publication year, were applied, to ensure comprehensive coverage within these conceptual and disciplinary boundaries.

Web of Science and Scopus were chosen as the most complete and high-quality databases for management and organizational research[20–22]; their combined use constitutes the gold standard in bibliometric research[23] and increases search completeness while maintaining quality control. Other databases such as PubMed were considered, but preliminary searches showed that they mainly cover psychology and medicine rather than the gig economy and algorithmic management; the choice of databases was therefore consistent with the theoretical framework of the study.

Corpus construction is documented in the flow diagram (Figure 1), which follows PRISMA reporting conventions as a transparency device that makes the assembly of the dataset reproducible; it does not function as an evidence-synthesis protocol. In the identification phase, 626 records were identified from Web of Science ($n = 274$) and Scopus ($n = 352$); no records were identified from registers or other sources. Before screening, 101 duplicate records were removed; no records were removed using automated tools or for other reasons. The remaining 525 records were screened for subject area and language, and 358 records (Web of Science 144; Scopus 214) were removed because they were not categorized under the Business subject area and/or not published in English. All 167 reports requested for retrieval were retrieved and verified against the corpus-defining criteria. No records were excluded at this stage: because the search query required the co-occurrence of algorithmic management terms and gig or platform work terms, topical

relevance had already been established at the identification stage, and this step served as confirmation rather than as a further filter. The final corpus thus comprised 167 documents, whose bibliographical data are presented in Supplemental Table S3.

To determine the robustness of the findings, a core dataset sensitivity analysis was performed following Donthu et al.[20] The entire dataset (n = 167) was compared with a core dataset defined by a citation threshold of ten (n = 52; about 31% of the total), and keyword frequency and co-occurrences were analyzed separately for each. The top ten keywords matched by 80% and the top twenty by 65% across the two datasets, with algorithmic management, gig economy, platform work, labor, algorithmic control and autonomy among the most frequent. The main association (algorithmic management ↔ gig economy) and the secondary links were identical in both.

Analytical framework and tools

Bibliometric analysis maps qualitative and quantitative data within a discipline, revealing the development and intellectual structure of a field over time,[24] and has been increasingly adopted across various fields of inquiry. In this study, it was employed to conduct a multidimensional examination of the algorithmic management and gig work literature. All results were generated in biblioshiny[25] (bibliometrix, R) within the RStudio environment, preferred for its strong integration in visualizing scientific maps,[26] from a single merged Web of Science–Scopus file;

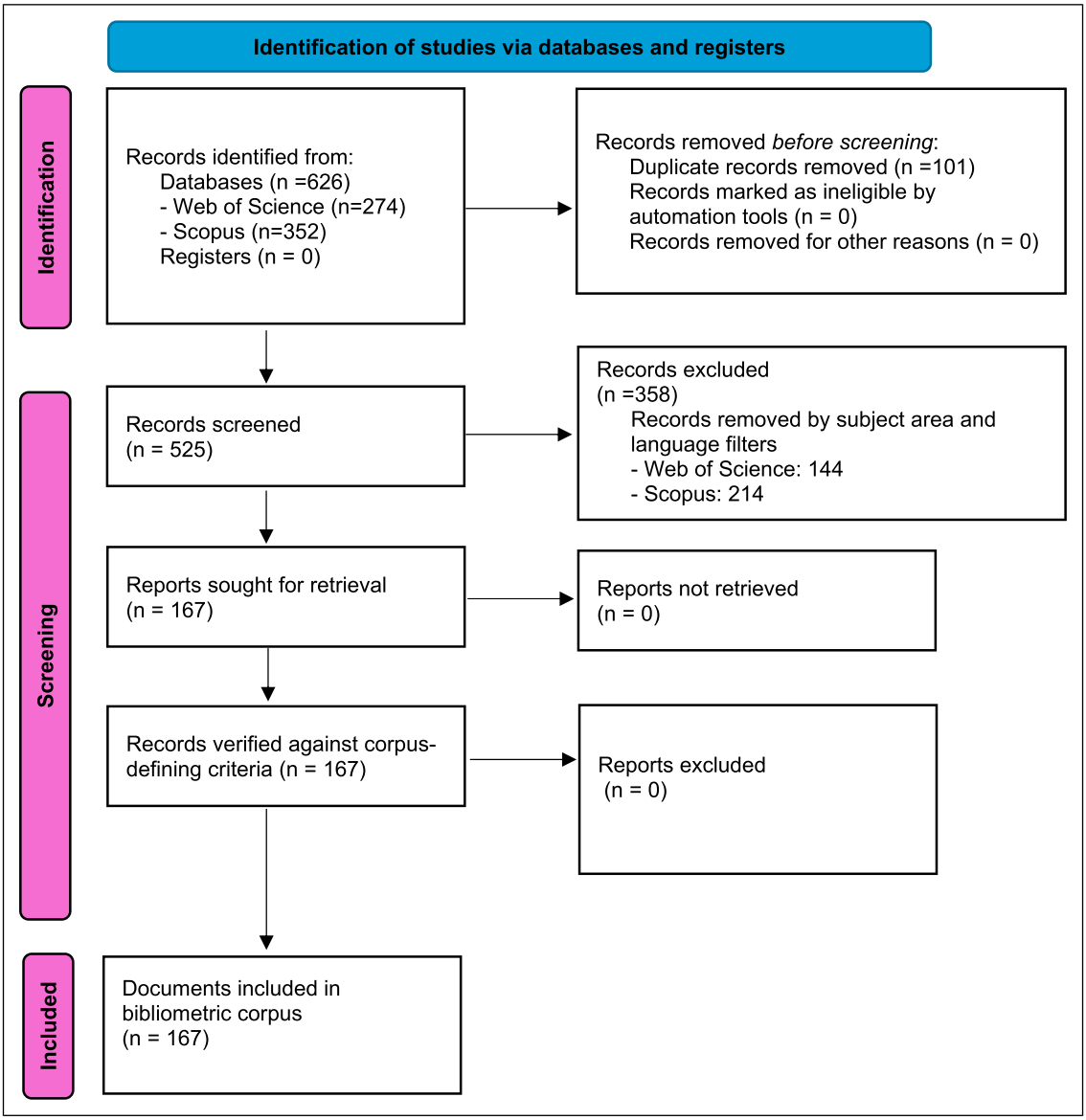


Figure 1. PRISMA.

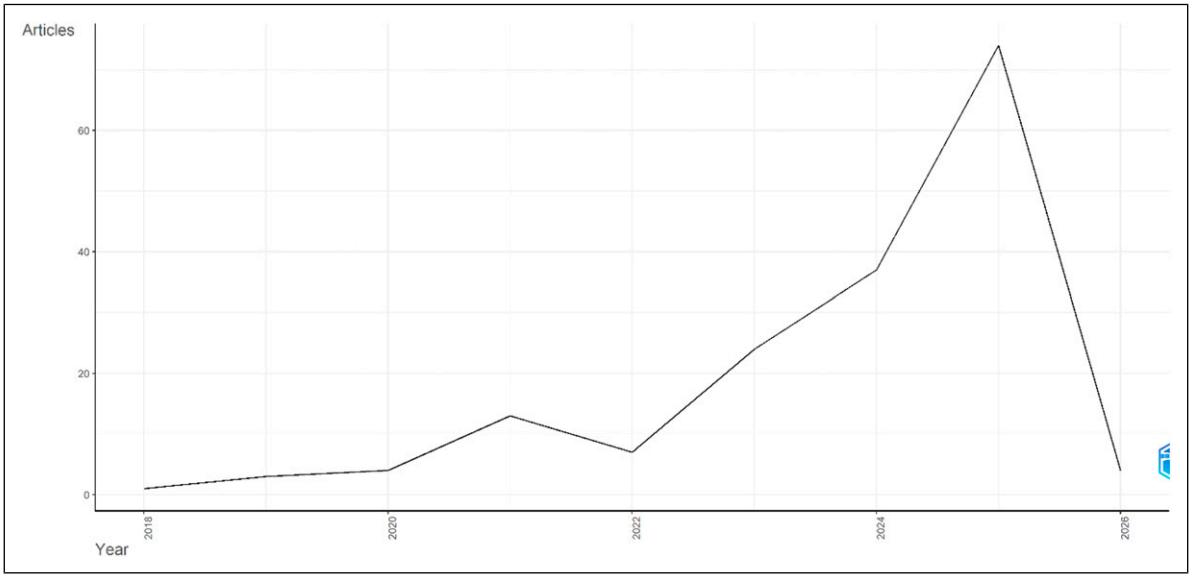


Figure 2. Annual scientific production.

no manual content coding of studies or keywords was performed at any stage.

The analyses were organized along four dimensions, each corresponding to one of the research questions. The first traces the temporal development of the literature through annual scientific production and a cumulative growth curve, identifying periods of acceleration, stagnation or renewed interest. The second maps the social structure of the field: journal distribution is assessed through Bradford's Law, author productivity is traced over time, institutional and country analyses identify the dominant research centers and national academic systems, and a country collaboration map visualizes cross-national co-authorship ties. The third examines the thematic structure through three complementary tools: thematic mapping, which positions concepts in motor, niche, emerging and basic theme quadrants; keyword frequency analysis, which identifies dominant and underrepresented emphases; and tree map analysis, which represents the relative prominence of keywords hierarchically. The fourth investigates the conceptual structure through Multiple Correspondence Analysis (MCA), which reveals latent associative structures among keywords, and keyword co-occurrence network analysis, which maps how sub-concepts such as surveillance, autonomy, labor process, oversight and justice are relationally positioned with respect to the core construct of algorithmic management.

Findings

Temporal development of the literature

The literature has grown both annually and cumulatively (Figures 2 and 3). Annual production (Figure 2) shows a three-stage development: sparse, exploratory output between 2018 and 2020; a first rise in 2021, followed by a temporary decline in 2022; and accelerated growth from 2023 onward, peaking in 2025. The cumulative growth curve (Figure 3) confirms this pattern, with slow accumulation until 2022 followed by a sharp acceleration, such that roughly half of the corpus was published from 2025 onward. The low 2026 value, and the resulting flattening at the end of the curve, reflects only the 3 weeks preceding the search date rather than a decline in scholarly interest. Together, the two indicators show that the field has moved rapidly from exploratory work to intensive scholarly engagement, establishing algorithmic management as a central analytical focus in gig and platform research (RQ1).

Social structure in the field

Figures 4–8 present the distribution of scholarly productivity across journals, authors, institutions, and countries.

Journals. Bradford's Law reveals a clear core–periphery structure in publication outlets (Figure 4). A core of nine journals, situated at the intersection of work and employment, human resource management, and industrial relations, accounts for a disproportionate share of the corpus and functions as the main venue through which the field is consolidated. Beyond this core, output is dispersed across a long tail of journals contributing only one or two documents each.

Authors. Author productivity over time (Figure 5) indicates that the literature is shaped by a narrow but influential core of researchers. Carbery, Duggan, McDonnell, Meijerink, and Sherman have contributed consistently across different

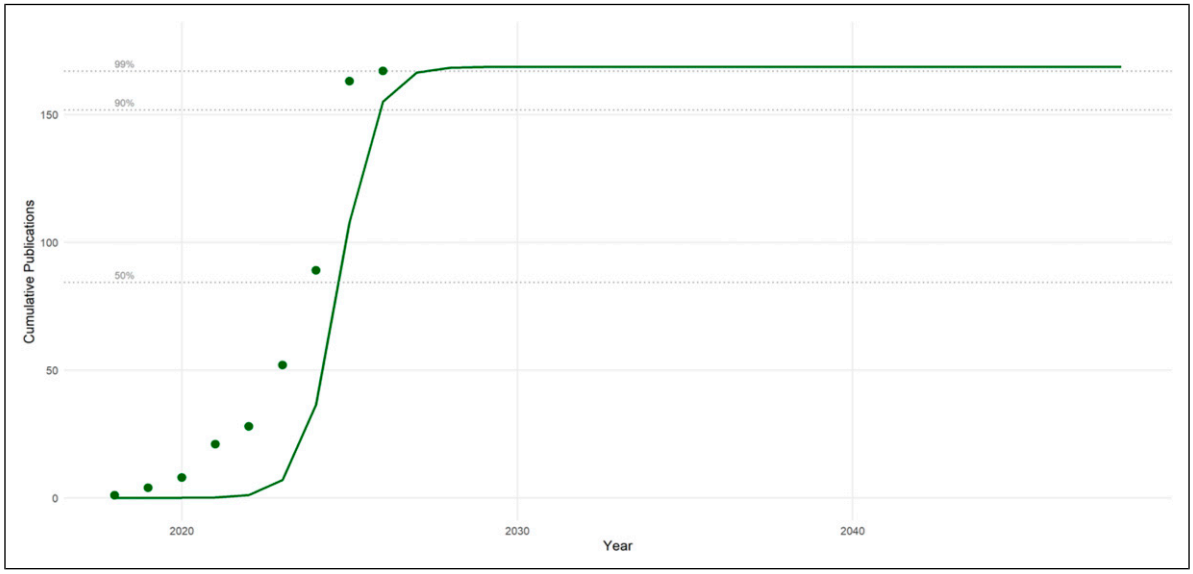


Figure 3. Cumulative growth curve.

years, while others (e.g., Cameron, Kougiannou) stand out with highly cited works in specific years, reflecting the coexistence of high-impact conceptual studies and cumulative knowledge production. Author productivity intensified after 2022, as the theoretical framework of the field became more clearly defined.

Institutions. Institutional affiliation analysis (Figure 6) reveals a similarly concentrated pattern. University College Cork is the most productive institution, followed by Cornell University, Heriot-Watt University, McMaster University, the University of Cambridge, University College Dublin, and the University of Sydney. The small differences in output among these institutions suggest a compact institutional core rather than a single dominant hub, mirroring the core–periphery structure observed in journals.

Countries. Country-level production over time (Figure 7) reveals a multi-centric but asymmetrical global structure. Production was limited and evenly distributed in 2018–2020 but diverged after 2021: the US gained momentum earlier (2022–2023), while China achieved a dominant position through a rapid rise after 2024. Discussions on algorithmic management have thus gained strength simultaneously in Western-centric labor relations literature and in East Asian contexts where platform economies are

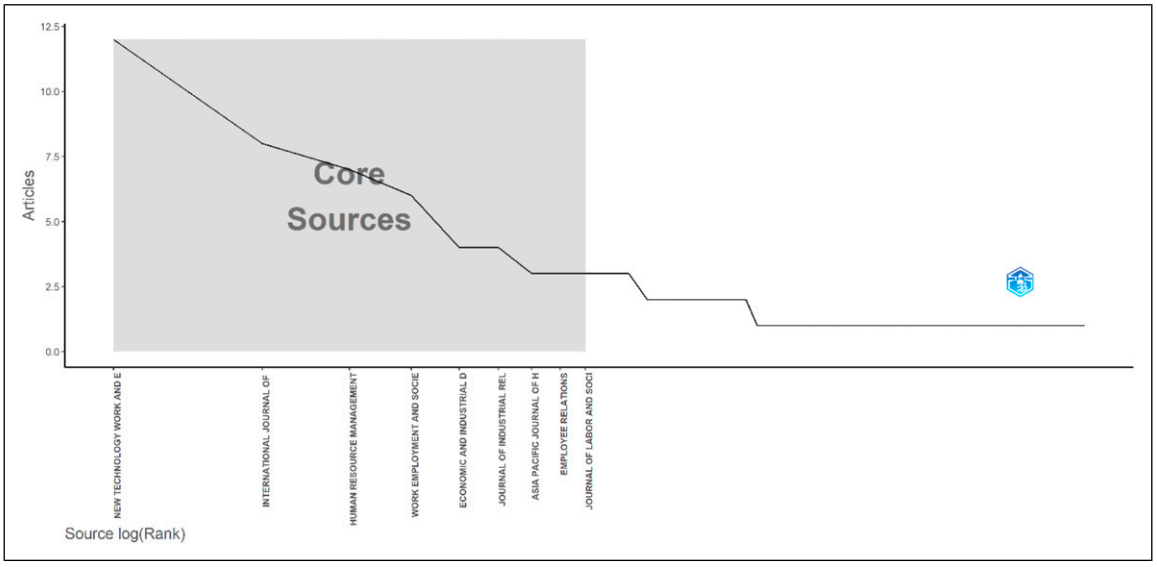


Figure 4. Core sources by Bradford's Law.

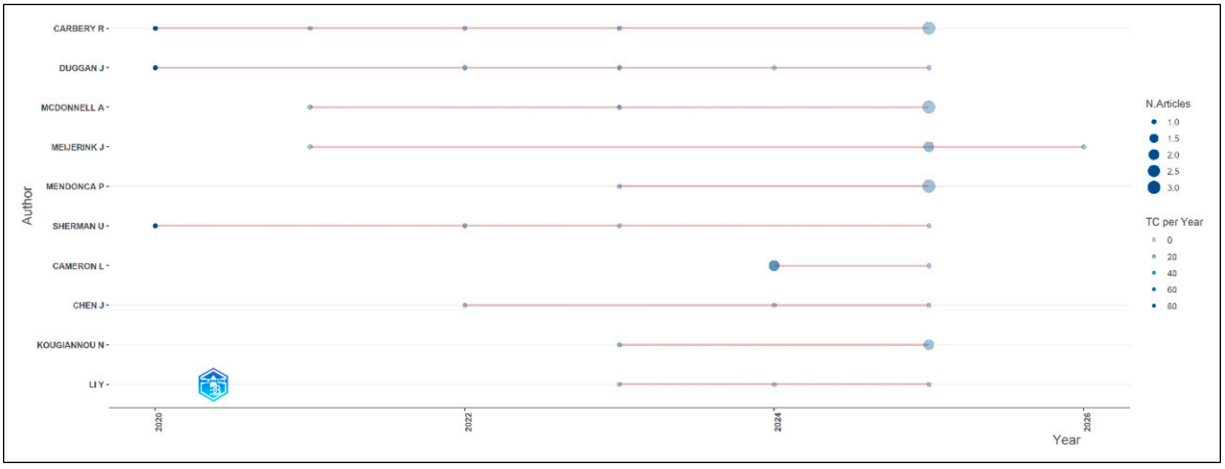


Figure 5. Authors' production over time.

expanding rapidly. The United Kingdom, Canada and Australia show more stable but limited growth, contributing primarily through conceptual and normative approaches focused on regulation, labor processes and justice.

Figure 8 maps the international collaboration structure of the field. Shading intensity indicates each country's publication volume, and arc thickness reflects the strength of bilateral co-authorship. The United States, China, Australia, and the United Kingdom are the most productive countries, alongside notable contributions from India and several Western European nations. The most prominent collaboration axes link China with Australia, the United States, and the United Kingdom, suggesting that cross-Pacific and Anglo-Chinese partnerships constitute the structural backbone of international research in this domain. The map thus complements the productivity indicators by revealing the cooperative networks through which scholarly influence is distributed.

Overall, scholarly productivity in algorithmic management research is structurally concentrated across journals, authors, institutions, and countries. The concentration of international co-authorship around a few dominant bilateral axes further suggests that the social architecture of the field reflects not only where research is produced but also who collaborates with whom (RQ2).

Thematic clusters

Figures 9–11 show the thematic focus of the literature through thematic mapping, word cloud, and tree map analysis.

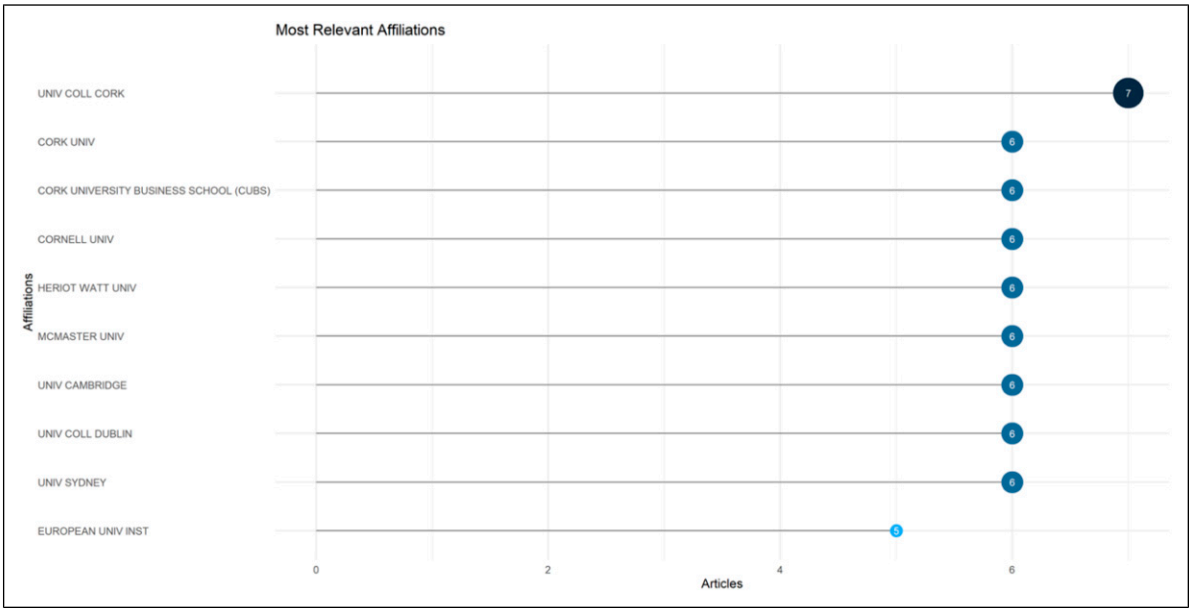


Figure 6. Most relevant institutional affiliations.

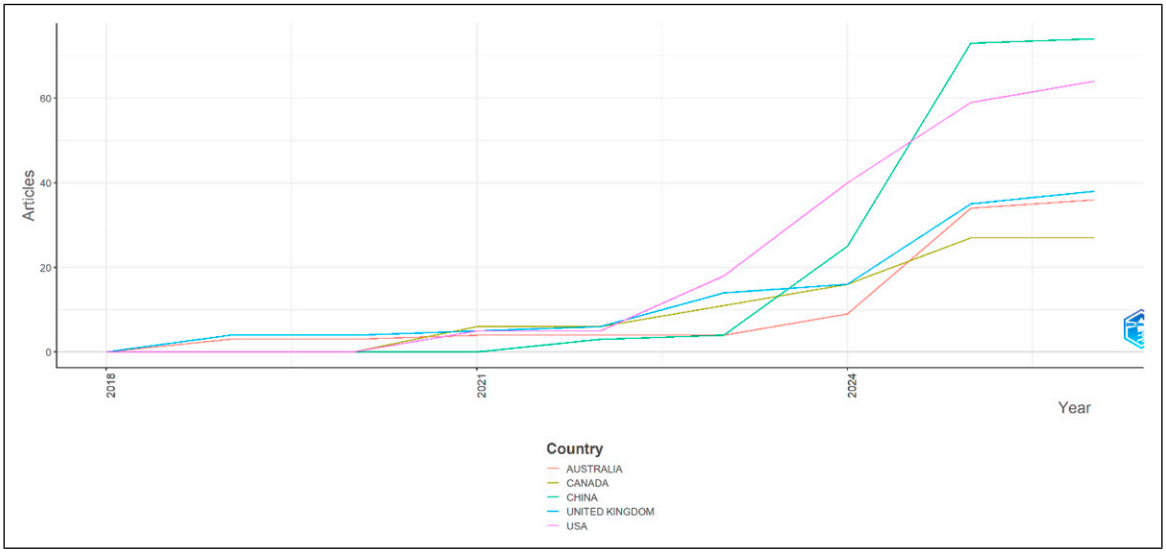


Figure 7. Country production over time.

The thematic map (Figure 9) positions research clusters according to centrality and density. The "gig work–management–platforms" cluster in the Motor Themes quadrant (high centrality, high density) shows that algorithmic management is a structuring force in the literature, framing gig work, and platforms not merely as technical coordination tools but as forms of managerial and organizational power, which indicates theoretical maturity. The "labor–work–autonomy" cluster in the Basic Themes quadrant (high centrality, low density) forms the foundation of the critical literature: these themes are widely shared across studies but not yet theoretically integrated, and thus remain central but open to further research. The "employment–algorithmics–food delivery" cluster in the Niche Themes quadrant (low centrality, high density) reflects sector-specific, methodologically intensive research, in which sectors such as food delivery serve as empirical laboratories but remain less connected to broader theoretical debates. Finally, the "information technology–resistance–model" cluster in the Declining Themes quadrant (low centrality, low density) represents approaches that are neither central nor densely developed. Notably, resistance falls within the smallest cluster in the map (five keywords, 20 occurrences), indicating that worker contestation has not yet acquired structural weight in the field's conceptual organization.

The word cloud and tree map (Figures 10–11) extend these findings by showing the relative frequency of

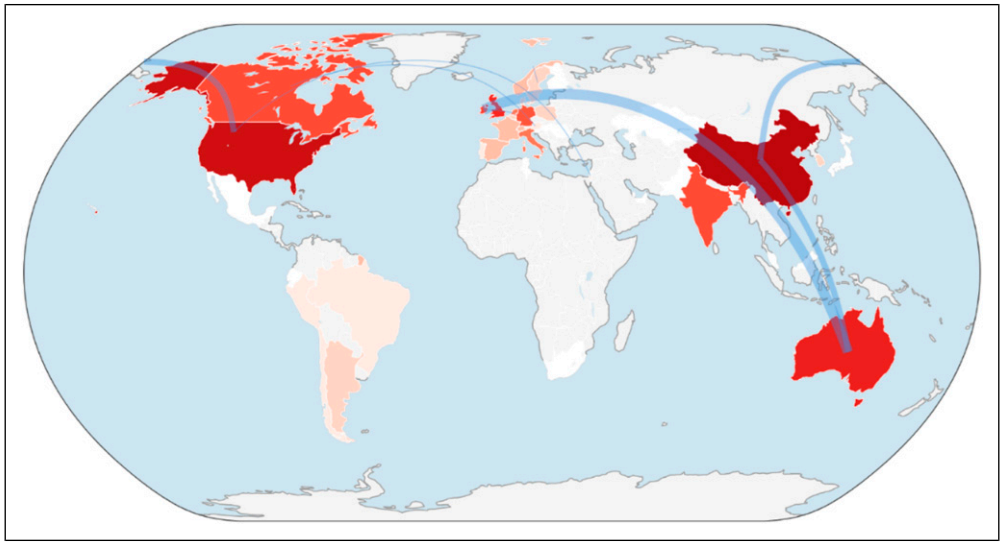


Figure 8. Country collaboration map.

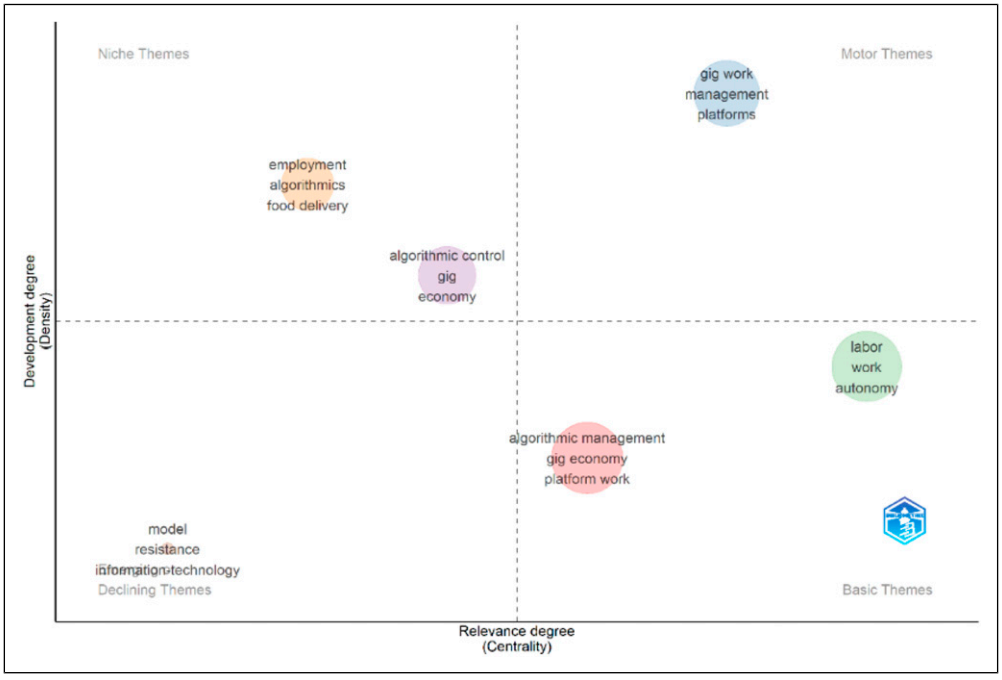


Figure 9. Thematic map of algorithmic management in gig and platform studies.

keywords. Both figures are based on the 50 most frequent keywords, which account for 677 of the 1043 occurrences across the 193 mapped keywords; tile area in Figure 11 is proportional to each keyword's share of this set. Because each occurrence corresponds to one study, counts equal numbers of studies, and the percentages below are prevalence rates across the 167 studies (Supplemental Table S2). "Algorithmic management" is the most prominent keyword ($n = 77$; 46.1%), followed by "gig economy" ($n = 66$; 39.5%), "gig work" and "labor" ($n = 34$ each; 20.4%), "platform work" ($n = 32$; 19.2%), "algorithmic control" ($n = 26$; 15.6%), "work" ($n = 25$; 15.0%) and "employment" ($n = 21$; 12.6%). The prominence of "algorithmic control," reinforced by "algorithmic transparency" ($n = 5$; 3.0%) within the same cluster, indicates that the literature specifies the mechanism of control in technical rather than relational terms. Keywords naming the experiential and material conditions of work occupy smaller tiles: "autonomy" ($n = 19$; 11.4%), "flexibility" ($n = 7$; 4.2%) and "precarity" ($n = 6$; 3.6%). All three sit inside the labor cluster (Cluster 3) rather than forming a group of their own, consistent with the thematic map (Supplemental Table S1).

Taken together, these results show a literature organized around a concentrated core of algorithmic management, platform coordination and control, with worker experience and resistance forming emerging rather than established research streams (RQ3).

Conceptual structure and relational positioning

Figures 12–13 illustrate the conceptual structure of the literature using Multiple Correspondence Analysis (MCA) and keyword co-occurrence network analysis.

The MCA (Figure 12) positions the keywords on two dimensions accounting for 24.13% and 20.52% of variance

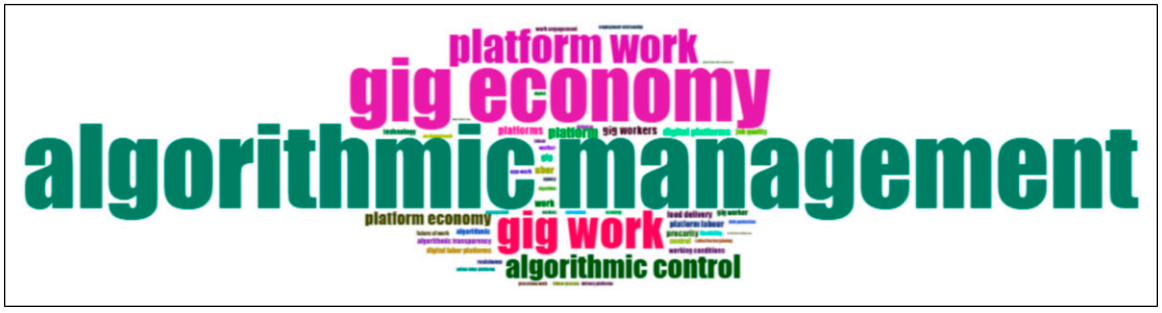


Figure 10. Keyword frequency and conceptual emphasis.

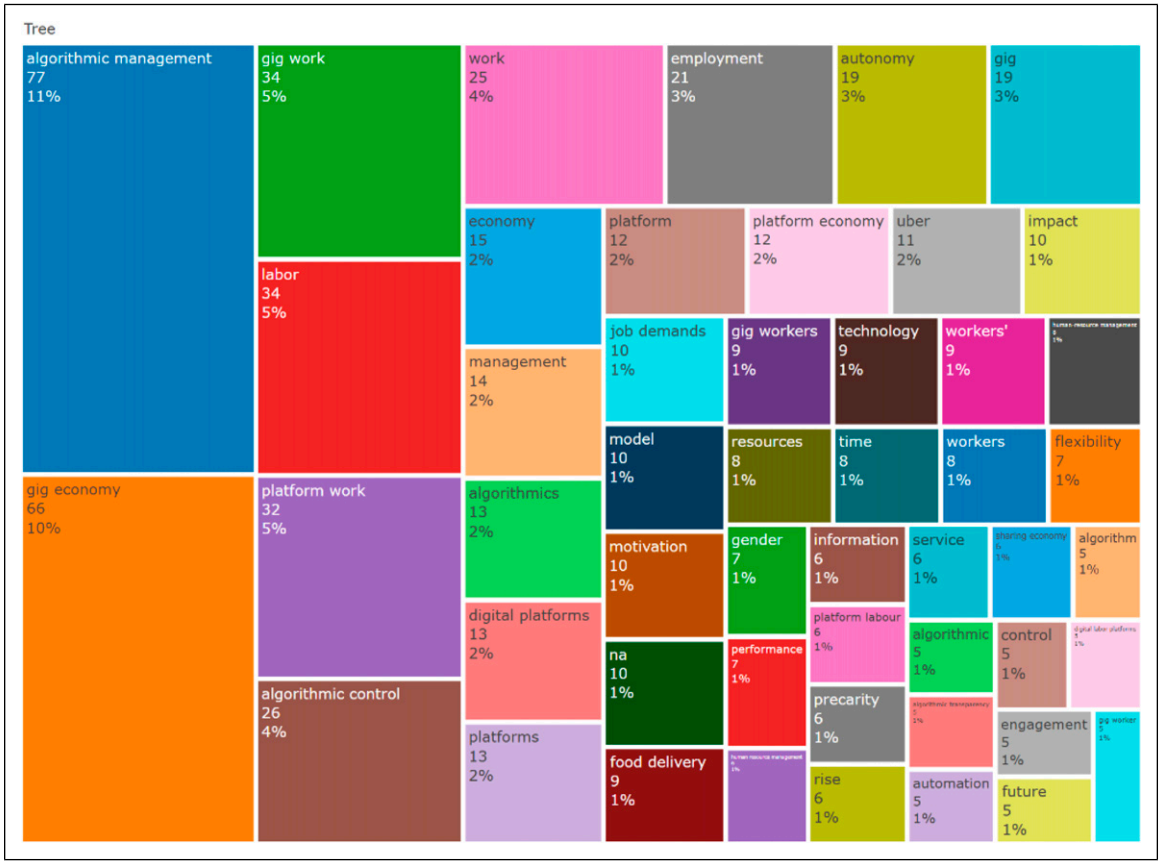


Figure 11. Tree map analysis.

(44.65% in total); the map is therefore read as an indication of relative proximity rather than as an exhaustive account of the conceptual space. First, the analysis returns a single cluster: the terms form one continuous cloud, and neither a worker-centered nor a self-contained managerial grouping emerges as a separate region. Second, the extremes of the first dimension are occupied by a few low-frequency, highly specific terms (algorithmics, workers', human resource management, algorithm and food delivery at one end; sharing economy, rise, time and strategies at the other), while algorithmic management, gig economy, gig work, platform work, labor, and workers sit close to the origin, indicating a shared conceptual core rather than a division into competing perspectives. The second dimension is more readily interpretable, separating structural employment outcomes at the top (working conditions, job quality, employment, outcomes) from individual psychosocial constructs at the bottom, where engagement, job demands, motivation, and resources reproduce the job demands–resources vocabulary. Worker-relevant concepts are distributed along this second axis rather than aligning with either pole of the first: working conditions and job quality at the structural extreme, autonomy, flexibility, gender, and health in the middle band, and engagement and motivation at the psychosocial extreme. They are thus dispersed across the map without forming a conceptual pole of their own.

In the co-occurrence network (Figure 13), node size indicates keyword frequency and edge thickness the strength of co-occurrence. The network is organized around algorithmic management and gig economy, by a wide margin its most connected nodes (betweenness 372.7 and 166.7; PageRank 0.104 and 0.091). Four communities are detected (Supplemental Table S4). The red community is the core itself, combining the algorithmic-technical vocabulary (algorithmic transparency, algorithm, platform labor, platform work, technology) with autonomy and flexibility, which attach directly to the managerial core rather than forming a distinct worker-centered community and sit far below it in connectivity (autonomy: 32.4 and 0.042; flexibility: 0.06 and 0.011). The blue community groups labor, gig work and work with management, automation, control and performance, alongside the more peripheral precarity, gender and health. The green community is psychosocial in focus, linking algorithmic control to job demands, engagement, and motivation, and thus to worker-level consequences. The purple community centers on employment, digital platforms, and human resource management, framing the

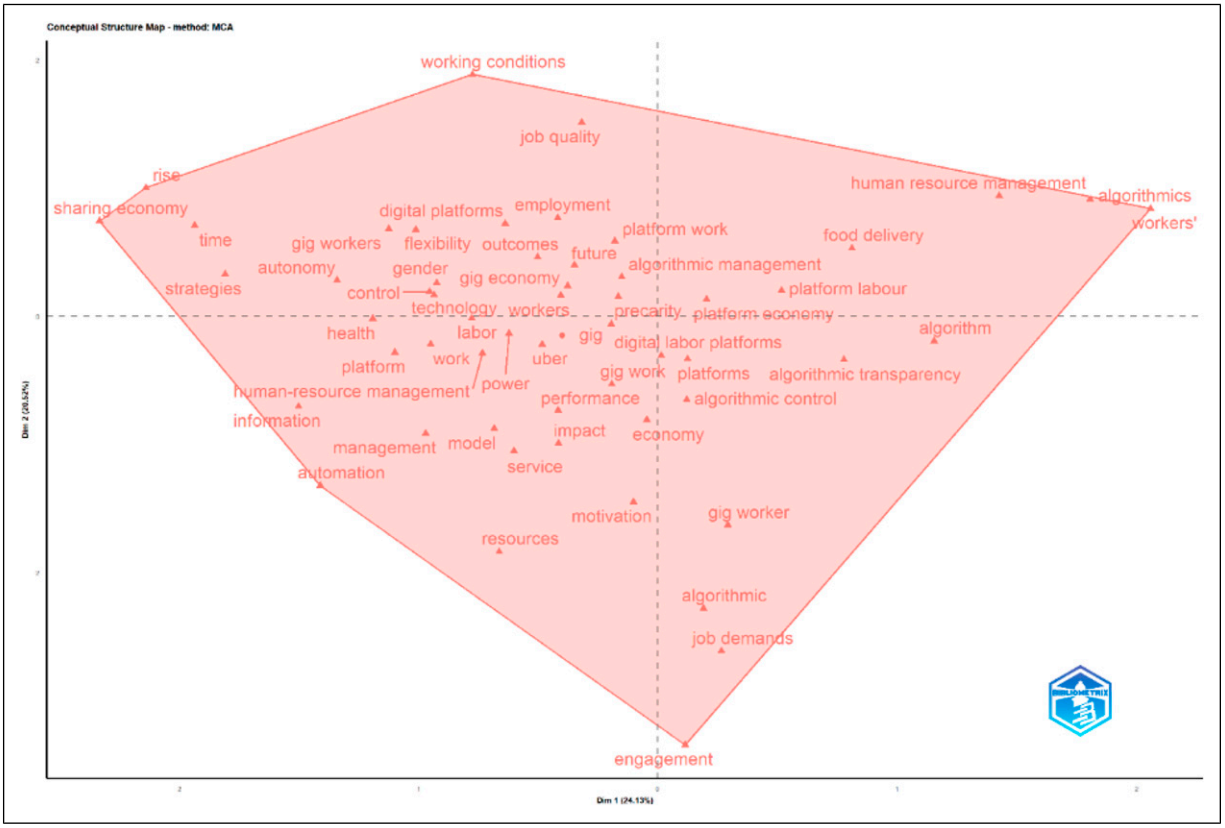


Figure 12. Conceptual structure of the literature: Multiple Correspondence Analysis (MCA).

field in employment-relations terms. Peripheral nodes such as food delivery, Uber, gender, and health (PageRank 0.008–0.018) represent context-specific research streams weakly connected to the core.

Read together, the two figures answer RQ4 by identifying the concepts that surround algorithmic management. In the MCA, it is surrounded by platform work, platform economy, digital labor platforms, precarity, and future—

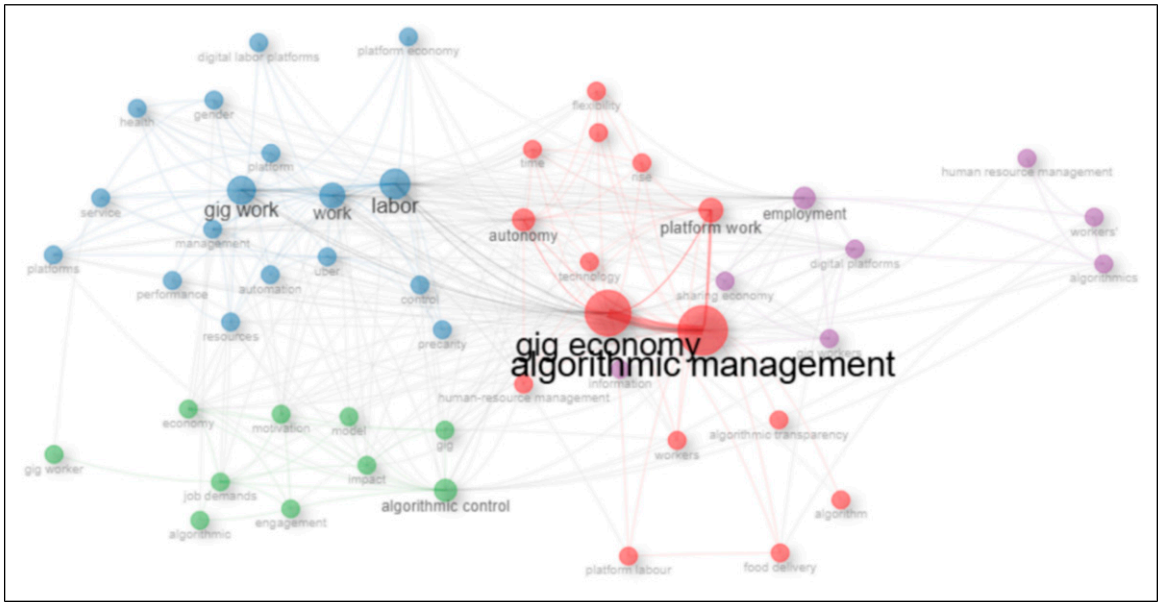


Figure 13. Keyword co-occurrence network and relational structure of the field.

descriptors of the setting in which algorithmic management operates rather than an analytical vocabulary of the employment relation. The network partly reproduces and partly refines this configuration: its core community is assembled primarily from algorithm, algorithmic transparency, platform work, platform labor, and technology, while also incorporating autonomy and, to a lesser extent, flexibility. Notably, autonomy belongs to this core community even though it occupies a distant position in the MCA, indicating that it co-occurs directly with algorithmic management in individual studies while sharing little of its wider keyword environment. Among worker-side concepts, only autonomy is positioned close to the core, and it attaches to the managerial community rather than anchoring one of its own. The remaining worker-relevant vocabulary is dispersed across the periphery: precarity, gender, and health sit at the edge of the labor community, while engagement, motivation, and job demands form a psychosocial cluster around algorithmic control. The vocabulary of control is itself split between these regions: generic control aligns with management, automation, and performance within the labor community, whereas algorithmic control migrates towards individual-level outcomes rather than towards the labor process.

The resulting structure is asymmetrical. Algorithmic management is positioned around a technical and contextual vocabulary of platforms, algorithms, and transparency, with autonomy as its single substantive worker-side anchor. Concepts describing worker experience and job quality remain present but enter the maps as outcomes located at the margins of the managerial core rather than as independent conceptual foundations from which algorithmic management is examined (RQ4).

Discussion and conclusion

This bibliometric analysis has traced the temporal evolution, social structure, thematic landscape, and conceptual positioning of the literature on algorithmic management in the gig and platform economy. The results show that the literature is a rapidly expanding but unequally structured body of knowledge. Although the rate of knowledge production has increased substantially since 2022, the conceptual structure of the literature remains asymmetrical: algorithmic management is predominantly framed through a platform-based and managerial vocabulary, while worker-oriented concepts, though present throughout the maps, tend to enter the field in relation to algorithmic systems rather than anchoring conceptual groupings of their own.

This rapid temporal growth in the body of literature can be explained through the institutionalization of the role of algorithmic management as a means of labor control in the platform economy. From the perspective of the Labor Process Theory, the development of the literature signifies the recognition of the fact that algorithms not only orchestrate the work but also reorganize the entire labor process. The concentrated social structure of the field, apparent in all levels (journals, scholars, institutions, countries), points to the organizing role played by academic actors and research sites in the production of knowledge about algorithmic management. In terms of theoretical perspective, this can be seen as an affirmation of the unequal relations of power stressed by Labor Process Theory. From a thematic standpoint, the findings show that ideas such as algorithmic management, coordination on platforms, and performance tracking represent the central theoretical position in the body of work on algorithms at work. These findings justify the application of the Labor Process Theory in analyzing algorithmic management as a system of management in the modern world where computer technologies enhance the processes of supervision. On the other hand, the relative marginal position of resistance, workers' voice, and collective action implies that the question of worker agency has not received sufficient theoretical attention in the area. Therefore, the conceptual structure of the literature reveals an imbalance in theory, wherein algorithmic management tends to be seen as a system of control rather than a labor process of contestation.

This paper aligns with recent bibliometric studies examining algorithmic management in the gig economy domain, including Nhan and Thu's[16] term-network map, Singh and Khan's[17] study on platform-mediated labor work (2017-2025), and broader review papers like Gupta et al.[15] and Subramony et al.[27] However, none of these considers the "algorithmic management of gig workers" as an independent primary construct for conducting a systematic bibliometric analysis. While Pilatti et al.[28] conduct a systematic review of literature with partial bibliometrics, their efforts cannot be considered as a comprehensive bibliometric map due to their narrative form of presentation. Most importantly, a bibliometric analysis has not been carried out in the intersection of these two constructs in relation to Labor Process Theory. In other words, none of the prior bibliometric studies have examined the "algorithmic management of gig workers" in conjunction with Labor Process Theory. This current study, therefore, seeks to fulfill both of these research gaps. For instance, this research paper represents the first bibliometric study of the combined construct of "algorithmic management of gig workers." Labor Process Theory provides the analytical lens to interpret such topographical analysis in mathematical and visual terms of marginalized and peripheral themes in terms of worker agency, resistance, collective actions, and justice.

Theoretical implications

The thematic map, MCA, and co-occurrence network all point to a consistent message. Whereas algorithmic management, platform coordination, and algorithmic control occupy the most connected positions in the field's

conceptual structure, the topics related to the employees' experience, autonomy, well-being, resistance, and collective action are less densely connected and do not anchor groupings of their own. Such disproportion shows that currently the literature pays more attention to how the platforms use algorithms than to how employees experience, understand, and challenge them.

From the perspective of Labor Process Theory, there is a structure-based disproportion in how the workplace algorithms are analyzed in the academic literature, with the predominance of studies on platforms and managerial perspectives against worker perspectives. This issue has significant ramifications on both the theory and policy-making process since it can lead to the reproduction of the functionalistic perspective on algorithmic management.

The peripheral position of resistance, collective bargaining, and worker voice in the conceptual core of the field indicates that although the critical and labor process theories are already represented in the academic literature, they do not have structural centrality in defining the research agenda. The future theoretical research should try to involve worker agency into it, understanding algorithmic management not only as something that is imposed on workers but also as something that workers navigate and oppose.

Moreover, the analysis of the MCA shows that there is a separation between the macro level employment outcomes and the micro level psychosocial experiences of workers. While concepts such as job demands, engagement, and motivation have gained attention, they occupy the opposite pole of the second dimension from working conditions and job quality, indicating limited conceptual integration between the psychosocial and the structural strands of the field.

Practical implications

The findings have implications for platform firms, policymakers, and trade unions. For management scholars and practitioners, the thematic pattern of the literature on control and monitoring practices should trigger a reevaluation of the long-term implications of surveillance-intensive algorithmic systems for worker motivation, trust, and retention. The emerging literature on job demands and engagement indicates that algorithmic management is more than an efficiency mechanism; it also contributes to the shaping of psychosocial work environments.

In terms of policy and regulation, the gap found in relation to worker well-being and collective voice indicates that the existing body of academic knowledge may not adequately inform frameworks of labor protection. As algorithmic management grows in prominence, there will be a need for research that centers on worker experiences and establishes the terms under which algorithmic management systems improve or degrade decent work.

In relation to labor movements, the marginality of resistance and collective action in the literature indicates both a research blind spot and a problem. The study of worker collective action in response to algorithmic management, whether formal or informal, or through digital resistance, is an area of research that is underdeveloped but highly pressing.

Research gaps and future directions

Based on the study's findings, four critical directions for future research are identified. First, worker-focused research is still nascent. There are relatively few studies that investigate how gig workers view the fairness of algorithms, how they develop strategies to cope with them, or how they resist them. Future research should focus on the voice and experiences of workers as the primary site of analysis.

Second, the geographical coverage of the literature indicates that there is a preponderance of studies in the Anglo-American tradition, and more recently, in the Chinese tradition. However, the platform economy in other parts of the world, such as Latin America, Africa, South Asia, and Eastern Europe, is underrepresented. The geographical focus of the literature should be broadened to add more theoretical depth and global significance to the field.

Third, sector-specific studies are largely restricted to ride-sharing and food delivery. Other areas of platform work, such as care work, freelance knowledge work, logistics, and micro-tasking, deserve more attention to account for the diversity of algorithmic management practices in different sectors.

Fourth, the literature needs methodological pluralism. Longitudinal studies of the development of algorithmic systems and their impact over time, as well as action research studies that involve workers as co-producers of knowledge, would be highly beneficial.

Limitations

This study is subject to several limitations. The search was limited to the Web of Science and Scopus databases in the Business category, which could have led to the exclusion of relevant literature published in sociological, legal, or interdisciplinary journals. The use of indexed and author-provided keywords could have resulted in a lack of sensitivity to the conceptual nuances of individual studies. Moreover, bibliometric analysis can identify structural properties but cannot evaluate the quality or argumentative sophistication of individual publications. In addition, the search query, although carefully designed, necessarily delimits the boundaries of the literature search, and other keyword combinations could have produced different results.

Finally, eleven of the 167 papers could not be assigned to a thematic cluster: ten have no keyword field in either database—seven of them being book chapters, books, and

editorials, document types for which Scopus generally does not supply keywords—and one carries only keywords that occur a single time in the corpus. These records are therefore absent from the keyword-based analyses generated by biblioshiny as well, and we report them as unassigned rather than allocating them manually (see Supplemental Table S3). A related consequence of retaining the software defaults is that no synonym thesaurus was applied, so orthographic variants such as gig-economy and gig economy are treated as distinct terms; in one case this places an otherwise mappable study below the frequency threshold, and in the conceptual structure map it places human resource management and human resource management at opposite ends of the first dimension. Interpretation of that map therefore relies on the overall configuration of terms rather than on the position of any individual keyword.

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Ethical considerations

Not applicable. This study is a bibliometric literature analysis and does not involve human participants, animal subjects, or private identifiable data.

Author contributions

Fatma Halide Kivrak: Conceptualization, methodology, theory development, formal analysis, investigation, writing—review and editing, and supervision. Esra Savas: Data curation, visualization, and writing—original draft.

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Data Availability Statement

The data used in this study were obtained from the Scopus and Web of Science databases and are available from the corresponding author upon reasonable request.

Supplemental material

Supplemental material for this article is available online.

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