



# When an AI “Agentforce” enters the workforce: generative AI, employment relations, and the changing social contract

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Received: 16 January 2025 / Accepted: 1 September 2025 / Published online: 1 October 2025  
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## Abstract

Generative AI and autonomous AI agents are reshaping both the legal employment relationship and the broader social contract between employers and employees. This contract reflects society’s shared expectations about what employers and employees owe each other, including how value is created and distributed and who has authority and accountability for various activities. Unlike prior waves of automation that primarily affected routine tasks, generative AI now touches high-wage, high-status “knowledge” work, altering how expertise is recognized, how decisions are made, and how relationships are formed at work. This paper examines the historical foundations of technological change and employment relations, highlighting how generative AI intensifies existing trends while also introducing new dynamics across six key domains: (1) the role of employee judgment and authority, (2) the value of employee expertise and human-created data, (3) appropriate organizational control and employee autonomy, (4) the nature of work relationships, particularly in the context of AI agents, (5) responsibility for reskilling and career development, and (6) worker collective power. By examining these changing domains, organizational scholars can help explain how generative AI and AI agents are fundamentally altering the social contract of modern employment.

**Keywords** Generative AI · AI agents · Employment relations · Social contract

## Introduction

The rise of generative AI and autonomous AI agents marks a transformative shift in the nature of work, employment relations, and the broader social contract between employers and employees. These technologies go beyond automating routine tasks, fundamentally reshaping high-wage cognitive work, altering expectations around skill development, and introducing new dynamics of control and collaboration. This review article examines the foundations and evolving nature of the employment relationship and social contract and then defines a research agenda to explore the changes brought about by generative AI and autonomous agents.

## A brief history of employment relations and technological change

Technology has long been a fundamental driver of work, serving as both the means of production and the framework for how tasks are accomplished. Technological change has consistently reshaped the employer–employee relationship in the United States, influencing the nature of work, employment categories, power dynamics, and legal protections. These shifts illustrate the ongoing challenge of aligning emerging technologies and work practices with established legal frameworks. Legal scholars analyze these changes through the lens of laws, regulations, and contractual agreements that govern the rights, duties, and responsibilities of both parties. Historically, major technological shifts have precipitated profound changes in employment relationships.

During the early industrialization of the 1800s, the transition from agrarian to industrial work introduced technologies like the factory system and power looms, revolutionizing production processes and creating a distinct class of wage-earning employees with interests separate from their employers (De Vries 1994; Hopkins 1982;

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Stearns 2020). The modal worker shifted from a craftsman in small, home-based settings to a factory laborer in centralized production facilities, marking the rise of the wage labor system (Lauck 1929). These changes brought new challenges, such as exploitative child labor and frequent industrial accidents, prompting legislative responses like child labor laws and the workers' compensation movement (Dau-Schmidt 2017; Stearns 2014). Together, these developments established the foundation of the modern employment relationship, characterized by workers' dependence on employers for wages and job security and firms' reliance on a stable, skilled workforce.

The next significant era of technological change was characterized by mechanization, automation, and the rise of the knowledge economy, spanning the late nineteenth and twentieth centuries. The advent of electricity and assembly line production revolutionized mass production, increasing efficiency but also concentrating workers in factories. This shift fostered the growth of labor unions and led to key legal developments such as the National Labor Relations Act (1935), which guaranteed the right to unionize, and the Fair Labor Standards Act (1938), which established minimum wage and overtime protections. The post-war period saw the rise of automation and white-collar work driven by early computers and automated systems, creating demand for educated workers and prompting laws like the GI Bill to expand access to higher education. This era also exposed systemic inequities, leading to landmark anti-discrimination laws such as the Civil Rights Act (1964) and the Americans with Disabilities Act (1990).

The emergence of the digital economy in the early twenty-first century accelerated these trends and further transformed the employment relationship. The proliferation of computers and the internet reshaped the global labor market by enhancing communication and information processing, enabling greater access to opportunities but also increasing competition. Digitization fundamentally altered the employment relationship by amplifying employer power, fragmenting long-term jobs into short-term or gig-based roles, and replacing personal interactions with algorithmic and automated hiring processes. Platforms like Uber and Upwork blurred the line between employees and independent contractors, sparking legal debates over worker classification and benefits. These platforms exposed gaps in traditional labor protections, as gig workers often lacked access to minimum wage guarantees, health benefits, or unemployment insurance, prompting legislative responses like California's Assembly Bill 5 and its amendments. Simultaneously, the rise of workplace surveillance tools raised significant concerns about employee privacy, leading to regulatory interventions such as the Electronic Communications Privacy Act (1986) and the EU's GDPR.

## Social contracts and psychological contracts in the employer/employee relationship

Organizational scholars examining the employer–employee relationship adopt a more expansive perspective, viewing employment relations not only through legal definitions but also as a social and psychological contract. Unlike formal legal contracts, which outline specific terms and conditions (e.g., wages, benefits, protections), the *social contract* encompasses broader and often unwritten understandings about what each party owes the other in terms of responsibilities, rights, and rewards. It reflects societal norms, cultural values, and historical contexts, which shape how work is organized and the reciprocal expectations between employers and employees. (Baker et al. 2002; Baron & Krepes 2013; DiMaggio 2001; Suchman 2003). The related concept of a *psychological contract* refers to individual perceptions and subjective beliefs held by employees and employers about the terms of their mutual exchange, including expectations of fairness and procedural justice, loyalty and trust, and reciprocity that are not explicitly articulated but significantly influence workplace dynamics (e.g., Morrison & Robinson 1997; Robinson et al. 1994; Rousseau & Tijoriwala 1998).

Technological change also influences the social and psychological contracts in the employer–employee relationship. For one, the digitization of the labor market has driven a shift toward flexible yet fragmented work arrangements, including the gig economy and the increasing use of contract workers, even by large tech firms (Endacott et al. 2024; Kunda et al. 2002; Rousseau 2006). This shift has reduced the expectation of long-term employer–employee relationships, as full-time employment becomes less common, and assumptions grow that workers will move frequently between firms. Related organizing models, such as flash teams—temporary groups that rapidly form and disband around specific projects—exemplify the transactional and short-term nature of digital labor markets (Retelny et al. 2014; Valentine & Bernstein 2025; Valentine et al. 2017).

As a result, career development and skill acquisition are no longer rooted in the relational framework of full-time employment and long-term employer investment in worker growth (Cappelli 1999; Hoffman et al. 2013). Workers are increasingly expected to upskill independently to keep pace with technological advancements, as organizations have scaled back formal training programs. This shift played out with significant skill polarization due to digitization in the 1990s and 2000s saw, with high-skill workers benefiting compared to middle- and low-skill workers (Autor et al. 2003; Penn et al. 1994). High-skill roles in IT, engineering, and management were prioritized

for reskilling programs and offered training in digital tools, programming, and enterprise systems, as these positions were deemed critical to innovation and competitive advantage. Lower-skill workers were less likely to benefit from reskilling opportunities, either because their roles were considered less critical to business strategy or because training programs were less accessible to them. The shift toward individualized learning and fragmented career pathways is even more pronounced in the gig economy, where workers face intensified pressures to manage skill development, job security, and career advancement independently (O'Mahony and Bechky 2006).

Overall, digital labor markets exemplify a key shift to a three-party employment model involving platform companies, client managers, and contractors (Vallas and Schor 2020). Client managers who are typically informal and unpaid lack the relational commitment and accountability expected in traditional full-time employment relationships (Rahman and Valentine 2020). Online labor markets and gig-based platforms also tend to rely on technical tools to solve problems introduced by the remote work and contingent work arrangements, for example using algorithmic ratings (Horton 2010; Lix 2021). In general, these tools illustrate the changing expectations about appropriate organizational control (Sitkin et al. 2010). Algorithmic technologies have intensified surveillance and rationalized control mechanisms, enabling managers to direct, evaluate, and discipline workers with greater precision and immediacy (Kellogg et al. 2020). At the same time, these technologies have led to resistance where employees push back against the encroachment of algorithmic control systems on their autonomy (Cameron & Rahman 2022; Kessinger & Kellogg 2019).

Finally, the so-called remote work revolution is another example where the social contract changed as the technologies of work changed; many companies and employees are facing changed (though not fully aligned) expectations about where and how work is done (Mortensen 2023). This shift is also implicating established status hierarchies and norms around intergroup communication and conflict (Hinds et al. 2025; Hu et al. 2021; Rhymer 2018), including questions of what employees owe employers and what they are owed in terms of flexibility and support (Countouris and De Stefano 2023; Voigtman 2024).

## How generative AI changes employment relations and the social contract

In the context of these changing employment relations and the evolving social contract, organizational scholars now confront a novel class of technologies: generative AI and agentic AI systems. What makes these technologies

distinctive is their ability to perform higher-order cognitive functions that were once the exclusive domain of skilled human workers. Large language models (LLMs) can now generate strategy memos, summarize legal documents, write code, and simulate interpersonal communication with surprising fluency. Agentic systems go further, using these capabilities to act autonomously by initiating tasks, making decisions, and coordinating actions across digital environments.

These AI tools seem to operate as functional equivalents to human expertise in ways that destabilize longstanding assumptions about judgment, authorship, ownership, and responsibility in the social contract that governs knowledge work. As these systems become embedded in organizational workflows, they streamline operations and reshape expectations about who is needed, what counts as valuable work, and how value and accountability are distributed across employees and AI tools. We propose six critical domains in the social contract between employers and employees that will likely be transformed, as generative AI both intensifies existing trends and introduces new tensions in: (1) the role of employee judgment and authority, (2) the value of employee expertise and human-created data, (3) appropriate organizational control and employee autonomy, (4) the nature of work relationships, particularly in the context of AI agents, (5) responsibility for reskilling and career development, and (6) sources of worker collective power. Table 1 summarizes the discussion below.

### The role of employee judgment and authority

Like earlier forms of automation, generative AI technologies such as large language models (LLMs) tend to operate at the task level rather than eliminating entire jobs (Acemoglu 2024; Das et al. 2020). However, unlike prior automation trends, which predominantly affected routine tasks in low-wage jobs (Autor and Dorn 2013), preliminary evidence suggests that generative AI is automating high-wage, high-status knowledge work (Eloundou et al. 2024; Kogan et al. 2023; Wilmers 2024). In such knowledge work, judgment, discretion, and authorship have traditionally been the basis for employee authority and advancement. Employees' ability to exercise expert judgment has been foundational to their authority and to the reciprocal commitments they received from employers, for example their work to synthesize complex information, make decisions under uncertainty, and create high-value content (Abbott 1991; Anteby et al. 2016; Highhouse et al. 2014). This capacity has shaped expectations in the social and psychological contract: those who demonstrate sound judgment will earn employer trust, managerial discretion, and long-term investment. Generative AI tools can now simulate core outputs of expert judgment at a level that challenges prior notions of what only humans

**Table 1** Generative AI and the changing social contract: analysis of relevant trends

Dimensions of changing social contract	Prior trends	Intensification of trends	New trends
Role of employee judgment and authority	Human experts were central to decision-making; judgment shaped organizational priorities; increasing quantification of expert decisions	AI-supported decision-making in strategic tasks, decisions increasingly justified through algorithmic outputs	AI outperforms human expertise on many new high-value cognitive tasks; ambiguity in what counts as contribution. Visible outputs increasingly machine-generated; ambiguity in expert role clarity and recognition
Value of employee expertise and human-created data	Employee-generated "everyday" outputs (e.g., emails, docs) low strategic value; some focus on documentation and knowledge repositories	Increased focus on employees ensuring fidelity of company documentation and data	Employee-generated data becomes core training material for proprietary AI tools, emergence of tensions around ownership, privacy, and compensation for employee data used to train AI
Appropriate organizational control and employee autonomy	Knowledge workers hold discretion over tasks, with high autonomy but shared responsibility for outcomes	Algorithmic management extends to knowledge work; more granular performance tracking and behavioral nudging	AI agents take autonomous action, offer real-time direction; accountability blurs between human and AI decision-makers
Nature of work relationships	Work identity tied to belonging and visible contributions; shift toward short-term contracts, gigification, remote work	Further erosion of long-term employment relationships; increased computer-mediation and taskification of work	Emergence of AI agents impacts social relations; potential shifts in trust, collaboration, and social cohesion norms
Reskilling and career development	Decline in employer-provided training; growing expectation of self-directed learning	Continuous AI-driven upskilling demands	Sharp change to apprenticeship models; senior knowledge workers use AI instead of relying on juniors; rise of AI tutors and personalized learning agents
Worker collective power	Decline of unions; rise of informal peer networks and professional affiliations	Fragmented workforce structure makes collective action harder	Potential for new forms of employee voice and power

could do (Alavi and Westerman 2023). As a consequence of AI tools producing similar expert judgements and deliverables, the basis for authority may shift (Lustig et al. 2016).

As these tools become embedded in organizational workflows, they challenge the assumption that valuable contributions will be created by human employees. This shift threatens to destabilize human expertise as the basis of recognition and decision rights (Ali et al. 2024; Grossman et al. 2023). It also complicates accountability, as organizations grapple with who is responsible when machine-generated judgments shape outcomes (Bagenal et al. 2024; Elliott and MacCarthy 2025; Lustig et al. 2016). The result is a blurring of fundamental tenets of how authority and responsibility have traditionally been distributed in firms. Longstanding expectations are destabilized: if human judgment is no longer the primary value that employees contribute, what do organizations owe them in return? Discretion, advancement, and professional trust, which were tied to individual expertise may be reconfigured (Haddadin 2025). Understanding how authority is renegotiated in human–AI workflows will be critical for reimagining fair and functional employment relationships in the era of generative AI (Daugherty & Wilson 2024).

### The value of employee expertise and human-created data

A second domain in the changing social contract relates to the value of employee expertise and their creation of data. This change relates in part to the fact that generative AI uses types of data that were not traditionally analyzed or utilized in similar ways before. Unstructured text data, such as books, articles, emails, social media posts, and transcripts, are now used to train models. Additionally, generative AI incorporates social media interactions and multimodal data, including video and audio. The widespread use of new data sources by generative AI is reshaping expectations and legal frameworks around data ownership in significant ways. As an example, publishers are suing OpenAI for damages, arguing that ChatGPT's dataset includes millions of copyrighted articles from news organizations used without consent or payment, constituting massive copyright infringement (Allyn 2025). Lawsuits like this question whether AI training constitutes fair use.

Similar questions around data ownership and use in generative AI are emerging within organizations and will reshape the employment relationship and social contract. Organizations increasingly explore training AI on their internal proprietary datasets to create domain-specific tools (Davenport and Diwari 2024). These proprietary datasets are often created by employees creating internal documents of various kinds; employees' natural language products created in the course of their work (e.g., Slack messages, email,

communication logs) did not hold the same kind of value as they do now as inputs to companies' training data for custom AI models (Alavi and Leidner 2001; Jarrahi et al. 2023; Nakash and Bolisani 2025). This tension, where domain experts' knowledge may be used to replace them or at least some of their tasks, is well-known (e.g., Bailey and Barley 2020; McCue 2015), but generative AI changes the dynamic by including new kinds of data that have not yet been subject to this renegotiation of value and ownership and employee privacy. Some scholars argue that this tension could potentially be mitigated through 'pro-worker AI,' which emphasizes integrating AI to enhance decision-making rather than replacing rather than employers extracting knowledge and expertise and then replacing it (Acemoglu et al. 2023; Autor 2024).

### The nature of work relationships, particularly in the context of AI agents

Another potential change in the social contract relates to ways that generative AI can further automate and digitize the labor market, offering capabilities that reduce some of the transaction costs in searching, contracting, hiring, and managing workers (Valentine & Bernstein 2025). Generative AI technologies can automate the extensive aspects of the labor market that rely on natural language, for example matching job requirements with resume screening, or even conducting initial interviews and onboarding using AI agents (e.g., Fleiß et al. 2024; Mozannar et al. 2024; Broek et al. 2021). Economic theories classically predict that lower labor transaction costs are likely to lead to more market-based employment models, which will challenge the existing policy landscape and social contract (Davis 2016; Davis and Sinha 2021; Vallas and Kovalainen 2019). Additionally, generative AI enables finer-grained decomposition of jobs into discrete, automatable tasks, contributing to what scholars call the 'taskification' of labor. This trend, long associated with gig platforms, can now reach into formerly stable white-collar work (Davis and Sinha 2021).

Another major change in the nature of work relationships involves new ways that people will be expected to interact with AI agents. Unlike predictive or generative AI, autonomous agents perform tasks independently, make decisions, and even negotiate. These agents offer "intelligent, scalable digital labor that performs tasks autonomously. Instead of waiting for human input, agents can analyze information, make decisions, and take action independently, adapting and learning as they go" (Bennihoff 2024, pg. 1. Note Bennihoff is the CEO of Salesforce which developed the set of AI agents called 'agentforce' referenced in the title). However, the integration of AI agents into the workplace poses significant technical and social challenges. Agents often struggle with compounding errors, inaccuracies, and hallucinations. To

address these issues, researchers are exploring methods to combine the "inexpensive" general data powering large language models (LLMs) with trusted, verified ("expensive") expert data sources—whether human or algorithmic—to ground interactions more effectively (e.g., Gligorić et al. 2024; Zrnic and Candès 2024). Related research is also focused on optimizing the relationships between agents, including systems of agent collaboration and the role of "agent managers" (e.g., Fourney et al. 2024; Hong et al. 2023; Qian et al. 2023; Wu et al. 2024), as well as the dynamics between agents and humans (e.g., Ashktorab et al. 2021; Cañas 2022; Kim and Im 2023; Zhou et al. 2024).

These research efforts highlight how closely the human workforce may be expected to work with an agent workforce. Workers may need to acquire new skills, such as crafting effective prompts, editing outputs, and supervising AI-generated work, fundamentally reshaping their roles. Rather than performing tasks from scratch, human workers might increasingly oversee and refine AI-generated outputs, blurring the lines between traditional work and data/AI oversight. These evolving dynamics could also influence workplace relationships and social interactions in ways that will need considerable future research (Einola and Khoreva 2023; Jorge et al. 2022; Ulfert et al. 2024). Jorge et al. (2024) argues that a better understanding of how human–AI teams function is needed, especially the main mechanisms that support collaboration, such as trust. Some scholars caution that widespread reliance on AI agents could reduce social interactions between colleagues, creating a "self-sufficiency spiral" that undermines collaboration, solidarity, and organizational culture (Gonzalez 2024). The current social contract was developed through social interactions between humans with known role relationships (e.g., manager, teammate); more needs to be understood about how these expectations about mutual obligations change when AI agents become active participants in the workplace.

### **Appropriate organizational control and employee autonomy**

Beyond the transactions that structure digital labor markets, generative AI's additional data and analytical capabilities can also increase algorithmic management. Prior algorithmic systems leveraged big data and real-time analytics to be far more comprehensive, instantaneous, interactive, and opaque in their control capabilities (Kellogg et al. 2020). Such all-encompassing monitoring and rapid, data-driven feedback loops could be configured to set up an unprecedented degree of organizational oversight, sometimes without human supervision. Generative AI tools largely intensify existing control patterns. Studies across industries suggest that generative AI is reinforcing trends like constant surveillance and metric-driven oversight. For example, generative

AI can extend existing surveillance practices; in customer service call centers that already had pervasive monitoring, AI now adds a layer of interpretation and real-time guidance, scrutinizing not just what workers do but how they interact (tone, wording, emotional cues) (Nguyen and Mateescu 2024). Generative AI technologies can also be used to aggregate disparate data about employees and output summaries of their activities, assess their behavior, or produce performance evaluations (Zielinski 2023). These tools may play a key role in standardizing and scaling "personalized" management interactions by interactively offering customized feedback, support or discipline (e.g., Almansour and Alfhaid 2024; Leong et al. 2024). Research is beginning to document the experiences of employees who work extensively with AI systems (Yi et al. 2024; Yu and Qi 2024). More research is needed, but as an example, a 2025 study found that routine collaboration with generative AI increased some workers' feelings of alienation (Hai et al. 2025). Workers and employers will need to create new social and psychological contracts in this contested terrain where generative AI can create workers augmentation but can also create alienation through intensified surveillance and control.

### **Responsibility for reskilling and career development**

Another domain where generative AI is destabilizing the social contract relates to ways that generative AI is changing expected skills and expected reskilling processes (Jesuthasan and Kapilashrami 2024). Generative AI intensifies the expectation that workers will independently acquire and refine skills (Christensen et al. 2024; Delaney 2024). This shift is driven by the rapid pace of AI development and the increasing availability of user-friendly AI tools, which make self-directed learning more accessible but also more necessary. The skills in demand are evolving as generative AI automates routine cognitive tasks, such as writing, summarizing, and coding. Workers are now expected to develop hybrid capabilities, combining domain expertise with proficiency in using AI tools; skills like prompt engineering, the ability to critically evaluate AI-generated outputs, and knowledge of data governance are becoming crucial (Davenport and Diwari 2024; Davenport et al. 2023; Larson et al. 2024). And yet, critically, these reskilling demands are again outside established pathways for social learning and career development, as experts use generative AI on tasks for which they may have previously relied on apprentices or novices (Beane 2019, 2024; Beane & Anthony 2024).

### **Worker collective power**

The parties in an employment relationship have different sources of power that shift as technologies change (e.g., Cornfield 2013; Molinder et al. 2021). Historically, worker

power has stemmed from control over specialized knowledge, scarcity of skill, or collective capacity to organize or to disrupt production. But as generative AI systems begin to simulate core outputs of judgment, creativity, and decision-making, these traditional foundations may change. At the same time, new claims for worker power are emerging. Unions and worker coalitions are also beginning to negotiate over AI implementation and algorithmic governance, not only to defend existing jobs but to define the conditions under which technology enhances rather than degrades work (Kochan et al. 2024; Spektor et al. 2023). Early agreements in sectors like entertainment and education signal that generative AI can be a site of negotiated control (e.g., Ananny & Karr 2025; Kelley 2023). Whether this potential is realized will depend on societal support and workers' ability to organize around the strategic levers of AI deployment (Kochan et al. 2024; Wilmers 2024).

Taken together, these critical changes compel scholars and policymakers to reconsider the foundations of the employment relationship and to develop new frameworks that reflect the realities of work in the era of generative AI.

**Author contributions** The first author reviewed the relevant literature and wrote the paper.

**Data availability** No data were used in this paper.

## References

- Abbott A (1991) The future of professions: occupation and expertise in the age of organization. *Res Sociol Organ* 8:17–42
- Acemoglu D, Autor D, Johnson S (2023) Can we Have Pro-Worker AI? CEPR Policy Insight, 123
- Acemoglu D (2024) The simple macroeconomics of AI: National Bureau of Economic Research
- Alavi M, Leidner D (2001) Knowledge management and knowledge management systems: conceptual foundations and research issues. *MISQ Review. MIS Q* 25(1):107–136
- Alavi M, Westerman G (2023) How generative AI Will transform knowledge work. *Harvard Business Review*
- Ali AE, Venkatraj KP, Morosoli S, Naudts L, Helberger N, Cesar P (2024) Transparent AI disclosure obligations: who, what, when, where, why, how, extended abstracts of the CHI conference on human factors in computing systems: Article 342. Honolulu, HI, USA: Association for Computing Machinery
- Allyn B (2025) 'The New York Times' takes OpenAI to court. ChatGPT's future could be on the line, NPR
- Almansour M, Alfahid FM (2024) Generative artificial intelligence and the personalization of health professional education: a narrative review. *Medicine* 103(31):e38955
- Ananny M, Karr J (2025) How media unions stabilize technological hype Tracing Organized Journalism's discursive constructions of generative artificial intelligence. *Digit Journal*, pp 1–21
- Anteby M, Chan CK, DiBenigno J (2016) Three lenses on occupations and professions in organizations: becoming, doing, and relating. *Acad Manag Ann* 10(1):183–244
- Ashktorab Z, Dugan C, Johnson J, Pan Q, Zhang W, Kumaravel S, Campbell M (2021) Effects of communication directionality and AI agent differences in human-AI interaction. In: *Proceedings of the 2021 CHI conference on human factors in computing systems*
- Autor DH, Dorn D (2013) The growth of low-skill service jobs and the polarization of the US labor market. *Am Econ Rev* 103(5):1553–1597
- Autor DH, Levy F, Murnane RJ (2003) The skill content of recent technological change: an empirical exploration. *Q J Econ* 118(4):1279–1333
- Autor D (2024) Applying AI to rebuild middle class jobs: National Bureau of Economic Research
- Bagenal J, Biamis C, Boillot M, Brierley R, Chew M, Dehnel T, Frankish H, Grainger E, Pope J, Prowse J (2024) Generative AI: ensuring transparency and emphasising human intelligence and accountability. *The Lancet* 404(10468):2142–2143
- Bailey DE, Barley SR (2020) Beyond design and use: How scholars should study intelligent technologies. *Inf Organ* 30(2):100286
- Baker G, Gibbons R, Murphy KJ (2002) Relational contracts and the theory of the firm. *Quart J Econ* 117(1):39–84
- Baron JN, Kreps DM (2013) Employment as an economic and a social relationship. In: Robert G, John R (eds) *The handbook of organizational economics*. Princeton University Press, Princeton, pp 315–341
- Beane M (2019) Shadow learning: building robotic surgical skill when approved means fail. *Adm Sci Q* 64(1):87–123
- Beane M (2024) The skill code: how to save human ability in an age of intelligent machines. HarperCollins
- Beane M, Anthony C (2024) Inverted apprenticeship: How senior occupational members develop practical expertise and preserve their position when new technologies arrive. *Organ Sci* 35(2):405–431
- Bennioff M (2024) How the rise of new digital workers will lead to an unlimited age. *Time Magazine*
- Cameron LD, Rahman H (2022) Expanding the locus of resistance: understanding the co-constitution of control and resistance in the gig economy. *Organ Sci* 33(1):38–58
- Cañas JJ (2022) AI and ethics when human beings collaborate with AI agents. *Front Psychol* 13:836650
- Cappelli P (1999) Career jobs are dead. *Calif Manage Rev* 42(1):146–167
- Christensen L, Durth S, Jones K, Rashid N (2024) Upskilling and reskilling priorities for the Gen AI Era, McKinsey People and Organization Blog.
- Cornfield DB (2013) Workers, managers, and technological change: Emerging patterns of labor relations. Springer Science & Business Media
- Countouris N, De Stefano V (2023) Out of sight, out of mind? Remote work and contractual distancing
- Das S, Steffen S, Clarke W, Reddy P, Brynjolfsson E, Fleming M (2020) Learning occupational task-shares dynamics for the future of work. In: *Proceedings of the AAAI/ACM conference on AI, ethics, and society*
- Daugherty PR, Wilson HJ (2024) Human + machine, updated and expanded: reimagining work in the age of AI. Harvard Business Review Press
- Dau-Schmidt KG (2017) The impact of emerging information technologies on the employment relationship: New gigs for labor and employment law. *U. Chi. Legal F.* 63
- Davenport T, Diwari P (2024) Is your company's data ready for generative AI? *Harvard Business Review*
- Davenport TH, Barkin I, Tomak K (2023) We're all programmers now. *Harv Bus Rev* 101(5):98–107
- Davis GF (2016) Can an economy survive without corporations? Technology and robust organizational alternatives. *Acad Manag Perspec* 30(2):129–140

- Davis GF, Sinha A (2021) Varieties of Uberization: How technology and institutions change the organization (s) of late capitalism. *Organ Theory* 2(1):2631787721995198
- De Vries J (1994) The industrial revolution and the industrious revolution. *J Econ Hist* 54(2):249–270
- Delaney K (2024) As employers embrace AI, workers fret—and seek input. *Time Magazine*
- DiMaggio P (ed) (2001) *The Twenty-first century firm: changing economic organization in international perspective*. Princeton University Press, Princeton and Oxford
- Einola K, Khoreva V (2023) Best friend or broken tool? Exploring the co-existence of humans and artificial intelligence in the workplace ecosystem. *Hum Resour Manage* 62(1):117–135
- Elliott MTJ, Deepak P, Maccarthaigh M (2025) Evolving generative AI: entangling the accountability relationship. *Digit Govern Res Pract* 6(1):1–13
- Eloundou T, Manning S, Mishkin P, Rock D (2024) GPTs are GPTs: Labor market impact potential of LLMs. *Science* 384(6702):1306–1308
- Endacott CG, Duran JM, Summerville K (2024) Labor in fissured workplaces: contract workers' Membership Negotiation in "Big Tech." *West J Commun* 88(5):935–956
- Fleiß J, Bäck E, Thalmann S (2024) Mitigating algorithm aversion in recruiting: a study on explainable AI for conversational agents. *SIGMIS Database* 55(1):56–87
- Fourney A, Bansal G, Mozannar H, Tan C, Salinas E, Niedtner F, Proebsting G, Bassman G, Gerrits J, Alber J (2024) Magentic-one: a generalist multi-agent system for solving complex tasks. *arXiv preprint arXiv:2411.04468*
- Glorigić K, Zrnic T, Lee C, Candès EJ, Jurafsky D (2024) Can unconfident LLM annotations be used for confident conclusions? *arXiv preprint arXiv:2408.15204*
- Gonzalez M (2024) The AI-powered organization: puzzles to be solved. *Thinkers50*
- Grossman MR, Grimm PW, Brown DG (2023) Is disclosure and certification of the use of generative AI really necessary? *Judicature* 107:68
- Haddadin ZKB (2025) Disrupting and facilitating: the dual role of generative AI in reshaping power, engagement, and collaboration within organizations
- Hai S, Long T, Honora A, Japutra A, Guo T (2025) The dark side of employee-generative AI collaboration in the workplace: an investigation on work alienation and employee expediency. *Int J Inf Manag* 83:102905
- Highhouse S, Dalal RS, Salas E (2014) *Judgment and decision making at work*. Routledge Taylor & Francis Group
- Hinds R, Valentine M, Berg J, DesCelles K (2025) Virtually even: status equalizing in distributed organizations. *Organization Science*
- Hoffman R, Casnocha B, Yeh C (2013) Tours of duty: the new employer-employee contract. *Harvard Bus Rev* 91(6):48
- Hong S, Zheng X, Chen J, Cheng Y, Wang J, Zhang C, Wang Z, Yau SKS, Lin Z, Zhou L (2023) Metagpt: meta programming for multi-agent collaborative framework. *arXiv preprint arXiv:2308.00352*
- Hopkins E (1982) Working hours and conditions during the industrial revolution: a re-appraisal. *Economic History Rev*, pp 52–66
- Horton J (2010) Online labor markets. *Internet and network economics*, pp 515–522
- Hu E, Hinds R, Valentine M, Bernstein M (2021) A "Distance Matters" paradox: facilitating intra-team collaboration can harm inter-team collaboration. *CSCW 2021: ACM conference on computer-supported cooperative work and social computing*
- Jarrahi MH, Askay D, Eshraghi A, Smith P (2023) Artificial intelligence and knowledge management: a partnership between human and AI. *Bus Horiz* 66(1):87–99
- Jesuthasan R, Kapilashrami T (2024) *The skills-powered organization: the journey to the next-generation enterprise*. MIT Press
- Jorge CC, Tielman ML, Jonker CM (2022) Assessing artificial trust in human-agent teams: a conceptual model. In: *Proceedings of the 22nd ACM international conference on intelligent virtual agents*
- Jorge CC, De Visser EJ, Tielman ML, Jonker, CM, Robert LP (2024) Artificial trust in mutually adaptive human-machine teams. In: *Proceedings of the AAAI symposium series*
- Kelley BJ (2023) Belaboring the Algorithm: artificial intelligence and labor unions. *JREG Bull* 41:88
- Kellogg KC, Valentine MA, Christin A (2020) Algorithms at work: the new contested terrain of control. *Acad Manag Ann* 14(1):366–410
- Kessinger R, Kellogg K (2019) Curation work: Indexing digital communication tool content as both control and resistance in multiple high-technology organizations. *MIT Economic Sociology Working Group Seminar, Cambridge, MA*
- Kim J, Im I (2023) Anthropomorphic response: Understanding interactions between humans and artificial intelligence agents. *Comput Hum Behav* 139:107512
- Kochan TA, Armstrong B, Shah J, Castilla EJ, Likis B, Mangelsdorf ME (2024) Bringing worker voice into generative AI. *An MIT Exploration of Generative AI*
- Kogan L, Papanikolaou D, Schmidt LD, Seegmiller B (2023) Technology and labor displacement: evidence from linking patents with worker-level data: National Bureau of Economic Research
- Kunda G, Barley SR, Evans J (2002) Why do contractors contract? The experience of highly skilled technical professionals in a contingent labor market. *ILR Rev* 55(2):234–261
- Larson BZ, Moser C, Caza A, Muehlfeld K, Colombo LA (2024) Critical thinking in the age of generative AI. *Acad Manag Learn Educ* 23(3):373–378
- Lauck WJ (1929) *The new industrial revolution and wages: a survey of the radical changes in American theory and practice which have come in since the world war and created the present era of prosperity*: Funk & Wagnalls
- Leong J, Pataranutaporn P, Danry V, Perteneder F, Mao Y, Maes P (2024) Putting things into context: generative AI-enabled context personalization for vocabulary learning improves learning motivation. In: *Proceedings of the 2024 CHI conference on human factors in computing systems: Article 677*. Honolulu, HI, USA: Association for Computing Machinery
- Lix K (2021) *Mixed-method approaches to employment relationships in team-based onling gig Work* Stanford University, Stanford, CA
- Lustig C, Pine K, Nardi B, Irani L, Lee MK, Nafus D, Sandvig C (2016) Algorithmic authority: the ethics, politics, and economics of algorithms that interpret, decide, and manage. In: *Proceedings of the 2016 CHI conference extended abstracts on human factors in computing systems*, pp 1057–1062. San Jose, California, USA: Association for Computing Machinery
- McCue C (2015) Chapter 2: Domain expertise. In: McCue C (ed) *Data mining and predictive analysis*, 2nd edn. Butterworth-Heinemann, Boston, pp 25–30
- Molinder J, Karlsson T, Enflo K (2021) More power to the people: electricity adoption, technological change, and labor conflict. *J Econ Hist* 81(2):481–512
- Morrison EW, Robinson SL (1997) When employees feel betrayed: a model of how psychological contract violation develops. *Acad Manag Rev* 22(1):226–256
- Mortensen M (2023) Tension is arising around remote work. *Harvard Business Review*
- Mozannar H, Lee J, Wei D, Sattigeri P, Das S, Sontag D (2024) Effective human-AI teams via learned natural language rules and onboarding. *Adv Neur Inf Process Syst* 36:30466–30498

- Nakash M, Bolisani E (2025) The transformative impact of AI on knowledge management processes. *Bus Process Manag J* 31(8):124–147
- Nguyen A, Mateescu A (2024) Generative AI and labor: power, hype, and value at work, data and society report, Vol December
- O'Mahony S, Bechky BA (2006) Stretchwork: managing the career progression paradox in external labor markets. *Acad Manag J* 49(5):918–941
- Penn R, Rose M, Rubery J (1994) *Skill and occupational change*. OUP Oxford
- Qian C, Cong X, Yang C, Chen W, Su Y, Xu, J, Liu Z, Sun M (2023) Communicative agents for software development. *arXiv preprint arXiv:2307.07924*, 6(3)
- Rahman HA, Valentine MA (2020) How managers maintain control through collaborative repair: evidence from platform-mediated “Gigs”. *Organization Science*
- Retelny D, Robaszekiewicz S, To A, Lasecki WS, Patel J, Rahmati N, Doshi T, Valentine M, Bernstein MS (2014) Expert crowdsourcing with flash teams. In: *Proceedings of the 27th annual ACM symposium on User interface software and technology*
- Rhymer J (2018) Scaling the coordination of location independent organizations. *Acad Manag Global Proc* 2018:189
- Robinson SL, Kraatz MS, Rousseau DM (1994) Changing obligations and the psychological contract: a longitudinal study. *Acad Manag J* 37(1):137–152
- Rousseau DM (2006) The shifting risk for the American worker in the contemporary employment contract. *America at work: choices and challenges*. Springer, pp 153–171
- Rousseau DM, Tijoriwala SA (1998) Assessing psychological contracts: issues, alternatives and measures. *J Organ Behav* 19:679–695
- Sitkin SB, Cardinal LB, Bijlsma-Frankema KM (2010) *Organizational control*. Cambridge University Press, Cambridge
- Spektor F, Fox SE, Awumey E, Riordan CA, Rho HJ, Kulkarni C, Martinez-Lopez M, Stringam B, Begleiter B, Forlizzi J (2023) Designing for wellbeing: worker-generated ideas on adapting algorithmic management in the hospitality industry, In: *Proceedings of the 2023 ACM designing interactive systems conference*: 623–637. Pittsburgh, PA, USA: Association for Computing Machinery
- Stearns PN (2014) *Child labor in the industrial revolution*. The World of Child Labor. Routledge, pp 38–44
- Stearns PN (2020) *The industrial revolution in world history*. Routledge
- Suchman MC (2003) The contract as social artifact. *Law Soc Rev* 37(1):91–142
- Ulfert A-S, Georganta E, Centeio Jorge C, Mehrotra S, Tielman M (2024) Shaping a multidisciplinary understanding of team trust in human-AI teams: a theoretical framework. *Eur J Work Organ Psy* 33(2):158–171
- Valentine M, Bernstein MS (2025) *Flash teams: leading the future of on-demand*. MIT Press, AI-Enhanced Work
- Valentine MA, Retelny D, To A, Rahmati N, Doshi T, Bernstein MS (2017) Flash organizations: crowdsourcing complex work by structuring crowds as organizations. In: *Proceedings of the 2017 CHI conference on human factors in computing systems*
- Vallas SP, Kovalainen A (2019) Taking stock of the digital revolution. *Work and labor in the digital age*. Emerald Publishing Limited, pp 1–12
- Vallas S, Schor JB (2020) What do platforms do? Understanding the gig economy. *Ann Rev Sociol* 46(1):273–294
- van den Broek E, Sergeeva A, Huysman M (2021) When the machine meets the expert: an ethnography of developing Ai for hiring. *MIS Q* 45(3):1557–1580
- Voigtman NAP (2024) The remote workers' psychological contract: an exploratory case study. Unpublished D.B.A., National University, United States--California
- Wilmers N (2024) Generative AI and the future of inequality An MIT exploration of generative AI
- Wu Q, Bansal G, Zhang J, Wu Y, Li B, Zhu E, Jiang L, Zhang X, Zhang S, Liu J (2024) AutoGen: enabling next-gen LLM applications via multi-agent conversations. In: *The first conference on language modeling*
- Yi E, Yun J-C, Lee J, Park D-H (2024) User experience (UX) in the early days of generative AI: the benefits and concerns of employees in their 30s and 40s through the Q-methodology. *J Inf Syst* 33(1):1–30
- Yu J, Qi C (2024) The impact of generative AI on employment and labor productivity. *Rev Bus* 44(1):53–67
- Zhou J, Li R, Tang J, Tang T, Li H, Cui W, Wu Y (2024) Understanding nonlinear collaboration between human and AI agents: A co-design framework for creative design. In: *Proceedings of the CHI conference on human factors in computing systems*
- Zielinski D (2023) How HR is using generative AI in performance management, strategic human resources management
- Zrnic T, Candès EJ (2024) Cross-prediction-powered inference. *Proc Natl Acad Sci* 121(15):e2322083121

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