



## SUMMARY OF FINDINGS

### SEAD: sustainable employment in the age of digitalisation

KAREN VAN AERDEN (VUB-BRISPO<sup>1</sup>) - JESSIE GEVAERT (VUB-BRISPO<sup>1</sup>) - JENS DOMS (VUB-BRISPO<sup>1</sup>) - ELIEF VANDEVENNE (VUB-BRISPO<sup>1</sup>) - KIM BOSMANS (VUB-BRISPO<sup>1</sup>) - EZRA DESSERS (KUL-HIVA<sup>2</sup>) - INE SMITS (KUL-HIVA<sup>2</sup>) - IGNACE POLLET (KUL-HIVA<sup>2</sup>) - ESTEBAN MARTINEZ (ULB-METICES<sup>3</sup>) - MEIKE BRODERSEN (ULB-METICES<sup>3</sup>) - ANASTASIA JOUKOVSKY (ULB-METICES<sup>3</sup>) - NICK DESCHACHT (KUL-ECON<sup>4</sup>) - CELINE DETILLEUX (KUL-ECON<sup>4</sup>) - FRANCOIS PICHAULT (ULIEGE-LENTIC<sup>5</sup>) - LAURA BEUKER (ULIEGE-LENTIC<sup>5</sup>) - CHIARA NATALIE FOCACCI (ULIEGE-LENTIC<sup>5</sup>) - MARINE FRANSEN (ULIEGE-LENTIC<sup>5</sup>) - GISELINE RONDEAUX (ULIEGE-LENTIC<sup>5</sup>) - CHRISTOPHE VANROELEN (VUB-BRISPO<sup>1</sup>)

<sup>1</sup> Brussels Institute for Social and Population Studies, Vrije Universiteit Brussel

<sup>2</sup> HIVA - Onderzoeksinstituut voor Arbeid en Samenleving, KU Leuven

<sup>3</sup> Métices, Université Libre de Bruxelles

<sup>4</sup> Department of Economics, KU Leuven

<sup>5</sup> Laboratoire d'Études sur les Nouvelles formes de Travail, l'Innovation et le Changement, Université de Liège

The ever more rapid development and adoption of new technologies raises questions about the associated threats and opportunities for the world of work. There is a general concern that automation and changing skill requirements might threaten or change many individuals' jobs and hamper job quality. At the same time, new technologies are often considered as the source of tremendous new opportunities in terms of job creation, business models, innovation and the reduction of occupational health and safety risks. The main aim of the SEAD project was to assess the potential for sustainable employment in the digital era and to generate policy-relevant findings on how to maximise the opportunities associated with technological innovation, while simultaneously limiting the vulnerability of workers.

### The impact of digitalisation on the Belgian labour market and occupational structure

Using both descriptive and econometric statistical methods and (survey) data from different sources, we performed a comprehensive macro-analysis of how new digital technologies are shaping the labour market (dynamics) and occupational structure of the Belgian economy.

Over the past 35 years, the total number of jobs in the Belgian labour market has grown by more than a third. Our analyses reveal that the largest employment growth has been witnessed in business and administration occupations, the health care sector, ICT jobs, legal and socio-cultural jobs, and education. On the other hand, employment drops have been noticed for blue-collar occupations in manufacturing, in the agricultural sector and for occupations such as butchers and bakers. These results considering the process of occupational change in Belgium are similar to the trends witnessed in neighbouring countries France, Germany and The Netherlands.

These evolutions have had very different impacts for different parts of the labour force. Our analyses revealed strong relations with gender and skills. 94% of the workers in the declining occupations are men, whereas most workers in the growing occupations are women. 90% of the workers in declining occupations are low- or middle-skilled, whereas almost three quarters of the workers in the growing occupations are high-skilled. Overall, we found that middle-skilled workers have experienced the greatest degree of occupational turbulence, a finding which is in line with theories of routine-biased technological change and job polarisation. Our analyses thus also provide evidence that the Belgian labour market has been experiencing job polarisation.

We also studied what the changing occupational structure in Belgium implies for skills and competence requirements. We find that intellectual and technology-related tasks are more common in growing occupations, while physical, routine and machines tasks are more common in declining occupations. Furthermore, our study suggests that skills required to perform non-routine tasks are likely to become more important in the future. Because of the rapid pace of changes introduced by digitalisation, the tasks of workers are expected to evolve and change over workers' careers. Workers will thus need to be capable to adapt themselves to changes and to be able to learn new skills.

### Organisations as a moderator between technologies and work experiences

A specific aim of this project was to provide a deeper understanding of how organisations shape the impact of technology on job quality and work experiences of employees. To this end, 22 organisations making extensive use of digital technologies were examined as case studies (both separately and in a comparative manner) through interviews with individuals in different functions, document analyses and observations.

Our research showed that the organisational context shapes the outcomes of digital transformations for workers. Important factors are the work organisation and the context shaped by management strategies, HR measures and the extent of employee involvement. In turn, technological innovation will affect jobs and business processes in the organisation, sometimes even unintentionally or in an undesirable way (e.g. making work less varied and more monotonous). Our study overall supports the prevalent notion that digitalisation generally fosters more active jobs. However, the existence of a high or increasing division of labour can act as a deterrent, potentially leading to a reduction in the richness of job content. In a context of technological innovation, organisational change is always implied, and no one-size-fits-all solution can be envisaged.

To make technological innovation a success, it is essential to simultaneously innovate regarding work organisation and HR policies, while at the same time strong employee participation in implementing these changes is necessary. At the moment, HR-related measures and social dialogue concerning the introduction of new technologies appear to be underused in most organisations. Nevertheless, the active participation of workers and trade unions not only ensures broadly supported changes, but also guarantees that job quality receives as much attention as the performance of the organisation.

### Digitalisation and changing occupations across various sectors

Five occupations present across different sectors (assembly line workers, customer advisors, middle managers, recruiters and R&D managers) were studied to show how technology-related change affects the skills requirements, job features and work experiences of workers in these occupations. This was accomplished by means of semi-structured interviews focused on technology-related change from the perspective of a regular workday and from a career perspective.

Our results highlight the significance of context in explaining variations in how workers respond to digital transformations. The acceptance and use of (a new) technology by workers is shaped by both their interpretations of said technology and the rationale behind the introduction. Among middle managers and R&D managers, technologies are mainly perceived as tools supporting process efficiency and not fundamentally transforming their work and role. The reality is quite different for assembly line workers, recruiters, and customer advisors, for whom digitalisation resembles more an intensification of control over their work performance, as well as a risk in terms of potential substitution by machines for a fundamental part of their work, and deskilling (for assembly line workers). In this scenario, the rationales of the actors, displayed in their actual use of technologies, involving the deliberate deviation from prescribed uses or abstention from use in general, align more closely with coping strategies and, in some cases, resistance. When workers feel threatened by technology, they are more likely to

develop (undesirable) coping strategies or to resist the use of these digital tools, to safeguard (aspects of) their profession.

The challenges, obstacles, and opportunities posed by digitisation in the context of sustainable careers vary across the analysed job categories. In terms of complexity, the higher mental charge and potential conflicts are compensated by enriching cognitive tasks, where employees experience satisfaction in resolving problems and using new skills. The use of tracking technologies may create opportunities for people management, but at the same time risks losing human interactions while increasing pressure on employees. Another risk relates to the transformation of the workplace, which creates unrealistic expectations of instantaneity and availability, affecting employees' ability to remain focused, as well as creating feelings of obsolescence.

### Digital platform work as an emerging employment phenomenon

One of the main objectives of the SEAD project was to perform an in-depth study of the platform economy in Belgium. To gain insight into the socio-demographic profile, employment trajectories and job quality of those engaged in urban space, in-home and online digital platform work, multiple methods were combined: descriptive analyses on (back-end) administrative platform data, an online cross-sectional survey, semi-structured interviews with platform workers and relevant stakeholders and (participant) observations.

Our study shows that there is no such thing as 'the Belgian platform worker'. Platform workers are a heterogeneous group, with varying socio-professional and demographic characteristics (both within and between different platform activities). This diversity is also reflected in the variety of trajectories into platform work.

From a job quality perspective, our research highlights both positive features of this type of work (such as it being a convenient and flexible way to provide additional income) and the presence of certain groups in a very vulnerable position, for whom platform work is far less of a choice and more of a necessity. For instance, a significant proportion of platform workers operate either as self-employed or without formal contract, a phenomenon that is particularly pronounced among socio-economically vulnerable groups. The employment status of platform workers is a major issue with cascading effects at many levels, as workers are often deprived of the rights and protections that are associated with a regular employment relationship. Autonomy and flexibility are often used as selling points by platforms but were also mentioned in the survey by platform workers as an important motivation to work through digital labour platforms. In general, our survey indeed finds rather high levels of autonomy related to workers' ability to organise their tasks, methods, and pace of work. However, actual autonomy and flexibility are limited due to the features of some platforms and algorithmic management policies (e.g. high competition; policies on gig distribution), certainly for those workers who are economically dependent on this type of work.

Finally, our results emphasise that platform work cannot be considered as an isolated phenomenon. Platform labour needs to be examined in combination with and in relation to overall labour market conditions and policies, social policies, and migration policies.

**Keywords**

Sustainable work

Digitalisation

Technology

Platform work