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Digital transformation and job quality: Insights from Belgian case studies

This SEAD policy brief highlights the impact of work organisation, HR management practices and employee participation on the change in job quality brought about by digital technologies, drawing from 22 Belgian case studies. It reveals that while digitalisation can lead to more active and autonomous jobs, high levels of task division and fragmentation within the organisation may negate these benefits. The study underscores the importance of integrating technological innovation with organisational change, emphasising the need for competence management and employee participation. Key conclusions include the role of work organisation in shaping digital transformation outcomes and the necessity of a tailored approach to digital transformation, acknowledging the varied effects across different organisational contexts.

Context

Businesses are embracing new technologies to improve their effectiveness and resilience. Understanding these technologies' evolution, application, and impact is crucial for achieving human-centred organisations and securing a decent future of work for all. New technologies offer potential to enhance business processes and job quality. However, technology projects sometimes fail or harm job quality, with the same technology leading to both positive and negative outcomes. Ultimately, the success depends on how technology is deployed. This study focuses on how work organisation, HR management practices and employee participation within an organisation influence the change in job content and job quality brought about by digital technology.

Main findings

We analysed the impact of digital technology on the workplace, drawing on 22 Belgian case studies of companies and organisations from different sectors, industries, sizes, and regions. Work organisation has been affected diversely, with some organisations experiencing increased standardisation and others seeing a reduction in task fragmentation. There is however a general tendency towards increased centralised control, driven by technological possibilities. HR management practices have evolved, necessitating new hiring and training strategies, and shifting disciplinary measures to more data-based evaluations. Recruitment management (i.e. recruiting new workers) was more prevalent in the face of digitalisation compared to competence management (i.e. retraining existing workers). Social dialogue around digital technology implementation was found to be generally limited, with minimal union involvement and employee participation. The role of line managers has transformed, typically losing traditional supervisory roles, while including more coaching tasks. The impact on job quality and employee well-being varies, with some experiencing increased work pressure and technostress, while others experiencing improvements in work-life balance. Overall, the study shows diverse effects of digitalisation on different organisations and sectors.

In general, digitalisation tends to lead to more active jobs, with increased challenges matched by more autonomy and support. But a work organisation context with high or increasing levels of task division and fragmentation hampers this link, leading to more passive job characteristics such as decreased task variety and less autonomy. Given the high variance in case characteristics between the organisations studied, work organisation could not be identified as the decisive factor for providing high quality jobs. However, the cases show that a digital transformation combined with a highly divided and fragmented work organisation can be related to increased task standardisation.

The cases show three patterns in management's actions with regard to digitalisation: Firstly, there is the rapid and integrated digitalisation which is a top-down approach. It can mainly be found in large (branches of multinational) companies. This approach is characterised by centralisation, with a focus on strengthening IT, and it is disruptive in nature. It impacts recruitment and can lead to skill erosion. Additionally, this approach may result in a decreased quality of work, high turnover rates, and a differentiation among employee groups. Secondly, the intrinsic digitalisation represents a bottom-up approach, which can be typically found in organisations that rely heavily on digital applications, such as online platforms or knowledge-based organisations. It is marked by a work organisation with limited task division and strong internal support, fostering a digital work culture. This approach gives employees high levels of autonomy, but it can be very demanding, potentially excessively so. Lastly, incremental digitalisation, which can be found in a large variety of organisations and typically involves high levels of task division and standardisation, is often met with resistance. To address this, adaptation measures are implemented to reduce resistance and improve the quality of jobs.

Overall, the cases confirm the preconceived conducive elements for the way digitalisation plays out on the shop floor: a limited task division, decentralised management, consciously developed competence management, consultation with unions or directly with staff, the use of the line manager as a coach, and the incorporation of sufficient autonomy, task variation and informal communication opportunities. Negative elements are top-down imposed digitalisation, lack of change management, and a situation of differentiation between employees, with some seeing their job content improve and others at risk of facing either bore-out or technostress (and eventually replacement). Tailoring IT applications and procedures too much to the high-intensity users, may lead to stress and nervousness among the less digitally skilled others. All in all, the joint cases show that neither the more conducive elements nor the negative elements occur all together in isolation, there always seems to be a quid-pro-quo at stake.

Conclusion

Five main conclusions can be drawn from this study. (1) The work organisation creates the context which shapes the outcomes of the digital transformation. Technological innovation should be part of a broader workplace innovation approach. (2) There is no technological innovation without organisational change. If you are not careful, technological changes can unintentionally affect business processes and jobs, increasing levels of task division between workers, making their work less varied and more monotonous. (3) HR related measures seems to remain underused, highlighting the need for more competence management and employee participation in times of digital transformation. (4) There is no one-size-fits-all solution that works for every organisation. Depending on the organisational context, management strategies, and related job quality risks and opportunities, different measures are needed. (5) Digital transformation is not a neutral process: conflicting interests require an understanding of different perspectives and moving towards a common narrative through consultation and adjusting strategies. A strong input from workers and trade unions is crucial. Their active participation not only ensures broadly supported changes, but also guarantees that job quality receives as much attention as the performance of the organisation.

The use of any technology can turn out both positively and negatively. No matter how smart, technology remains a tool. Ultimately, the way we use and implement technology is decisive. To make technological innovation a success, it is essential to simultaneously innovate your work organisation and develop an adapted HR policy with strong employee participation.

Read more

The full report on the case analysis, as well as related publications, can be found at www.sead.be/results.

Information

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