

FROM ALGORITHMIC MANAGEMENT TO ALGORITHMIC LEADERSHIP: A CITATION ANALYSIS ON THE THEORETICAL FOUNDATIONS OF THE FIELD

Assoc. Prof. Arzu Uğurlu Kara

National Defense University, Army War College

auugurlukara@gmail.com, ORCID: 0000-0001-9348-6107

ABSTRACT

The ongoing digital transformation is fundamentally reshaping organizational decision-making mechanisms, job design, and leadership paradigms. Within this context, algorithmic management has emerged as a disruptive force, replacing traditional oversight mechanisms and evolving from a mere operational tool into a strategic entity that redefines leadership practices. This study provides an in-depth exploration of the conceptual trajectory of algorithmic management literature through a comprehensive bibliometric lens, uncovering its theoretical evolution toward a sophisticated leadership perspective. Utilizing the Web of Science (WoS) database, 247 high-impact academic studies were retrieved and subjected to co-citation analysis using VOSviewer software. The findings reveal that the intellectual structure of the field is concentrated within three primary thematic clusters: (1) the psychological and behavioral implications of algorithmic control on employees and human resource management; (2) the strategic governance of platform economies and digital ecosystems; and (3) the analytical foundations of digital innovation and organizational design. The resulting network visualizations demonstrate a clear paradigm shift from surveillance-oriented management to a strategic and interactional leadership framework. This research contributes to the literature by highlighting a growing conceptual shift toward viewing algorithms not merely as passive socio-technical tools, but as active agency-bearing actors that direct organizational processes and fulfill leadership functions in the digital age.

Keywords: Algorithmic Management, Algorithmic Leadership, Management, Leadership.

Research Field: Business Administration, Leadership

Research Type: Review

JEL Codes: M12, M15, O33

Gönderim Tarihi: 23.12.2025; Kabul Tarihi: 05.05.2026
Copyright © İstanbul Ticaret Üniversitesi Girişimcilik Dergisi

ALGORİTMİK YÖNETİMDEN ALGORİTMİK LİDERLİĞE: ALANIN TEORİK TEMELLERİ ÜZERİNE BİR ATIF ANALİZİ

ÖZ

Günümüzde devam eden dijital dönüşüm süreci, örgütsel karar alma mekanizmalarını, iş tasarımı ve liderlik paradigmasını temelden sarsmaktadır. Bu süreçte ortaya çıkan algoritmik yönetim, geleneksel denetim mekanizmalarının yerini alarak operasyonel bir araç olmanın ötesine geçmiş ve liderlik uygulamalarını yeniden tanımlayan stratejik bir güce evrilmiştir. Bu çalışma, algoritmik yönetim literatürünün kavramsal gelişimini bibliyometrik bir yaklaşımla derinlemesine incelemekte ve alanın salt yönetsel kontrolden etkileşimsel bir liderlik perspektifine doğru gösterdiği teorik evrimi ortaya koymaktadır. Araştırma kapsamında Web of Science (WoS) veri tabanından elde edilen 247 nitelikli akademik çalışma, VOSviewer yazılımı aracılığıyla eş-atıf analizine (co-citation analysis) tabi tutulmuştur. Elde edilen bulgular, literatürün üç temel entelektüel kümede yoğunlaştığını göstermektedir: Birinci küme algoritmik kontrolün çalışan psikolojisi, davranışı ve insan kaynakları süreçleri üzerindeki etkilerini; ikinci küme platform ekonomisi ve dijital ekosistemlerin stratejik yönetimini; üçüncü küme ise dijital inovasyonun analitik ve teknolojik temellerini ele almaktadır. Ortaya çıkan ağ haritaları, algoritmaların artık yalnızca verimlilik odaklı denetim araçları değil, örgütsel süreçleri yönlendiren, anlamlandıran ve liderlik işlevlerini fiilen üstlenen "aktif aktörler" olduğunu kanıtlamaktadır. Bu araştırma, algoritmaların yalnızca pasif sosyo-teknik araçlar olarak değil, dijital çağda örgütsel süreçleri yönlendiren ve liderlik işlevlerini yerine getiren aktif eylemlilik (agency) sahibi aktörler olarak görülmesine yönelik büyüyen kavramsal değişimi vurgulayarak literatüre katkıda bulunmaktadır.

Anahtar Kelimeler: Algoritmik Yönetim, Algoritmik Liderlik, Dijital Dönüşüm, Bibliyometrik Analiz, Eş-Atıf Analizi.

Araştırma Alanı: İşletme Yönetimi, Liderlik

Araştırma Türü: Derleme

JEL Kodları: M12, M15, O33

1. INTRODUCTION

The ongoing process of digital transformation is fundamentally reshaping organizational decision-making mechanisms, job design, and leadership paradigms. While traditional leadership models have long been rooted in interpersonal influence and intuition, these frameworks appear increasingly insufficient in environments where artificial intelligence, automation, and data-driven systems dictate strategic outcomes (Pirzada, 2025). Within this context, the concept of "Algorithmic Management" emerged, initially used to describe the process of assigning, optimizing, and evaluating workers through algorithms and tracked data in platform-oriented business models such as Uber (Lee et al., 2015). At its core, algorithmic management is defined as a suite of technological tools and techniques that rely on data collection and surveillance to manage a workforce remotely, with decisions being made either automatically or semi-automatically (Mateescu & Nguyen, 2019). By utilizing self-service algorithms, these systems aim to maximize operational efficiency while minimizing direct human supervision over the workforce (Duggan et al., 2020).

However, current debates in the literature suggest a significant shift in focus: moving away from control-based "management" toward "leadership," which represents a more strategic and relational dimension. Algorithmic leadership is characterized as a capacity aimed at enhancing decision quality and organizational alignment by synthesizing human judgment with algorithmic intelligence (Pirzada, 2025). While traditional leadership theories—such as transformational, servant, or ethical leadership—position the human as the primary moral agent, the era of algorithmic leadership sees this agency being shared with algorithmic systems (Frimpong, 2025). This evolution requires leaders to conduct not only mechanical tasks like task allocation but also relational leadership functions—such as motivating, supporting, and developing employees—either through algorithms or in close collaboration with them (Harms & Han, 2019).

The objective of this study is to examine the theoretical foundations of the transition from algorithmic management to algorithmic leadership using the citation analysis method. In the literature, this field is grounded in various perspectives, including Resource-Based View (RBV), Dynamic Capabilities Theory, Socio-Technical Systems (STS) Theory, and Human Capital Theory (Pirzada, 2025). Understanding the impacts of this new form of management and leadership—which is expanding from the platform economy into traditional organizational structures (Jarrahi et al., 2021)—on the workforce and the transformation of organizational hierarchy is of critical importance.

2. CONCEPTUAL FRAMEWORK

The role of algorithmic systems in organizational structures is primarily addressed in the literature along two main axes. The first of these consists of "algorithmic management" practices, which focus on the supervision of work processes and operational efficiency. The second is the dimension of "algorithmic leadership," where these systems evolve into processes of strategic decision-making and human-centered interaction. In the following sub-headings, the theoretical foundations of this study are established by detailing the conceptual origins, operating mechanisms, and psychosocial impacts of these concepts on employees.

2.1. Algorithmic Management

The rise of artificial intelligence and data-driven technologies is radically transforming organizational structures and the prevailing management paradigm. Algorithmic management—defined as the delegation of functions traditionally performed by human managers, such as task allocation, performance monitoring, and discipline, to software algorithms—has become one of the most defining elements of the modern business world (Lee et al., 2015; Duggan et al., 2020). Initially emerging within digital platforms like Uber or Airbnb, this model is now penetrating traditional sectors such as retail, logistics, and manufacturing, thereby triggering a process of "platformization of work" (Baiooco et al., 2023; Jarrahi et al., 2021). From a strategic perspective, algorithmic management blurs boundaries by transforming the organizational form from vertical hierarchies into "platform" structures, creating a topology akin to a "Möbius strip" where the most valuable assets are users outside the firm. In this new configuration, organizations maintain control not by issuing direct commands, but by integrating users and data flows into the system (Stark & Vanden Broeck, 2024).

At the level of management and strategy, algorithmic systems view the market or the organization as a constrained optimization problem to be solved (Li, 2024; Rilinger, 2024). This "logic of optimization" classifies employees and resources as mechanical inputs aligned with efficiency goals, often disregarding the unique needs of human labor (Li, 2024). While this model promises organizations immense scalability, increased decision speed, and operational consistency, it simultaneously introduces strategic risks such as ambiguity of responsibility and a lack of algorithmic transparency (OECD, 2025; Jarrahi et al., 2023). Although the design of algorithmic management is presented as data acting as an objective judge, these systems can actually reproduce inequalities by embodying the value judgments of their designers and the biases present in historical data (Kellogg et al., 2020; Stark & Vanden Broeck, 2024). Notably, the role of lower-level managers is being relegated to that of a "subvisor" who merely implements the algorithm's outputs rather than making autonomous decisions, leading to an epistemological hollowing out within the management ranks (Stark & Vanden Broeck, 2024).

From an organizational behavior perspective, algorithmic management deeply destabilizes the social and psychological ties employees have with

their institutions. The replacement of human interaction with algorithms leads to feelings of isolation, alienation, and a loss of social support among workers (van Zoonen et al., 2024). Employees may experience intense negative emotional states, such as algorithmic paranoia and mistrust, fueled by the sensation of being constantly monitored by opaque, "black-box" systems (Alacovska et al., 2024; Möhlmann et al., 2023). Within the framework of Organizational Support Theory, employees' beliefs that they are valued by the organization are directly linked to their perceptions of algorithmic justice and autonomy support; however, the mechanical nature of the system often makes it difficult to perceive such support (Jabagi et al., 2020). Furthermore, from a psychological contract perspective, the management of areas requiring "human skills"—such as performance appraisal—by algorithms can be perceived by employees as a breach of contract, which in turn increases turnover intentions (Tomprou & Lee, 2022; Lee, 2018).

This environment of pressure created by algorithmic management pushes employees into a complex cycle of consent and resistance, where they both comply with and manipulate the system. While fulfilling algorithmic instructions, employees simultaneously attempt to find loopholes to protect their own interests, oscillating between "alignment tactics" and "deviation tactics" (Cameron, 2024). Particularly in moments of "algorithmic misfit," where algorithms fail to grasp real-world complexity, employees maintain the system's functionality through their own invisible labor, essentially performing "labor repair" to fix the system's shortcomings (Li, 2024). This creates a paradox where workers both resist the system and subsidize its efficiency with their own skills (Li, 2024; Woodcock, 2021). Ultimately, algorithmic management harbors a structural tension that makes work seem "good" (outwardly autonomous and flexible) but also "bad" (precarious and under intense surveillance) (Cameron, 2024). The success of a responsible management strategy depends on balancing this algorithmic power with human oversight, transparency, and employee participation (OECD, 2025; Kelly-Lyth & Thomas, 2022).

2.2. Algorithmic Leadership

The process of digital transformation is fundamentally reshaping organizational decision-making mechanisms, job design, and the very philosophy of leadership. Traditional leadership models—long predicated on interpersonal influence and intuition—reach their limits in environments where strategic outcomes are increasingly dictated by artificial intelligence, automation, and data-driven systems. At this juncture, algorithmic leadership emerges as a specialized capability that synthesizes human judgment with algorithmic intelligence to enhance decision quality, learning processes, and organizational adaptability (Pirzada, 2025). This paradigm refers to a process in which machines or software programs assume leadership functions such as motivating, supporting, and developing employees (Harms & Han, 2019).

Algorithmic leadership is grounded in several foundational perspectives within organizational theory. From the Resource-Based View (RBV), it is positioned as a strategic capability that creates a hard-to-imitate competitive advantage

by mobilizing both human and digital assets. Within the context of Dynamic Capabilities Theory, algorithms assist organizations in sensing and responding to environmental shifts more rapidly by providing predictive insights and automating complex evaluations. Furthermore, Socio-Technical Systems (STS) Theory argues that in workplaces where algorithms have become central actors in task coordination and performance monitoring, leaders must harmonize human expertise with algorithmic processes. Algorithmic leadership operates through four primary mechanisms that shape how leaders interact with intelligent systems (Pirzada, 2025):

Algorithmic Augmentation: This refers to the expansion of human decision-making capacity through AI tools and data models. This process allows leaders to transcend their cognitive limitations by interpreting complex datasets.

Algorithmic Orchestration: The strategic distribution of tasks between humans and algorithms with the aim of optimizing efficiency.

Algorithmic Oversight: The use of real-time analytics to monitor performance, provide feedback, and foster continuous improvement.

Algorithmic Alignment: The process of ensuring that automated systems remain consistent with organizational values and strategic objectives.

2.3. The Relationship Between Algorithmic Management and Algorithmic Leadership

While the concepts of algorithmic management and algorithmic leadership are frequently conflated in the literature, a distinct functional and philosophical divide exists between them. Algorithmic management encompasses control- and organization-oriented functions—such as assigning tasks, dictating work pace, and monitoring performance without direct human intervention (Feshchenko, 2021; Lee et al., 2015). In contrast, algorithmic leadership tends toward integrating social and relational dimensions, such as motivating, inspiring, and supporting the development of workers, into technological systems (Harms & Han, 2019). While algorithmic management is often perceived as a "Big Brother" that imposes itself on workers without regard for feedback, algorithmic leadership takes on the character of a "Companion" aimed at assisting and guiding the user.

The relationship between these two concepts is not merely a division of labor; it represents a fundamental shift in the perspective on the nature of power. Some researchers define algorithmic management as a practice where power and control reside directly in the hands of the software (Lee et al., 2015; Möhlmann & Zalmanson, 2017; Mateescu & Nguyen, 2019). Others view it as a leadership transformation where technology shifts this power from managers to other stakeholders within the organization (Schildt, 2017). For instance, on platforms like Uber, algorithms do more than just plot routes; they assume traditional leadership roles by sending personalized motivational messages to persuade drivers to work longer hours (Harms & Han, 2019).

This serves as a concrete indicator of management evolving from mechanical supervision into influential guidance.

The delegation of leadership authority to algorithms elevates this relationship to an ethical plane. The illusion that algorithms are "neutral" can lead leaders to abdicate their moral subjectivity by attributing responsibility to the systems. To manage these ethical risks, the proposed "ethical delegation" framework suggests that algorithmic leadership should be built upon four pillars (Frimpong, 2025):

Intentionality: The inclusion of AI in decision-making processes must be a conscious moral choice.

Interpretability: Algorithmic logic must be transparent and explainable to all stakeholders.

Moral Authorship: The ultimate responsibility for decisions made by AI must be explicitly claimed by the human leader.

Justice: Algorithmic systems must be designed to prevent the reinforcement of existing inequalities.

Consequently, algorithmic leadership is not just a technological tool but a relational capability that bridges the potential of machines and humans (Pirzada, 2025). The diversity of concepts in the literature—such as "platformic management" (Jarrahi et al., 2019) or "Technology-Mediated Control" (Wiener et al., 2019)—demonstrates that this relationship is still in its developmental stages. Future leaders must become "hybrid leaders" who can critically evaluate algorithmic outputs, question the system's underlying assumptions, and blend technological intelligence with human values (Frimpong, 2025; Pirzada, 2025).

3. METHODOLOGY

This study adopts the bibliometric analysis method to reveal the conceptual development of the algorithmic management literature. This method, which allows for the objective and quantitative mapping of scientific production in a specific field, enables the discovery of the literature's theoretical foundations. Citation analysis was specifically preferred within the scope of the analysis to identify the core studies that have the highest impact and determine the direction of the field. Citation networks hold strategic importance as they tangibly demonstrate the sources from which knowledge is fed and how they lay the groundwork for new leadership-oriented discussions.

3.1. Data Collection Process

Research data was obtained on February 4, 2026, via Web of Science (WoS), one of the most comprehensive and reliable databases for scanning academic publications. The following steps were followed during the data collection phase:

A search was conducted based on the keyword "Algorithmic Management" across titles, abstracts, and keywords.

To cover the most current and high-impact literature in the field, "Article" and "Review" publication types were selected, along with SSCI, SCI, and ESCI index types. As a result of this process, 247 articles were included in the dataset for analysis.

Full records and cited references of the selected publications were exported in a suitable format for transfer to bibliometric analysis software.

3.2. Bibliometric Analysis and Visualization

VOSviewer (v.1.6.20) software was used for the analysis and visualization of the obtained data. To trace the theoretical roots of the literature and the transition from "management to leadership," the following techniques were applied:

Co-citation Analysis: "Cited References" was selected as the unit of analysis. This method identified the most influential works in the field by scanning a total of 4,767 references found in the bibliographies of the 247 articles in the dataset.

Threshold Value: Considering the newly emerging and fragmented structure of the field, a requirement of at least 3 co-citations (threshold=3) was established. As a result of this filtering, 94 key works included in the analysis were visualized on a network map.

Clustering: Publications with similar research topics and common theoretical foundations were clustered into different colors (Red, Green, Blue) on the map, defining the primary theoretical orientations of the literature.

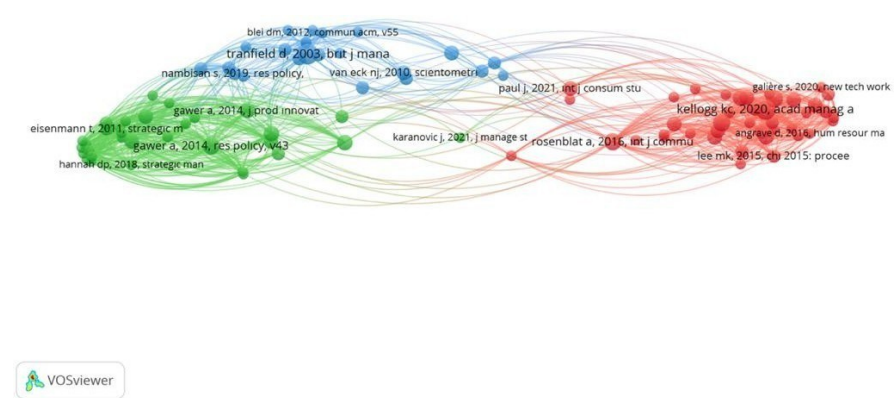


Figure 1. Co-citation Network of Algorithmic Management Literature

The co-citation map generated via VOSviewer clearly demonstrates the nonlinear, multi-layered, and interdisciplinary nature of the algorithmic management literature. The three primary concentration areas (clusters) observed on the map and the network connections between these regions point to the following significant findings:

- The Red Cluster, located on the right side of the map, constitutes the "operational core" of the literature with dense and tightly interconnected lines. The node sizes of authors such as Kellogg (2020) and Lee (2015) prove that these works are the most fundamental reference sources in the field and that discussions on algorithmic control emanate from this center.
- The physical distance between the Green Cluster on the left (Gawer, Eisenmann, etc.) and the Red Cluster on the right indicates that "strategic platform management" and "employee-oriented algorithmic control" developed in parallel but separate lanes for a long time.
- The Blue Cluster (Tranfield, Blei, Van Eck), positioned in the upper-middle part of the map, acts as an "information bridge" between the other two major clusters. The central location of pioneering names in systematic literature reviews, such as Tranfield (2003), serves as visual evidence that the fragmented nature of the field requires a theoretical synthesis.

The thin but distinct lines extending from the red cluster toward the green and blue clusters illustrate the beginning of a transition from the technical dimension of management to the strategic and human dimensions of leadership. This network density between nodes confirms that algorithms are no longer singular surveillance tools but have evolved into a "managerial ecosystem"—and consequently, a form of leadership—that permeates the entire organization.

Table 1. Theoretical Foundations and Clustering Structure of the Algorithmic Management Literature

Cluster	Theoretical Focus	Core References (Top 5)	Role in Literature & Leadership Bridge
Cluster 1 (Red)	HRM and Organizational Behavior	1. Angrave (2016) 2. Ashford (2018) 3. Cameron & Rahman (2022) 4. Cappelli (2013) 5. Cheng (2021)	Represents the impact of algorithms on employee psychology, work identity, and HR practices; thus, it embodies the human and behavioral dimension of management.
Cluster 2 (Green)	Strategic Management and Ecosystems	1. Boudreau (2012) 2. Ceccagnoli (2012) 3. Cennamo (2013) 4. Cennamo (2018) 5. Cusumano (2019)	Explains how algorithms, as platform infrastructures, create strategic power and competitive advantage; it represents the structural and strategic power of management.
Cluster 3 (Blue)	Digital Transformation and Methodology	1. Aria & Cuccurullo (2017) 2. Autio et al, (2018)	Represents the technological, analytical, and innovative infrastructure of algorithmic management.

		3. Blei (2012) 4. Cenamor et al. (2019) 5. Del Giudice (2023)	
--	--	---	--

This tripartite structure, emerging from the co-citation analysis, clearly demonstrates the evolutionary trajectory and conceptual depth of the algorithmic management literature. Cluster 1 centers on the human dimension, utilizing the works of scholars such as Angrave and Ashford to reveal that algorithms are not merely technical stacks of code, but behavioral actors that shape an employee's professional identity and motivational processes. Cluster 2, led by Boudreau and Cennamo, documents how algorithms transform into strategic power and decision-making mechanisms within platform ecosystems, thereby redrawing the structural and operational frameworks of management. Finally, Cluster 3, featuring names like Blei and Del Giudice, illustrates how analytical competence based on big data and machine learning integrates with innovation processes to digitalize the rational foundation of management. The synthesis of these three clusters provides empirical evidence that discussions in the literature have moved beyond simple surveillance mechanisms; a new managerial paradigm, termed algorithmic leadership, is blossoming at the intersection of human agency, strategic structure, and analytical data.

4. CONCLUSION and DISCUSSION

The transition from algorithmic management toward algorithmic leadership expands the boundaries of leadership theory into the realm of "hybrid intelligence." The co-citation analysis conducted in this study reveals that three fundamental theoretical schools (clusters) already exist within the intellectual roots of the literature, providing the groundwork for leadership-oriented debates. While the Red Cluster (Kellogg, Lee, etc.) focuses on the psychological effects of algorithms on employees, the Green Cluster (Gawer, Cennamo, etc.) represents strategic platform management, and the Blue Cluster (Tranfield, Blei, etc.) represents the methodological and analytical transformation of work. The interaction of this tripartite structure on the network map scientifically confirms that management is no longer comprised of technical supervision alone but is evolving into a strategic and interactional leadership paradigm.

In light of the bibliometric findings, algorithmic leadership is identified as both a technological and relational competency. Successful implementation necessitates investment in ethical governance, transparency, and digital literacy (Ismail et al., 2025; Pirzada, 2025). When evaluated within the framework of the Resource-Based View (RBV), algorithmic leadership emerges as a strategic capability that is difficult to imitate—a unique combination of technological fluency, ethical reasoning, and strategic insight. From a Socio-Technical Systems (STS) perspective, the leader's task is to harmonize human expertise with algorithmic processes, ensuring that both sub-systems support rather than constrain one another (Pirzada, 2025).

The focal point of these discussions is the transformation of algorithms from "tools of control" into "decision partners" or "social actors." The transparency and accountability of algorithmic systems are the most critical factors determining employee trust (Höddinghaus et al., 2021). Leaders must possess "algorithmic literacy" to critically evaluate algorithmic recommendations; this is essential for maintaining human judgment while reducing over-reliance on intuition (Pirzada, 2025). Furthermore, the role of human managers within algorithmic performance management systems is shifting toward a supportive structure that "translates" algorithms for employees (reflexivity). In this new role, managers must make the complex logic of algorithms intelligible to staff and reintroduce the human contexts that the system may overlook (Leavitt et al., 2025).

However, risks described as the "dark side" of algorithmic leadership also exist. Pervasive surveillance, data-driven biases, and the dehumanization of the workplace can threaten employee well-being and organizational loyalty (Vignola et al., 2023). The legitimacy of algorithmic authority depends heavily on the cognitive and emotional trust followers place in these systems (Höddinghaus et al., 2021). In systems where algorithms can make errors and where human managers are empowered to correct these errors, employee trust levels remain higher (Leavitt et al., 2025). This underscores the strategic importance of "human-in-the-loop" hybrid models over fully autonomous systems.

Future research should examine the reflections of algorithmic leadership across different industries through longitudinal studies. Additionally, there is a critical need to develop "ethical delegation" frameworks (intentionality, interpretability, moral authorship, and fairness) regarding how leaders maintain moral responsibility when delegating authority to AI systems (Frimpong, 2025). Ultimately, algorithmic leadership will provide a sustainable competitive advantage only when it is constructed not as an imposition of technology, but as a mode of governance that balances efficiency with human values, blended with principles of transparency and accountability (Frimpong, 2025; Pirzada, 2025). This study relies solely on WoS database. The exclusion of other databases such as Scopus may limit the comprehensiveness of the dataset. Future studies could integrate multiple databases for a broader representation of the field.

REFERENCES

- Angrave, D., Charlwood, A., Kirkpatrick, I., Lawrence, M., & Stuart, M. (2016). HR and analytics: Why HR is set to fail the big data challenge. *Human Resource Management Journal*, 26(1), 1–11. <https://doi.org/10.1111/1748-8583.12090>
- Aria, M., & Cuccurullo, C. (2017). bibliometrix: An R-tool for comprehensive science mapping analysis. *Journal of Informetrics*, 11(4), 959–975. <https://doi.org/10.1016/j.joi.2017.08.007>
- Ashford, S. J., Caza, B. B., & Reid, E. M. (2018). From surviving to thriving in the gig economy: A research agenda for individuals in the new world

- of work. *Research in Organizational Behavior*, 38, 23–41. <https://doi.org/10.1016/j.riob.2018.11.001>
- Autio, E., Nambisan, S., Thomas, L. D., & Wright, M. (2018). Digital affordances, spatial affordances, and the genesis of entrepreneurial ecosystems. *Strategic Entrepreneurship Journal*, 12(1), 72–95. <https://doi.org/10.1002/sej.1266>
- Baiocco, S., Fernández-Macías, E., Rani, U., & Pesole, A. (2022). The algorithmic management of work and its implications in different contexts (JRC Working Papers Series on Labour, Education and Technology, No. 2022/02). European Commission. <https://hdl.handle.net/10419/262292>
- Blei, D. M. (2012). Probabilistic topic models. *Communications of the ACM*, 55(4), 77–84. <https://doi.org/10.1145/2133806.2133826>
- Boudreau, K. J. (2012). Let a thousand flowers bloom? An early look at large numbers of software app developers and patterns of innovation. *Organization Science*, 23(5), 1409–1427. <https://doi.org/10.1287/orsc.1110.0678>
- Cameron, L. D. (2024). The making of the “good bad” job: How algorithmic management manufactures consent through constant and confined choices. *Administrative Science Quarterly*, 69(2), 458–514. <https://doi.org/10.1177/00018392241236163>
- Cameron, L. D., & Rahman, H. (2022). Expanding the locus of resistance: Understanding the co-constitution of control and resistance in the gig economy. *Organization Science*, 33(1), 38–58. <https://doi.org/10.1287/orsc.2021.1557>
- Cappelli, P., & Keller, J. R. (2013). Classifying work in the new economy. *Academy of Management Review*, 38(4), 575–596. <https://doi.org/10.5465/amr.2011.0302>
- Ceccagnoli, M., Forman, C., Huang, P., & Wu, D. J. (2012). Cocreation of value in a platform ecosystem! The case of enterprise software. *MIS Quarterly*, 36(1), 263–290. <https://doi.org/10.2307/41410417>
- Cenamor, J., Parida, V., & Wincent, J. (2019). How entrepreneurial SMEs compete through digital platforms: The roles of digital platform capability, network capability and ambidexterity. *Journal of Business Research*, 100, 196–206. <https://doi.org/10.1016/j.jbusres.2019.03.035>
- Cennamo, C. (2018). Building the value of next-generation platforms: The paradox of diminishing returns. *Journal of Management*, 44(8), 3038–3069. <https://doi.org/10.1177/0149206316658350>
- Cennamo, C., & Santalo, J. (2013). Platform competition: Strategic trade-offs in platform markets. *Strategic Management Journal*, 34(11), 1331–1350. <https://doi.org/10.1002/smj.2066>

- Cheng, M. M., & Hackett, R. D. (2021). A critical review of algorithms in HRM: Definition, theory, and practice. *Human Resource Management Review*, 31(1), Article 100698. <https://doi.org/10.1016/j.hrmr.2019.100698>
- Cusumano, M. A., Gawer, A., & Yoffie, D. B. (2019). *The business of platforms: Strategy in the age of digital competition, innovation, and power*. Harper Business.
- Del Giudice, M., Scuotto, V., Orlando, B., & Mustilli, M. (2023). Toward the human-centered approach: A revised model of individual acceptance of AI. *Human Resource Management Review*, 33(1), Article 100856. <https://doi.org/10.1016/j.hrmr.2021.100856>
- 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>
- Feshchenko, P. (2021). *Algorithmic management & algorithmic leadership: A systematic literature review* [Master's thesis, University of Jyväskylä]. JYX Digital Repository. <https://urn.fi/URN:NBN:fi:jyu-202101221224>
- Frimpong, V. (2025). Algorithmic authority and the complexities of delegated decision-making: Case studies on ethical challenges for 21st-century leadership. *International Journal of Organizational Leadership*, 14(3), 637–655.
- Harms, P. D., & Han, G. (2019). Algorithmic leadership: The future is now. *Journal of Leadership Studies*, 12(4), 74–75. <https://doi.org/10.1002/jls.21615>
- Höddinghaus, M., Sondern, D., & Hertel, G. (2021). The automation of leadership functions: Would people trust decision algorithms? *Computers in Human Behavior*, 116, Article 106635. <https://doi.org/10.1016/j.chb.2020.106635>
- Ismail, R., Sedjati, M., Saling, Indriaty, L., Yahya, N., & Izwan, I. D. M. (2025). Algorithmic leadership through artificial intelligence in organizational strategy: A case study of Papua Pegunungan Province, Indonesia. *International Journal of Research and Innovation in Social Science*, 9(10), 1906–1915. <https://doi.org/10.47772/IJRISS.2025.910000160>
- Jabagi, N., Croteau, A. M., Audebrand, L. K., & Marsan, J. (2020). Perceived organizational support in the face of algorithmic management: A conceptual model. *Proceedings of the 53rd Hawaii International Conference on System Sciences*. <https://hdl.handle.net/10125/64231>
- Jarrahi, M. H., Möhlmann, M., & Lee, M. K. (2023). Algorithmic management: The role of AI in managing workforces. *MIT Sloan Management Review*. <https://sloanreview.mit.edu/>

- Jarrahi, M. H., Newlands, G., Lee, M. K., Wolf, C. T., Kinder, E., & Sutherland, W. (2021). Algorithmic management in a work context. *Big Data & Society*, 8(2), 1–14. <https://doi.org/10.1177/20539517211020332>
- 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>
- Kelly-Lyth, A., & Thomas, A. (2022). Algorithmic management: Assessing the impacts of AI at work (SSRN Scholarly Paper). SSRN. <https://ssrn.com/abstract=4251502>
- Leavitt, K., Barnes, C. M., & Shapiro, D. L. (2025). The role of human managers within algorithmic performance management systems: A process model of employee trust in managers through reflexivity. *Academy of Management Review*, 50(4), 745–767. <https://doi.org/10.5465/amr.2022.0058>
- Lee, M. K. (2018). Understanding perception of algorithmic decisions: Fairness, trust, and emotion in response to algorithmic management. *Big Data & Society*, 5(1), 1–16. <https://doi.org/10.1177/2053951718756684>
- Lee, M. K., Kusbit, D., Metsky, E., & Dabbish, L. (2015). Working with machines: The impact of algorithmic and data-driven management on human workers. *Proceedings of the 33rd Annual ACM Conference on Human Factors in Computing Systems*, 1603–1612. <https://doi.org/10.1145/2702123.2702548>
- Li, A. K. (2024). Working with algorithmic management: Design logic, algorithmic unfitness, and labor repair behind the wall. *New Media & Society*. Advance online publication. <https://doi.org/10.1177/14614448231221238>
- Mateescu, A., & Nguyen, A. (2019). Explainer: Algorithmic management in the workplace. Data & Society Research Institute.
- Möhlmann, M., Salge, C. A. L., & Marabelli, M. (2023). Algorithm sensemaking: How platform workers make sense of algorithmic management. *Journal of the Association for Information Systems*, 24(1), 35–64. <https://doi.org/10.17705/1jais.00774>
- OECD. (2025). Algorithmic management in the workplace: New evidence from an OECD employer survey. OECD Publishing. <https://doi.org/10.1787/287c13c4-en>
- Pirzada, W. (2025). Transforming leadership for the digital age: A conceptual model of algorithmic leadership and human capital management. *Business, Technology & Innovation Studies Journal*, 1(1).
- Rilinger, G. (2024). Algorithmic management and the social order of digital markets. *Theory and Society*, 53, 765–794. <https://doi.org/10.1007/s11186-024-09555-6>

- Schildt, H. (2017). Big data and organizational design—the brave new world of algorithmic management and computer augmented transparency. *Innovation*, 19(1), 23–30. <https://doi.org/10.1080/14479338.2016.1252043>
- Stark, D., & Vanden Broeck, P. (2024). Principles of algorithmic management. *Organization Theory*, 5, 1–22. <https://doi.org/10.1177/26317877241257213>
- Tomprou, M., & Lee, M. K. (2022). Employment relationships in algorithmic management: A psychological contract perspective. *Computers in Human Behavior*, 126, Article 107022. <https://doi.org/10.1016/j.chb.2021.106997>
- van Zoonen, W., Sivunen, A. E., & Treem, J. W. (2024). Algorithmic management of crowdworkers: Implications for workers' identity, belonging, and meaningfulness of work. *Computers in Human Behavior*, 152, Article 108066. <https://doi.org/10.1016/j.chb.2023.108089>
- Vignola, E. F., Baron, S., Abreu Plasencia, E., Hussein, M., & Cohen, N. (2023). Workers' health under algorithmic management: Emerging findings and urgent research questions. *International Journal of Environmental Research and Public Health*, 20(2), Article 1239. <https://doi.org/10.3390/ijerph20021239>
- Woodcock, J. (2021). The limits of algorithmic management: On platforms, data, and workers' struggle. *South Atlantic Quarterly*, 120(4), 703–713. <https://doi.org/10.1215/00382876-9443266>