



Editorial: Robots, AI, and the reconfiguration of working life¹

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Science fiction literature offers rich contrasts for understanding how robots and artificial intelligence may come to shape the future of work. At the dystopian end of the spectra stands Kurt Vonnegut's (1952) *Player Piano*, in which he offers a compelling and critical exploration of a future where automation has transformed society to such an extent that nearly all human labor has been rendered obsolete. The novel vividly portrays a world dominated by machines, where engineers and managers form a privileged elite controlling vast automated systems, while the majority of people are displaced from meaningful work and confined to monotonous, purposeless roles. As Vonnegut writes (p. 78), 'Now, you people have engineered them out of their part in the economy, in the market place, and they're finding out - most of them - that what's left is just about zero'. This mechanized world reveals deep social inequalities and raises questions about the meaning and value of work in an automated future. He further illustrates the social divide when he notes (p. 131), 'The general feeling across the river was that these persons weren't too bright to be replaced by machines; they were simply in activities where machines weren't economical'. Vonnegut's narrative is a cautionary tale about the social and ethical consequences of unchecked automation. It raises pressing questions about what work means when machines can perform tasks more efficiently than humans, and how societies might cope with the loss of purpose and community that meaningful labor traditionally provides.

In contrast to this bleak vision, Iain M. Banks's (1987–2012) *Culture novels* articulate a radically different view of the relationship between humans, work, and automation. Here, artificially superintelligent systems, the so-called Minds, are not a threat but the foundation of a society characterized by abundance, voluntariness, and individual autonomy. Banks writes (1987, p. 90), 'Besides, it left the humans in the Culture free to take care of the things that really mattered in life, such as sports, games, romance, studying dead languages, barbarian societies and impossible problems, and climbing high mountains without the aid of a safety harness'. As AI takes over all necessary labor, a social order arises where humans can finally dedicate themselves to creativity, relationships, experimentation, and self-development. Technology does not function as a means of control but as a prerequisite for emancipation. In this society, the concept of money is irrelevant because the 'capacity of its means of production ubiquitously and

¹ You can find this text and its DOI at <https://tidsskrift.dk/njwls/index>.

comprehensively exceeded every reasonable... demand it's not unimaginative citizens could make' (p. 498). The human role is not defined by production demands but by their own interests and ambitions, and machine intelligence becomes a partner that expands rather than limits human agency.

The contrast between these two perspectives illustrates a fundamental theoretical tension that recurs in contemporary discussions about the future of work. While *Player Piano* presents work as a central source of meaning, status, and participation, its automation leads to displacement and existential emptiness. In *The Culture*, by contrast, compulsory labor is seen as a historical artifact, an obstacle to living fully; only when technology frees humans from the burden of work can human potential be realized. These two positions reveal not only different views on technology but also differing anthropological assumptions about what humans need to create a good life.

As Czarniawska and Joerges (2020) argue, such narratives are more than speculative fiction; they actively shape how organizations strategize and how workers conceive of themselves as agents within changing work environments. Thus, robotization and AI-fiction are as much cultural and political processes as they are technical ones, fundamentally influencing the constitution of professional personhood and value. But while science fiction often frames the impact of robots and AI on work in starkly utopian or dystopian terms, the research presented in this special issue seeks to move beyond such polarized views. Rather than portraying automation as inherently good or bad, the contributions delve into the nuanced realities of how these technologies are integrated into diverse work environments.

While cultural narratives shape imaginaries of automation, empirical evidence underscores that these imaginaries intersect with material transformations in work (Hallin et al. 2025). Existing forecasts, such as the World Economic Forum (2025), suggest that robotization and automation will render certain tasks and, in some cases, entire occupational categories, obsolete in the near future. The rapid advancement of AI and robotics is not only transforming organizational processes but also reshaping how professionals understand their roles, identities, and capacities for agency. Often driven by organizational goals of efficiency, standardization, and competitiveness, these technologies are adopted with little critical reflection on their long-term implications for organizational structures, psychosocial work environments (Turja et al. 2024), and ethical considerations. As a consequence, robotic and AI systems may subtly reorganize workflows, redistribute decision-making power, intensify surveillance, and transform professional identities, processes that frequently escape sustained academic scrutiny. Beyond the immediate practical effects, the current technological shift generates powerful imaginaries about the future of work, ranging from utopian visions of liberation from repetitive labor to dystopian fears of surveillance, deskilling, and loss of control.

Such dynamics also challenge Nordic ideals of 'good work', participation, and fairness, raising questions about how these values can be sustained amid accelerating automation which is explored in this special issue. Despite the widespread integration of digital technologies into workplaces, we adhere to that there remains a significant gap in research that systematically examines how the introduction of robots and AI reshapes the realities of work on the ground. This emerging body of research emphasizes that automation is not merely a technical adjustment but a profound restructuring of the conditions of work, including job demands, available resources, governance mechanisms, and employee autonomy (Babashahi et al. 2024; Murire 2024). Addressing these

structural dimensions requires moving beyond individual experiences to understand how organizational environments are fundamentally altered.

For the purpose of this special issue, we adopt a broad and inclusive definition of robots and AI as autonomous machines or applications capable of carrying out complex series of actions automatically. This definition deliberately encompasses both material and immaterial forms. Material robots may take the form of humanoid machines, animal-like devices, vehicles, industrial equipment, or embedded systems in tools and infrastructure. Immaterial agents include software-based bots, such as chatbots and algorithmic systems, embedded in digital platforms. Increasingly, these dimensions converge in hybrid configurations, such as robotic devices equipped with integrated AI engines that combine physical embodiment with cloud-based intelligence. Such sociotechnical assemblages challenge established analytical distinctions between tool, colleague, and manager, and require new conceptual vocabularies within working life research.

By examining the everyday interactions, challenges, and negotiations between humans and intelligent machines in different sectors of working life, the papers in this special issue illuminate the complex grey zones where opportunities and risks coexist. The issue highlights how AI and robotics do not simply replace or liberate workers but reshape power dynamics, identities, social relations, and organizational practices in multifaceted ways. In the following sections, we introduce two clusters of research that deepen the understanding of these intricate processes, offering a more grounded and balanced perspective on the future of work in an increasingly automated world: *Work environment and Professional Agency*, and *Ethics and Relational Dilemmas*.

Together, these clusters of studies contribute to a growing scientific debate that recognizes automation as a multifaceted and context-dependent phenomenon. Instead of framing robots and AI as inherently beneficial or harmful, these studies show that research must engage with the nuanced grey zones where technological change intersects with organizational politics, professional identities, and work design. This further encourages a more holistic understanding of automation's impact, emphasizing that outcomes depend not only on the technologies themselves but also on how they are implemented, governed, and experienced within social systems. By addressing organizational structures, job demands, resources, and governance, this theme situates the discussion of robotization and AI-fiction within broader conversations on work environment, job design, and ethics in the digital age. It highlights the urgent need for empirical studies that capture the complexities of automation in practice, informing policies and interventions that balance efficiency with human-centered values.

Work environment and professional agency

Fiction can inspire us to explore the conditions for and the boundaries of human autonomy in the age of intelligent machines. For instance, Ian McEwan's (2019) *Machines Like Me* portrays a world where artificial beings possess superior intellect and moral clarity, forcing humans to question whether their choices remain truly free when constantly compared to machine perfection. Similarly, Kazuo Ishiguro's (2021) *Klara and the Sun* examines agency through the eyes of an AI companion observing human fragility and longing, suggesting that technological mediation can both empower and constrain agency. Together, these novels invite reflection on how human autonomy is reshaped



when technology becomes not just a tool, but a moral and emotional actor that enables and restrains human agency.

This cluster of studies focuses on how automation reconfigures professional identities, competencies, and the conditions for self-directed action among workers. It interrogates the complex ways AI technologies challenge and enable human agency, revealing emerging forms of collaboration, supervision, and contestation between humans and algorithmic systems.

How the eHealth system 1177 Direct affects the work environment of registered nurses in Swedish primary health care is explored by Magdalena Ramstedt Stadins and Åsa Cajanders work in *Registered Nurses' Work Environment Associated with Auto-Anamnesis, Auto-Triage, and Online Chat*. In their study, nurses reported increased cognitive and psychological job demands. The implementation of 1177 Direct was perceived as adding to the workload since it was introduced without eliminating other communication channels; nurses frequently had to manage multiple chats simultaneously, leading to cognitive strain to ensure they did not mix up patient cases. Furthermore, the lack of system integration required nurses to manually transfer information from the auto-anamnesis into records. This made concerns about equity rise, as chat patients could cut ahead of those waiting in long telephone queues. Nurses expressed that their expertise exceeded the robot's capabilities, but that the text-based chat format limited their ability to use all their senses, including vocal cues, which are essential for clinical assessment and clinical intuition. The auto-triage system often over-prioritized cases, raising concerns about nurse desensitization. Auto-anamnesis improved job control by preparing nurses for consultations, yet control was limited by their inability to manage chat inflow or patient response times. To address these issues, nurses sought streamlined contact channels, greater autonomy (e.g., control over chat hours), and restricted access for minor conditions.

In another professional context, in *The Relevant Human Resource Professional in Relation to Artificial Intelligence – Constructing Human Agency* by Anna Launberg and Eva Lindell, the written articles in Swedish HR magazines are explored. Analysis shows how AI, ranging from predictive algorithms to generative systems like ChatGPT and interview bots, reshape what it means to be a relevant HR professional in a cultural context characterized by relatively low AI adoption. The study highlights conflicting constructions of HR professionals' agency in relation to AI. One view frames relevance as requiring courage and proactivity—HR must master AI and ensure technology adapts to people. Another emphasizes skepticism and ethical judgment to counter risks like bias and data leaks, preserving human oversight. In contrast, some portray humans as more biased than AI, justifying reduced involvement for fairness and efficiency, while others argue humans offer nuanced judgment that AI lacks, warning against blind reliance on algorithms. The core challenge for the HR professional is reconciling these conflicting mandates, simultaneously being portrayed as both more and less biased than AI, and expected both to embrace and question the technology. For a profession whose legitimacy has historically been contested, meeting the expectations necessary to belong to the 'relevant professional' category becomes a matter of professional survival.

Complementing this focus on professional identity, Maria Forsgren, Susanne Tafvelin, Andreas Stenling, and Ulrika Haake's study on medicine-dispensing robots in elder-care highlights the vital role of leadership in navigating the complex human-technology interface. The article *Balancing Optimism with Strategy: Leadership in Public Sector*

Automation turns attention to medicine-dispensing robots in eldercare. These automated devices, designed to dispense medication and issue reminders, displace highly routinized but relational aspects of care work. The paper demonstrates how leadership becomes a critical mediating factor: managers are required to navigate the contradiction between technological optimism, promises of efficiency, safety, and standardization, and the moral and emotional complexities of care practices. The robot thus becomes not only a technical artifact but also a focal point for strategic, ethical, and affective labor within organizations. This study examines leadership during the implementation of medicine robots in elder care, emphasizing how local context shapes leadership practices. Effective leadership relied on optimism, collaborative coordination, and knowledge-based support, including clear communication and timely training. Challenges arose from leaders' initial instrumental view of the robot as a simple device, leading to reactive rather than proactive strategies for managing complex human-technology interactions. Unforeseen issues—such as stress for elders and technical malfunctions—highlighted the need for systematic follow-up and adaptive planning.

Together, this cluster of studies explore how AI-driven automation is reshaping work environments and redefining the conditions for professional agency. A key insight from Ramstedt Stadin and Cajander is that, despite technological advances, patients ultimately seek human guidance and compassion rather than relying solely on automated responses—underscoring the enduring value of human expertise in care settings. Launberg and Lindell highlight how HR professionals struggle to navigate conflicting expectations and the opacity of advanced AI systems, which can fundamentally constrain their ability to exercise judgment and discretion. Similarly, Forsgren et al. show that successful automation depends on leadership that combines optimism with strategic foresight, integrating technical knowledge with sensitivity to organizational and social dynamics. Leaders must proactively address challenges at the human-technology interface and ensure continuous employee participation to maintain agency and trust. Together, these contributions reveal that AI's impact on work environments and professional agency is neither uniformly positive nor negative. Instead, it creates contested and evolving landscapes where technology reconfigures expertise, discretion, and responsibility. By examining material conditions alongside discourse, identity, and leadership practices, this theme advances understanding of how automation transforms what it means to be a working subject and how agency is negotiated in hybrid spaces between humans and intelligent machines.

Ethics and relational dilemmas

Science fiction has further inspired the imagination about how AI might transform the relational and social dimensions of human life. In the Black Mirror episode *Be Right Back* (Brooker 2013), a grieving woman turns to an AI service to recreate her deceased boyfriend from his digital footprints, eventually ordering a lifelike robot replica. This episode pictures the bonds and profound emotional challenges that humans potentially could be exposed to in relation to emerging technology. In Ishiguro's novel (2021) *Klara and the Sun*, another extreme version of the highly complex and relational aspects between human and AI is narrated: in the novel, the robot Klara exercises the ability to engage so deeply into the well-being of a human that she is able to pray to the Sun to heal the child that she is employed to care for.



In this section, the relational, social, and ethical connections between AI and humans in workplaces display different complex, ethical, and relational challenges that require new competencies and disrupt established social dynamics and human values in the Nordic working life. These studies explore how automation increasingly mediates work, and how tensions emerge around fairness, trust, emotional labor, and the authenticity of social interactions. These studies investigate both inspiring and troubling moral ambiguities and social friction that arise when human values and relationships intersect with algorithmic decision-making and automated systems.

David Redmalm, Clara Iversen, Marcus Persson, and Elin Thunman explore how care workers navigate ethical and emotional challenges when residents in dementia care homes mistake the robot cats and dogs for real animals. Their study *Robot Dilemmas: Deception and Digital Emotional Labor in Dementia Care Work* examines two interconnected issues: how staff handle residents' misconceptions about robots and how these practices relate to emotional labor. Addressing a gap in research on health and welfare technology, the authors ask which strategies care workers employ to balance truth and deception, what dilemmas these strategies entail, and how emotional labor shapes these interactions. The authors identify strategies that care workers use to frame a balancing act between ethical principles and residents' emotional wellbeing; telling the truth, which aligns with prescriptive-professional norms and Swedish guidelines emphasizing transparency; remaining vague, involves empathetically 'playing along' with residents' interpretations without explicitly confirming or denying the robot's status; or lying, which entails actively sustaining the illusion of a living animal through verbal cues, storytelling, and physical gestures. The authors argue that these strategies cannot be understood through a simple truth-lie dichotomy. Instead, they highlight how care workers orient toward an 'emotional truth', prioritizing comfort and relational attunement over factual accuracy. Emotional labor emerges as central: whether through prescriptive-professional transparency, empathetic following, or creative worlds-making, staff manage their own emotions and those of residents to maintain dignity and reduce distress.

Collaborative robots (cobots) are under scrutiny in *Unintended Impacts of Collaborative Robots on Social Relations at Work* written by David Regin Öborn, Kristina Palm, Calle Rosengren, and Carin Håkansta. Focusing on the relational, social interactions, and psychosocial work environment, the study reveals complex consequences of robot implementation process. In diverse Swedish workplaces (a restaurant, a university laboratory, and a mechanical workshop), the robots were initially introduced primarily to reduce physical strain and perform monotonous tasks, and while the novelty of the robots often generated enthusiasm and collaboration, serving as a shared focal point that temporarily increased social interaction among colleagues learning how to use the new technology. The study however shows how this novelty effect diminished as the robots became routine. Regarding the psychosocial environment, while physical burdens were eased, the robots simultaneously led to job intensification. Time supposedly saved by automation was often immediately filled with additional tasks, such as cleaning, maintenance, or process adjustments required for the robot's use (job enlargement). The influence on social interactions varied significantly by context: In restaurants, robots (used for carrying dishes) physically replaced the link between kitchen and serving staff, resulting in reduced human interaction and increased feelings of isolation and monotony for some employees. Conversely, in the lab and workshop, the robots sometimes served as a form of social company for

solitary workers, sometimes treated almost like a colleague—praised and patted—suggesting a form of shared interaction ritual.

On an organizational level, Matilda Axelson investigates *Consultant Dependency when Automating Complex Work Processes: Implications for the Work Environment*, how long-term client–consultant relationships shape organizational work environment conditions during complex process automation projects. Her study addresses a gap in research by examining how knowledge and power dynamics within these collaborations influence structural aspects of work—such as governance, communication, and resource allocation—rather than treating automation as a purely technical endeavor. The central question asks how dependency on external consultants affects organizational conditions when automating Human Resources processes like onboarding, offboarding, and parental leave. Using a qualitative single-case study of a Swedish industrial company’s collaboration with a consultancy firm, her analysis shows that, first, technological expertise resides primarily with consultants, creating a perceived dependency that challenges the client’s autonomy and raises concerns about vulnerability. While consultants hold essential technical knowledge, legitimacy is questioned when their experience appears limited, complicating perceptions of expertise. Second, contractual power formally rests with the client, who can scale consultant involvement up or down, yet high turnover and ongoing reliance on external knowledge blur this advantage, reinforcing interdependence. Third, knowledge transfer emerges as a contested terrain: consultants advocate for structured transfer activities but occasionally withhold expertise to remain indispensable, while the client hesitates to invest in such initiatives, assuming the relationship will persist indefinitely. Finally, decision-making power is concentrated with the client’s service manager, whose prioritization of HR’s agenda often overrides sprint planning and end-user needs, creating tensions over workload and transparency. This study reveals a paradox: while agile methods and collaborative ideals suggest shared control, the reality reflects asymmetries in knowledge and influence that strain democratic practices.

Finally in this cluster of articles, Christoffer Larsson, Anna Launberg, and Eva Lindell examine how ethical considerations are framed in research on AI implementation in workplace settings and how these insights can inform the Nordic working life model *Scoping Ethical AI in Working Life: Lessons for the Nordic Model*, Christoffer Larsson, Anna Launberg, and Eva Lindell. Their literature review addresses the gap between high-level ethical principles and their practical application in organizational contexts, asking which ethical frameworks dominate the discourse, how they shape reflections on responsible AI adoption, and what implications they hold for Nordic values of trust, participation, and collective bargaining. The authors argue that while AI promises efficiency and data-driven insights, it often conflicts with fundamental workplace values such as fairness, transparency, and wellbeing. The analysis reveals three key patterns. First, rights-based ethics dominate, emphasizing fairness, transparency, and protection of individual autonomy in AI-driven decisions. Second, ethics of care highlight relational concerns, employee wellbeing, and trust, particularly in contexts such as career development and job security. Third, utilitarian arguments appear in discussions balancing efficiency gains against risks like bias and diminished trust. Less frequent but significant are distributive justice, which addresses fairness in resource allocation, and virtue ethics, which stresses leadership integrity and moral responsibility. When mapped onto the Nordic working life model, characterized by high union density, collective bargaining, and flat organizational structures, the findings suggest strong alignment with



rights-based and care-oriented framings. These resonate with Nordic traditions of transparency, cooperation, and psychological safety. Conversely, utilitarian framings may face resistance in contexts where efficiency alone cannot justify organizational change without dialogue and consensus.

This cluster of studies delve into the complex, sensitive relationships between humans, such as patients and care workers or colleagues, as well as the organizational and structural prerequisites that are shaped by and continue to shape the Nordic working life. Redmalm et al. display that the use of robots in highly relational and sensitive contexts such as care might introduce new ethical complexities, challenging humanist ideals of autonomy and rationality among care workers. Additionally, Öborn et al. show in a wider scope of working life settings that collaborative robots are not neutral tools; they integrate into the social structure, either energizing or disrupting interaction rituals between colleagues. Their study shows how disruption occurs when robots replace essential human connections, while energy is generated when they become focal objects for shared attention. Successful implementation, particularly relevant to the Nordic ideal of ‘good work’, must be treated as a sociotechnical process that strategically accounts for the social dimension of technological change alongside efficiency gains. Further, grounded in Nordic traditions of user participation and democracy, Axelsson displays how attributes of power, legitimacy, and urgency intersect with knowledge transfer practices in shaping organizational outcomes. She concludes that mapped to Nordic work environment ideals of participation and fairness, complex automation projects require a strategic approach to relational dynamics, ensuring robust governance, clear structures for knowledge transfer, and wide stakeholder involvement to safeguard organizational work environment conditions over time. Likewise, Larsson et al. conclude that ethical AI implementation in Nordic workplaces will require participatory processes, robust governance, and leadership committed to safeguarding fairness and trust.

Together, these contributions enrich the scientific discourse on automation by foregrounding its ethical and social complexities, which is informed by and will continue to inform the circumstances in the Nordics. These contributions challenge simplistic narratives of AI and robots as either purely beneficial or harmful, showing instead how these technologies implicate deeply human concerns about fairness, trust, social connectedness, and emotional care. By addressing these relational dilemmas, this theme opens pathways for designing and governing automation in ways that honor both technological innovation and the core human values that sustain meaningful work and social life in the Nordic countries.

Conclusion

This special issue traces a red thread from imaginaries to infrastructures, showing that the future of work with robots and AI is forged as much in culture and politics as in code and hardware. Building on the insight that science fiction actively configures organizational strategy and worker self-understanding, the papers in this issue collectively move beyond utopian–dystopian binaries to reveal how automation is negotiated in the granular realities of everyday practice.

Across the two thematic clusters, *Work environment and Professional Agency and Ethics and Relational Dilemmas*, the contributions demonstrate that AI-driven systems

recalibrate the terms of expertise, discretion, and responsibility, while simultaneously reshaping leadership, collaboration, and identity at the human–technology interface. They show that professionals’ agency is neither eclipsed nor guaranteed: it is contingent, continually renegotiated through design choices, governance structures, participatory processes, and the relational demands of care and collaboration. The Nordic context, with its traditions of ‘good work’, user participation, and democratic workplaces, emerges not as a barrier to innovation but as a resource for ethically robust, socially attuned implementation—where optimism is balanced by strategic foresight, and efficiency gains are weighed against trust, fairness, and psychosocial well-being.

Taken together, the special issue offers an integrated contribution: an empirically grounded, theoretically informed, and applied account of how AI and robotics reconfigure work environments and professional personhood; a vocabulary for analyzing hybrid sociotechnical assemblages that blur distinctions between tool, colleague, manager, and structure; and a pragmatic agenda for leaders, designers, and policymakers to cultivate agency-preserving automation through participatory governance, transparent decision architectures, and sustained attention to the social texture of work. This, we suggest, is the path to a future of work that is technologically advanced and humanly meaningful in the Nordic working life.

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