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## DEBATE PACK

# The future of work

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## Summary

A [Westminster Hall debate](#) on 'The Future of Work' has been scheduled for Thursday 19 November from 3pm. The debate has been initiated by [Kirsten Oswald MP](#) .

## Contents

The House of Commons Library prepares a briefing in hard copy and/or online for most non-legislative debates in the Chamber and Westminster Hall other than half-hour debates. Debate Packs are produced quickly after the announcement of parliamentary business. They are intended to provide a summary or overview of the issue being debated and identify relevant briefings and useful documents, including press and parliamentary material. More detailed briefing can be prepared for Members on request to the Library.

# 1.  Background

Developments in technology, automation and artificial intelligence (AI) continue to have a significant impact on the world of work. The concept of the 'future of work' is not one that lends itself to a concise summary. There are a broad range of areas that are affected from education and employment policy to privacy and discrimination.

What follows is a summary of recent reports on the future of work and an overview of key Government policies.

Technology, automation and the industrial strategy

'Automation' is one of the key issues associated with the future of work. At a basic level it described a phenomenon where tasks formerly carried out by humans can now be carried out by machines.

However, automation has far wider implications. In a recent [report on Covid-19 and the future of work](#), the Institute for the Future of Work (IFOW) describes automation in the following terms:

> Automation is the buzzword which frames most thinking and public dialogue about the use of technology and the future of work. Automation tends to be associated with the physical, mechanical, or computational displacement of humans from particular tasks and jobs. At IFOW, we argue that 'automation' should be recognised as a far more expansive phenomenon: the integration of technology for a range of uses such as the design, organisation and structure of business models and jobs which shape the lived experience of work and the structure of the economy that provides work. This new definition of 'automation' is important because it captures risks to job security and changes to the quality of work which may be exacerbated by responses to Covid-19.[1]

Daniel Susskind, Fellow in Economics at Balliol College, Oxford, describes two different ways in which the growth of technology (or 'task encroachment') can impact employment: 'frictional technological unemployment' and 'structural technological unemployment'.[2]

Frictional technological unemployment describes a situation where even if new technologies create new jobs, workers are not well placed to access these jobs. This could be because workers do not have the right skills ('skills mismatch'), workers are overqualified for the new jobs that are emerging ('identity mismatch') or workers are not geographically in the places where new jobs are being created ('place mismatch').

Structural technological unemployment describes a longer-term trend where the growth of new technology actually leads to a world with less work for humans. Susskind explains:

> For now, this assumption, that human beings are best equipped to perform new tasks that arise in the economy, may well still be right. But look further into the future, and it is far from clear that this will be the case. Technological progress might indeed transform the way things are produced, requiring new tasks to be done – but why assume that these tasks will always be ones that human beings are best placed to do? As task encroachment continues, will it not become sensible to allocate more of the complex new tasks to machines instead?[3]

A 2019 report by the Chartered Institute of Personnel and Development (CIPD) found that, for now, slightly more jobs are being created rather than eliminated as a result of AI. For physical tasks the numbers were 44% to 43% and for cognitive tasks it was 42% to 37%. The report also found a higher proportion of jobs that are being eliminated are low skilled jobs (44%) whereas a higher proportion of jobs that are being created are high-skilled jobs (39%).[4]

**Industrial Strategy and upskilling**

The UK Government published its Industrial Strategy in November 2017. For an overview, see the Library Briefing, Industrial Strategy (CBP-7682).

The 'People' strand of the Industrial Strategy places a significant focus on ensuring the UK workforce has the right skills for the future world of work. The initiatives that were put in place included:

- New technical education system as recommended in the Skills Plan, including 'T Levels' (emphasising technical skills) and apprenticeships

- Invest £400 million in maths, digital and technical education

- Create a National Retraining Scheme by the end of the Parliament, including £64 million investment for digital and construction retraining

- Increase ethnic minority employment and employment of disabled people. Support carers into work.

Section 7 of the Library Briefing, Apprenticeships and skills policy in England (SN 3052), provides a more detailed overview of various programmes the UK Government has put in place to develop skills.

The impact of Covid-19 on certain sectors of the labour market has led to increased focus on skills and retraining as a response to the rise in unemployment. The Resolution Foundation has argued that the UK's skills strategy – focussed on automation and job displacement in heavy industries – is not well-suited for the sectors impacted by Covid-19. It

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[3]   Ibid., p. 121
[4]   CIPD, People and machines: from hype to reality, April 2019, pp. 18 and 21

has called for a retraining policy that is focussed on the broader issue of unemployment, rather than challenges to specific sectors.[5]

The Trades Union Congress (TUC) has called for a National Retraining Scheme to be incorporated into the Government's Coronavirus Job Retention Scheme, with training offered to employees furloughed for more than 50% of their hours.[6]

Covid-19 and the future of work

The Covid-19 pandemic continues to have a significant impact on the UK economy and labour market. The Library Briefings, Coronavirus: Economic Impact (CBP-8866) and Coronavirus: Impact on the labour market (CBP-8898) provide a detailed overview.

The IFOW's Future Work Commission undertook a rapid review of the impact of Covid-19 and the future of work. Their report identified five key trends:

1   **Accelerated pace of technology adoption:** The continued adoption of technology and automation will change the need for certain tasks, skills and jobs while also impacting on the quality, quantity, type and experience of work. Economic shocks tend to increase the use of automation for risk mitigation. This could have a significant impact on jobs in sectors affected by Covid-19 (sectors that depend on close contact).

2   **Inequalities in work and health:** The impact of Covid-19 has been felt differently by different groups. Health risks vary by age, ethnicity and pre-existing health conditions. Risk also varies by job type, with lower paid workers less able to work from home. The ability to bounce back from Covid-19 will not always be uniform across areas and types of work. There will also be a need to ensure that labour market recovery focuses on good quality work.

3   **Geography of work:** The rise in remote working during the Covid-19 pandemic has led to companies reconsidering the need for large offices in urban centres and has stalled the trend of urbanisation. This offers an opportunity for a genuine levelling up agenda but this will need local engagement and devolution.

4   **Transition for workers:** The Covid-19 pandemic has resulted in a large number of workers looking for new work, including in new sectors. However, the rate of creation of new jobs is low and the pandemic has accelerated reliance on automation. This could result in significant unemployment or underemployment and will require a range of interventions and support from the state.

5   **Digital giants:** Services offered by platforms like Amazon, Deliveroo or Zoom were viewed as essential during lockdowns. This has allowed large technology companies to both survive and capitalise on certain markets. The share of the gains going to the workers at these platforms continues to decline, exacerbating

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[5]   Kathleen Henehan, Can training help workers change their stripes?: Retraining and career change in the UK, Resolution Foundation, August 2020
[6]   TUC, A new jobs protection and upskilling plan, September 2020

wealth inequality. The growth of large firms also entrenches their employment practices, which are viewed by many as pushing down pay and resisting workers' rights.

For further analysis of the impact of Covid-19 on jobs, see:

- Royal Society for the Arts, Who is at risk?: Work and automation, in the time of Covid-19, October 2020

- Resolution Foundation, Jobs, jobs, jobs: Evaluating the effects of the current economic crisis on the UK labour market, Oct. 2020

For information on the impact of Covid-19 on employment rights see the Library Debate Pack, The covid-19 outbreak and employment rights (CDP 2020-0140).

Good work

As noted above, one of the key concerns that has arisen as a result of Covid-19 and the general growth of automation is the rise in insecure work. The Trades Union Congress has identified poor quality work – low paid and insecure work –  as one its major concerns for the future of work in the UK.[7]

In December 2018 the UK Government published the Good Work Plan, a programme to reform employment law. It builds on recommendations of the Taylor Review of Modern Working Practices which made a series of recommendations aimed as ensuring employment rights were in line with modern business practice. In the December 2019 Queen's Speech the Government committed to introduce these reforms through an *Employment Bill*, which has yet to be published.

The recommendations of the Taylor Review, the proposals in the Good Work Plan and responses from various stakeholders are covered in detail in the Library Briefing, Insecure work: the Taylor Review and the Good Work Plan (CBP-8817).

Algorithms and automated decision-making

Another area of concern in the context of the future of work has been the increased adoption of algorithmic decision-making in the workplace and the suitability of existing legal frameworks to address new issues. The use of automated decision-making often goes hand-in-hand with increased monitoring of employees.

A recent report by the CIPD found that employees overwhelmingly felt that monitoring in the workplace had a negative effect (57% felt it was negative compared to only 12% who thought it was positive). The report also found issues with employee voice, finding that only 35% of employees were consulted about the use of monitoring in work and that, of those, only 20% were likely to perceive changes as positive.[8]

In a detailed report in 2019, the IFOW provided an overview of the equality and accountability implications of the use of AI in work. They concluded that the existing statutory regime – principally the General

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[7]   TUC, A future that works for working people, September 2018
[8]   CIPD, Workplace technology: The employee experience, pp. 16-21

Data Protection Regulation and the Equality Act 2010 – were not sufficient to address this new phenomenon.

They noted that the GDPR does offer certain key protections, including a requirement that there be a lawful basis for data processing, a prohibition on purely automated decision-making (sometimes called 'human in the loop') and the ability to make subject access requests. However, they concluded that the GDPR did not enable sufficient scrutiny of automated decision-making. They noted that data protection impact assessments (DPIAs) do not need to be made public and that subject access requests (SRAs) relate to individuals and are hard to use for uncovering collective impacts. They also noted that many employers do not rely on 'consent' as the lawful basis for processing employee data but, rather, 'necessity for entering into / performing a contract'.[9]

They noted that the Equality Act 2010 prohibits direct and indirect discrimination in recruitment, the terms and conditions of work and in dismissal decisions. In particular, indirect discrimination offers the basis for challenging the use of automated decision-making. However, they noted that with complex algorithms, particularly those that learn and adapt (machine learning), it is often extremely difficult to identify why a particular decision has been made. They note that this could make it particularly difficult to show a disadvantage on the basis of a protected characteristic – a key requirement of any discrimination claim.[10]

Jeremias Adams-Prassl, Professor of Law at the University of Oxford, has raised similar concerns around the ability of existing law to address the use of machine learning algorithms for decision-making in work:

> It is important to acknowledge these shortcomings in existing regulatory structures. However, in order to come up with credible solutions, we first need to understand the fundamentally different control and decision structures behind algorithmic decision making, and model legal responses accordingly – up to and including a complete rethink of the legal techniques required to counter discrimination at work. It is unclear, for example, whether discrimination law's long-standing emphasis on causation can be reconciled with machine learning's reliance on correlation? As predictive algorithms improve their accuracy with ever-larger datasets, what sanctions should be in place for a pre-emptive dismissal on grounds of an unprotected characteristic (such as a preference for sugary drinks) which is highly correlated with a protected ground (e.g. developing a disability in old age)?[11]

At the same time, some commentators have noted that the complexity of algorithms (the 'black box' problem) could impact employers seeking to defend against claims of discrimination. Joe Atkinson, Lecturer in Law at the University of Sheffield, has argued that provided employees can

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9   IFOW, Mind the gap: How to fill the equality and AI accountability gap in an automated world, October 2020, pp. 32-35

10   Ibid., 38-41

11   Jeremias Adams-Prassl, 'What if your boss was an algorithm? Economic Incentives, Legal Challenges, and the Rise of Artificial Intelligence at Work' (2019) 41(1) Comparative Labour Law and Policy Journal 123

make a case for *prima facie* discrimination, the burden of proof would shift to the employer that the treatment was not because of the employee's protected characteristic.[12] He has also noted the need to explore what remedies a tribunal could offer if it found an employee had been discriminated against by an algorithmic decision. He noted that it could involve preventing the use of the algorithm or ordering re-programming of the software.

**Privacy and employee surveillance**

A separate question relates to employee privacy in the context of monitoring and automated decision-making. The rise in employee surveillance has been a particular feature of the Covid-19 pandemic as more workers have been working from home.

Dr Philippa Collins, a Lecturer in Law at Exeter University, summarised the problem in the following terms:

> The use of electronic surveillance of workers in the home thrusts the previously public life of the workplace deep into the private sphere of the individual. Boundaries, previously blurred by weekend working or answering emails in the evenings, begin to disappear altogether. Imagine, for example, that an employee – during the pandemic particularly – uses the flexibility of working from home to balance their duties at work with their need to care for their family. They might work unusual or variable hours to complete their tasks, whilst spending time with their family during what would previously have been considered 'working time'. The employer may consider, therefore, that they have the right to monitor the individual during all of these hours of the day, both the tradition "9-to-5" as well as the early mornings and evenings when the employee might be prioritising their work.[13]

A number of academics, including Dr Collins, have begun considering how Article 8 of the European Convention on Human Rights (the right to private and family life) might regulate such surveillance.[14]

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12   Joe Atkinson, Automated management and liability for digital discrimination under the Equality Act 2010, UK Labour Law Blog, 10 September 2020

13   Philippa Collins, The Right to Privacy, Surveillance-by-Software and the "Home Workplace", UK Labour Law Blog, 3 September 2020

14   Collins, Ibid. Eleni Frantziou, The right to privacy while working from home ('WFH'): why employee monitoring infringes Art 8 ECHR, UK Labour Law Blog, 5 Oct. 2020

# 2.  Press/Blog articles

**Don't Fear the Robots, and Other Lessons From a Study of the Digital Economy**
New York Times
17 November 2020

**Coronavirus: How the world of work may change forever**
BBC Worklife
Oct 2020

**This is our big chance to make work better for all;**
Financial Times
7 September 2020

**Are Robots Eating Our Jobs? Not According To AI**
Forbes.com
28 August 2020

**Work is changing quickly: Labour must embrace the future**
The Times
24 February 2020

**Daniel Susskind: 'Automation of jobs is one of the greatest questions of our time'**
The Guardian
18 January 2020

**Hidden in plain sight: the ghost in the automation and future of work debate**
LSE Business Review
23 September 2019

**Are We Facing AI Armageddon? What's Wrong With The Automation And Future Of Work Debate**
Forbes.com
8 August 2019

# 3.  Press releases

## IFOW announced as Strategic Research Partner to All Party Parliamentary Group on the Future of Work
**Institute for the Future of Work**
**17 November 2020**

IFOW is delighted to have been announced as the Research Partner for the newly constituted All-Party Parliamentary Group (APPG) on the Future of Work.

The APPG, which was registered on 2nd November 2020, will be chaired by David Davis MP (Conservative) and Clive Lewis MP (Labour). The vice-chairs are Kirsten Oswald (SNP), Jon Cruddas MP (Labour), Stephen Metcalfe MP (Conservative), Baroness Prosser (Labour) and Lord Clement-Jones (Liberal Democrats). The group has been set up to advance:

- understanding and discussion about the impacts of technology on work

-dialogue and collaboration between government, business, unions, academics and civil society

-practical solutions in response to key challenges and opportunities aimed at shaping a future of better work across the UK.

IFOW director Anna Thomas said "We are looking forward to supporting the All Party Parliamentary Group on the Future of Work. With technology adoption accelerating through COVID-19, and greater attention being paid to regional and demographic inequalities, we are at a critical moment for setting the direction for future of work policy in the UK. We hope that the APPG will become an essential forum for sharing knowledge and building consensus for the way ahead."

## Future of Work Commission Makes Recommendations to Government
**Institute for the Future of Work**
**20 October 2020**

The Institute for the Future of Work is urging the Government to initiate a strategy on future work to reinvigorate and rebuild the economy in the wake of the Covid-19 pandemic.

In A Better Future for Work: the World after Covid-19, a rapid review by the Future of Work Commission, a cross-disciplinary body of experts brought together by the Institute for the Future of  Work, has identified a series of new policy challenges and opportunities to support a strong and robust recovery for the economy and future of work  in the UK in the wake of the Covid-19 pandemic.

Anna Thomas, the Director of the Institute for the Future of Work said:

"This report has been carried out at pace by the Future of Work Commission – a group of eminent experts in how work shapes and binds our lives and society. The Commission has identified the need to think in new ways about the roles of government, business, communities and people that reflect the changes to our lives and the way we work. The report identified high level objectives to guide policy makers looking to create a fairer, more resilient society.  They are aimed at overhauling problems created by the pandemic – but also systemic issues that have been exacerbated by Covid-19 such as the displacement of jobs by new technologies."

Recommendations include creating a national work strategy, guided by experts, that will encourage entrepreneurialism, improve infrastructure, build resilience among workers and tackle inequalities. The report also calls on ministers to consider ways to protect good work by enshrining a set of key rights for key workers – and raise basic protections.

In addition, the Commission also suggests the Government should announce a second wave of jobs support, which should focus on training on-the-job for new workers. Companies which hire people who need training after the pandemic should get a wage subsidy to support this skills development.

The report also recommends the creation of a Community Health and Work Corps to respond to local social and environmental needs, underwritten by Government, and aimed at supporting people (including vulnerable groups) through education, training and voluntary community work.

Other recommendations:

Give key rights to key workers (including a real living wage); The Employment Bill should be brought forward, with consideration given to a dedicated Key Workers Bill of Rights as a schedule to the Act;

Support groups moving between sectors through training, job matching, access to community work;
Stimulate the creation of good jobs, prioritising work which serves shared social and environmental goals;

Promote socially-responsible adoption of data-driven technologies, ensuring use puts people first and that adverse effects are assessed and addressed;

Regulate digital giants which, as with utilities, are now an essential part of the infrastructure (protect competition principles, making the first moves towards treatment of some services as a utility);

Shape policies on evidence by empowering and funding the ONS to gather data and assess the impact of work, health, the introduction of new technology, and inequalities on people and communities;

Establish a Council to develop a dedicated and comprehensive strategy on the UK's future of work;

Support development of new, place-based (local) Industrial Recovery and Rebuild Strategies;

Implement a mini-furlough scheme to give financial support to companies which re-train people migrating into new jobs;

Encourage good practice when supporting companies during the exit from lockdown (such as payment of real living wage), undertake assessment of equality/health/ environmental impacts of business decisions, discourage excessive executive pay and shareholder dividends.

Helen Mountfield QC, the Principal of Mansfield College, Oxford, co-chaired the Commission:

"We must acknowledge that much work – previously seen as low-skilled and poorly rewarded – is in fact essential to our collective wellbeing and as our society changes, we must recognise that our prosperity is interlinked with the wellbeing and prosperity of our fellow citizens. If the economy exists for the benefit of society at large then we must ensure that it works for the benefit of society. Not doing so would increase poverty, deprivation, inequality, and poor health and would be a shameful legacy.

"This report calls for a strategy to take account of longer term structural changes to the economy that have been accelerated by the pandemic where people's jobs have been replaced by digital technologies – for instance robots in manufacturing or artificial intelligence in other sectors. It suggests ways to manage the huge shifts that have been accelerated by the pandemic and which threaten people's livelihoods and ultimately their health and wellbeing.

"It is a manifesto for change. It puts people at the heart of our response to Covid-19 and the shifts in our economy – and should be required reading for policy makers."

Background to the recommendations:

A poll conducted by Opinium for the Institute for the Future of Work in May demonstrated the importance of preparing workers for change and supporting them to boost resilience in the face of transformation to their working lives. Concentrating on good jobs, better work and well-being will increase people's resilience and sense of security.

The report analyses five trends with implications for good jobs and for pay, terms and the quality of work across the country. These include:

Accelerated technology adoption and automation
The report found that the accelerated pace of technology adoption and automation can support growth, new jobs and boost the economy but its adverse effects are unevenly spread.  This Catch-22 cannot be ignored and needs to be actively  addressed by policy makers.

Exacerbating inequalities of work and health

The pandemic has revealed inequalities faced by people during the pandemic – people in the lowest paid jobs are less likely to be able to work from home or to self-isolate. The report highlights how people from BAME backgrounds have a four times higher mortality rate than white people from Covid-19.

Re-evaluation of the importance of place: the geography of work
Local authorities working with communities have created strategies to manage challenges thrown up for businesses by the pandemic. These localised responses will be increasingly needed to manage the shifts we are seeing for people, their employers, and local government such as less need for large offices, the ability to work remotely, and the virulence of the pandemic in urban areas.

Accelerating transition for workers
The pace of automation is expected to increase in response to Covid-19. People will increasingly seek work in industries which are more secure or where there is work. Government will need to respond by empowering local authorities to innovate and pilot new policies.

The march of the digital giants
The pandemic has concentrated market power increasingly in the hands of the digital giants which have been essential services for the public in lockdown. Tech firms are likely to be setting downward trends in pay and conditions that are replicated elsewhere. Regulation should mitigate the effects of this concentration of power in the interests of the people and communities who work for them and use them.

Future of Work Commissioners:

Professor Sir Christopher Pissarides, Regius Professor of Economics at LSE and Nobel Laureate, Co-Founder of IFOW
Dr Anne-Marie Imafidon MBE, Founder of Stemettes
Naomi Climer CBE, Co-Founder of IFOW, technologist and engineer
Lord Robin Hodgson, Conservative peer and Chair of IFOW Founders' Circle
Professor Sir Michael Marmot, Director of UCL Institute of Health Equity
Helen Mountfield QC, Principal of Mansfield College Oxford, Co-Chair of Future of Work Commission (FWC)
Anna Thomas, Director and Co-Founder of IFOW, Co-Chair of Future of Work Commission (FWC)
John Evans, Former General Secretary  Trade Union Advisory Committee to the OECD
Dr Daniel Susskind, Economist and author, Balliol College, University of Oxford
Lord Jim Knight, Chief Education Officer of TES Global
Professor Michael Sandel, Professor of Government Theory, Harvard University Law School, BBC's Public Philosopher
Professor Michael Osborne, Professor in Machine Learning and Co-Director of Oxford Martin Programme on Technology and Employment
Dr Nadia Danhash, CEO of RCAInnovation
Kate Bell, Head of Rights and Economics at TUC
Val Cooke, Retail Worker and Trade Union Representative, USDAW
Tabitha Goldstaub, Co-Founder of CogX and Chair of the AI Council

### [Recession and Automation Changes Our Future of Work, But There are Jobs Coming, Report Says](#)
**World Economic Forum**
**20 October 2020**

The workforce is automating faster than expected, displacing 85 million jobs in next five years
The robot revolution will create 97 million new jobs, but communities most at risk from disruption will need support from businesses and governments
In 2025, analytical thinking, creativity and flexibility are among the top skills needed; with data and artificial intelligence, content creation and cloud computing the top emerging professions
The most competitive businesses will be those that choose to reskill and upskill current employees
Read the Future of Jobs Report, watch a video overview and watch livestreamed sessions from the Jobs Reset Summit.
Geneva, Switzerland, 21 October 2020 – The Future of Jobs 2020 report has found that COVID-19 has caused the labour market to change faster than expected. The research released today by the World Economic Forum indicates that what used to be considered the "future of work" has already arrived.

By 2025, automation and a new division of labour between humans and machines will disrupt 85 million jobs globally in medium and large businesses across 15 industries and 26 economies. Roles in areas such as data entry, accounting and administrative support are decreasing in demand as automation and digitization in the workplace increases. More than 80% of business executives are accelerating plans to digitize work processes and deploy new technologies; and 50% of employers are expecting to accelerate the automation of some roles in their companies. In contrast to previous years, job creation is now slowing while job destruction is accelerating.

"COVID-19 has accelerated the arrival of the future of work," said Saadia Zahidi, Manging Director, World Economic Forum. "Accelerating automation and the fallout from the COVID-19 recession has deepened existing inequalities across labour markets and reversed gains in employment made since the global financial crisis in 2007-2008. It's a double disruption scenario that presents another hurdle for workers in this difficult time. The window of opportunity for proactive management of this change is closing fast. Businesses, governments and workers must plan to urgently work together to implement a new vision for the global workforce."

Some 43% of businesses surveyed indicate that they are set to reduce their workforce due to technology integration, 41% plan to expand their use of contractors for task-specialized work, and 34% plan to expand their workforce due to technology integration.

By 2025, employers will divide work between human and machines equally. Roles that leverage human skills will rise in demand. Machines will be primarily focused on information and data processing,

administrative tasks and routine manual jobs for white- and blue-collar positions.

New sense of urgency for the reskilling revolution

As the economy and job markets evolve, 97 million new roles will emerge across the care economy, in fourth industrial revolution technology industries like artificial intelligence, and in content creation fields. The tasks where humans are set to retain their comparative advantage include managing, advising, decision-making, reasoning, communicating and interacting. There will be a surge in demand for workers who can fill green economy jobs, roles at the forefront of the data and artificial intelligence economy, as well as new roles in engineering, cloud computing and product development.

For those workers set to remain in their roles in the next five years, nearly 50% will need reskilling for their core skills.

Despite the current economic downturn, most employers recognize the value of reskilling their workforce. An average of 66% of employers surveyed expect to see a return on investment in upskilling and reskilling of current employees within one year. They also expect to successfully redeploy 46% of workers within their own organization. "In the future, we will see the most competitive businesses are the ones that have invested heavily in their human capital – the skills and competencies of their employees," Zahidi said.

Building a more inclusive future of work

The individuals and communities most negatively affected by the unprecedented changes brought about by COVID-19 are likely to be those that are already most disadvantaged. In the absence of proactive efforts, inequality is likely to be exacerbated by the dual impact of technology and the pandemic recession.

The Future of Jobs 2020 report partner ADP Research Institute tracked the impact of COVID-19 on the United States labour market. Between February and May 2020, data showed that displaced workers were, on average, mostly female, younger and had a lower wage. Comparing the impact of the global financial crisis of 2008 on individuals with lower education levels to the impact of the COVID-19 crisis, the impact today is far more significant and more likely to deepen existing inequalities.

"In the wake of COVID-19, the US workforce experienced immense change, and we were able to track this impact on the labour market in near real time," said Ahu Yildirmaz, Head of ADP Research Institute Labour Market Research. "While the swift and staggering job loss in the initial months was significant, it is only one anomaly of this 'recession.' Industry distribution, business size and worker demographics were all disrupted due to labour market changes brought about by COVID-19, signalling that this downturn is unlike any other in modern US history."

"The pandemic has disproportionately impacted millions of low-skilled workers," said Jeff Maggioncalda, Chief Executive Officer of Coursera, another report partner. "The recovery must include a coordinated

reskilling effort by institutions to provide accessible and job-relevant learning that individuals can take from anywhere in order to return to the workforce."

Currently, only 21% of businesses worldwide are able to make use of public funds for reskilling and upskilling programmes. The public sector will need a three-tiered approach to help workers. This includes providing stronger safety nets for displaced workers, improving the education and training systems and creating incentives for investments in markets and the jobs of tomorrow.

Companies can measure and disclose their treatment of employees by adopting environmental, social and governance (ESG) metrics. This will help benchmark success, provide support where it is needed and ensure new gaps that arise are quickly identified and closed.

Remote working is here to stay but requires adaptation

Some 84% of employers are set to rapidly digitalize working processes, including a significant expansion of remote working. Employers say there is the potential to move 44% of their workforce to operate remotely.

According to the report, 78% of business leaders expect some negative impact on worker productivity. This suggests that some industries and companies are struggling to adapt quickly enough to the shift to remote working caused by the COVID-19 pandemic.

To address concerns about productivity and well-being, about one-third of all employers said they will take steps to create a sense of community, connection and belonging among their employees.

Career pivots become the "new normal"

The research also indicated that a growing number of people are making career changes to entirely new occupations. According to LinkedIn data gathered over the past five years, some 50% of career shifts into data and artificial intelligence are from different fields. That figure is much higher for sales roles (75%), content creation and production positions, such as social media managers and content writers (72%), and engineering roles (67%).

"As we think about ways to upskill or transition large populations of the workforce who are out of work as a result of COVID-19 into new, more future-proofed jobs, these new insights into career transitions and the skills required to make them have huge potential for leaders in the public and the private sector alike," said Karin Kimbrough, Chief Economist at LinkedIn.

"Our research reveals the majority of transitions into jobs of tomorrow come from non-emerging jobs, proving that many of these jobs are more accessible than workers might think, Kimbrough continued. "If we can help individuals, and the leaders who are directing workforce funding and investment, identify the small clusters of skills that would have an outsized impact on opening up more sustainable career paths,

we can make a real difference in addressing the unprecedented levels of unemployment that we're seeing globally."

Data shows how long to reskill

According to The Future of Jobs Survey, core skills such as critical thinking, analysis and problem-solving are consistently top of the reskilling and upskilling priorities for educators and businesses. Newly emerging in 2020 are skills in self-management such as resilience, stress tolerance and flexibility.

Data from Coursera suggests that individuals could start gaining the top 10 skills for each emerging profession in people and culture, content writing, sales and marketing in one to two months. Those wishing to expand their skills in product development and data and artificial intelligence could do so in two to three months, and those switching into cloud computing and engineering could make headway in the new skillset through a four to five-month learning programme.

There has been a fourfold increase in the number of people seeking opportunities for online learning under their own initiative, a fivefold increase in employers offering their workers online learning opportunities and a ninefold enrolment increase in people accessing online learning through government programmes.

Those in employment are placing larger emphasis on personal development courses; those unemployed have placed greater emphasis on learning digital skills such as data analysis, computer science and information technology.

"The pandemic has accelerated many of the trends around the future of work, dramatically shrinking the window of opportunity to reskill and transition workers into future-fit jobs," said Hamoon Ekhtiari, CEO of FutureFit AI. "No matter what prediction you believe about jobs and skills, what is bound to be true is heightened intensity and higher frequency of career transitions especially for those already most vulnerable and marginalized."

"The Future of Jobs Report is a critical source of insights in supporting companies and government through these workforce transitions, and FutureFit AI is honoured to share our data and insights in the Report, Ekhtiari continued. "We look forward to continuing to contribute to a just, worker-first, and data-powered recovery as a partner of the World Economic Forum's New Economy & Society community and its Reskilling Revolutions Platform."

The Future of Jobs

Now in its third edition, The Future of Jobs report maps the jobs and skills of the future, tracking the pace of change. It aims to shed light on the pandemic-related disruptions in 2020, contextualized within a longer history of economic cycles and the expected outlook for technology adoption, jobs and skills in the next five years. The Future of Jobs survey informs the report. It is based on the projections of senior business leaders (typically Chief Human Resource Officers and Chief

Strategy Officers) representing nearly 300 global companies, which collectively employ 8 million workers.

It presents the workforce planning and quantitative projections of chief human resource and strategy officers through to 2025, while also drawing on the expertise of a wide range of World Economic Forum executive and expert communities. The report features data from LinkedIn, Coursera, ADP and FutureFit.AI, which have provided innovative new metrics to shed light on one of the most important challenges of our time.

# 4. Further reading

**Reports**

[The Work of the Future: Building Better Jobs in an Age of Intelligent Machines](), US Massachusetts Institute of Technology, Nov 2020

[Jobs, jobs, jobs: Evaluating the effects of the current economic crisis on the UK labour market]()
Resolution Foundation, Oct 2020

[The Future of Jobs Report 2020,]() World Economic Forum, Oct 2020

[Mind the Gap: The Final Report of the Equality Task Force](), Institute for the Future of Work, Oct 2020

[Work and automation in the time of Covid-19](), RSA, Oct 2020

[A better future for work: the world after Covid-19]() ,Institute for the Future of Work, June 2020

[DWP's preparations for changes in the world of work](), House of Commons Work and Pensions Select Committee 2019-21 [ongoing inquiry]

[Automation and the future of work](), House of Commons Business, Energy and Industrial Strategy Committee, Sept 2019 [see also [Government response](), Feb 2020]

[AI, the future of work?]() European Commission, Dec 2019

[Automation, Skills and the Future of Work: What do Workers Think?]()
IMF Working Paper, Dec 2019

[The impact of Technological innovation on the Future of Work](), European Commission Joint Research Centre, 2019

[Work for a brighter future](), ILO/Global Commission for the Future of Work, Jan 2019

[A future that works for working people](), TUC, Sep 2018

[Will robots really steal our jobs? An international analysis of the potential long term impact of automation](), PwC, Feb 2018

[Universal basic income and the future of work,]() Fabian Society, 2017


**Websites**

European Commission - [Policy papers and projects relevant to changing nature of work]()

ILO -  [The Future of Work]()

OECD – [The Future of Work]()

RSA – [The Future of Work]()

World Economic Forum - [Preparing for the Future of Work]()