



**Commission on Workers and Technology**  
**Background briefing note**  
**June 2019**





## Commission on Workers and Technology

---

### BACKGROUND BRIEFING NOTE

*This briefing note presents four emerging findings from the Commission on Workers and Technology.*

The Commission on Workers and Technology was established in August 2018, with the aim of determining what needs to happen to make sure technology change is an opportunity not a threat for typical workers. The Commission is hosted by the Changing Work Centre – a joint research initiative from Community and the Fabian Society – and is chaired by Yvette Cooper MP.

Taking a ‘worker’s eye view’ of technology change in the workplace, the Commission is looking in granular detail at case-study occupations and sectors to draw conclusions on what government, employers and trade unions need to do to ensure workers benefit as the fourth industrial revolution unfolds.

Since its launch, the Commission has had a packed programme of evidence hearings, workplace visits and special events. Evidence sessions have hosted expert witnesses including Robert Skidelsky, Torsten Bell, Carl Benedict Frey and James Bloodworth – as well as senior stakeholders from the retail, manufacturing and financial services sectors. The Commission has visited several workplaces including a distribution centre in Wakefield, an insurance company in Fareham, and an advanced manufacturing plant. It has also hosted roundtables with high-profile guests including Sir Charlie Mayfield and Icelandic Prime Minister Katrín Jakobsdóttir. It has conducted focus groups with retail workers in Doncaster, financial service workers in Fareham and a cross section of workers in jobs at risk of automation in Manchester.

At its half-way point, the Commission has identified four key emerging findings about the experience of workers on the ground. These emerging findings are a warning sign to government: if action isn’t taken, we could face a future where jobs get worse, workers’ voices go unheard and people are left unprepared.

### **FINDING ONE: Technology is changing most people’s jobs but workers aren’t getting a say when this happens**

The Commission has seen that technology change is having a widespread effect on jobs, and in the YouGov survey 80% of workers said technology introduced at their workplace has had some impact on their current role over the last five years. But the polling of GB workers also revealed that 58% of employees disagree with the statement ‘my employer gives me the opportunity to influence how new technology is used in my workplace’. Workers have told the Commission they feel frustrated and powerless about their lack of influence.

*New polling evidence suggests that nearly 6 in 10 workers have no say over the technology that is implemented at their workplace*

- In polling conducted by YouGov for the Commission, 994 British employees were asked whether they agreed with the statement: ‘My employer gives me the opportunity to influence how new technology is used in my workplace’. Almost 6 in 10 respondents (58 per cent) disagreed with this statement, with 30 per cent strongly disagreeing.

- The survey also reveals that technology change is widespread, with 80% of workers saying technology introduced at their workplace has had some impact on their current role over the last five years. 52% say there has been either 'a fair amount' or 'a great deal' of impact.
- The survey questioned employees who had reported that new technology introduced at their workplace in the last five years had affected their role. Out of a sample of 820 workers, almost two in three (65 per cent) said they had not been consulted the most recent time new technologies were introduced.
- The poll also suggests that workers who had been consulted about technology change are more likely to view the impact on their job as positive. 73 per cent of those who were consulted said the change was positive, compared to 51 per cent who weren't.

*Workers told us they feel frustrated and powerless about not having a say*

- One retail worker told the Commission: "If they want to implement new technology, those that are on the shop floor will know better if that's going to work or not than the person sat up in the office ... But they don't let you talk." Some workers in the same focus group reported having non-disclosure agreements included within their contracts, which disallowed them from speaking about changes at work.
- An insurance administrator told the Commission that "you can't change the processes – you get told what to do and how to do it".
- The Commission heard from a bar supervisor who said that his employers "won't really take anything on board" and that "it's really hard to get your voice heard".
- Some workers emphasised that this distance between managers and workers on the ground represents a shift from the past. As one worker said to the Commission: "You need the old way where you were sat down in a meeting [and asked] 'have you got any problems?' ... Nothing gets passed on anymore, nobody's disagreements or grievances get passed on."
- The quality of any engagement that does occur between workers and managers is compromised by new technology-enabled means of communicating. Practices such as managers FaceTiming into meetings and holding conference calls instead of in-person visits, reduce real opportunities for the expression of worker voice.

**FINDING TWO: Many workers are positive about technology change but there is also bad practice with significant problems in many sectors**

The Commission has met workers across the country facing technology change at work and many are positive about change. In the YouGov survey, of the workers who said technology has had some impact on their work in recent years, 57% feel that it has had a positive impact on their role. But there is evidence of bad practice and signs this could get worse. The Commission has heard separate evidence about new technologies removing the enjoyable interpersonal elements from jobs, putting pressure on pay and conditions, and increasing the capacity of employers to engage in the punitive monitoring of workers.

*New polling reveals workers feel positive about tech change at work*

- New polling reveals that workers feel positive about how technology has affected their jobs. Of the workers who said technology has had some impact on their work in recent years, 57% feel that it has had a positive impact on their role.
- There is also very little negativity about the impact of change. Just 7% of workers who have seen technology change think the impact has been negative for their current role.
- Workers who have been impacted by tech 'a great deal' or 'a fair amount' (614 workers) are more likely to view it as positive (75% positive to 8% negative) than workers who have been impacted to any extent (57% positive to 7% negative) (942 workers).

- But workers with fewer qualifications seem to find technological change to their jobs less positive. Workers whose highest qualification is GCSE-equivalent and below are ten points less likely to say that technology has been positive (51%, 217 workers) than those with a first degree or higher (60%, 292 workers).

*The Commission has seen ways in which new technology can make workers jobs better too*

**More efficiency and flexibility:** Some workers spoke to the Commission about the potential of technology to improve their job quality if it is deployed in the right way.

- A financial services worker told the Commission that new technology was “more time efficient”
- Another worker stressed that working remotely has been made possible by technology change: “I actually live in Eastleigh but I work in London”
- The Commission heard from a warehouse worker that he would like to see new technology introduced to reduce human error in the scanning of barcodes in his workplace: “You make one mistake with one number and it will just throw it out and you’re picking something else for somebody that they don’t want. I think technology would work a treat in our place”.

**Less demanding physical work:** Automating technologies can perform tasks which are repetitive, draining and in some cases dangerous for humans.

- New ‘Low Level Order Pickers’ (LLOPs) had recently been introduced into a distribution centre visited by the Commission – these are essentially small automatic vehicles which transport workers around to the locations they need to pick goods, and stop automatically to ensure safety. The Commission was told by workers at the centre that “it makes the job easier for you and you wouldn’t want to walk that much ... it’s definitely a development for us”.
- Katherine Bennett, Airbus’s Senior Vice President, told the Commission about the potential to automate the task, currently performed by humans, of crawling inside the wing box of an aeroplane to perform safety checks.

*But there is evidence that technological change is harming the job quality of some workers*

**Reduced enjoyment:** New technology is compromising the thing that workers say they tend to like most about their jobs – human interaction and communication.

- One retail worker told the Commission that new technology is having a negative impact on their job because “you’re sort of losing the face-to-face and the interaction with the customer”.
- A worker from the food and drink service industry told the Commission he bemoaned the use of technology to take orders, stressing that “you can’t give hospitality through a screen”.

**Worse pay and conditions:** Some workers also felt that new technology had put pressure on them to work harder and do more for the same, or lower, pay.

- A retail worker explained how, because their employer needed to remain viable in the face of online shopping, the firm was taking steps to squeeze more value out of workers in stores: “If you’re looking for a certain item ... you might find it online in an online shop [where the owner] is working from his garage. That’s a lot cheaper”.
- Another worker pointed out a direct connection between the growth of online retail and the failure of their wages in the sector to keep up with the cost of living: “I found my wage slip the other day, I was 26 ... and I was on £4.60 an hour. So I’m now 52 and it’s, what, £8?”

**Oppressive monitoring:** Some employers are utilising new technology to implement extreme levels of workforce surveillance and control.

- Last year, Amazon patented wristbands that track warehouse pickers' hand movements and vibrate to point their hands in the direction of the correct items. In recent years, BP America has adopted health-tracking wearable technology for their employees in order to improve behaviours. And Uber monitors its drivers via customer feedback, deactivating their profiles if they drop below a particular customer rating and do not improve over a period of time.
- The Commission heard evidence from James Bloodworth, journalist and author of *Hired*, who had worked undercover in an Amazon warehouse. While he was employed there he had to carry around a device at all times that tracked where he was, whether an item had been scanned, whether he was going to the toilet, and more.

**Tech failing to work:** Remarkably often, new technology does not function as intended in workplaces, and this can make life harder for workers.

- A financial services worker told the Commission: "There's always that one-time delay when a lender comes out and says we've got a new software and it doesn't work, and everything just stops basically, and it's delays".
- The Commission heard from a retail sales assistant: "It looks good as an idea, but it never works in principle, like you can say you've got so much stock in and you can say, "You're getting this in at this time," but it doesn't actually happen, so you look a fool. So it will tell you you've got this in the warehouse and you can be upstairs like ten or fifteen minutes looking for it and it hasn't even come in the store. There's no way to check it off, it's just all numbers, there are just so many errors".
- A clerical assistant working in building services told the Commission: "We have a screen where we sign in and it takes our eye and our fingerprints, if that breaks down it's just a complete nightmare. You don't get paid. You have to go and see a manager. 'Why has it broke down? What time was it?' It's just horrendous".

### **FINDING THREE: Technology change risks worsening inequality**

Technology change risks embedding existing inequalities in the workforce. ONS analysis shows that people without a degree currently do almost all the jobs at high risk of automation. Women and older workers are also at greater risk, and there are big inequalities between places too. The ONS says that if you are a worker in Boston, Lincolnshire, on average you face a 57 per cent chance that your job will be automated – but if you are worker in the London Borough of Wandsworth, the chance is only 33 per cent. The Commission has also heard evidence about algorithms embedding existing bias in recruitment, and new technology facilitating a growing gap between the incomes of those who own assets and those who earn wages.

*Women, people without degrees, and younger and older workers are at especially high risk of their jobs being automated:* In March this year, the Office for National Statistics conducted an analysis of the labour market in England. It found that 7 per cent of jobs – that's 1.5 million jobs – are at high risk of being automated. The data reveals that certain groups of people are disproportionately at high risk: those without higher education qualifications, women, and workers at both the beginning and nearing the end of their working lives.

- Almost all jobs at high risk of automation (99 per cent) are done by people educated up to A level, GCSE or below GCSE level
- Women's jobs make up 70 per cent of the total number at high risk of automation
- Workers aged between 55 and 65 are more than twice as likely to be in high-risk jobs than workers in their thirties – and young workers aged 16 to 24 are more than eight times as likely

*There are stark inequalities in the automation risks faced by different places:* The ONS data suggests that if you are a worker in Boston in Lincolnshire, on average you face what the ONS describe as a 57 per cent ‘probability of automation’ – but if you are worker in the London Borough of Wandsworth, the probability is only 33 per cent. There are 26 local authority areas in England where a worker is more likely than not to see their job automated. Only one of these areas is within a city – all the others are made up of towns, villages or smaller settlements. None of these areas are in the regions of London or the South East.

*Algorithms can embed biases in the world of work:* There are risks that algorithms will embed existing bias, such as in recruitment processes, but there is also the possibility that technology could help root bias out.

- Anne Boden, CEO of Starling Bank, told the Commission: “Without due care there’s a risk that technology entrenches rather than corrects the kind of discrimination perpetuated by humans”.
- Benedict Dello, then Head of the RSA’s Future Work Centre and now Head of AI Monitoring at the Centre for Data Ethics and Innovation, told the Commission: “I’ve seen evidence to suggest that recruitment algorithms can exacerbate bias, but I’ve also seen evidence that the algorithms can actually weed out bias, so I think it all depends on the quality of the data upon which the algorithms are trained”.

*Inequality between workers and owners is set to be increased by automation:* Mathew Lawrence, then a senior researcher at IPPR and now director of the think tank Common Wealth, told the Commission that the number of jobs associated with technical tasks that could be automated over the next decade accounts for roughly £290bn of wages. If a substantial amount of this sum flows from labour to capital – i.e. those who own the technology and the firms deploying it – then automation will intensify inequality between workers and owners.

#### **FINDING FOUR: Politicians, trade unions and business leaders must do more to prepare workers for change**

Most workers are not very worried about new technologies replacing or fundamentally changing their jobs in the near future. The Commission has spoken to workers in occupations at high risk of automation who did not believe that what they do in their own job could be affected by new technology. Workers are unaware and uncertain about potential technological innovations, and often do not receive training from employers to prepare them for future change. This combination of a lack of worker awareness of risk, plus a patchy provision of training, leaves workers vulnerable to significant changes in the world of work.

**Most workers aren’t worried:** Polling for the Commission conducted in July 2018 showed that a much larger proportion of workers in Britain were *not* worried than *were* worried that their job would not be needed within the next 10 years due to changes in technology: 23 per cent of workers in Britain were worried, while 59 per cent of workers suggested that they were not worried about their jobs becoming redundant.

A number of reasons for workers lack of concern have emerged from the Commission’s focus groups with workers in at-risk sectors.

- *Impossible to predict the future:* When the Commission asked workers in its retail focus group if they agreed or disagreed with the statement ‘I am worried about my current job no longer being needed because of new technology’, most were ambivalent and unsure: “Well, I put down I neither agree or disagree”. Another worker said that “it’s a don’t know, you don’t know what the future holds”.
- *‘Machines can’t do what I do’:* Some workers believe that technology would not be able to automate many of the tasks they performed in their job roles. One financial advisor told the Commission: “I just can’t imagine that they’ll ever be sophisticated enough”. A bar worker told the Commission that, abroad, he had witnessed a robot that could pour and serve drinks – but still insisted that “you’re always going

to really need a bartender behind a bar”. A warehouse worker the Commission spoke to felt certain that “there are things I don’t think a robot can do”.

**Significant numbers of workers are not accessing training:** Employers will need new skills from their employees with the introduction of new technology, but there is evidence to suggest many are not providing training.

- According to the ONS, in 2017 only 26 per cent of employees participated in in-work training in the three months before they were surveyed.
- A financial services worker told the Commission he considered it “dangerous” that his knowledge of Microsoft Excel was from his GCSEs in 2006, when his firm relied on him producing reports using the software. Yet he was told by his employer that going on a course to update his skills would be “a waste of time”.
- A retail sector worker told the Commission that when new headsets were introduced into her workplace, “I just worked it out myself, no training whatsoever”.
- The gaps being left by employers are left increasingly unfilled by government provision. Stephen Evans, Chief Executive of the Learning and Work Institute, told the Commission that the adult skills budget has declined by around 40 per cent over the last decade – and “the number of adults learning has fallen by around the same amount”.

**Informal learning between colleagues is relied on as an alternative:** Peer-to-peer learning is often relied upon to fill the gaps left by formal training from employers.

- One worker reported to the Commission that he was not given training when new scanners were introduced in his place of work: “I’m quite lucky because the chap I work with, he’d had all the training ... you don’t get any help off the boss”.
- Workers in other focus groups echoed these instances of reliance on discretionary sharing of information between colleagues. A financial services sector worker told the Commission: “We were developing the skills and passing them on more than anything”.

**Where training is offered, workers often cannot take part:** Training can be made inaccessible when workers are asked to complete it outside of working hours. This is especially challenging for part-time workers, with one worker telling the Commission that she “work[s] part-time for a reason”.

**Those who need training the most tend to receive it the least.** ONS statistics show that employees with a degree or equivalent higher qualification are almost 4 times as likely to have received training at work than employees with no qualification at all. The occupational group least likely to have undertaken training are those in ‘elementary occupations’. Only 15 per cent of employees in elementary occupations received in-work training in the three months prior to being surveyed – and this occupation group is the one of the most at-risk of job automation.