

# Megatrends and the West Midlands 2021: The Future of Work and Training: A provocation for the West Midlands



**Abigail Taylor, City-REDI/ WMREDI, University of  
Birmingham – 2021**

**West Midlands Regional Economic Development Institute**

**FOR THE WEST MIDLANDS COMBINED AUTHORITY**



**UNIVERSITY OF  
BIRMINGHAM**

**BIRMINGHAM  
BUSINESS  
SCHOOL**



**Research  
England**



## Summary

Increasing technological innovation and growing adoption of new technologies is changing the types of jobs available and the range of skills required by employers. At the same time, participation in training is declining. The Covid-19 pandemic risks accelerating and accentuating these trends, potentially further polarising labour markets and widening class inequalities as the divide between highly-skilled highly paid occupations and low-skilled poorly paid occupations widens. Work in the future is likely to involve greater demand for higher-level skills, especially technology and interpersonal/people skills. Unless the UK finds a way to radically upskill its workforce, over the next decade, this will lead to skills mismatches limiting individual employment and earnings opportunities and also firm performance and productivity. Reskilling and upskilling the workforce is urgent.

Some sectors are likely to be harder hit by automation than others and there could be greater geographical concentration of job growth over the next ten years.

By investing in training, firms can build on existing talent and prepare themselves for the changing labour market. Developing the quality of managers and a broader institutional culture which champions training is essential to this.

Brexit and Covid may negatively impact particularly on the role of the business, professional and financial services (BPFs) sector in Business Districts in the West Midlands. However, people value meeting so city centres are likely to continue to be important for business. The most successful city centres are likely to be those that enable people to interact in new ways. Business Improvement Districts (BIDs) have an important role to play in upskilling the current and future workforce.

## Key policy messages

- Reskilling and upskilling the UK workforce is urgent to avoid significant skills gaps and mismatches within the next decade.
- Developing training and improving the quality of managers is important if firms are to maximise the benefits of increased technological capability.
- There is a need for employers to work with government, education providers and job search platforms to improve data regarding job and skills opportunities for workers (Orlik et al, 2020).
- Business Improvement Districts in the West Midlands could work across organisations to share good practice for developing the quality of managers and a broader institutional culture which champions training. It is vital such initiatives are actively led from the top of organisations.
- Firms in the BID should work with skills providers to develop opportunities for school and university students and leavers who have faced two years of disrupted education. Strategic partnerships are essential to preventing a spiral of decline.

## Introduction

Over recent years, a number of key labour market and skills trends have been affecting countries across the world including the UK. The increasing speed of technological innovation and growing adoption of new technologies is resulting in shifts in the types of jobs available (as a result of increased

automation and use of AI and robotics) and the range of skills required by employers. The Covid-19 pandemic risks accelerating and accentuating these pre-existing trends, increasing technological adoption and also potentially polarising labour markets and widening class inequalities as the divide between highly-skilled highly paid occupations and low-skilled poorly paid occupations widens. Experiences during the pandemic to date have emphasised how the ability to (and experience of) transition to remote working varies across socio-economic groups (Weinberg et al, 2020). Unemployment across the world has also risen rapidly. Within the UK, despite the continuation of the government's furlough scheme in the three months to November 2020, unemployment was estimated at 5.0%. This is 1.2 percentage points higher than the rate a year earlier and 0.6 percentage points higher than the previous quarter. (ONS, 2021). As the [Futures of Work blog](#) puts it "By compressing processes already under way, the pandemic has expedited the future of work into the present".

Work in the future is likely to involve greater demand for higher-level skills, in particular technology and interpersonal/people skills. Unless the UK finds a way to radically upskill its workforce, over the next decade, this will lead to skills mismatches which could limit both individual employment and earnings opportunities but also firm performance and productivity. In turn, this would risk reducing the competitiveness of the UK labour market (McKinsey, 2019). Companies must therefore better seek to prepare for these changes.

Understanding how these trends are likely to play out in practice over the coming years and decades is essential if firms are to be able to develop the skills required to enable themselves to continue to grow. Policymakers must also have access to such knowledge if they are to support the development and implementation of effective strategies in this realm. Analysing experiences in the pandemic also offers opportunities to redesign the future of work through building on practices and lessons learned during the crisis (Deloitte Insights, 2020a).

This provocation provides insight into how work and training are likely to change in over the coming years and decades. It discusses which trends have the potential for greatest impact and the implications of this for businesses in Birmingham and the West Midlands. This is particularly important given how commentators have argued that the economic impacts of the pandemic combined with the implications of Brexit are "likely to increase regional disparities". The West Midlands may be particularly vulnerable to such changes because of the high concentration of blue-collar, male workers, with low formal education qualifications in the region (TUC, 2020). As explored below, automation risks leaving individuals in such roles behind. Research on possible Brexit impacts (prior to the signing of the Withdrawal Agreement), showed how the competitiveness of key sectors (including the automotive and manufacturing of basic metals sectors) in the West Midlands which are likely to be critical to technological progress – and in turn higher level skills development – within the region could be strongly negatively affected by Brexit (Ortega—Argilés, 2020). The provocation will suggest a number of ways that Future Business Districts could seek to mitigate some of the potential negative trends and support businesses in the BID to take a proactive approach to harnessing the opportunities offered by current work and training trends.

## Key issues/ trends

The economic impacts of Covid-19 are likely to both exacerbate existing issues and trends experienced by employers, and to create new challenges for businesses and employees alike. This will require employers to respond to existing issues and be flexible in developing responses to the new challenges

brought about by the pandemic in order to mitigate the longer-term impact of challenges relating to reskilling and upskilling the labour force.

Employer surveys have identified key skills gaps within the existing workforce, including time management, leadership skills, customer skills, analytical skills and digital skills. In the 2019 Employer Skills Survey, 32% of employers cited being unable to recruit specific skills as the main cause of skills gaps compared to 25% in 2015 (Winterbotham et al, 2020a). A range of interviews conducted with employers in 2019 identified how employers increasingly value staff who possess a mix of social and behavioural skills (Green and Taylor, 2020).

While employers have indicated that the existing skills gaps are already causing issues in terms of firm performance, participation in training is also declining. UK employers stand out internationally for their preference to recruit rather than train and employer investment in training in the UK is low relative to that in many international competitor countries (Green and Taylor, 2020; Eurostat, 2019). The average volume of training in the UK has declined over recent decade. For example, the average time spent on job-related training over a four-week period declined by 10% over 2011-2018 according to the Quarterly Labour Force Survey (QLFS) whilst the annual volume of formal training in the UK household Longitudinal Study fell by 19 % over the period 2011 and 2017 (Green and Henseke, 2019).

This lack of training provided by employers is compounded by trends relating to employee participation in training. The low skilled, poorly paid, young and lower qualified are the least likely to undertake training (Social Mobility Commission, 2019). In the 2017 Adult Participation in Learning Survey, fulltime staff were “significantly more likely” to learn for work or career related reasons than those who worked part-time or were self-employed (p.27). In the 2019 Survey, whilst social grade continued to be the most common factor predicting whether an adult would participate in training, participation among those in higher social grades and with higher levels of education also fell. The 2019 survey identifies particular concerns regarding a continued decline in training participation among working age adults (Smith et al, 2019).

While the UK population is gradually becoming more qualified, demand for higher qualifications is expected to outstrip the rise in the proportion of the population with degree level qualifications or above. Advances in technology such as automation and big data mean that 7.4% of jobs in England are at high risk of some of their duties and tasks being automated in the future (ONS, 2019). By 2030, there could be a 13% increase in jobs requiring a bachelor’s degree, and 7 million additional workers could find themselves under-skilled compared to the requirements of their job (McKinsey, 2019).

The pandemic has already had an immediate impact upon the demands of firms and their workers, with increased adoption of new digital technologies among firms. “In the period from late March to late July 2020, over 60% of firms adopted new digital technologies and management practices; and around a third invested in new digital capabilities” (CEP, 2020). This digitalisation of work requires an urgent process of training and upskilling staff: the Industrial Strategy Council suggests that this most important of skills is expected to experience the highest level of under-skilling by 2030 if existing trends continue (Lyons et al, 2020; McKinsey, 2019).

Covid-19 could accelerate automation in five ways: necessity, cost, labour, investment and acceptance, as demonstrated in Figure 1. The role that automation will play for skills will be to replace lower-skilled jobs, requiring reskilling and upskilling of workers if they are to remain in the labour market. The Organisation for Economic Cooperation and Development (OECD) however has found that those in the labour market most vulnerable to losing their job due to automation, such as the

poorly skilled, as well as the unemployed, are less likely to participate in adult learning than those facing lower risks of job automation (OECD, 2019).

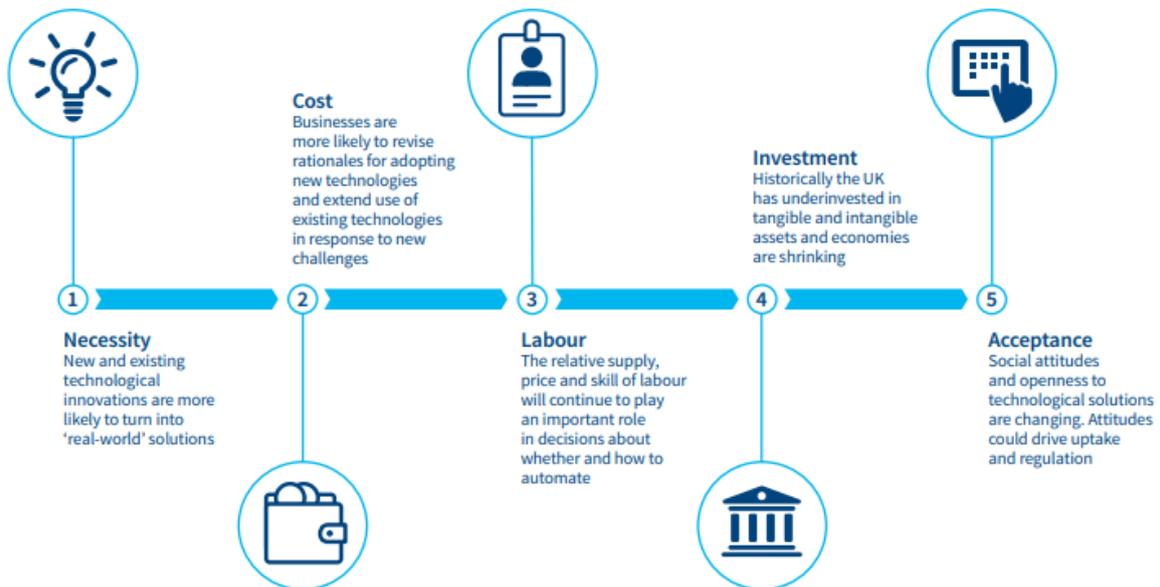


Figure 1: The extent, nature and pace of technological adoption. Source: Gilbert et al. (2020), p.6.

The existing gaps in skills required by employers combined with the current under-funding of training, the inequalities in access to training, and likely continued increases in demand for highly skilled workers clearly demonstrate the urgent need for reskilling and upskilling of the workforce. As the Industrial Strategy Council has argued, employees with a range of social and emotional skills, analytical and interpretative skills, and digital skills will be better placed to adapt to changing job requirements in the eyes of employers (Lyons et al, 2020).

## What might the future look like?

Existing analysis provides insight into how continued growth in automation and AI may impact on skills demand over future decades.

Modelling by McKinsey (2020) suggests that by 2030 skills shortages are likely to be more severe in terms of ‘workplace skills’ than ‘qualifications’ and ‘knowledge’ and that the “most widespread under-skilling” is predicted to be in basic digital skills. In line with advances in technology, ‘basic digital’ by this point, are likely to be increasingly advanced compared to skills considered ‘basic’ today. Predictions suggest 5 million workers could be acutely under-skilled in basic digital skills by 2030 whilst up to two-thirds of the workforce might face some level of under-skilling. Other skills in which employers are likely to face acute skills shortages include core management, STEM and teaching and training skills. The analysis suggests that 2.1 million workers are likely to suffer from acute under-skilling in at least one core management skill (leadership, decision-making or advanced communication), whilst 1.5 million workers are likely to face acute under-skilling in at least one STEM workplace skill and 800,000 workers are likely to face acute under-skilling in teaching and training skills which are vital upskilling others.

Some sectors are likely to be harder hit by the impact of automation than others. It is predicated that across Europe, occupational categories such as STEM professionals and healthcare workers will “grow significantly”, whilst declines are predicted in relation to the number of office support and production jobs (Smit et al, 2020). To give just one example, predicted changes in human and health services mean that by 2025 technology will replace many repetitive tasks such as data entry. Caseworkers will instead have more time to develop specific interventions whilst managers will have more time to spend on coaching their teams and developing external partnership opportunities (Deloitte Insights, 2020b).

NESTA have recently used machine learning to produce an [interactive map](#) which identifies the similarities between over 1,600 jobs and compares their risk of automation. Built on understanding of skills and work activities in each role, it reveals clusters of jobs in which the core tasks appear most suitable for machine learning. Jobs within the sales and business sectors appear to be most vulnerable to automation risk. By contrast, roles in the construction and manufacturing sectors appear to contain fewer jobs which are vulnerable to automation. The map also provides insight into worker resilience by providing guidance on how workers (in the UK, France and Italy) can transition out of ‘at risk’ occupations into lower-risk roles. A key finding from the research is that the risk of automation is likely to be hard for employees in certain occupations to escape because “occupations that are at high risk of automation tend to require similar skills”. It identifies the need to focus reskilling efforts particularly on at-risk workers in sales, customer service and clerical roles (Kanders et al, 2020).

Concerns have been expressed that these sectoral changes could result in greater geographical concentration of job growth over the next ten years. Research by Smit et al (2020) indicates that apart from if Covid-19 leads to considerable changes in employer and employee preferences for less dense communities, “the same 48 megacities and superstar hubs that contributed 35 percent of the EU’s job growth in the past decade could capture more than 50 percent through 2030”. For the UK, this is likely to mean continued concentration of high-skilled jobs in London and the South East. Outside this area there are only pockets of potential net growth of over 10%, in places such as York.

## **Which trends provide greatest opportunity for change?**

Whilst certain of the trends might at first seem alarming, there are opportunities for firms to respond positively.

By investing in training, firms can build on existing talent within their workforce and prepare themselves for the changing labour market. Deloitte (2020b) has emphasised how the pandemic reinforced the importance of “understanding what workers are capable of doing than understanding what they have done before”. They argue that, as employers look to emerge from the pandemic, rather than reducing workforce opportunities, they should “double down on commitments to building a resilient workforce that can adapt in the face of constant change”. Looking beyond existing skills or existing qualifications is essential to develop new skills and assume new roles.

One way in which employers can seek shape the opportunities made available to, and the incentives for, employees to participate in skills development and use their skills in the workplace is through developing the quality of managers and a broader institutional culture which champions training (Green and Taylor, 2020). This can be facilitated through identifying clear training goals, improving skills development and skills utilisation systems within organising and establishing clear internal career progression paths and awareness of training benefits. Improving data relating to training outcomes is also important in inform better training decisions (Lyons et al, 2020). The Institute for the Future of

Work are right to argue that “Enabling technology works best when supported by human management and training” (Weinberg et al, 2020).

## Implications of megatrends for the West Midlands

The megatrends analysed above pose a number of implications for cities in the West Midlands and priorities for city centre business districts within the region.

The Business and Professional and Financial (BPFs) sector in the region has grown strongly over recently years. Prior to the Covid-19 pandemic, the West Midlands Growth Company reports that the region’s financial and professional services hub is one of the largest outside of London, employing nearly 260,000 people (West Midlands Growth Company, no date given). As explored in an accompanying provocation (Green, 2021), offices are likely to look different in future given the likely increase in flexible working as we emerge from the pandemic. In addition, the BPFs sector is likely to face particular challenges due to Brexit and Covid. There is a risk that the additional costs and difficulty of trading with the EU may cause multinational firms to move their operations abroad. Having said that, people like to meet and socialise and so city centres are likely to continue to be important centres for business. The most successful are likely to be those that enable people to interact in new ways.

Developing talent within organisations is likely to impact how Future Business Districts overcome challenges related to increased automation and AI as well as these new challenges relates to the location of work created by the pandemic.

The sectoral makeup of Birmingham could be more affected by these trends due to the nature of employment in the city. Given the size of the BPFs sector and the high vulnerability of sales, customer service and clerical roles, it appears particularly important for firms of all sizes to start to consider and prepare for how employee roles are likely to change over coming years and ensure that plans are devised and implemented to upskill staff. NESTA have emphasised the importance of employers working with government, education providers and job search platforms to “generate, open up and share relevant data about jobs and skills” to help workers to make better decisions about future career plans (Orlik et al, 2020). Good employers will get more motivation out of their staff if they provide greater opportunities for training that allow individuals to develop their skills rather than just focusing on current firm needs.

There would appear to be a particular role for the Business Improvement District to work across organisations to enable sharing of good practice relating to developing the quality of managers and a broader institutional culture which champions training. It is vital that such initiatives are actively led from the top of organisations. If offices are likely to look different with a continued increase in flexible working, the way they manage will also need to be different. For example, how to manage employees remotely requires a different skill set for manager. Therefore such a network could focus on developing leadership skills of the future.

It is important that employers within the West Midlands contribute more broadly to wellbeing and inequalities pathways. Historically, over recent decades the West Midlands has suffered from [low qualifications levels, comparatively high unemployment and low/poor jobs growth](#). These challenges are being exacerbated by the Covid-19 pandemic (e.g. [increasing unemployment](#) and potential term scarring effects on young people) as well [issues related to the new trade regulations](#) following the UK-EU withdrawal agreement. The pandemic risks slowing or reversing recent progress in this area. There would appear to be a particular role for firms in the Business Improvement District to work with skills

providers to develop opportunities for school and university students and leavers who have faced two years of disrupted education. Strategic partnerships are essential to preventing a spiral of decline. Table 1 below illustrates the importance of investment in upskilling and reskilling to wider economic development and progress in addressing social inequalities in the West Midlands in two contrasting scenarios.

Table 1: Potential scenarios with high and low levels of investment in upskilling and reskilling over future decades in the West Midlands

<b>High levels of investment in upskilling and reskilling</b>	<b>Low levels of investment in upskilling and reskilling</b>
Clear skills pathways which enable school leavers, graduates and employees to effectively upskill across the life course	Poor relationships with employers and skills providers (schools, Further Education, higher education)
The risk of increased youth unemployment is reduced as, thanks to strong strategic partnerships, school leavers and graduates are equipped with the skills required by firms in the region	Increase in youth unemployment as school leavers and graduates lack the skills required by firms within the region
The risk of increased unemployment across age groups is reduced thanks to effective and upskilling programmes within firms and partnerships with skills providers. Training opportunities are fostered within firms by organising developing the quality of managers and upskilling initiatives being active led by senior management	Increase in unemployment across other age groups as roles are replaced by automation and AI and employees lack higher level skills required to move into new roles
Firms in the region are highly competitive nationally and internationally. Productivity is driven by high skills levels and cutting edge technology	Decrease in productivity of firms in the region
The region is perceived as an attractive place to live, work and invest	Decrease in attractiveness of the region for firms and students
Decreasing health inequalities	Widening health inequalities
Decreasing economic inequalities with continued progress in increasing skills and employment levels	Widening economic inequalities

## References

Deloitte Insights. (2020a). [Returning to work in the future of work. Embracing purpose, potential, perspective, and possibility during COVID-19.](#)

Deloitte Insights. (2020b). [The future of work in health and human services What will jobs look like in the age of AI.](#)

Egglestone, C., Stevens, C., Jones, E., and Aldridge, F. (2018). [Adult Participation in Learning Survey 2017.](#) Learning and Work Institute for Department for Education.

- Eurostat. (2019). [Enterprises not providing CVT, 2015 \(%\)](#).
- Gilbert, A., Thomas, A., Atwell, S., and Simons, J. (2020). *The impact of automation on labour markets: Interactions with Covid-19*. [Future of Work Commission evidence review](#). Institute for the Future of Work.
- Green, A. & Taylor, A. (2020). [Workplace Perspectives on Skills](#), City-REDI, University of Birmingham.
- Green, F. and Henseke, G. (2019). [Training trends in Britain](#). Research paper 22. unionlearn from the TUC.
- Kanders, K., Djumalieva, J. Sleeman, C. and Orlik, J. (2020). [Mapping Career Causeways: Supporting workers at risk](#).
- Lyons, H., Green, A. and Taylor, A. (2020). [Rising to the UK's Skills Challenges](#). Industrial Strategy Council.
- McKinsey. (2019) [UK Skills Mismatch in 2030](#). Industrial Strategy Council.
- Mundlake, G. and Fudge, J. (05/06/2020). [The Future of Work And The Covid-19 Crisis](#). Futures of Work.
- Office for National Statistics. (2019). [Which occupations are at highest risk of being automated?](#)
- Office for National Statistics. (2021) [Labour market overview, UK: January 2021](#).
- Orlik, J., Rhode, M., Douglas, R., Ward, P. and Scott, R. (2020). [Finding Opportunities in Uncertainty The information and support that workers need to navigate a changing job market](#).
- Smit, S., Tacke, T., Lund, S., Manyika, J. and Thiel, L. (2020). [The future of work in Europe Automation, workforce transitions, and the shifting geography of employment](#). McKinsey
- Smith, R., Egglestone, C., Jones, E. and Aldridge, F. (2019). [Adult Participation in Learning Survey 2019](#).
- Social Mobility Commission. (2019). [The adult skills gap: is falling investment in UK adults stalling social mobility?](#)
- TUC. (2020). [Impact of Covid-19 and Brexit for the UK economy Review of forecasts published between July-November 2020](#). TUC.
- Weibnerg, N. with Thomas, A., Gilbert, A. and Atwell, S. (2020). [Remote working and Covid-19. Putting people first What is work and what is personal](#). Institute for the Future of Work.
- West Midlands Growth Company. (No date given). [Invest in the West Midlands](#).
- Winterbotham, M., Kik, G., Selner, S, Menys, R. Stroud, S. and Whittaker, S. (2020a). [Employer Skills Survey 2019: Research report](#). Department for Education.