Eurofound

Ethical digitalisation at work: From theory to practice

Introduction

Digitalisation is bringing about profound changes in how people live and work. While digital technologies can be harnessed for good and drive progress, they may also raise ethical concerns, depending on their field of application and their purpose.

The workplace is an important arena where technologies display their transformative potential but it often remains under the radar in policy debates on ethics and digital technologies. The implications of automation of work and digitisation of processes for working conditions are intertwined with ethical considerations. In data-driven, digitally connected and automated workplaces, new ethical issues arise. These relate, for example, to the capture and management of personal data, the transformation of the role of the human worker and changes to the nature of work, and distress or anxiety among workers who perceive their jobs as at risk.

Drawing on Delphi studies, in-depth interviews with policy stakeholders, and exploratory case studies, this report contributes to the broad discussion about the ethical implications of automation and digitisation technologies and the effects of such technologies on working conditions.

Policy context

In the race for technological innovation, the EU has taken a different approach from other global superpowers, such as China and the United States, placing ethics at the heart of technology development and use. The EU's vision, firmly anchored in fundamental human rights and democratic values, is of technology that works for society – 'technology for good purpose', rather than for social control or profit.

Several EU-level policy initiatives stress the importance of ethics in the development and use of artificial intelligence (AI). Documents that make such references include the European strategy on AI, the European Commission's communication on a coordinated plan on AI, and the Ethics guidelines for trustworthy AI produced by the High-Level Expert Group on Artificial Intelligence.

On the regulatory front, the EU has been steadily building on the existing legal framework for data protection. Through the forthcoming AI Act, which will affect AI use in the workplace, the EU intends to increase the safeguards in place to ensure a secure, human-centric and ethical technology-driven economy and society. The draft text classifies the use of AI systems for work management and recruitment as 'high risk' and hence subject to scrutiny, checks and third-party conformity testing.

The rapid development of AI – albeit still largely confined to 'narrow AI' applications (which automate specific tasks) – has further intensified the EU-level policy debate about the ethical implications of digital technologies for work, employment and society at large. At European level, job quality issues associated with the digitalisation of work are increasingly debated from an ethical perspective. Such issues relate, for example, to mental strain due to the use of intrusive technologies to monitor work and the growth of an 'always on' culture, which can blur the boundaries between work and private life.

Key findings

- The concept of ethics is central to the adoption and use of technology in the workplace and foundational to quality of work. According to the experts consulted, the ethical use of technologies entails not only adherence to ethical principles and compliance with fundamental rights but also the anticipation and mitigation of negative impacts on working conditions. Their views suggest that the risks associated with technology implementation for working conditions, human rights and ethical principles should be assessed comprehensively as a first step in design and development.

- The concerns most commonly expressed by the policy stakeholders interviewed related to future skills needs. This issue has an ethical dimension: without adequate training provision and reskilling programmes, workers will be vulnerable to skills obsolescence and job loss. Other ethical concerns involved data protection and privacy, and trust – the latter in relation in particular to the transparency of AI systems and potential discriminatory outcomes.

- Social dialogue and collective bargaining can be slow to respond to challenges arising from the digitalisation of work. These may result from more intensive use of technologies for recruitment, work management, monitoring and surveillance, and profiling of workers. Nonetheless, some instances of collective bargaining outcomes demonstrate the added value of social dialogue in dealing with the digitalisation of work.

- Survey data and evidence from the case studies carried out for this report suggest that companies tend not to have explicit policies, guidelines or procedures addressing ethical issues arising from technology in the workplace. In the establishments interviewed, principles such as accountability, transparency and human oversight were loosely embedded in technical procedures or addressed in training. The experts consulted also indicated that ethical principles are not systematically embedded in the design and development of AI; instead, at the design stage a trial-and-error approach is often followed to identify ethical pitfalls of AI systems.

- Technology adoption in establishments was typically motivated by reducing costs and increasing productivity. However, the technologies were also intended to make work more human-centric and to improve working conditions by making work less repetitive and more rewarding. In several establishments, management regarded this as particularly important to retain staff in the face of increasing labour shortages or to align tasks with workers' qualifications.

Policy pointers

- There is a need to coordinate efforts among a range of different stakeholders to translate agreed ethical principles into tools and methods for designing and using technologies. Practical guidance on how to incorporate these systematically throughout the technology lifecycle must also be developed. In the establishments interviewed, future plans invariably involve greater automation of tasks, and this is expected to impact the quality of work to a much greater extent than seen and documented in previous research. There is a clear need for a more forward-looking and ethical approach to technological change.

- The effects on the workplace warrant more attention in the general policy debate on digitalisation and ethics. National policies focusing on ethics tend to be broad in scope and pay little attention to issues related to quality of work. Policy initiatives focusing on ethical workplace digitalisation should be incorporated into national digitalisation and AI strategies. Such initiatives might include campaigns raising awareness of the benefits of ethical technology design and use, efforts to embed ethics in education and training curricula or practical guidance for companies on implementing an ethical and human-centred approach to technology design and use.

- Greater efforts are needed to build the capacity of national social partners to deal effectively with issues arising from the digitalisation of work. The European social partners' 2020 framework agreement on digitalisation is an important instrument for coordinating such efforts and promoting the exchange of information with a view to mainstreaming digital ethics into collective bargaining and social dialogue. The involvement of social partners (beyond consultation) in the design and implementation of policy initiatives on ethical digitalisation and ethical AI must also be increased to create an increased focus on quality-of-work issues.