Gender Equality Index 2020: Digitalisation and the future of work

Digital transformation of the world of work

Advances in digitalisation have had profound impacts on the labour market, chiefly resulting from the adoption of new ICT, increased use and storage of digitally codified information, and new developments in AI and robotics (Autor, 2015; Valenduc and Vendramin, 2017).

Public debate on this transformation usually focuses either on its potential to boost economic productivity and growth or on the challenges it presents for workers, businesses and labour market regulation, paying only limited attention to gender equality prospects.

This section focuses on the gendered implications of several key advances in the digitalisation of the world of work. While these can be understood as a continuation of long-term trends in labour market transformation (Valenduc and Vendramin, 2017), the analysis here is mostly limited to developments within the past decade and their implications for the future. More specifically, it covers the following.

- Job automation – that is, a process in which human labour input is replaced by (digitally enabled) machine input (Eurofound, 2018a). In the past decade, the 'exponential growth in the collection, storage, and processing of digitised information' (Valenduc and Vendramin, 2017, p. 124) has enabled the development of powerful algorithms that exploit these data to 'learn' how to perform an increasing range of tasks. This has enhanced the capacity of machines to perform tasks previously done by workers (Autor, 2015; Frey and Osborne, 2017), encouraging further transformation of employment structures and content as new technologies increasingly replace or complement workers.
- Use of new technologies at work. With workers increasingly working alongside digitally enabled machines, there is higher demand for both basic and advanced digital skills in the labour market. This contributes to the growth of employment in certain well-paid sectors that require advanced digital skills, such as ICT. It also supports the use of new technologies in other sectors, often resulting in transformation of work practices, conditions and quality.

- Greater flexibility of work. The spread of portable devices (e.g. computers, tablets and smartphones) and improvements in internet connectivity and infrastructure have enabled increasing amounts of work to be carried out at various places and times. This allows (and sometimes obliges) people to work 'anytime, anywhere' (Eurofound and ILO, 2017).
- New forms of work. The remote working enabled by ICT has contributed to an increasing amount of work being contracted out (Howcroft and Rubery, 2018; Piasna and Drahokoupil, 2017), with new contracting practices emerging in the context of platform work.

Within the EU policy framework, the digital transformation of work is addressed under the European Pillar of Social Rights, which endorses the principles of fair working conditions, access to social protection and gender equality. Although the Pillar underlines the importance of supporting emerging business models, innovative forms of work, entrepreneurship and self-employment, support for such new business models should entail quality working conditions and equal treatment of workers irrespective of the type of employment relationship.

In 2018, the European Commission set up a high-level expert group to look at the process of the digital transformation of the EU labour market, provide analysis and explore policy options. To date, much of the gender equality focus has been on the gender segregation of some key sectors linked to digitalisation, such as ICT and STEM, notably in the context of the recent WiD declaration.

When it comes to platform work, this is part of the EU's single market strategy and also part of the digital strategy. In its communication on the European agenda for the collaborative economy (June 2016), the Commission provided guidance for Member States on the application of existing EU rules to the platform economy, including fair working conditions, and adequate and sustainable consumer and social protection.

More recently, the President of the European Commission stated that she 'will look at ways of improving the labour conditions of platform workers' (von der Leyen, 2019). Platform work will be covered by the preparations for the Digital Services Act[1], which should upgrade the liability and safety rules for digital platforms, services and products, and complete the digital single market.

The analysis of the gendered implications of digital transformation of work is structured in five subsections. The first looks at the broad labour market transformation resulting from automation of work and increased use of new technologies, and gives a broad overview of the gendered implications of these changes.

The remaining subsections then provide a more detailed analysis of the challenges and opportunities for gender equality in the context of two economic activities closely linked to digitalisation, one usually offering well-paid, high-quality jobs (the ICT sector) and the other often providing low-paid, less secure but highly flexible opportunities (certain types of platform work).

The second subsection analyses the employment prospects for women and men within these economic activities, while the third discusses new forms of work and flexible working practices from a gender equality perspective. The fourth and fifth subsections look at the implications of digitalisation for work–life balance and gender differences in pay, respectively.

As the analysis focuses chiefly on recent technological developments, it is often severely constrained by the availability of (gender-disaggregated) data. Quantitative data on platform work, for example, is limited to several recent surveys covering a number of EU Member States.

There is no EU-wide survey and existing surveys suffer from a range of methodological weaknesses inherent in monitoring a newly emerging phenomenon. As gender-disaggregated data on platform work is extremely limited, the gender analysis relies on qualitative, and sometimes rather speculative, research. This is, to a considerable degree, true for the analysis of job automation as well.

Footnotes

[1] https://ec.europa.eu/digital-single-market/en/digital-services-act-package

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