





2030 SKILLS CLOSING THE GAP

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EXECUTIVE SUMMARY

Skills challenges are not new to manufacturing. However, the big changes taking place across industry – digitalisation and the push for net zero – as well as the post-pandemic recovery and adapting to the post-Brexit landscape, are changing the nature of these challenges.

Our research shows that manufacturers lack access not just to the long-term skills they need in their business – increasingly at a higher technical level, and with a growing focus on areas such as leadership and management as well as those technical occupations across the production line – but also to the labour they need right now to fulfil orders and continue their operations. This is no longer a question of underlying skills shortages, but immediate labour shortages that are having a tangible impact on the sector now.

An extremely tight labour market and high turnover in the sector is adding significant pressure to firms to pay more and offer more benefits just to retain their existing talent, and it is becoming harder to recruit the skills needed now – especially as firms contend with the introduction of a new points-based immigration system from last year.

The mechanisms that employers rely on to bring in the next generation of talent, such as apprenticeships and other work-based training, are also only partially equipping firms and their workforces with the skills that are needed for the future. The apprenticeship levy continues to frustrate manufacturers, and there is only mixed awareness of a number of other government initiatives intended to provide support for employers to invest more in training.

The majority of those who will be working in manufacturing in 2030 are already in the workforce. As such, employers are increasingly focused on upskilling and retraining their existing employees, both to ensure that their technical skills keep pace with changing needs, and to retain that talent in the business over the longer term. This is the key priority for manufacturers over the next decade.

The investments that manufacturers are already making in their current and future workforce are significant. With the right policy environment and right support, the manufacturing workforce can thrive in 2030 and beyond.



THE STATE OF THE MANUFACTURING WORKFORCE

The manufacturing sector has faced a skills shortage for decades. What we are seeing at this current moment in time is not new, but instead a build-up of historical challenges. The difference now is that manufacturers are not just facing a skills shortage, but also a labour shortage.

Some 36% of vacancies in manufacturing are proving hard-to-fill because of applicants lacking the appropriate skills, qualifications or experience – this compares to an average rate of 24% across all industries. The number of vacancies in the manufacturing sector is at a 20-year high, demonstrating the extent to which immediate labour shortages are affecting manufacturing employers.

There are currently 95,000 live vacancies in manufacturing. As orders and outputs pick up postpandemic, recruitment is on the rise. This was somewhat expected, with Make UK's Executive Survey published at the start of year revealing that nearly two-thirds of manufacturers expected to increase the number of permanent employees in their business in 2022.¹

However, what was not foreseen was the current tight labour market, with unemployment at just 3.8%. The latest vacancies data published by the Office for National Statistics shows that the UK's manufacturing sector has 4.0 vacancies per 100 employed jobs; if we were to exclude 2022 data, the historical average ratio has been 1.9. As a point of comparison, the retail sector currently has a vacancy rate of 3.6 in the latest data, against manufacturing's 4.0. We estimate the cost of lost productivity due to vacancies in manufacturing being left unfulfilled in 2022 amount to £7.7-£8.3 billion, or approximately £21 million a day in lost output for UK GDP.

Despite this external data suggesting some major challenges for manufacturers, business confidence in securing the 'skills' it needs within the next 12 months on the surface looks broadly positive. That said, a quarter of companies (24%) said that they are not confident in acquiring the skills they need. Moreover, as discussed above, there remains the issue of a 'people' shortage. It may be the case that while companies believe that they have the skills at their disposal, should they need to go out to the labour market, they may be faced with nothing but tumbleweed.

Not only is unemployment at 3.8% but around 20% of the labour market is defined as 'economically inactive' shrinking the labour pool available to manufacturers. Since comparable records began in 1971, the economic inactivity rate had generally been falling; however, it has now been increasing since the coronavirus pandemic. More recent increases have been driven by those aged 50 to 64 years; in fact, the number of those aged 50 to 70 years moving from economic activity to inactivity between Quarter 2 (April to June) and Quarter 3 (July to September) 2021 was 87,000 higher than in the same period in 2019.

This pool of 'former workers' tends to be those that have taken early retirement (and likely to include manufacturing employees). Previous Make UK data revealed that a third of manufacturers had seen a noticeable increase in the number of employees that were retiring early.²

It is not just those leaving the labour market that should be on manufacturers' radars – it is also those who are leaving the industry. At the start of the year Make UK's Executive Survey found that 87% of companies were concerned that employees would be leaving their business and 84% leaving the industry altogether. Make UK's labour turnover report found that churn rates in the past 12 months excluding redundancies was 25% - the highest we have seen for years.³

There is clearly pressure on the here and now, but a further alarming trend is the fall in confidence when we asked

manufacturers how confident they were in acquiring the skills they need in the next five and ten years. Again, it is worth highlighting that while confidence may be higher than expected now, when faced with the realities of recruiting, manufacturers may see a very different story.



of manufacturers disagree that they can access the talent their business needs locally

The proportion of staff expecting to leave the manufacturing workforce is also a warning sign that it may not be as easy to recruit as companies hope. More than half of manufacturers expect between 6% and 20% of their workforce to retire in the next 10 years, and with the trend towards early retirement already a feature of the labour market, there is a risk that this could be accelerated even further over the coming years.

Chart 1: Manufacturers are overly optimistic in their ability to acquire skills

% companies citing how confident they are in accessing the skills they need



Source: Make UK/Sage, Skills Survey 2022

¹Make UK, Executive Survey (2022) ²Make UK, Manufacturing Monitor (2022) ³Make UK, Labour Turnover (2022)

WHAT DOES THIS MEAN FOR MANUFACTURING SKILLS IN 2030?

Clearly there are challenges with what we see in the labour market right now (high vacancies, low unemployment) and what we are likely to see specifically in the manufacturing sector (high proportion of workers retiring, employees leaving the industry to go elsewhere) – but what does this mean for the people and skills we need for 2030?

The need to double or even treble the size of the talent pipeline is not a new concept. As we set out later in this report, manufacturers have been actively investing in developing the next generation of talent to ensure they have the skills they need for the future. What is interesting in determining the skills and jobs we need for 2030 are the overarching trends which are driving these changes. Manufacturers told us that the dominant themes are automation, flexible working, digitalisation and environmental sustainability, or 'greenification.' We take a look at each of these in turn to begin to create a picture of what a 2030 manufacturing workforce will look like and, importantly, what will need to be done to secure the people and skills we need for 2030.

Chart 2: Digitalisation, greenification and flexible working are driving the skills and jobs needs for 2030



2. TRENDS DRIVING SKILLS AND JOBS FOR 2030

A. FLEXIBLE WORKING



of manufacturers said that flexible working was a key trend driving changes to jobs and skills between now and 2030

Flexible working is generally common in the manufacturing sector, but there is often a difference between what is available for production and non-production staff. Production roles can rarely be carried out at home as they involve the use of equipment that is only available at the employer's premises.

In addition, offering flexibility in terms of working hours can be challenging in production roles as it is often the case that all members of a production line need to be present for a full shift in order for all tasks to be completed. That said, the shift system may already offer employees some degree of choice as to when they work.

B. AUTOMATION AND DIGITALISATION

Six in ten (59%) manufacturers cited automation as a trend that is changing jobs and skills needs for their business, and half (50%) cited wider digitalisation. Research from Make UK's upcoming Innovation Monitor reveals that as manufacturers continue to automate and adopt digital technologies, the number of jobs created increases, and as does the skill level needed to fill these roles.

Manufacturers offer flexible working but there is a difference between production and non-production staff. Make UK research from earlier this year found:

- 50% of surveyed companies said they offer flexible working as a way to recruit and retain staff.
- 90% of surveyed companies said they offer flexible working for non-production staff.
- Of the different types of flexible working, nonproduction staff are most likely to be offered regular remote working, flexitime, or part-time working.
- 26% of surveyed companies are not currently able to offer any forms of flexible working for production staff.
- Of the different types of flexible working, production staff are most likely to be offered individualised hours or shifts, or part-time working.

Source: Make UK Executive Survey 2022

Manufacturers took quick and significant steps towards digitalisation when the pandemic struck, with nearly half moving to digital working practices within two weeks of lockdown; 94% of companies said they had staff working successfully from home in industries often associated with manual tasks and an extremely high proportion of production-based work. Our previous research shows 91% of manufacturers had benefitted from adopting new digital technologies during the pandemic, with a quarter saying new digital technologies had boosted productivity and 12%.⁴

We expect this acceleration to continue at pace if UK manufacturing is to power ahead as the sector rebuilds, but also as we transition to a digital and green economy. Make UK's previous research found that a lack of digital skills remains the biggest barrier to adoption of Industrial Digital Technologies (IDTs). If this challenge could be addressed, manufacturers could reap more of the benefits of digitalising their workplaces. Digital technology is creating opportunities to increase productivity, reduce costs and accelerate innovation plans. Some of these skills relate to change management, with leaders not always able to articulate and implement the need to adopt new digital technologies.

In <u>Sage's 'Digital Britain'</u> research, manufacturers cited technology as being critical to several aspects of running their business, including training staff (94%), hiring new staff (78%) and becoming more environmentally sustainable (91%); however, 47% thought digital technologies were being applied at an average or below level overall. Learning the necessary skills for new technology (33%) was found to be the biggest barrier preventing manufacturers from using technology in the survey.

Basic digital skills, such as the use of information and communication technology that might form part of day-to-day work in both production and non-production roles, sit alongside more advanced digital skills that come with use of new technology following demand from employers, and the leadership and management skills often needed to instigate and implement significant processes of change in production methods and working practices. The constantly evolving nature of digital skills mean that it is vital that manufacturers are supported to continue to invest in this area of training if they are to thrive in 2030 and beyond.

C. GREENIFICATION

Almost two-fifths (37%) of manufacturers cited greenification as a factor in changing skills needs. Key to this is access to high-level skills such as innovation and management, as highlighted by our previous work on digital and green skills to meet the challenge of net-zero by 2050.⁵

Other skills that have often been highlighted include areas such as resource efficiency, development of green products, natural asset management and others. While many manufacturers are confident that they have the ability already to produce their goods in a more environmentally sustainable way, employers continue to revise and review their workforce and skills strategies to ensure that they have the right technical skills at the right levels to make further progress on achieving net zero emissions.

As highlighted in our previous work, some of the key green skills that are typically highlighted by manufacturers include:

- Resource efficiency, e.g., carbon accounting, lean manufacturing
- Low-carbon economy, e.g., nuclear and renewable energy generation, carbon emission minimisation
- Development or new or amended products, e.g., design and production of electric vehicles

Of course, as we have previously noted, digital skills and green skills go hand-in-hand, and accelerating investment in and access to clean technology, utilising innovative digital processes to reduce intensive use of natural resources, and measuring sustainability are all crucial parts of greenification. They all require a combined focus on digital and green skills to maximise the benefits of investment in new technology and innovation.

⁴Unlocking the Skills Needed for a Digital and Green Future | Make UK ⁵Ibid 3. TRANSLATING TRENDS INTO JOB AND SKILLS REQUIREMENTS

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Automation, digitalisation and greenification all cement an increase in demand previously seen for higher level technical skills over the longer term and invites the question as to whether we will have enough people with the right skills to fulfil manufacturers' ambitions to a transition to a digital and green economy.

These factors are then driving the changes in skills needs between now and 2030. Moreover, the change in skills needs also align to manufacturers' wider growth ambitions – to transition to net zero, to accelerate adoption in digital technologies, to tap into new global markets and to build the workforces of the future.

We see a strong focus, for example, on line management and leadership skills with a quarter (25%) of companies expecting this to significantly increase and a further 39% expecting demand to somewhat increase.



of businesses disagree with the statement that ensuring their business has the skills it needs for 2030 will be easy compared to 17% that agree

Chart 3: Manufacturers' wider ambitions are driving skills demand between now and 2030 % companies reporting how they expect skills needs to change between now and 2030



Source: Make UK/Sage, Skills Survey 2022

Chart 4: Manufacturers will find themselves fighting for talent against new industries

% companies citing the job roles they need to recruit from in the next 12 months



Source: Make UK/Sage, Skills Survey 2022

This is accompanied by demand to build a resilient workforce with 64% of companies citing increased need for people management skills. As manufacturers continue to adopt new digital technologies and automate their factories, we see demand for software skills, cyber security skills, data analyses and programming skills. Likewise, as innovation continues to be a core business strategy, demand and R&D technical skills are also needed.

LEADERSHIP AND MANAGEMENT SKILLS

Greater investment in leadership and management skills is a clear and consistent priority for manufacturers as they consider their current and future skills gaps, and what they most need in their workforce to meet the big challenges that the sector faces to 2030 and beyond.

All of the significant changes identified above – automation and digitalisation, flexible working, and greenification – require employers to have highly-skilled leaders and managers in place to see through complex processes of change within the firm.

Increasing demand for flexible working practices means that there is a growing need for managers who are able to respond positively and constructively to often sensitive or complex personal situations and requests from employees. Increased digitalisation and technological changes mean that onsite working practices may be changing rapidly, and the structure and skillsets of the workforce may also need to adapt. Greenification will also transform how firms operate, both from a production and non-production perspective, as they move forward with deployment of clean technologies and seek to use resources more efficiently, placing a greater emphasis on innovation and the skills needed across the workforce to ensure more sustainable production.

This is especially the case for many SMEs in the sector, who identify a lack of access to the right skills – and specifically leadership and management skills – as one of the key barriers to their future growth.

Therefore, it is unsurprising that such a high proportion of manufacturers are seeking to prioritise leadership and management training and recruitment in both the near term and long term.



Chart 5: Leadership and management skills are the focus in the immediate term

Source: Make UK/Sage, Skills Survey 2022

When we look at which of the job roles manufacturers expect to be recruiting between now and 2030, it is clear that 'technical' job roles will be in demand. Indeed 58% of companies already have plans to recruit engineering technicians and 61% have plans to recruit production and process engineers.

In a shift from what we have seen in previous years we see a stronger focus on data with 27% planning to recruit data analysts and 11% planning to recruit data scientists. This once again reinforces the impact that digitisation is having across manufacturing and how it is shaping the jobs and skills needs of the near future.

Crucially, manufacturers already find themselves competing with other sectors for talent across the board and will continue to do so over the coming years. Many of these roles are in demand not just in manufacturing but in other sectors across the economy, and the fight for talent is likely only to intensify in the years leading up to 2030.

IT IS NOT JUST TECHNICAL SKILLS THAT WILL BE IN DEMAND

The need for more technical skills in manufacturing is well documented. Perhaps what is less prominent in this discussion are the wider skillsets manufacturers need between now and 2030, taking into account those core drivers of greenification, digitalisation and flexible working.

- Almost three-quarters (74%) of companies expect demand for cognitive and meta-cognitive skills such as critical thinking, creative thinking and learning to learn to increase between now and 2030. As the transition to a greener and digital future in manufacturing gathers pace, skills such as this are crucial in developing innovative practices across research, design, production and other critical roles across the manufacturing workforce.
- Two-thirds (65%) expect demand for social and emotional skills such as empathy, self-efficacy, responsibility, and collaboration to increase between now and the end of the decade. This may be particularly important in response to trends such as flexible working where the nature of communication and collaboration in the workplace may change, and also as manufacturers seek to become more diverse and inclusive employers.
- Over 8 in 10 (83%) see increases in demand for practical skills including, but not limited to, using new information and communication technology devices. This reflects the broader trend in terms of digitalisation but is particularly relevant for non-production staff working remotely and using new or unfamiliar technology, and production staff who are increasingly responsible for using or monitoring new pieces of digital technology as part of their routine production tasks.

4. The regruitment Drive

Manufacturers will need to put their foot on the pedal when it comes to recruiting the people it needs between now and 2030.

Our survey revealed that manufacturers are recruiting for posts across the entirety of their business, from the shop floor to board level. Over the past 12 months there has been a particular focus on recruiting apprentices and skilled trades and technical roles. In the next 12 months, this focus remains, but there is an additional drive to bring in more graduates and mid-level managers.

This partially reflects the growing demand across the board for both higher level technical skills and management skills described above, as well as occupations such as highlevel engineering roles which are currently in shortage and therefore likely to be high on the agenda for manufacturers in terms of their recruitment priorities. Our research shows that manufacturers typically recruit young apprentices at level 2. This has been the priority for those seeking to fill current skills gaps at this level over the last 12 months and to continue to invest in young talent that will be the next generation of the manufacturing workforce.

Planned recruitment is on the rise. The challenge will be whether manufacturers can fill the posts they have available. As mentioned previously, there are currently 95,000 live vacancies in manufacturing, and this is unlikely to decrease any time soon.



Chart 6: Skilled trade roles and apprentices are sought after posts

% companies citing whether they have or plan to recruit specific job posts

Source: Make UK/Sage, Skills Survey 2022

SPOTLIGHT ON APPRENTICESHIPS

Manufacturers have always been the true champions of apprentices. Apprenticeship programmes have been embedded within manufacturing firms for decades (if not centuries!)

Over half of manufacturers have recruited an apprentice in the past 12 months and almost the same number again plan to recruit apprentices in the next 12 months. While on the surface its positive that half of manufacturers plan to recruit an apprentice in the next 12 months, this is some way off the 75-80% of companies that would typically tell us they would be recruiting apprentices.

Manufacturers are focused on securing the next generation of talent. Around 6 in 10 (58%) said they typically recruit apprentices ages 16 to 18, one in three (31%) said 19 to 21 and just 10% said 22 and over. For manufacturers apprenticeships are clearly a much-needed pipeline for the future.

When it comes to Level of apprenticeship, manufacturers were mostly like to say that they typically recruit apprentices at Level 2 (Intermediate) cited by 63% of companies, followed by Level 3 (Advanced) cited by 30% of employers and 6% saying Level 4 (Higher). However, it is worth noting that Level 2 apprenticeships are very rarely the end point for training. Many apprentices will progress onto Level 3 and beyond depending on what the skills needs are of the business.

No conversation with a manufacturer on skills is complete without talk turning to the apprenticeship levy. Over 6 in 10 (62%) manufacturers we surveyed pay in the apprenticeship levy. This is despite over 56% of respondents having less than 250 employees.

Apprenticeship numbers have taken a nose-dive. While they may look to be picking up year on year due to comparisons of pre and post pandemic, the more interesting figures are pre- and post-Apprenticeship Levy. For example, in 2016/17 (pre-Levy) there were 75,020 manufacturing and engineering starts. In 2018/19 (post Levy) this fell to 59,970. In 2020/21 (post Levy and in pandemic) this fell to 39,510.

The Apprenticeship Levy was sold as a 'win-win' for sectors such as manufacturing but in its current form it remains a 'lose-lose'.

Manufacturers are restricted in what they spend it on, how they spend it and when they spend it. It is unsurprising then that the latest data from May 2022 shows £3.3 billion of unspent levy funds returned to the Treasury since 2019.

In the first section of this report, we set out some of the challenges around this including low unemployment, high churn rates and an increasing number of employees that have either retired early already (and are sitting within the economically inactive category) or plan to retire in the next 5 to 10 years.

However, there are two additional recruitment challenges that manufacturers continue to raise with us that is evident within this survey also. The first is pay, and the second is recruitment from outside the UK.

A CANDIDATE'S MARKET WHEN IT COMES TO PAY

Manufacturers are experiencing high wage inflation. The cost-of-living crisis together with scarcity of labour means that manufacturers are now paying premiums, particularly in areas of skills shortages.

Almost half (56%) of manufacturers had agreed their pay settlements. Some 11% have deferred their settlement dates (possibly considering external factors such as the outcome of the changes to the National Living Wage). For a third of companies pay settlements are under review. October is another typical pay settlement month.

Of those that have settled, the average (median) pay settlement figure is 4% across the board, notably higher than 6 months ago when it was around 2-3%. However, the mean average is 9% this is due to the number of companies who are settling at extraordinary rates to hold onto workers in the current market.

Anecdotally we are hearing of more and more companies holding additional pay reviews or bring forward pay reviews from early 2023 into Q3 or Q4 2022. The cost-of-living pressures has led to an increase in trade union activity. Over a third (37%) of manufacturers recognise a trade union within their business. Of those, 20% have seen an increase in union activity over the past six months. The focus of this activity has been increasing both basic and overall take home pay for their employees. It is clear that manufacturers are continuing to work closely and collaboratively with unions, and they are looking at ways to boost overall employee pay and to retain their valued employees.

However, there are concerns that employment-related costs are on the rise. General wage inflation, the recent NICs increase and the potential increases to the National Living Wage and National Minimum Wage next year are causing concern.

The target for the National Living Wage, which now applies to those aged 23 and over, is for it to be at two-thirds of median earnings by 2024. Based on this ambition, the National Living Wage is expected to be at around £10.32 per hour from April 2023 and £10.95 from April 2024.

Manufacturers are already instituting pay increases and reflecting the growing cost of living for their workforce, but this pressure is likely only to grow over the coming years.

THE NEW POINTS-BASED IMMIGRATION SYSTEM IS COSTLY AND COMPLEX

Prior to the UK's exit from the EU and the introduction of the points-based system, EU nationals made up around 11% of an average manufacturing workforce. Yet data suggests that the number of EU nationals leaving the UK has risen since the UK left the EU and a new points-based system was introduced. Office for National Statistics (ONS) data for 2020 shows that within a year, the population of EU nationals in the UK dropped by 200,000, from 3.7 million to 3.5 million

With order books filling up and the domestic labour market unable to deliver the volume and quality of candidates needed, manufacturers have no option to look to recruit from outside the UK. In the past 12 months over a quarter (26%) of manufacturers have recruited from the EU and 14% have recruited from outside the EU. The reason for this overseas recruitment has primarily been a lack of applications from UK national, followed by UK nationals not having the right technical skills or relevant qualifications.



of companies disagree that they do not need to recruit outside of the UK to get the skills they need However, companies have cited delays to the system with 14% saying they have experienced this. Others (13%) cited additional costs and charges. The cost of the application fee, immigration skills charge, health surcharge, sponsor licence and certificate for sponsorship can easily add a further £5,000 onto the cost of recruitment. Some 11% cited difficulties meeting the eligibility criteria, including job and technical skill level, in order to recruit.

The Shortage Occupation List contains a number of skilled job roles which are eligible for the 'skilled worker' visa route under the new system, and this allows employers to recruit from overseas to fill vacancies at a reduced financial cost and in a shorter timeframe. However, a number of the roles where manufacturers are finding it hardest to recruit are not currently included on the list, which has not been updated by the Government for more than two years.

At a time when manufacturers are experiencing immediate labour shortages, their recruitment is being made more difficult by a burdensome immigration system that is not flexible or responsive enough to the needs of employers.



5. MANUFACTURERS' INVESTMENT IN PEOPLE AND SKILLS

5. MARUFACTURERS INVESTMENT IN PEOPLE AND SKILLS

Manufacturers are committed to investing in their workforce, including their current employees as well as the next generation. With the fight for talent on-going, manufacturers increasingly consider training and development an important factor in retaining the talent they already have, as well as ensuring that the current workforce possesses the skills it needs between now and 2030.

Even at a time when many manufacturers are cashstrapped they have continued to focus on investing in training. Half of manufacturers said they had increased spending on training for both production and nonproduction employees in the past two years. Even for those who have not increased their spending, for the vast majority this has stayed the same rather than decreased.

In the immediate term (defined as between 1-3 years) manufacturers plan to prioritise investment in either middle or higher-level skills. Almost half (49%) said they will prioritise investment in Level 3 skills and over a quarter (28%) on Level 4 and 5. A very small number (5%) cited Level 6 and above, which is likely due to the gaps in 'technical' level roles that tend to be serviced by the vocational training market. Perhaps most notable is that almost one in five (17%) cited demand for skills at Level 2. Increasingly we have heard from manufacturers that there is a gap in labour for Level 2 roles and this is borne out in this research.

Looking ahead to the longer-term (over 3 years), the trend pivots more towards the mid to higher level skills, reflecting manufacturers' plans to invest in digitalisation and greenification which, as demonstrated above, will lead to an increase in demand for higher level technical skills. The proportion of companies prioritising Level 2 falls away to just 8% and those focusing on Level 3 falls from half to a third. Demand for mid-level skills increases to almost half (47%) and Level 6 increases to one in ten companies.

Chart 7: Investment priorities will change in the longer-term

% companies citing immediate and long-term priority investment for skills by level



6. TURBO-CHARGING TRAINING – TACKLING LONGSTANDING BARRIERS

Despite the commitment from manufacturers to invest in their people, there remain barriers to doing so. Time and financial constraints are among the factors which typically prevent manufacturing employers from investing more in skills training.

- Over half (53%) of manufacturers cited a lack of time to train as a barrier
- Almost two-fifths (37%) cited a lack of external finance
- A third cited a lack of external finance, e.g., Government support
- Over a quarter cited a lack of appetite from employees (often also attributed to a lack of time)
- 14% said their internal budget has been consumed by the Apprenticeship Levy

The second most commonly cited barrier is access to relevant training provision, cited by 45% of respondents. Our survey shows that the training market is simply not keeping pace with industry. When speaking to manufacturers, we often hear examples of companies sending apprentices hundreds of miles away because it is the closest provision that delivers what they need.

The development of Local Skills Improvement Plans (LSIPs) by the Government can be part of the solution to this issue. LSIPs are intended to bring together local employers and training providers to shape training provision in their area, matching it to the particular skills needs in the local labour market.



of companies agree that colleges and providers are meeting the needs of their business, but 47% disagree

In its Levelling Up white paper, the Government also announced the creation of the Unit for Future Skills (UFS), an analytical unit which will collect labour market data to inform the development of education, skills and employment policy, intended to be focused on future skills needs. This should also play a part in shaping local training markets to respond to employer demand for skills, working together will LSIPs. As a quarter of manufacturers want the Government to focus on skills as part of any future work on levelling up, it will be important that these initiatives support the effective collaboration that already exists between many manufacturers and local training providers, and facilitates more productive engagement where it may be lacking.⁶

There is a mixed understanding of the support that is provided through the Government for manufacturers

to access skills and training. While the apprenticeships 'brand' is very strong among manufacturing employers and policies such as the apprenticeship levy are generally well understood – if not always considered effective – other initiatives suffer from lower levels of awareness and understanding.

There are specific areas of support from the Government, such as the Help to Grow schemes, which are relatively new and evolving into programmes which may offer the right support to manufacturers, but take-up remains low. Other new initiatives such as T Levels remain a promising step towards bringing in higher numbers of young learners to the sector, but awareness is also low among employers and there remains concern over aspects of the policy such as industry placements.

TURBO-CHARGING TRAINING INVESTMENT

Our data shows that there are favoured ways of government providing additional support to manufacturers to invest in training; this typically consists of direct funding and tax-based measures.

The most popular option for manufacturers is direct subsidy for workplace training, and the second most popular is tax relief on training, demonstrating the appetite for some form of additional co-investment support from the Government for training the workforce. Direct funding may be easier for policymakers to ensure that support is targeted at the right areas, e.g., digital and green skills, and tax relief may be easier for employers to engage with, offsetting the up-front cost of training against their tax bill and providing a clear incentive for a higher level of investment.

There is also some support for broadening the scope of the apprenticeship levy. While it is important that the strength of manufacturing apprenticeships is preserved and enhanced – and the efficient functioning of the levy is an important aspect of achieving this – there is an appetite among manufacturers to consider how levy funds could be spent on other high-quality types of training. The £3.3 billion that has been returned to the Treasury in unspent levy funds in the last three years, and lack of clarity for all employers over how that money is being used – has only reinforced manufacturers' desire to see the levy reformed and for better use to be made of the money that employers are paying into the system.

Make UK has previously called for greater flexibility in how levy funds can be spent by employers beyond immediate training costs, including support for wage costs and capital expenditure associated with apprenticeship delivery. Manufacturers continue to support greater shortterm flexibility with a view to deeper long-term changes to the policy.

Also highlighted by manufacturers was the need for better access to modular, flexible training options as the need for upskilling and retraining becomes a more prominent feature of employees' careers and employers' evolving workforce needs. The Government's new Lifelong Loan Entitlement (LLE) is a positive step forward on this, allowing all employees to access the value of a higher education student loan to spend on modular training between levels 4 and 6 throughout the duration of their careers. However, more can be done, especially to reflect the persistent need for technical skills below level 4, which would not currently be met through the LLE.



of manufacturers do not think there is adequate Government support for training

Chart 8: Manufacturers looking for tax-based incentives

% companies citing what would increase their investment in training



Source: Make UK/Sage, Skills Survey 2022

OVERALL EMPLOYER INVESTMENT IN SKILLS REMAINS LOWER IN THE UK COMPARED WITH OTHER COUNTRIES

The most recent research conducted found that UK employers invested around £42 billion annually in skills training for the workforce;⁷ a number that has barely changed in the last decade, and where manufacturing has historically compared poorly with some other sectors of the economy with regard to the proportion of the workforce receiving training from their employer and hours spent per year on training.⁸ On an international basis, the UK is slightly below the OECD average for employer investment in training, with available data for manufacturing reflecting this broad trend.⁹

While UK manufacturers' investment in skills training has remained resilient through a difficult period, and there is a clear appetite from employers to continue to invest over the coming years to address skills shortages in what may prove to be ongoing difficult economic conditions, there remains more to be done to meet employers' demand for skills across all levels and areas of the workforce, and enable the UK to close the gap on other countries and help British manufacturing to become even more internationally competitive.

⁷Employer Skills Survey 2019: Training and Workforce Development (publishing.service.gov.uk) ⁸ukcess13-employer-investment-in-training.pdf (publishing.service.gov.uk)

⁹Firm investments in skills and capital in the UK services sector LOECD Economics Department Working Papers LOECD iLibrary (oecd-ilibrary.org)

7. Polgy Recommendations

Make UK's own recent research estimates the cost of lost prosperity that these manufacturing vacancies being unfulfilled in 2022 amount to £7.7-£8.3 billion, or approximately £21 million a day in lost output for UK GDP.

1. ADDRESSING IMMEDIATE LABOUR SHORTAGES

Revise the Shortage Occupation List

It is welcome that the Government has commissioned the Migration Advisory Committee (MAC) to review the Shortage Occupation List (SOL). It is now more than two years since the Government last commissioned a review of the SOL; since then, Brexit and the pandemic have had a significant impact on the UK labour market, and the Government has introduced the new, points-based immigration system with a new 'skilled worker' visa route.

There are a number of engineering roles which are currently on the SOL, and these should remain on the list to ease current shortages. However, manufacturers currently face waiting 12 months or more to recruit for a range of key roles across the workforce where they cannot fill vacancies from the domestic labour force.

Given the time that has elapsed since the last review of the SOL – and the drastic changes in the labour market and the Government's approach to immigration that have occurred in that time – it is essential that the review is completed urgently to reflect the current state of the UK labour market and where there is demand from employers to recruit from overseas. The Government should then engage with the MAC's recommendations to ensure that there is a revised version of the list in place by early 2023 at the latest. It is also important that, in future, the SOL is reviewed and revised at more regular intervals to ensure it remains an accurate depiction of contemporary labour shortages across the UK.



2. SECURING THE TECHNICAL SKILLS NEEDED FOR 2030

Introduce apprenticeship incentives for areas of skills shortages

Reviewing the SOL to address immediate labour shortages is only a partial solution to the long-term, structural skills challenges the UK faces. To tackle these, there must be much closer alignment between skills, labour market and immigration policy. This includes the DfE's Unit for Future Skills becoming a cross-government, independent body, working on a similar basis to – and together with – the Low Pay Commission and the Migration Advisory Committee.

The Government rightly introduced increased employer incentive payments for apprenticeships at the height of the pandemic, encouraging businesses to continue to invest in training in difficult circumstances. There is scope for targeted employer incentive payments for apprenticeship standards which reflect the job roles where skills are most needed now and in the future.

Employers should be eligible to receive incentive payments for apprenticeship training where the standards correspond to:

- 1. Occupations included on the revised Shortage Occupation List
- 2. Areas of national skills shortages identified by the Unit for Future Skills

Other countries which have adopted points-based immigration systems, such as Australia, take a similar approach to stimulate employer investment in training the domestic workforce as access to overseas labour becomes more restrictive. Combining incentives for training with a short-term easing of access to overseas labour via the SOL will mean that manufacturers can more easily access the labour they need immediately, while also investing in the domestic workforce to take on skilled employment in those job roles in the future.

Over time, the UFS could consider the scope for expansion of incentives based on information gathered in relation to priority sectors, geographical location (working with Local Skills Improvement Plans to understand local and regional skills gaps) and age cohorts.

Create an Employer Training Fund

Reform to the apprenticeship levy is essential to make it work better for employers. The high level of unspent funds being returned to the Treasury indicates that the levy is not functioning as it should do, and employers want to ensure that they can use all avenues available to them to invest more in high-quality training.

A portion of unspent levy funds should be formally ringfenced as part of a new Employer Training Fund, which could support the upskilling and retraining of existing employees, as well as providing support to bring through the next generation of talent through routes such as T Levels, where manufacturers are keen to explore taking on learners as the engineering and manufacturing route is rolled out from September 2022.

This would allow employers to access the direct funding that they want to help invest in training the current and future workforce, and assuage concerns held by many manufacturers that they are not able to see how and where unspent levy funds are currently being used.

Introduce a Training Investment Allowance

As noted above, it is not just direct funding support that would make a difference for manufacturers. Taxbased measures are a popular choice for employers and fit within the recent focus from the Government on taxes and training. As Ministers consider how to spur greater employer investment in training using the tax system, existing mechanisms can be used to incentivise businesses to continue to upskill and retrain their workforce to meet current and future skills needs. The Government should expand the current tax exemption for work-related training into a Training Investment Allowance, providing a tax rebate on investment in training for existing employees. This reflects manufacturers' desire to access tax relief on investment in training which is easy to understand and provides a clear incentive, offsetting the cost of training through their tax bill.

3. BUILDING A RESILIENT WORKFORCE FOR THE FUTURE

Target support at lifelong digital and green skills

There remains a critical demand among manufacturers for the digital and green skills that will define their ability to meet the most important challenges they face in the next decade and beyond. In addition to Make UK's previous call for a lifelong digital skills account, the Government's new Lifelong Loan Entitlement, covering modular training between levels 4 and 6, should be shaped by the need for digital and green skills to be kept up to date throughout an employee's career.

Expand Help to Grow to support future leaders and managers

The Government's Help to Grow: Management scheme is a welcome attempt to address some of these issues, but for many manufacturers awareness and understanding of the scheme is low. For those who have engaged with it, the eligibility criteria for the scheme can be restrictive; evidence from manufacturers has indicated that take-up in the sector has been low due to employers either not meeting the size requirement (i.e., between 10 and 249 employees) or the number of employees who are able to participate in the scheme is too low. In order to address these concerns, the eligibility criteria for the Help to Grow: Management scheme should be widened to reflect the priority employers are attaching to these skills and enable them to access the right training for their employees.

Help early retirees to join the further education teaching workforce

For those in the sector who have recently become economically inactive or are planning to retire, one way for them to continue to make a contribution without being on the frontline of industry is to enter the teaching workforce.

The Government has rightly identified the need to

have members of the FE teaching workforce with recent, relevant direct experience of working in industry. Through the creation of a Workforce Industry Exchange scheme, first proposed in the Government's Skills for Jobs white paper, there is an opportunity to bring individuals with recent industry experience who have stepped back from full-time, permanent employment into the classroom.

Soge VIEWPOINT

With the right support, manufacturers can balance addressing immediate concerns around labour shortages with building the next generation of talent.

Manufacturers have demonstrated incredible resilience in the face of multiple challenges and uncertainties in the last few years. Their importance in driving much needed growth of the UK economy cannot be underestimated.

As you've read in this report, UK manufacturers are facing significant challenges in acquiring and retaining the skills needed for future growth and success, with key changes being driven by demand concerning flexible working, digitalisation, automation and environmental sustainability. The good news is that leveraging digital technology can play a key part in supporting UK manufacturers to meet this demand.

Leveraging Digitalisation and Automation for Success

At Sage, our recent research highlights a fundamental shift, accelerated by the pandemic, which shows that tech is now vital to the creation, survival and success of SMBs across all sectors. Amongst UK manufacturers, 88% say that tech is important to the survival and resilience of their business and for achieving key business goals. As we look to the challenges ahead, we need to ensure that manufacturers can take full advantage of the digital economy to help mitigate disruption.

Knocking Down Barriers

As we enter another period of instability, having the tools to adapt, innovate and be agile are vital. However, cost pressures, a lack of the correct expertise, and being stuck in old habits are holding many manufacturing businesses back from reaching their full potential.

Together, the Government and big tech companies like Sage can knock down these barriers businesses experience. By providing wider financial incentives to encourage more investment in tech, by unlocking the power of data so businesses can innovate and grow and by ensuring that digital infrastructure supports the economy across every part of the UK.

The size of the prize is vast if we work together to accelerate the tech evolution, unlock growth and deliver a pro-tech, pro-enterprise Digital Britain.

*www.sage.com/investors/investor-downloads/press-releases/2022/06/untapped-tech-adoption-could-boost-uk-economy-by-232-billion-annually/



Make UK is backing manufacturing – helping our sector to engineer a digital, global and green future. From the First Industrial Revolution to the emergence of the Fourth, the manufacturing sector has been the UK's economic engine and the world's workshop. The 20,000 manufacturers we represent have created the new technologies of today and are designing the innovations of tomorrow. By investing in their people, they continue to compete on a global stage, providing the solutions to the world's biggest challenges. Together, manufacturing is changing, adapting and transforming to meet the future needs of the UK economy. A forward-thinking, bold and versatile sector, manufacturers are engineering their own future.

www.makeuk.org @MakeUKCampaigns #BackingManufacturing



Sage offers digital solutions to run your entire manufacturing business, helping many types of manufacturers to thrive, from food & beverage manufacturing through to industrial machinery manufacturing and FMCG distribution. Sage supports the entire value chain from seed to sale or farm to fork with enterprise-level software solutions.

Find out more about how Sage 200, Sage X3 and the recently launched Sage Intacct Manufacturing solutions can help your manufacturing business adapt, grow, and transform.

www.sage.com/en-gb

For more information, please contact:

Jamie Cater Senior Policy Manager (Employment) Make UK JCater@makeuk.org

For more information, please contact:

Kelly Walker

Marketing Campaign Manager Manufacturing & Distribution kelly.walker@sage.com





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