

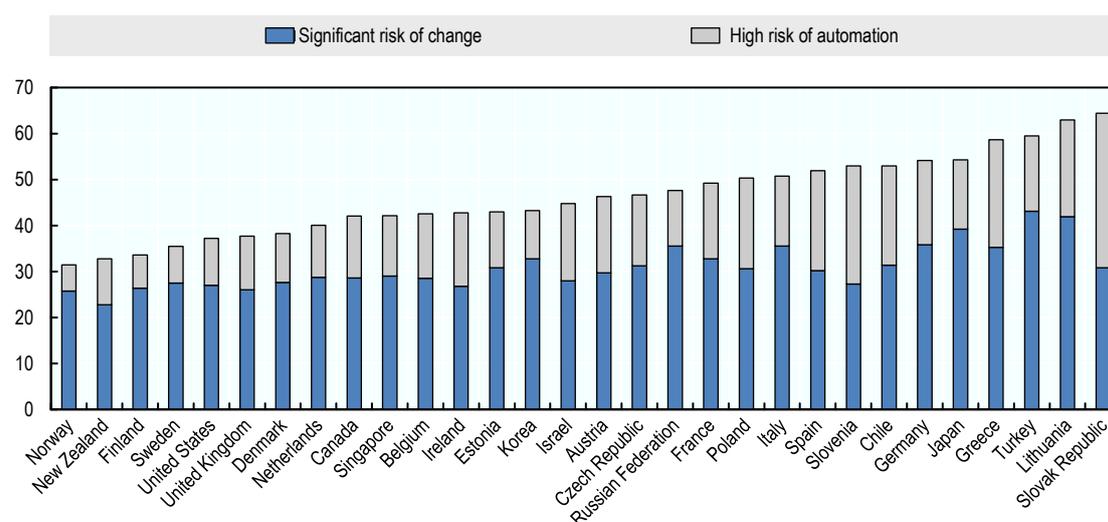
Session 8: Jobs in the Digital Age

Digital transformation will destroy jobs, but also create new ones

Digital transformation leads to creative destruction, with many new jobs being created but others being lost. Many routine tasks have already been automated, and estimates of possible automation of tasks over the next 10 to 20 years suggest that on average in the OECD 14% of jobs are at high risk of being fully automated, while another 32% at risk of significant change. To date, however, concerns around massive technological unemployment have not materialised. Employment rates are at a record high in many countries and the digital revolution has contributed significantly to job creation: four out of ten jobs were created in digital intensive sectors over the past decade. As labour markets transform, a challenge will be to promote successful and fair transitions from declining to expanding jobs, e.g. by striking a balance between flexibility and mobility, on the one hand, and job stability on the other, including through social dialogue.

A significant share of jobs could be affected by automation

Percentage of jobs at high risk of automation and at risk of significant change



Source: Nedelkoska and Quintini, (2018⁽²⁾), "Automation, skills use and training", <http://dx.doi.org/10.1787/2e2f4eea-en>.

Jobs are changing: Countries face a massive training challenge

The jobs that are created are not the same as the ones that are disappearing. Over the past two decades, labour markets in most OECD countries have polarised; that is, the share of employment in high-skilled (and to some extent in low-skilled) jobs has increased, while the share of employment in middle-skilled jobs has decreased. Consequently, the demand for cognitive skills such as written and oral expression, numeracy, reasoning and complex problem solving has increased, while the demand for routine and physical abilities has declined significantly. Looking ahead, the individuals who are most likely to bear the potential costs of digital transformation are low-skilled workers in routine jobs at risk of

automation, facing increased competition from middle-skilled workers, and having difficulties to adapt to new skills needs. Given the speed and depth of changing skills needs, there is an urgent need to scale up adult learning opportunities but also better assess competences of workers in the labour market and training needs. Access to training remains difficult for low-skilled workers, that is, those who needed the most: low-skilled workers are significantly less likely (24%) to participate in adult education and training than high-skilled workers (72%).

Effective social protection and employment services will be essential to ensure that no one is left behind

Not all workers who transition into new occupations or enter the labour market for the first time or after an unemployment spell will find a new job immediately. Adequate social protection is crucial to enable a successful and fair transition for all, combined with effective employment services, prevention and early intervention measures. Public spending on active labour market programmes is only 0.36% of GDP across the OECD, and below this level in many of the countries that face the highest risk of automation, which is low in view of the expected costs of re-training workers in jobs at high risk of automation. Furthermore, many social programmes are not available to those with non-standard contracts and employment services may not be targeted on those who need help the most.

New forms of work offer new opportunities, but job quality is a concern

Digital technologies and new business models, among other drivers, have given rise to online platforms that facilitate the emergence of platform-mediated work. This type of work appears to have grown fast over recent years, but it is estimated to be still a very small share of overall employment. These new forms of work offer flexibility to both employers and workers, and they may also facilitate the integration of under-represented groups. But job quality varies greatly. For example, own-account workers are significantly more likely than employees to earn less than the minimum wage, less likely to be covered by collective bargaining arrangements and/or some labour regulations. They also tend to receive less training and tend to be more exposed to job strain. Some platforms also go beyond being a mere facilitator or marketplace, e.g. in determining prices, working times, or details of services provision, which can undermine the flexibility and autonomy associated with genuine self-employment.

Q1: What is the evidence showing about whether the result of digitalisation on the labour market will be massive technological unemployment, or more inequality, or neither?

Q2: Can everyone re-train to take advantage of the higher-skilled job opportunities that may arise in the future, and what policies do you think we need to consider?

Q3: How much will it cost to ensure that workers successfully navigate the digital transformation, and how should these costs be distributed among employers, workers and the state?

Q4: How can the OECD help in addressing these challenges?