

SUMMARY REPORT

community
For a better working world

FABIAN SOCIETY

An illustration depicting a collaborative work environment. A worker in blue overalls and a yellow hard hat is climbing a large blue document. Another worker in a white shirt and yellow pants is reaching up to a document. A woman in a blue top and yellow hard hat is pointing at a document. A woman in a brown top and yellow pants is holding a glowing lightbulb. A yellow sign with a code symbol and a yellow triangle with 'FABIAN SOCIETY' are also present.

SHARING THE FUTURE

**WORKERS AND TECHNOLOGY
IN THE 2020s**

*Summary of the final report of the
Commission on Workers and Technology*



The Changing Work Centre was established by the Fabian Society and the trade union Community in February 2016 to explore progressive ideas for the modern world of work. Through in-house and commissioned research and events, the centre is looking at the changing world of work, attitudes towards it and how the left should respond. The centre is chaired by Yvette Cooper MP and supported by an advisory panel of experts and politicians.

community

For a better working world

Community is a modern trade union with over a hundred years' experience standing up for working people. With roots in traditional industries, Community now represents workers across the UK in various sectors.



The Fabian Society is an independent left-leaning think tank and a democratic membership society with 8,000 members.

A Community and Fabian Society report
Community general secretary: Roy Rickhuss
Fabian Society general secretary: Andrew Harrop

This report represents not the collective views of Community and the Fabian Society, but only the views of the individual commissioners and authors. The responsibility of the publishers is limited to approving its publications as worthy of consideration within the labour movement.

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The Commission on Workers and Technology

was established in August 2018 by Community and the Fabian Society. It was chaired by Rt Hon Yvette Cooper MP who led the commission's work across its life. The other commissioners were Hasan Bakhshi, Sue Ferns, Paul Nowak, Katie O'Donovan, Roy Rickhuss and Professor Margaret Stevens.

The commission's aim has been to take a 'worker's eye view' of technology change in the workplace, and especially the automation of existing job tasks. It has looked in granular detail at case-study occupations and sectors to draw conclusions on what needs to happen to make new workplace technologies an opportunity not a threat for typical workers.

The commission was hosted by the Changing Work Centre, a joint initiative by Community and the Fabian Society. Community generously provided financial support for the commission as well as invaluable access to workplaces and workers; the Fabian Society provided the core research and secretariat capacity, in the shape of Josh Abey and Olivia Bailey (until February 2020). Colleagues from both organisations made up the wider project team.

The lead authors of this report were Josh Abey and Andrew Harrop. They were extensively supported by co-authors Natasha Collett, Lauren Crowley, Alastair Holder Ross, Anna Mowbray and Luke Raikes.

The full version of the report is available at www.fabians.org.uk. ■



Technology is already fast changing the world of work – creating remarkable new opportunities but also serious dangers of widening inequality and injustice unless we act. The Covid-19 crisis makes those dangers much more acute. Government, employers and unions cannot stand back and watch while inequality grows. We need urgent action now to make sure all workers benefit and that we use technology to rebuild a fairer, stronger, greener economy instead. That is what this report is all about.

Yvette Cooper MP, chair of the Commission on Workers and Technology

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Introduction

Covid-19 and the future of work

These are extraordinary times. Covid-19 has taken loved ones, upended lives and will have an enduring impact on our future in ways we cannot yet foresee. The economic shockwaves are hitting communities across the country and will continue to do so for years to come.

Even when the public health crisis has passed, after so much dislocation the world of work will not just snap back to how it was before. Instead, we are probably entering a decade of unsettling economic transition.

Just like the many structural changes the UK has experienced over the course of our industrial history, this one is likely to bring new opportunities but also to be most painful for the people and the places that can least afford it.

Technology will be at the forefront of whatever transition comes in the months and years ahead. For two centuries technology change has been reshaping how we work; building up and tearing down different industries and sources of employment across our villages, towns and cities. And at times of crisis, technology-driven change can be at its fastest.

During 2020 digital technologies have enabled transformations in the way we work that have been unprecedented in their speed and scope, with employers of every shape and size innovating and investing in

technology in order to survive. Technology is saving and changing jobs that would otherwise have been destroyed by Covid-19, and we are seeing its huge potential to improve work and boost productivity for the future.

But at the same time, the Covid-19 crisis is dramatically accelerating the pace of job disruption and dislocation, something that had previously been happening at a much slower speed. Jobs in some sectors – like high street retail or hospitality – face a ‘double whammy’ from Covid-19 and accelerating technology change: we found that 61 per cent of jobs furloughed in the first half of 2020 were in sectors at high risk of automation.¹

61 per cent of jobs furloughed in the first half of 2020 were in sectors at high risk of automation

Many of the jobs put on hold by public health measures will not come back even when better times return. Spending patterns are shifting permanently towards digitally based consumption, and to cope with new conditions businesses are adopting technologies that frequently replace human tasks, even if they also have the potential to create new or better jobs.

Some people have seen unexpected improvements in the way they work this year. But those on low incomes have both been most likely to lose out in the short term and are at greater risk from the long-term consequences of the crisis. Unless we act, workplace inequality stands to widen because of both Covid-19 and accelerating automation.

All of this makes it far more urgent to address the work and technology issues our commission has been considering for the past two years. We already had choices to face as a nation, over how to shape the impact of technology on work for better or worse. But with Covid-19 these challenges have become immediate and pressing.

A crossroads for jobs

The future of work could go in two directions after the Covid-19 crisis.

In one possible future, jobs get worse as technology gets better. Millions of people face greater insecurity, harder work, more surveillance, and worse pay and conditions. They are shut out of decisions without rights or representation and are denied the training to adapt to new jobs and prepare for the future. In this world, only a minority of workers share in the new wealth and opportunities that technologies create, and people who lack the skills needed in future jobs are shut out. The scars from a painful Covid-19 recession run deep – and those

who lose their jobs struggle to find good new work. Inequalities with respect to earnings, working conditions and control get wider, and the people and places with least are hardest hit. In our work as a commission, we have already glimpsed this dismal future in parts of the labour market today.

But there is a second, more optimistic future too. Technology change can be a huge force for good. We need it to solve Covid-19, support our ageing population, make our economies more productive, fund and improve our public services, and deal with the crisis of climate change. We can use technological innovation to make our country fairer, stronger, cleaner and greener. We have seen that in the way smartphone apps, video conferencing, cloud computing and responsive algorithms have helped millions of people keep working safely from home or at a distance throughout the Covid-19 crisis.

That better, fairer future – where technology makes work safer, more flexible and more productive – can be achieved. In the past each new wave of technology has in time created more new jobs and more better jobs than those that went before. Today, on average, jobs are safer and higher quality than they were a generation ago. And the majority of people we spoke to for our commission were positive about the capacity of technology to improve their work. But we need to act.

Leadership

The Covid-19 crisis forces us to make an active choice between these two paths. We cannot sit back. As a country we have made big choices about the future of work many times before in our 250-year industrial history – the passing of the Factory Acts, the creation of trade unions, the building of the welfare state. The shape of our economy is not determined by uncontrollable technological forces, but by the decisions taken in workplaces, boardrooms, communities and in politics.

We can create policies, partnerships and plans to deal with the dual challenges of Covid-19 and accelerated technology change; to ensure that the quality of work improves, that rewards are fairly shared, that workers get a voice in change, and that everyone is equipped to adapt and make the most of new opportunities as work is transformed.

After Covid-19, we need to build back better. Government, businesses, unions and communities all have opportunities now

to respond to the crisis by driving positive change. The way we have had to react during 2020 shows us how fast we can change and how radical we can be when it is needed. Building back better means using this as a moment to reset the economy: a chance to force the pace on ambitious new agendas from decarbonisation to strengthening our public services, from a skills revolution to reducing inequality and improving all our working lives.

This is a moment where politicians, workers and business leaders can shape the future together. But it needs active leadership. In previous eras of major technological and economic change it took decades for new legislation and new institutions to emerge to tackle injustice and to make sure the rewards were fairly shared. In the midst of a global crisis, we cannot afford to wait that long. We need to start preparing for the future now.

Our commission

The Commission on Workers and Technology was established in August 2018. It is chaired by Yvette Cooper MP and hosted by the Changing Work Centre, a joint research initiative from Community union and the Fabian Society. Our commission-

ers are drawn from experts, businesses and trade unions, and the focus of our work has been on reserved UK policy (although there are also lessons in our findings and proposals for decision makers in Northern Ireland, Scotland and Wales).

We examined how technology is changing everyday jobs now and in the next few years, hearing from hundreds of people in different jobs in different sectors of the economy across the country. Other reports have looked at the future of work over a much longer time frame. This report is focused on jobs and the labour market in the short and medium term, and we have deliberately taken a workers' eye view.

During our work, we sought answers to a series of big questions:

- How can we ensure that technology narrows rather than widens inequality, and that it generates prosperity to be shared by all?
- What action is needed so that technology change leads to jobs getting better not worse?
- What do we need to do to support people to adapt to change at work?



Commissioners visiting an Asda warehouse in Normanton



- How should workers get a say and how should government, employers and trade unions work together to shape the adoption of workplace technology?

The Covid-19 crisis and the new recession has brought a fresh urgency to all these questions. It has also led us to ask what urgent action is needed on jobs and technology right now to get us through the coming months, which is where our report starts.

Our report

In chapter 1 we look at the relationship between the Covid-19 crisis and technology change. We show how the coronavirus recession is accelerating the adoption of technologies. While this is saving some jobs and businesses, unless action is taken the combination of a severe downturn and accelerating automation could also lead to an employment crisis with long-lasting consequences including widening inequality and long-term structural unemployment. We make immediate recommendations to the government including targeted support for key industries and work-and-train guarantees for those who lose their jobs.

In chapter 2 we look at prospects for technology and inequality as the economy recovers. We find that new technology is needed to boost productivity and pay, but there is a significant risk that it will lead to inequalities widening unless we act, as people with low incomes and low skills are at most risk of losing out. We set out proposals to help everyone get a fair share in the gains from new workplace technologies.

In chapter 3 we look at how best to help people keep up with fast-changing workplace technology, and how to ensure employers make the most of their human talent. Currently those who need the most training and support receive the least. The UK adult skills system is totally inadequate and cannot meet the scale of the challenge we face. It needs a complete overhaul and we present proposals for a comprehensive new adult skills offer for workers and employers.

In chapter 4 we look at the quality of jobs. We find that there is huge potential for technology to improve the quality of work, to make jobs better, safer, and deliver the kind of flexibility that workers want. However, we also point to worrying exam-

ples of technology being used to exploit, dehumanise and dominate. We recommend measures and safeguards to make sure technology is used to improve work and protect people's rights.

Finally, in chapter 5, we look at whether workers are getting a say when technology is changing and find that the lack of worker voice and representation underpins many of the potential problems that lie ahead. We call for reforms to institutions to facilitate stronger partnerships between government, employers and unions, and for more worker representation and consultation in workplaces.

We are at a crossroads and the decisions taken now by government, employers and trade unions will shape the future of work for decades to come. Without action, the combined risks of the Covid-19 recession and accelerated automation in the coming years could result in mass unemployment, worse jobs and widening inequality. But with leadership, new technology can be harnessed to improve work, empower workers and boost productivity across the country. We need to get it right first time and this report sets out how to do that. ■

Chapter one: The Covid-19 crisis

DURING THE COVID-19 crisis technology has protected jobs, as small and large businesses have embraced new technologies and modes of working in order to survive. Many of these changes will be permanent and will bring long-term benefits for productivity and the quality of work. The rapid take-up of new technologies during this crisis has also given us insight into the opportunities that technology presents for the future.

However, the combination of the Covid-19 recession and the acceleration of technology change also presents real dangers. Jobs in some sectors – like retail and hospitality – are likely to be hit twice, by Covid-19 and by a quicker pace of automation. Those with low incomes and low skills are also doubly at risk from losing their jobs – from the immediate effects of the Covid-19 crisis and from the ongoing automation it triggers. There is a risk of enduring structural unemployment, with some parts of the UK particularly hard hit. The Covid-19 crisis will exacerbate existing inequalities unless action is taken.

Our findings

- **Jobs have been saved during the Covid-19 crisis because of new technologies:** Without the capacity of technology to allow businesses to adapt and people to work remotely, the economic

consequences of the pandemic would have been much greater (in April 2020 almost half of workers were able to work at home).² Services from retail to education have used digital technologies to move online, transform their operations and continue without disruption, saving jobs in the process.

Jobs in some sectors - like retail and hospitality - are likely to be hit twice, by Covid-19 and by a quicker pace of automation

- **The Covid-19 crisis is set to accelerate job-replacing automation meaning that vulnerable sectors face a 'double whammy':** Past recessions have accelerated automation, replacing human tasks with technology, and there is already evidence that this is happening again during the Covid-19 recession. Sectors including hospitality and retail face a 'double whammy' because they are being hit by Covid-19 restrictions now and also have the most job tasks that can be automated. Our research has found that 61 per

cent of furloughed jobs were in sectors where there is a high risk of jobs being replaced by automation.³ 5.9m of the 9.6m furloughed workers came from the third of sectors with jobs at highest risk of automation; and 3.1 million came from the very most vulnerable fields: hospitality, retail and the motor trade. The people whose jobs have been suspended during the Covid-19 crisis are therefore also more likely to see their work replaced by technology. This is particularly concerning because these sectors are key recruiters for young and unemployed people.

- **Inequality is likely to rise as low-paid and disadvantaged workers are at greater risk from the Covid-19 recession and from automation:** There is a sharp disparity between the workers who are benefiting from technological trends linked to the crisis and those who are being hit. During the spring 2020 lockdown, 42 per cent of employees in the bottom earnings quintile were furloughed, lost their job or worked fewer hours, compared to under 15 per cent in the highest quintile.⁴ Low-paid and disadvantaged workers are also much more likely to work in jobs at high risk of automation with women, younger and older workers, people from minority ethnic

backgrounds and disabled workers more likely to lose out.

- **Some places will also be affected more severely by the combination of Covid-19 and automation than others:** We are very worried by the prospects for city centres over the coming months as office workers and customers stay away during the Covid-19 pandemic. But most of the English local authority areas most vulnerable to the combination of Covid-19 and automation over the medium term are made up of towns and smaller communities (25 out of 28 areas).⁵ Places with less resilient, less skilled and less diverse labour markets, and concentrations of employment in high-risk sectors, may end up suffering most in the long term.
- **The government's economic response to the first wave of Covid-19 was effective in the short term, but ministers have done little to address the 'double whammy' of Covid-19 and technology change:** In the first six months of the Covid-19 crisis the government introduced some extremely important and successful measures to support employment, working in partnership with employers and trade unions. After a damaging delay, these measures were extended to reflect the second England-wide lockdown. But there has been little recognition of the combined impact of Covid-19 and automation and the added pressure on workers and businesses in particular sectors. Reforms to the skills system from April 2021 are so far vague and appear underfunded; and training and jobseeker support are not well integrated. People will be left on furlough for up to a year without any training or work and will find it harder to get new employment if their jobs do not return at the end of the Covid-19 crisis.

Our solutions

The government needs to work urgently with employers and unions on a major plan to support the labour market through the recession and beyond – including targeted support for the sectors and workers where most jobs are at risk as a result of both Covid-19 and technology change.

1. Provide immediate training for furloughed workers and more support

for freelancers (England/UK). Ministers should urgently provide free training or education courses for all workers furloughed this winter. Where there is no employer-provided training, furloughed workers should be offered free training through the Union Learning Fund Jobcentre Plus, further education colleges or online courses to improve opportunities for workers whose jobs may not return. The government should also provide more robust support for freelancers, newly self-employed workers and others who have been excluded from existing job support schemes.

2. Introduce new industry plans for sectors where jobs are most at risk (UK).

Urgent action plans are needed for sectors facing big job losses – either temporarily or permanently – including hospitality, culture, leisure and high street retail. Plans should include additional help for businesses to adopt technology that could keep them viable and support jobs; additional targeted training and courses for workers facing the coronavirus-automation 'double whammy'; and measures to help with sector-specific issues – for example, local authorities working with high street landlords to keep small retailers open. Government investment should come with conditions regarding skills and employment practices.

3. Create and support good jobs to absorb unemployment during the recession (England/UK).

The government should provide direct support for job creation to prevent unemployment rising. This should include bringing forward capital investment that can be delivered quickly on a widely dispersed basis (including energy efficiency improvements, social housebuilding, digital infrastructure, roads and flood defences). It should also support additional jobs in education, health and social care to respond to immediate Covid-19 related challenges.

4. Introduce a 'work and training' guarantee for the unemployed during the recession (UK).

The government's new Kickstart programme for the young unemployed should be expanded to offer a guarantee for all unemployed young



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people of either a job with training or a return to full-time education. The guarantee of a job with training should also be extended to unemployed people aged over 25. Jobseekers should enrol in training as soon as they are out of work and job centres should aim to place people of all ages with low skills into apprenticeships.

5. Fund a major increase in adult training and education during the next 12 months (England).

While the labour market is weak and so many people are likely to be underemployed or unemployed, the government should fund a major expansion in adult education and training, as well as training for all workers on the furlough scheme (recommendation 1); this would include free technical education for all adults choosing priority courses; higher education tuition and bursaries for career changes into skills shortage jobs; an expansion of the Union Learning Fund instead of its abolition as the government has proposed; and a nationwide version of the National Retraining Scheme to act as a gateway for these new entitlements. Universal credit rules should also be changed to support full-time learners on level 2 courses or those aged 18 to 21, and part-time students in other circumstances. ■

Chapter two: A fair share in the rewards

TURNING TO THE medium term, it is clear that new technologies have the potential to bring extraordinary economic, social and environmental benefits. But without action they could also lead to growing inequality, with those on low incomes losing out.

We want to see a future where workers receive a fair share of the rewards from technology change – both as the economy recovers in the next few years and across the 2020s. The dividends of new workplace technology need to translate into higher earnings, or into shorter working hours if that is what people prefer. And these improvements must be fairly shared: everyone should be able to gain from the rewards of technology change, no matter where they live or what their demographic characteristics. Technological developments should be used to narrow inequality not to widen it.

Technology is a force for good that has the potential to boost future living standards for all, while also reducing carbon emissions. However, each wave of technological change has also brought dislocation: as work changed, some jobs were destroyed, while others were created. The rewards from technological change are not always shared, and the disruption it causes can lead to unemployment, exploitation and injustice. The Covid-19 recession and the technology change it has triggered have

increased the risks. It will take new policy and new partnerships to ensure the rewards of change are fairly shared. Without action, new technologies will further polarise the labour market so those who already have least end up losing most.

Our findings

- **New technology is needed to boost productivity and pay in the UK:** Before the Covid-19 crisis, the UK experienced a decade of stagnant pay linked to terrible productivity growth (caused partly by insufficient and uneven investment in technology). France, Germany and the USA produce more than the UK for each hour worked, and the differences in output between their high and low productivity businesses are smaller.⁶ In order to improve pay and living standards, and stay competitive, firms across the economy need to adopt technology more widely. The UK is a world leader in innovation with lots of firms at the frontier of productivity and an excellent higher education system. But we need to translate these assets into faster productivity growth everywhere, greater diffusion of technology and higher living standards.
- **Rapid automation risks high levels of technology driven-job replacement:** With a deep recession beginning, there is

a risk that a sharp cyclical jobs contraction could give way to long-term, structural unemployment as industries are restructured and technologies replace human tasks. Researchers have different views on the future potential for tasks and jobs to be automated but the ONS has produced estimates suggesting that more than 1.5 million low-skilled jobs are at particularly high risk.⁷ New jobs will also be created, both tech-enabled jobs and those focused on relationships and creativity. But evidence from past recessions suggest it may be many years before employment returns to previous levels; and that even when it does some people could be trapped in persistent long-term unemployment, as in the 1980s, because of a mismatch between the new jobs and the profile and location of jobseekers.

Without action, new technologies will further polarise the labour market

- **New technology risks widening inequality and further concentrating power and wealth:** Many of the job roles with the most tasks at risk of au-

tomation over the next 10 years pay the lowest wages. But when increases in productivity take place, these are not currently being translated into better rewards for low-skilled workers (unlike in economies with stronger trade unions or collective bargaining).⁸ Minimum wage policies have increased both pay and productivity in low-paid sectors, but they are not enough. To tackle inequality, we also need more workplace representation and bargaining, so that workers benefit from the rising productivity that technology can bring.

- **People who already have least could lose most:** People from disadvantaged groups are more likely to be in occupations with routine job tasks that are at significant risk of automation. According to ONS estimates, of the 1.5 million people in England in jobs most vulnerable to automation, 70 per cent are women and 99 per cent do not have higher education degrees. Workers aged 55 to 64 are more than twice as likely to be in these high-risk jobs as workers in their 30s; and young workers aged 16 to 24 are more than eight times as likely.⁹
- **The places that already have least could lose most:** As things stand, the capacity for workers to share in the benefits of technology-driven growth is dependent on where they live. Jobs that are vulnerable to automation are also concentrated in economically disadvantaged areas. The 20 local authority areas where existing jobs are most likely to face automation are mainly rural, coastal or ex-industrial towns.¹⁰
- **AI may entrench existing discrimination and disadvantage:** New selection, assessment and monitoring technologies risk creating new forms of workplace bias and unfairness, worsening existing inequalities. Without intervention, biased technology risks locking disadvantaged groups out of the changing labour market.

Our solutions

Strong collective leadership is needed to achieve high employment, technology-driven productivity improvements, rising wages and a fair distribution of opportu-

nities between people and places. We want to see a gradual shift from immediate crisis support to measures that steer the direction of future growth.

6. **Adopt a new industrial strategy with renewed focus on high-employment industries and increased infrastructure investment (UK).** Since Boris Johnson came to power the government has ignored Theresa May's 2017 industrial strategy. A new strategy is planned and will reportedly be even more focused on pioneering science and technology. This approach is too narrow. The post-Covid-19 industrial strategy should include a major focus on improving productivity and the quality of work in high-employment industries with relatively low productivity today, drawing on the experience of high-productivity service sectors like the creative industries. Our proposed Covid-19 industry plans (see recommendation 2) should therefore evolve into long-term industrial strategies for each sector with decade-long plans for innovation, technology, skills and working practices. In addition, we need increased investment in infrastructure to support new jobs growth, including in green and digital infrastructure and in public service infrastructure in areas such as education, social care and early years.

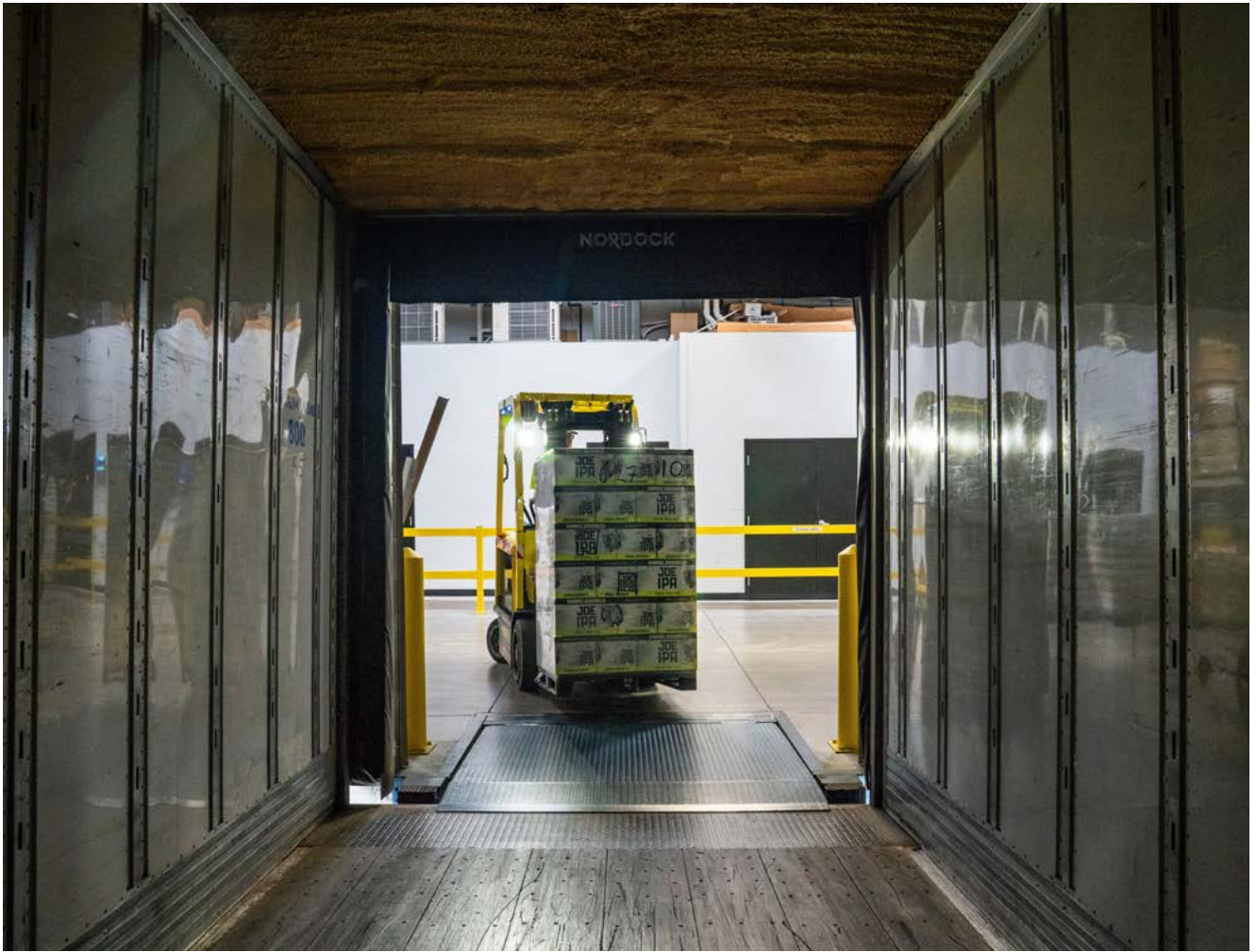
We recommend
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during the recession

7. **Act to prevent higher earnings inequality during the recession and promote rising pay and productivity over time (UK).** We recommend a sequenced package of measures to ensure that inequality does not widen during the recession and that as the economy is recovering, pay rises for low and middle earners become a spur for better use of technology and higher productivity. The package should include extending pay ratio transparency

and promoting firm-level commitments on earnings inequality; setting a statutory target for the national living wage by the mid-2020s; and introducing reforms to increase collective bargaining. The government should make a start by drawing up a plan with employers and unions for introducing sectoral pay bargaining in social care.

The government should
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paid occupations

8. **Increase the value, status and pay of care work and other essential low-paid jobs that are unlikely to be automated (England).** We recommend that the government sets out a robust strategy to increase status, pay, job security and professional development for social care and early years jobs, and other low-paid occupations less susceptible to automation where new jobs are likely to be created. The Covid-19 crisis has demonstrated how much society relies on these roles and other key workers. To prevent further polarisation of the labour market between those with high levels of academic qualifications and those with low levels of qualifications, the government should set out a plan to increase the status of and rewards for workers in key low-paid occupations, starting with expanding sectors like social care.
9. **Combine employer support for innovation, business development and skills to drive up productivity, technology adoption and support for the workforce (UK).** We recommend that services supporting employers on innovation, business development and skills are coordinated and expanded. In England local growth hubs should lead delivery, supported by national agencies such as Innovate UK, and increased funding should be guaranteed for at least five years. Following the Covid-19 crisis this assistance should



be combined with support on employment and skills, to help businesses upgrade the skills of new recruits and their existing workforce so they can work well with new technology.

- 10. Empower local leaders to help more businesses use new technology and create good jobs (England).** Significant economic power and funding should be devolved to towns and cities. Options include extending devolution to non-metropolitan areas; ensuring that towns are adequately represented and served within city-regions; devolving responsibilities for adult education budgets (where this has not already happened), employment support and economic development powers (eg transport, housing, innovation);

and ensuring local enterprise partnerships are fully accountable everywhere to elected leaders.

- 11. Transform towns with plans for jobs, training and investment (England).** We recommend that the government provides special support to enable disadvantaged towns to adapt. Towns or clusters of smaller communities need their own jobs plans; corresponding training and skills provision; and a single investment plan, to coordinate and prioritise all public and regulated investment in the area (including early access to full fibre broadband).
- 12. Establish a review of equality law and automation (Great Britain).** We recommend that the government

Towns need their own jobs plans and training and skills provision

establishes a review of how equality law is working in the age of automation, led jointly by the Equality and Human Rights Commission and Information Commissioner's Office to clamp down on technology-powered discrimination before it emerges as a serious issue. The review should lead to new guidance and codes of practice and should consider whether there is a need for legislative change or extra resources for the regulators. ■

Chapter three: The support to adapt

COVID-19 AND THE acceleration of technology adoption demands a complete overhaul of the adult skills and education system. This is a dangerous moment for millions of workers facing painful transitions, but it can also be a catalyst for change. We need to reset the way the UK delivers training and employment support throughout people's working lives.

The UK has the capacity to create a radically better system to help workers keep pace with changing technology and jobs, and our commission found that workers have an appetite to retrain and acquire new skills. Workers need urgent and active support to keep up with changes to their jobs or to flourish in new occupations that may need very different skills.

Our findings

- **The skills and training system is not fit for the challenges we face and needs a major overhaul:** England's adult skills system has been failing for a long time despite many well-intentioned public policy initiatives. Participation in employer-based training is well below the EU average and fell in the decade between 2005 and 2015. In England adult participation in further education (FE) also fell by 39 per cent between 2012/13 and 2018/19. Without action 7 million extra workers will have insufficient skills for their jobs by 2030.¹¹
- **People that need most help receive least:** Employees with a degree or equivalent higher qualification are almost four times as likely to have recently received training at work as employees with no qualification at all. A survey for the commission also found that people with degrees are much more likely to be offered training to prepare for technology changes compared to people educated to GCSE level.¹²
- **Too many local economies are stuck with weak demand and supply in skills:** There is a strong spatial dimension to the UK's skills challenges and too many communities are trapped in a 'low-skills equilibrium' with low demand for skills and low supply in skills: most places with low workplace productivity also have residents with few qualifications.
- **Government is badly underfunding adult skills:** There has been a steep decline in funding for adult skills provision. Public spending on adult education in England apart from apprenticeships has declined by almost 50 per cent since 2009–10 and by almost two-thirds since the start of the century.¹³ The government's new national skills fund, while welcome, will only make up around one fifth of the cuts made since 2010.
- **Employers don't provide enough training and good employer practice appears to be the exception not the rule:** We found excellent examples of good practice when it comes to provision of learning for workers, both in job-specific training and in general, portable skills. But this is the exception not the rule. Across the economy employers spend around half the EU average on vocational training, and training participation is particularly poor in SMEs.
- **People want to train for work. But they need to see the point of it and often they don't:** Nine in 10 workers say they would be likely to take part in training to help them prepare for future changes to their role.¹⁴ However, the benefits of seeking training are not always clear. People in jobs at high risk of automation find it hard to imagine their jobs disappearing and feel that the future is too unpredictable to take steps to prepare for change.
- **Workers often don't have the time or the money to participate in learning opportunities:** Educating working-age people means addressing the opportunity cost: the loss of pay while learning. Ultimately, learning becomes inaccessible when the only option is learning outside working hours. Some other European

countries have schemes to provide adults with an income while learning.

- **Jobcentre Plus is not equipped to deal with retraining or with high levels of unemployment:** Jobcentre Plus has not had to support mass unemployment for a very long time. It will need to change the support it offers, not just during the height of the Covid-19 recession but beyond, as more people have to move jobs or sectors or retrain because of changing technology.

Our solutions

In the short term, the priority is to help people who have lost their jobs or are at risk of becoming unemployed in the months ahead. But we also need to make enduring and long-overdue changes to employment support and adult training, with a permanent, universal offer where both employers and government take greater responsibility for skills. We must act to provide workers the support to adapt whenever their jobs change or disappear as a result of new technology.

- 13. Create an integrated adult skills system with a training offer for everyone (England).** We want to see an integrated adult skills system, operating on a scale never seen before in this country, working as a partnership between government, employers and people. There should be multiple training offers to meet the needs of each individual and employer including: short job centre courses; FE courses; apprenticeships; regular on-the-job training for all workers; sector-led training and accreditation pathways; and HE courses for career change. The spine of the new system should be personal digital portals and specialist skills support for employers. Creating this integrated adult skills system will necessitate additional public spending over time, although the returns to the economy are likely to be considerable and the costs remain significantly lower than expenditure on higher education.
- 14. Support unemployed people to ‘work and train’ on a permanent basis (Great Britain).** After the recession unemployed people should continue to be helped to ‘work and train’ as part of a long-term change to the support offered by DWP and Jobcentre Plus. The ‘work and train’ guarantee we propose as a response to the Covid-19 crisis (see recommendation 4) should evolve into a permanent system of support, where every jobseeker takes part in training and people at risk of long-term unemployment are guaranteed a paid job placement with training.
- 15. Support incomes while workers train (UK).** We recommend that the government develops a package that will make it much easier for learners to work part-time and train part-time; take short periods off work to train; or, in the case of 19 to 21-year-olds, train full-time. We propose four measures: universal credit for part-time work and part-time learning; statutory training pay; a statutory training allowance; and a special scheme for 19 to 21-year-olds.
- 16. Gradually build apprenticeships into the mainstream in-work pathway for intensive training (England).** During the Covid-19 recession apprenticeships should be a principal route for unemployed people of all ages into good jobs. For now, no artificial limits should be placed on the number of jobseekers recruited onto apprenticeships. Then, once unemployment starts to fall, we want to see apprenticeships promoted to employees of all ages and all occupational levels, whether they are starting out, reskilling or advancing in their careers. Apprenticeships should evolve into pathways for anyone who would benefit from 12 months or more of training, at least one-day-a-week, on an accredited workplace programme.
- 17. Support local areas and sectors to fund high-priority technical qualifications beyond the new national entitlement to free adult training (England).** We welcome the government’s decision to use the new national skills fund to offer a free level 3 (A-level equivalent) qualification to anyone without one. This new national offer should however be supplemented by access to additional funded qualifications in strategically important skills: local skills funders should be mandated to offer extra qualifications to meet local needs and sectors should receive match-funding to strengthen their own occupational training and accreditation pathways.
- 18. Create a new national digital service to support all workers to retrain and expand the union learning fund (England).** We recommend that the UK government creates a new national support service to help people plan their careers and retrain, to act as a coherent national gateway for all our proposals on skills and training. One cost-effective option would be to create a personalised digital portal for all workers to be accompanied by a major promotional campaign and employer-facilitated enrolment. Alongside this the government should reverse its decision to scrap the Union Learning Fund, so that it can be expanded and repurposed to become a trade union-based arm of the personalised learning offer.
- 19. Reform Jobcentre Plus and create ‘work and skills’ hubs in every part of the country (Great Britain).** We recommend that Jobcentre Plus should evolve over five years into a ‘work and skills’ service, open to those in work as well as those without a job, and that it should be integrated with other local services as part of devolution arrangements. The DWP should determine a set of core national services linked to benefits, and other employment support, career guidance and skills services should be commissioned locally. Job centre buildings should be community ‘work and skills’ hubs.
- 20. Over time introduce new requirements on employers to support training and skills (England/UK).** We will only solve our national adult skills challenges if all employers shoulder more of the burden. Requirements need to be phased in over a number of years, once businesses have recovered from the Covid-19 crisis, with no extra responsibilities introduced in the depths of recession. A sequenced package could include responsibilities for employers to prepare skills reviews and plans (with assistance from specialist skills services); promote and support our proposed learning portals; consider requests for time off to train (expanding this ‘right to request’ to all workers); and administrate and potentially co-fund our proposal for statutory training pay. Other obligations might be agreed on a sector-by-sector basis. ■

Chapter four: Better jobs

WE WANT TO see all jobs become good jobs as a result of technology change. The adoption of new technologies presents both employees and employers with the chance to improve the quality of work, and in doing so to also improve productivity and the creative contribution workers make. There is the potential for jobs to become more fulfilling; relationships with managers, colleagues and customers to grow stronger; and for work to become more flexible, healthy and secure.

However, we have also seen significant evidence of technologies being used to reduce the quality of work by facilitating precarious working contracts, increasing work-related stress, and creating social isolation. We have found that too often new forms of flexibility come at the expense of social protections associated with more traditional kinds of employment. And we are concerned by the increase in employer use of technology for monitoring and surveillance, alongside excessive punitive practices reducing worker autonomy.

We want technology change always to lead to better jobs, not worse ones. But we face major choices ahead. We are optimistic that technology can be used in a hugely positive way, but this will not happen without stronger action from government, employers and unions.

Our findings

- **Technology is being used to significantly improve the quality of many jobs but decisions about how technology is implemented really matter:** Technology change is providing new ways of making work better. In a 2019 survey for the commission we found that 57 per cent of workers with jobs affected by new technologies in the previous five years said it had had a positive impact; only 7 per cent said negative.¹⁵ But in similar workplaces we heard of examples of technologies being implemented in ways that were both empowering and oppressive.
- **Technology has enabled flexible working for more and more people:** Flexible working, most notably remote working and working from home, has become an option for more and more people because of the proliferation of inexpensive, secure systems to link together employees with their employers. Many people will choose this as a permanent way forward after Covid-19 (although some may be also forced out of offices against their wishes). Technology has also enabled flexible rostering arrangements and platform apps where individuals chose their working hours.
- **Technology-enabled flexibility can increase insecure and precarious work:** Technology-enabled flexibility can come with significant drawbacks for workers including the proliferation of precarious working contracts, increasing work-related stress, and social isolation. New forms of flexibility involving self-employment or atomised 'gigs' too often come at the expense of social protections associated with more traditional kinds of employment including statutory and contractual employment rights and the support of trade unions.
- **Technology can lead to safer, fairer, more human work:** New technology is relieving workers of repetitive, strenuous or dangerous tasks, so that they can spend a higher share of their time adding value, with more interesting, creative or human-focused tasks. Workers also told us that appropriate use of technology can lead to fairer, more transparent management decisions.
- **Technology is extending opportunities for employer control, monitoring and surveillance:** New technology is encouraging excessively punitive practices by employers and reducing worker autonomy. Problematic, tech-enabled



monitoring and surveillance practices appear to be increasingly common in traditionally structured businesses as well as through tech-enabled platforms. Three-quarters of workers believe that technology is being used to monitor colleagues in their workplace.¹⁶

- **The intensity of work is increasing, especially for low-skilled workers:** For some people technology change is resulting in the intensification of work and greater work-related stress (the proportion of people reporting stress at work has risen in recent decades). A tech-enabled ‘always on’ culture reduces opportunities for informal breaks during the day and encroaches on non-working hours. There is no evidence that increased work intensity and the erosion of a healthy work-life balance lead to higher productivity.
- **How technology is designed and implemented matters immensely:** The problem of intensification of work is often linked to the bad design or implementation of technology. People resent having to operate poorly designed technology that is difficult to use, breaks down or makes errors. Workers appreciate new technology when they see it as ‘right for the job’ and dislike it when it is dysfunctional, unsuitable or misunderstood by managers.

- **Technology can negatively impact personal interaction in the workplace:** New technologies can reduce the human interaction that is a valued aspect of many service jobs. A recurring theme from our focus groups was the dissatisfaction workers felt when new technology reduced their face-to-face interaction with colleagues and customers.

Our solutions

The Covid-19 crisis has spurred the rapid, unplanned adoption of new technology-enabled working practices by employers and workers across the country. Many changes have been beneficial and overdue, but businesses acted fast without being able to consider implications for the overall quality of jobs.

We want technology change always to lead to better jobs. For this to happen we need strong partnerships and a robust policy framework. We hope that good progress can be made through voluntary approaches, with national and local leaders supporting and facilitating partnership between employers and trade unions. But some legislative action is also needed.

21. **Establish good work standards and require large employers to take part to access government procurement and grants (England or UK).** We recommend the establishment of a national good work standard drawn up by employers and trade unions. Government decisions on public procurement and access to funding could be contingent on large firms adopting or working towards the standard. Each industry should also develop its own good work standard.
22. **Introduce a stronger universal right to request flexible work (UK).** The right to request flexible working should be expanded in response to technology changes making remote working and flexible hours much easier. This would mean extending the right to workers who are not classed as ‘employees’ and to job applicants and employees with less than 6 months’ service.
23. **Create a platform economy council to improve gig work (UK).** The UK government should convene a new platform economy council, as a social

partnership body for platform work (initially as a voluntary initiative but with the potential for statutory underpinning to make it more effective). The council would enable platform businesses and trade unions to develop a framework for improving employment standards, training pay and benefits for gig work.

24. **Clarify who is eligible for employment rights and seek to eliminate financial incentives for employers to use contractors rather than employees (UK).** The government should change the law to create a clear definition of a ‘worker’, in order to provide people with employment rights in situations where they personally undertake work and there is substantial control by the hiring organisation. It should also pass a law stating that anyone taxed as an employee must also have a worker’s employment rights. Ministers should monitor whether Covid-19 and increased remote working triggers more insecure freelance or platform working, and they should also continue to act to reduce financial incentives for employers to use contractors over employees.

A full review of the role of automated decisions in recruitment is needed

25. **Reform privacy legislation and codes of practice to restrict automated decision-making and workplace monitoring (UK).** The government should consult on amending data protection legislation to give greater protection to workers in the context of automated decision-making and workplace monitoring. The information commissioner could also be tasked with publishing tougher, clearer codes of practice which the courts would be required to refer to in interpreting the law. Key areas for consideration include workplace monitoring, automated decision-making and consent. In particular, a full review of the role of automated decisions in recruitment is needed, with a proper system of transparency and safeguards to prevent recruitment technology building in discrimination or unfairness. ■

Chapter five: Making workers' voices heard

THROUGHOUT THIS REPORT, many of the problems we have identified – working people not getting a fair share, poor innovation and low productivity, lack of adequate training, technology implemented in a way that makes jobs worse not better – reflect the lack of involvement workers often have in decisions about adopting new technology.

At a time when there is going to be very significant disruption in the labour market and when the adoption of new technology will be at the heart of many changes taking place – both saving jobs and replacing them – voice and representation are immensely important. Employers need to be able to draw upon the innovation, ideas and views of their workforce if they are to get new technology right, introducing changes smoothly and with consensus.

This is not a call for a return to the industrial relations practices of the 1960s and 1970s but a new, modern approach to workplace partnership that recognises the scale of employment changes likely to take place as a result of new technology. Cooperation between employers, workforce representatives and government is essential to support people in the workplace, prevent rising inequality, smooth transitions and deliver the best results for the economy.

Our findings

- **Workforce consultation and representation improves work and productivity:** Consultation, representation, and voice at work are widely considered by workers to be valuable in themselves. But worker voice has also been shown to be highly effective at improving pay and conditions; and employee involvement is also shown to improve business performance and innovation.

Industries with a high proportion of jobs susceptible to automation tend to have low rates of trade union membership

- **Workers are far less likely to be represented than was once the case:** Membership of trade unions and the proportion of workers covered by collective bargaining agreements on pay and conditions have been in long-term decline. Union membership fell from 52 per cent of workers in 1979 to 21 per cent in 2019; collective bargaining coverage fell from two-thirds of employees in the mid-1980s to 29 per cent today.¹⁸
- **Representation is lowest where technology is making work more precarious:** Industries with a high proportion of jobs susceptible to automation tend to have especially low rates of trade union membership: in 2019 only 2.3 per cent of employees in the accommodation and food services sector were union members. Self-employed workers, temporary workers and people employed by small businesses are also less likely to be union members.¹⁹
- **Small but successful steps have recently been taken towards stronger social partnership:** Although the UK has a history of weak social partnership in recent decades, there have been some new and successful examples of social partner-

- **Most workers currently have little say about new workplace technology:** In 2019 we surveyed workers whose jobs had been impacted by the introduction of new technology in the last five years; 65 per cent said that they had not been consulted by their employers the last time new technologies were introduced.¹⁷



Commissioners visiting an Asda warehouse in Normanton

ship working at national, local and firm level. In particular, the TUC and CBI have worked closely with the government on the development of measures to support businesses and workers during the early phases of the Covid-19 crisis.

Our solutions

The initial economic policy response to the Covid-19 crisis, which involved cooperation between government, employer organisations and trade unions, demonstrated the value of worker voice at national level. Within workplaces and sectors, action is also needed to enable meaningful consultation and influence over technology change. More dialogue will benefit employers.

26. Employers should embrace a new culture of workplace partnership and involve workers and trade unions in technology-related decisions (UK). Across the economy we need to see major culture change so that workforces are routinely involved in developing ideas and making decisions on new technology. Culture change among employers should be led by employer organisations, ACAS, the Industrial Strategy Council and local enterprise partnerships. Union engagement with members and employers should promote continual dialogue on technology and skills. The government should also use its public procurement role and its engagement with different

sectors to promote workplace consultation on technology.

27. Trade unions should redouble their efforts to support vulnerable workers and demonstrate the benefits of strong social partnership (UK). Trade unions should redouble their efforts to recruit and organise people in insecure work who are at risk of technology change and facing pressure as a result of the Covid-19 crisis. Unions need to draw on all the good practice that exists and take it to scale. During the pandemic the TUC and individual unions have also demonstrated the benefits of solutions-focused partnership working. Unions should showcase this partnership approach to make the case for it to become a permanent fixture in Britain's economic landscape.

28. Transform national, sectoral and regional economic leadership bodies into social partnership institutions (England/UK). Key economic institutions should be transformed into tripartite social partnership bodies bringing together government, employers and workers (taking account of the changing labour market, so including voices for small businesses and the self-employed). For our country to be able to secure the benefits and manage the challenges of fast-changing technology, government needs to work in partnership. Specifically, we propose that the following institutions become social partnership bod-

ies: the Industrial Strategy Council, the national skills fund, sector partnership bodies and local enterprise partnerships.

29. Technology and skills should become part of collective bargaining at firm and sector level (UK). Employers and trade unions should come together to roll out a significant extension of collective bargaining on issues relating to technology change and skills. At workplace level, recognised trade unions should seek agreements with employers to bargain on new technology and on skills. The formal process for union recognition should also allow unions to apply to negotiate on these issues. At sector level, recognised social partnership bodies should seek to agree sector-wide agreements on training and skills and involving workers in technology change.

30. Extend worker consultation across the economy and introduce worker directors for large firms (UK). Worker consultation should be extended across the economy and worker directors should become the norm on the boards of large companies. Formal consultative arrangements should be compulsory in workplaces with over 100 staff and ministers should build consensus on how to establish effective consultation in small firms. Workers in large businesses should be granted rights to elect employee directors to their company's board and remuneration committees. The government should consult on models of board representation for firms of different sizes and characteristics and reach agreement through negotiations with unions and business.

31. Remove barriers to trade union recognition and organisation (UK). We recommend that barriers to trade union organising and recognition are greatly reduced. The government should consider the following proposals: update all trade union law to facilitate use of electronic communications and balloting; enhance unions' rights of physical and digital access to workers where they are not recognised; relax rules on statutory recognition procedures; and require employers to provide information about joining trade unions to new recruits and workers. ■

The commissioners



Yvette Cooper MP,
chair of the commission

Yvette is the Labour Member of Parliament for Normanton, Pontefract and Castleford and has represented the constituency at Westminster since 1997. She served in the Cabinet between 2008-2010 as Chief Secretary to the Treasury and Secretary of State for Work and Pensions. Yvette has also represented the official opposition as Shadow Foreign Secretary and Shadow Home Secretary, chaired the Labour Party's Refugee Taskforce and is now chair of the Home Affairs Select Committee. Yvette has long campaigned on the issues of support for working parents and tackling child poverty.



Hasan Bakhshi, director, Creative Industries Policy and Evidence Centre (PEC); and executive director, creative economy and data analytics, Nesta

Hasan leads Nesta's creative and digital economy research programme and is a recognised authority in the field. His work includes co-authoring the Next Gen skills review of the video games and visual effects industries, which led to wholesale reforms of the school ICT and computing curriculum in England, and The Future of Skills which analyses what global trends will mean for the workforce skills mix in the future. He is also an adjunct professor at the Queensland University of Technology.



Sue Ferns, senior deputy general secretary, Prospect

Sue has been deputy general secretary of Prospect since 2013 and was previously their head of research. Her responsibilities in Prospect include leading the union's work on equal opportunities, legal services, skills, campaigning and communications, and on science, engineering and sustainability. Sue has been a member of the TUC General Council since 2005. She is also chair of Unions 21.



Paul Nowak, deputy general secretary, Trades Union Congress

Paul has been TUC deputy general secretary since 2016. He previously held roles and was an activist in CWU, GMB, Unison, and BIFU. He introduced the TUC's Leading Change programme.



Katie O'Donovan,
head of public policy, Google UK

Katie is responsible for Google's engagement with the UK government to ensure Britain remains a world-leading digital economy and Google continues to meet its commitments to responsible innovation. Katie sits on the board of youth charity Redthread, has been a board member for the Internet Watch Foundation and UKCISS and is a Policy

Fellow at Cambridge University. Prior to her time at Google, Katie established the communications and policy team at Mumsnet, and worked in politics, both for prime minister Tony Blair and David Miliband.



Roy Rickhuss CBE,
general secretary, Community

Roy is a lifelong trade unionist, first joining one of Community's founding unions in 1979, and has been general secretary of Community since 2013. He represents Community on the TUC General Council and is a member of the Executive Council of the General Federation of Trade Unions. He was invited to join the government's Industrial Strategy Council in 2018, and in the 2019 New Year honours he was awarded a CBE for services to the steel industry. Roy is a member of the Unions 21 Commission on Collective Voice and the Money and Mental Health Commission.



Margaret Stevens, professor of economics, University of Oxford

Margaret is a labour market economist and an expert on vocational and skills policy. She is currently head of the department of economics at the University of Oxford. The main application of her work has been to the economics of vocational training. In particular, Margaret has studied the effects of government policies on training in international contexts. ■

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