





EXECUTIVE SUMMARY

The UK manufacturing sector has undergone significant changes since the 18th century; from the first industrial revolution to the emergence of the fourth, the manufacturing sector has remained the UK's economic engine and the world's workshop.

The sector has continually reinvented itself in order to adapt not only to the structural changes and evolution of our economy but also to the policy changes brought in by successive governments. Nonetheless, manufacturers have proven themselves to be the ones creating the new technologies of today and designing the innovations of tomorrow. They have continued to invest in their people, allowing them to capitalise and compete on a global stage, and in many cases have provided the solutions to the world's biggest challenges.

Today's challenge to position the UK as a global leader in the global marketplace, to lead a green revolution to transition to net zero and to inspire the next generation of creators, makers and innovators, is no different. In addition, as we seek to recover from the current Covid-19 pandemic, the UK economy will need manufacturers to continue to step up and boost productivity, to power economic growth and to deliver shared opportunity in every region of the UK. A digital, global and green future post Covid-19 is possible, but it will require a bold, brave and new vision for our economy – one that puts manufacturers at its heart.

What we make matters, and what that in turn provides for our economy, communities and regions will matter even more going forward.

As the Covid-19 pandemic struck, much like the rest of the economy, the manufacturing sector was hit hard. Sales and orders fell, domestic and global supply chains came to a halt and staff were furloughed, with redundancies expected to follow across a range of industries. The Bank of England (BoE) expects the UK economy to shrink by 14% this year, assuming social distancing measures end by September. The Office for Budget Responsibility (OBR) has forecast a staggering 35% fall in real GDP in the second quarter of 2020 and an unemployment spike of up to 10% - that is 2 million additional people out of work. Furthermore, the OBR predicts that manufacturing, construction, retail, travel, food industries and education will see the biggest losses. However, sanitary and social distancing restrictions have also disrupted the services sector in a manner that is likely to last for some time, meaning the UK is now more reliant on manufacturers to lead the recovery. It is already notable how the ability to use manufacturing in this time of national emergency has proved vital.

Yet, despite the tough trading conditions, the overwhelming majority (94%) of manufacturers¹ remained operational and

hundreds of firms became #ManufacturingHeroes, repurposing their factories and supply chains to produce vital medicines, machinery, utensils and personal protective equipment (PPE) for our front-line staff, and supporting critical parts of our economy and society with vital food, drink and other necessities. Manufacturers are also now leading the way in implementing and demonstrating best practice for our return to work.

This shows that the manufacturing sector has a key role to play both in our recovery and in the digital, global and green future we should be aiming for.

It is clear that the road ahead remains bumpy. Our biggest export market, the EU, has said it could be 2024 before its economies fully recover from the economic and trade effects of the Covid-19 crisis. Chancellor Rishi Sunak has made similar forecasts for the UK. As Make UK has set out previously in our three-point-plan,² any recovery will take time, and the impact of Covid-19 on manufacturers will be felt for some time. Different parts of the economy, as well as different regions, will recover at different speeds, with export demands, consumer tastes and business models changing to the 'new normal'. This is why it is vital for Government to boost economic confidence and deliver shared prosperity, and for manufacturers to implement best practice and build resilience.

History has shown us, a strong industrial base provides the foundations needed to create a prosperous society. It is the manufacturing sector, with its versatile and innovative industries and firms, that stands ready to rebuild our economy. To support the recovery, this report, delivered in partnership by Make UK and Santander, explores:

- the impact of the Covid-19 pandemic on UK manufacturers so far:
- how each sub-sector has been affected;
- an international comparison of the manufacturing response to Covid-19;
- the key Covid-19 challenges UK manufacturers have faced;
- the actions manufacturers have taken to respond;
- opportunities for UK manufacturing post Covid-19; and
- recommendations to Government to support a recovery and build a digital, global and green economy to boost the national recovery.

FOREWORD

The manufacturing sector is no stranger to challenges and structural changes as it has had to evolve and develop at pace through the various stages of the industrial revolutions. The Covid-19 pandemic has however concentrated these challenges into a much shorter period and at the same time virtually removed consumer demand in various sectors while scaling up demand massively in others.

As a result, the sector has again shown its resilience and adaptability in the face of fierce headwinds, which were already compounded by ongoing Brexit negotiations. What is needed now is for the sector to step up further and drive the UK economic recovery over the next few years. In this it has a huge role to play and a generational opportunity to do the right things in the right way.

Not all subsectors are starting from the same position as the report highlights. Some have diversified during the lockdown and they may pursue these opportunities when trading conditions return to the new normal. Others will have forged new relationships while some will be working hard to regain ground that has been lost and some unfortunately will not be able to recover. Consolidation, mergers and acquisitions will inevitably follow in the coming months and years.

We are already seeing that manufacturers are stepping up and the recovery plans are being put into action. The pandemic is forecast to bring on a global recession with all markets affected. So now more than ever UK manufacturers will need to invest valuable time and resources into innovation, research and development to improve the sector's productivity and to enhance our competitiveness internationally. With social distancing measures still front of mind, much of the sector has had to adapt to new ways of working and there is an opportunity to embrace that change. Manufacturers must consider what automation and digitisation can be introduced and maintained to allow the sector to thrive on the global stage.

Now is not the time to focus on domestic trade only, there are opportunities out there for bold UK companies in existing as well as new international markets, particularly as the UK looks to reposition its place on the global stage outside of the

European Union. Santander is here to assist manufacturers make those international connections, navigate local customs, break down bureaucracy and help finance the trade gaps.

What we have learnt from the Covid-19 pandemic is that complex international supply chains can grind to a halt when the chain is broken. Looking ahead, many manufacturers are likely to be building in dual sourcing to their procurement programmes and may also look at different geographies for these dual or multiple sources. In some instances, there could be the opportunity to reshore some manufacturing back to the UK, but I expect this to be the exception rather than the norm. However this is done, the resilience of supply chains will feature more prominently going forward. In reviewing supply chains our international partners and local ecosystems can help find alternative sources of supply.

Global recovery depends on many factors outside the control of manufacturers. What we must support though is those makers that are willing to innovate, develop and find ways to overcome the Covid-19 hurdles in new and existing markets. The success of the sector is vital to the UK as a whole over the tough months and years ahead.

Paul Brooks Head of Manufacturing



THE ECONOMIC IMPACT OF THE COVID-19 PANDEMIC ON **UK MANUFACTURERS TO DATE**

The UK manufacturing sector has been profoundly hit by the Covid-19 pandemic. The UK manufacturing Purchasing Managers' Index (PMI) dipped to 32.6, the lowest value since records began almost 30 years ago. Some 70% of manufacturers have seen a fall in their orders and sales, and a quarter of manufacturers expect to make redundancies in the next six months.3 This is further backed up by the latest UK GDP data, which fell by a staggering 20.4% in April alone.4

Manufacturing output has fallen to an all-time low, with some firms reducing production while others have shifted to producing much-needed medicines, sanitisers, ventilators, PPE and other equipment for the health service to combat the spread of the disease.

Sales and orders continue to nosedive owing to the pandemic – more than 70% of manufacturers have seen a further decrease in orders and sales.5 In addition, onethird of manufacturers believe a significant number of their employees will refuse to return to work despite seven in ten manufacturers planning to provide additional PPE for their staff. The vast majority, 60%, said they were still concerned about health and safety legal claims increasing through staff.6

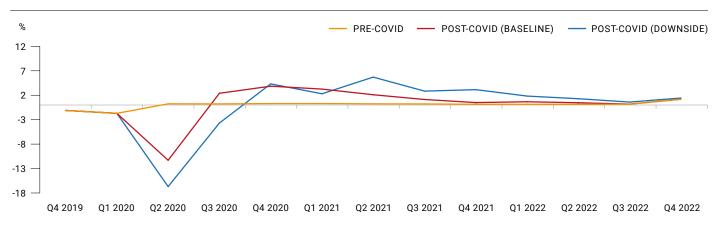
While the latest data shows a slight fall in the number of manufacturers using the CJRS (Covid-19 Job Retention Scheme), a quarter of firms are planning to make

redundancies in the next six months, with a further 44% considering doing so.7

Top-level findings of the impact of Covid-19 on UK manufacturing

- Manufacturing Gross Value Add (GVA) is expected to decline by 11% in Q2 2020 in the baseline forecast.
- Output is expected to decline by -9.7% in the baseline forecast for 2020.
- Up to £19.2bn in lost GVA in 2020 (baseline).
- Up to £35.7bn in lost GVA in 2020 (downside).
- Total Manufacturing GVA could be between £6.8bn and £16.5bn lower in 2022 compared to the pre-Covid-19
- Manufacturing investment could decline between 1% and 9.7% in 2020.

Chart 1: How do we ensure manufacturers are supported throughout the recovery phase?



Source: Make UK analysis of Oxford Economics UK Model

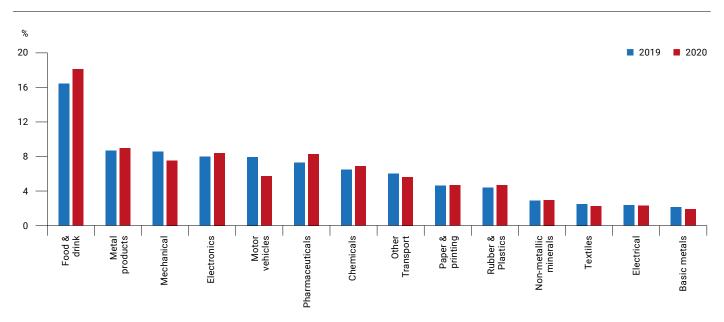
*Make UK, Covid-19 Manufacturing Monitor, May 2020 40NS, GDP monthly estimate, April 2020 *Make UK, Covid-19 Manufacturing Monitor, May 2020 *Make UK, Regional Advisory Board Polling, May 2020 *Make UK, Covid-19 Manufacturing Monitor, May 2020

The pace and extent of the slowdown and recovery will be determined by how quickly businesses can rebuild capacity and return to normal operation. The baseline forecast shows a significantly faster rate of recovery than the downside scenario, but this forecast hinges on the assumption that there is outstanding business yet to be fulfilled. If the worst of the pandemic's effects were to be protracted longer than expected, orders may be cancelled across supply chains, resulting in much less of a pronounced recovery peak than we can observe in the baseline forecast.

UK manufacturing subsector overview

The Covid-19 crisis has impacted the manufacturing sector in insurmountable ways, resulting in almost zero demand for many products while increasing demand for others. As a result, there is expected to be a slight shift in the relative size of certain subsectors in 2020. However, it is difficult to say whether the new dynamics will remain in place for the long

Chart 2: Subsector share of UK manufacturing, 2019 versus 2020



Source: Make UK analysis of Office for National Statistics/Haver Analytics data, 2020 Manufacturing Sector Composition by GVA (% share)

TOP 3 SECTORS BY THEIR RELATIVE CONTRIBUTION TO

TOP 3 SECTORS BY THEIR RELATIVE CONTRIBUTION TO OVERALL MANUFACTURING GVA DECLINE: OVERALL MANUFACTURING GVA INCREASE:



MECHANICAL EQUIPMENT





FOOD & DRINK PHARMACEUTICALS

CHEMICALS



Pharmaceuticals

The pharmaceutical industry could be the only subsector to see growth (+2.8%) in 2020 thanks to an increase in demand for medical equipment and increased spending from the NHS. Especially contributing to this growth will be those domestic companies directly involved in the production of Covid-19 interventions.



Food & Drink

The Food & Drink subsector is expected to decline weakly (-0.2%) as increased demand from fresh-toconsumer produce are outweighed by the decrease in demand from other key sectors, such as Hospitality. Supermarket spending habits have now stabilised following initial panic buying, therefore demand from households is unlikely to increase any further.



Rubber & Plastics

The Rubber & Plastics subsector is expected to decline significantly as a result of falling orders from downstream industries - such as Construction, Motor Vehicles and Aerospace. However, increased demand for PPE, food packaging, and single-use plastics limited the decline in the Rubber & Plastics sector (-3.2%)



The Motor Vehicles industry expects the biggest decline (-34%) in GVA. The subsector was exposed to a collapse in buyer demand, parts shortages, supply-chain bottlenecks and Covid-19 containment measures resulting in mass factory shutdowns. However, the subsector is expected to hit a significant bounceback in 2021, assuming demand conditions return to normal and all else remains constant.

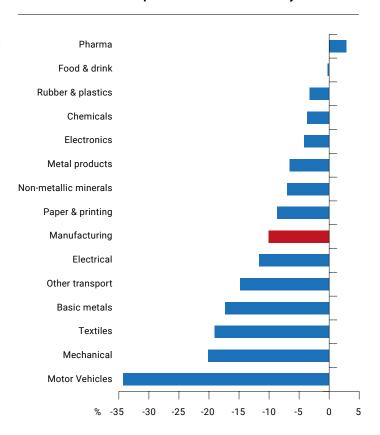
What do forecasts suggest?

Although output will be lower in real prices and there is uncertainty concerning the immediate rate of recovery, growth expectations over the coming two years are expected to converge to pre-Covid-19 trends, assuming all else remains constant. The UK manufacturing sector has been hit hard by an economic shock that will leave a scar for years to come. Make UK forecasts heavy declines in the sector during shutdowns, with a prolonged recovery period depending on when both domestic and key international markets restart. However, recovery within the sector will vary according to industry.8 Some industries will face different, and very likely extended, challenges than other industries owing to the longer wind-up time required to restart production, and the interdependency within the sector for generating new orders down supply chains. Yet there are growing positive signs to indicate that, with the right support, UK manufacturing can return to its pre-crisis growth trajectories.

- On average, manufacturers predict quarter-on-quarter manufacturing GVA growth to recover to pre-Covid-19 trends by 2022.
- 85% of manufacturers either have reviewed or plan to review the resilience of their supply chain to prevent future downturns and make UK manufacturing stronger.

Many UK manufacturers have begun to prioritise long-term recovery over short-term survival, and with the right support the sector could lead the way towards economic recovery that is global, green and digital. But any UK economic recovery will also depend on how our foreign customers respond.

Chart 3: Forecasted impact of Covid-19 in 2020 by subsector



Source: Make UK analysis of Oxford Economics UK Industry Model, 2020 % change in GVA (2019–2020)

INTERNATIONAL COMPARISON OF ECONOMIC INDICATORS

The economic impact of Covid-19 on not only the UK manufacturing sector but the economy as a whole has been profound. Whilst the UK economy has been impacted, this is a global problem. We have seen similar impacts across the world with economies and global supply chains brought to a halt. Any recovery and growth will come from learning from other markets, driving up global demand and diversifying supply chains.

The latest PMI data is falling dramatically across the world with the pandemic having a significantly negative impact on expected growth, orders, and output:

Table 1: Manufacturing PMI data March to May 2020

	March	April	May
Germany	45.4	34.5	36.6
US	48.5	36.1	39.8
China	50.1	49.4	50.7
ASEAN	43.4	30.7	35.5
UK	47.8	32.6	40.7

Source: IHS Markit / BME, 2020

Germany

According to provisional data from the Federal Statistical Office of Germany (Destatis), industrial production declined significantly in Germany in March 2020 as a result of the Covid-19 pandemic. Industrial production fell by -9.2% month to month and by -11.6% year on year in March. This is the largest decline since its records began in 1991.

The number of new orders also saw a significant decline, as real new orders (seasonally adjusted) fell by -15.6% in March 2020 month to month. Unfilled orders (seasonally adjusted) in the manufacturing sector declined by -0.9% month to month in March. Unfilled domestic orders fell by -1.3% and the stock of foreign orders decreased by -0.6% month to month.

The data does not support the current crisis having a clear impact on unfilled orders in manufacturing in Germany, as manufacturers did not record exceptional cancellations of orders in March.

Looking at the latest figures for PMI collected by IHS Markit/BME, Covid-19 and the resulting lockdown measures led to a record contraction in German manufacturing output in April. Headline Manufacturing PMI remained in contraction territory in May at 36.6, but still showing a slight improvement from 34.5 in April. Any PMI reading below 50 indicates a net drop in production during the month, pointing to a significant fall in German manufacturing output. The softer decline in output and new orders was partially offset by a sharper fall in employment, a drop in stocks of purchases and a softer lengthening of supplier delivery times.

According to IHS Markit, German manufacturers continued to report a decline in output in May, as manufacturers suffered from reduced production capability and continued decline in external and internal demand. However, the decline in the headline index was softer compared to April, as businesses across the main industrial groups of the survey – intermediate, consumer and investment goods - reported a pick-up in output. Uncertainty and store closures by customers led to order cancellations and postponements for German manufacturers, with an adverse impact on new business volumes and new work received.

Export sales continued to see a faster decline than overall new orders in May, as a result of weak external demand. However, the rate of decline slowed in both categories compared to what was seen in April. Looking into the future, manufacturers' expectations for output for the rest of 2020 showed some improvement from April, but remained in the negative territory. Most firms continued to be pessimistic about the outlook, with significant concern over the long-lasting effects of the pandemic on demand and supply.

A European recovery plan based on resilience and competition

The European Employers' organisation, Ceemet – representing the interests of the metal, engineering and technology-based industries with a particular focus on labour market policy and industrial relations issues – outlined its recovery plan for the 'new normal'. The European recovery and resilience plan is a two-phase approach that focuses on three key areas to support a swift and sustainable recovery. Ceemet has called for the exit and recovery measures to be more coordinated between the EU, member states and near neighbours, to ensure complex European and global supply chains are able to return to the strength seen before the crisis.

Phase 1 – Get society and industry back on track

The first phase focuses on developing a roadmap for an economic reboot, particularly as countries have eased out of lockdown at different times. Despite there being no one-size-fits-all, the roadmap should be applied through a well-coordinated approach. The European recovery plan should provide liquidity and cash to companies, occupational health and safety measures, and smart, practicable protocols for a safe recovery.

Phase 2 – Revitalising and reinforcing the single market

The second phase firstly recommends to restore the European single market and to transform it into a seamless, secure, digital single market. Secondly, to 'Be big on the big things'. This means financing the future of the European project and agreeing on the 2021–2027 EU budget, known as the multiannual financial framework (MFF), to support in delivering MFF on top of the recovery and resilience initiative. And thirdly, to support national processes to establish fit-for-future agile labour markets linked with boosting innovative approaches of blended permanent up- and right-skilling.

Ceemet Director General Uwe Combüchen adds: "A coordinated and determined relaunch of Europe's societies and economy after Covid-19 holds the potential to put Europe in the leading position in the world, whether politically, socially, ethically or economically. We have to seize this crisis as a unique opportunity."

Source: Ceemet, Recovery plan – Shaping a new normal, 2020



USA

Similar results have been recorded in the US, as Covid-19 has forced several factories to slow or suspend operations throughout the month of April. According to the US Federal Reserve, total industrial production in the US fell by -11.2% in April, which is the largest monthly drop in the 100+-year history of the index. Manufacturing output dropped by -13.7%, which is its sharpest decline on record. Motor vehicles and parts fell dramatically by more than -70%, whereas production in other manufacturing categories decreased by -10.3%.

Official data from the Fed supports the analysis published in the IHS Markit for the US Purchasing Manager's Index, which also showed a severe decline in manufacturing output in May, although the rate of decline was softer than what was seen in April. US headline manufacturing PMI was recorded at 39.8 in May, showing a slight increase from 36.1 seen in April. Despite this slight improvement, the May recording was still the second-steepest deterioration in operating conditions since April 2009.

The impact of Covid-19 and related lockdown measures continued to impact on US manufacturing output, as firms reported lower sales, temporary shutdowns and operating at reduced capacity. Most businesses surveyed attributed the decline in output to weaker internal and external client demand, as well as continued decline in new orders. New orders fell for the third month in a row, as firms reported cancellations, postponements and a decline in client renewals. New export orders fell sharply in May, as the measures to prevent the spread of Covid-19 continues to impact global markets and weakens external demand for US goods and services.

The American Renewal Action Plan

The National Association of Manufacturers (NAM) is the representative body for 14,000 American manufacturers employing 12.8 million employees. In accordance with the 'Opening Up America Again' programme, NAM has developed an American Renewal Action Plan, aimed at supporting manufacturers to ramp up production of PPE and to outline the tools required to reopen and restart the economy. In line with many economies, the plan calls for recognition that manufacturing has long been the backbone of the American economy, and any future successes depend on the sector's resilience.

Response

This phase focused on supporting manufacturers to ramp up the production of PPE rapidly to meet medical and industry demand. It includes robust coordination with foreign governments on best business guidance to continue to work safely.

Recovery

The next phase highlights the tools manufactures need to reopen and restart the economy. This includes boosting the production of essential goods so that employees can return to work with the proper health precautions being implemented, and legal reforms so companies in essential industries can ensure employees are kept safe and healthy.

Renewal

The final phase is renewal, building a stronger manufacturing industry at the heart of a strong economy. NAM calls for greater investment to protect jobs and ensure that manufacturing in America remains viable and ready to deliver economic growth. This includes investing in the skills and training required, better infrastructure to support competition, and an export promotion programme improving manufacturers' ability to compete in a global marketplace.

Source: National Association of Manufacturers, Renewal Action Plan, 2020

China

In contrast, China is in a different phase of the Covid-19 cycle, and the measures taken to reopen parts of the economy are starting to show in official statistics. According to China's National Bureau of Statistics (NBS), China's economy was recovering in April, despite battling severe challenges in the operating environment as its domestic economy recovers from months of inactivity and the virus continues to spread in other global markets. NBS statistics show that Chinese industrial output rose 3.9% in April 2020 year on year, representing the country's first expansion this year.

Meanwhile, the Purchasing Manager's Index figures collected by IHS Markit and CAIXIN showed a significant rise in Chinese manufacturing output in May, as the rate of output expanded at its fastest rate since 2011. However, Covid-19 continues to have a severe negative impact on demand, as other countries continue to have measures in place to prevent the spread of the virus. Chinese headline PMI recovered from 49.4 seen in April to 50.7 in May, signalling a slight improvement in operating conditions, as firms were able to restart operations and supply chains stabilised following months of disruption. In contrast, total new orders continued to decline in May, driven by weak external demand and a further fall in new export orders.

Chinese business confidence recovered in May, as firms were generally more optimistic about the outlook for the next 12 months. Several firms attributed the pick-up in optimism to hopes that the global economy would recover as countries emerge from the Covid-19-crisis.

ASEAN

The ASEAN region saw a similar contraction in the manufacturing sector as cited above for the US and Germany. According to IHS Markit, operating conditions in ASEAN continued to decline in May for a third month in a row, following the record sharp contraction in April. The sector saw significant declines in output, exports and new orders, although the rate of decline was softer compared to April, as a result of countries relaxing certain lockdown measures. Headline manufacturing PMI for ASEAN rose slightly to 35.5 in May, from the record low of 30.7 in April. However, the May figure continues to indicate a severe contraction in the sector in the region.

Countries in the ASEAN region continued to see a further decline in operating conditions in May, with strong signs of deterioration in activity for all countries in the region. The sharpest decline was recorded in Singapore, which was the only country seeing a sharper downturn compared to April. Headline PMI for Singapore fell to 26.4 from 29.3 in April, reaching a record low since records began. Weaker demand conditions and factory closures led to another reported contraction in the manufacturing sector for Indonesia, with the headline index recorded at 28.6 in May. Meanwhile, Myanmar (38.9), the Philippines (40.1), Thailand (41.6) and Vietnam (42.7) all reported significant contractions in operating conditions, albeit at softer rates of decline compared to the record lows seen in April. The analysis provided by IHS Markit suggests that the decline in operating conditions across the region was primarily driven by the continued decline in output and new orders, as well as weak external demand. However, the rates of decline were softer in all categories compared to April, as lockdown measures were eased and some factories were able to restart operations. Current Covid-led uncertainties and deteriorations in demand continued to weaken confidence levels for the ASEAN region, showing only a modest improvement from April. Firms' output expectations picked-up slightly from April's record low, but firms' expectations for the 12-month outlook remained among the weakest on record.

THE KEY COVID-19 CHALLENGES MANUFACTURERS HAVE FACED

Alongside many businesses, manufacturers have faced a myriad of challenges during this pandemic, some of which have had more of an impact on the health of our sector and overall economy than others.

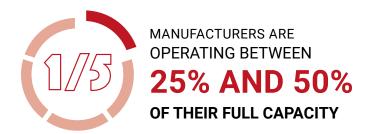
The challenges have led to unprecedented falls in sales (77%) and orders (81%), as well as one in five companies have furloughed up to a quarter of staff. The four main challenges manufacturers faced during this period can be summarised as:

- protecting manufacturing workforces both during pandemic and when planning for reopening;
- managing complex, integrated supply chains that had come to a halt:
- prioritising the health and safety of staff while operations continued; and
- ensuring access to sufficient finance to stay operational.

Protecting manufacturing workforces

As Covid-19 hit, factories and offices were forced to close, leaving many with no choice but to furlough staff in a bid to remain operational once the pandemic was over. The Covid-19 Job Retention Scheme (CJRS), introduced by the Government in March to support businesses by allowing them to furlough staff and subsidising up to 80% of employees' salaries, provided welcome relief for manufacturers.







ALMOST 40%
OF MANUFACTURERS
BELIEVE IT COULD TAKE

MORE THAN 12 MONTHS TO RETURN
TO NORMAL TRADING CONDITIONS



Source: Make UK, Manufacturing Monitor, May 2020

However, ensuring that the scheme took account of the unique requirements of the manufacturing sector, from on-and-off production systems to fluctuating and sometimes countercyclical supply and demand, proved challenging. At the beginning, the concerns manufacturers raised were as follows:

- The CJRS was too rigid. The scheme stated that employees would have to be furloughed for minimum periods of three weeks, and prevented manufacturers from recalling staff before the three weeks were over to accommodate sudden fluctuations of production needs.
- The CJRS was too short. There was a clear message from the sector that the CJRS was helping to maintain production levels as close as possible to the pre-Covid-19 ones, but that once the scheme closed, many manufacturers were forecasting a significant dip in their business from July onwards, and for at least 6−12 months. As such, the extension of the CJRS was key for the sector to be able to ride the next six months.¹º

In early May, reforms to the CJRS were announced by the Chancellor which extended the scheme until the end of October. This, alongside new flexibilities, including abolishing the three-week minimum furlough from 1st August, went a long way to addressing the concerns of manufacturers and protecting jobs. As the Government looks to kick-start the

economy, our surveys show that redundancies are inevitable. We also found that between one-fifth and two-fifths of businesses have already planned redundancies in the next one to three months, while another 40% of businesses said they will 'wait and see'.

Maintaining a skilled workforce

As manufacturers look to the months ahead, having the right skills will be a priority to enable businesses to build in long-term resilience to external shocks such as pandemics but also to adapt to long-standing issues such as climate change. This includes on the one hand keeping and upskilling workers, and on the other hand hiring the next generation of creators and leaders, who can take advantage of the newest technologies and skills of the future.

For existing workers, this was already going to be a significant challenge before Covid-19 hit, particularly as manufacturers were faced with an ageing workforce, and attracting the next generation of talent remains a well-known issue. The decision to leave the EU has exacerbated this challenge, therefore retaining skilled employees will be even more important. Despite some initial challenges, the CJRS can help manufacturers to retain not just jobs, but also the skills themselves. This will be crucial going forward, as without such support businesses will face considerable difficulty in continuing to invest in training their workforces.

Skills for a digital future

Transitioning to the new normal for manufacturers will entail embracing the wave of change through digitalisation. One of the biggest changes they will face is skills - having the right skills in their business to adapt and evolve in the new business environment. The skills that are likely to be demanded can be split into:

- Baseline digital skills skills that help to boost productivity through software such as Word, Excel and SAP.
- Specific digital skills such as software & programming, data analysis, digital design and machining & manufacturing technology.

These skills will be demanded in job roles and professions which will require a higher qualification. It is estimated the proportion of the labour workforce required to be at least at degree level is expected to increase from 32% in 2014, to 43% in 2024*. Furthermore, the World Bank reported in 2015 that the UK will need additional workers with digital skills to meet rising demand from employers, with almost 90% of new jobs requiring digital skills to some degree. The manufacturing sector is not immune to this**. To support this transition Make UK have called for National Skills Taskforce to ensure the sector is ready to embrace a digital future.

*Source: Engineering UK, The state of UK engineering, 2018 **Source: Made Smarter Review, 2017

Supply chains came to halt

As countries began to restrict movement and places of work were closed, it wasn't long before the impact of the lockdown was felt on integrated, complex manufacturing supply chains spread across the world. A concern raised by manufacturers in the early weeks was around sourcing parts from China. In particular:

- 31% of small manufacturers sourced component parts directly from China or other countries affected by Covid-19;
- 65% of large manufacturers did so too;
- 40% of all manufacturers said they had experienced difficulties in sourcing components; and
- a further 49% anticipate difficulties in the weeks ahead. 11

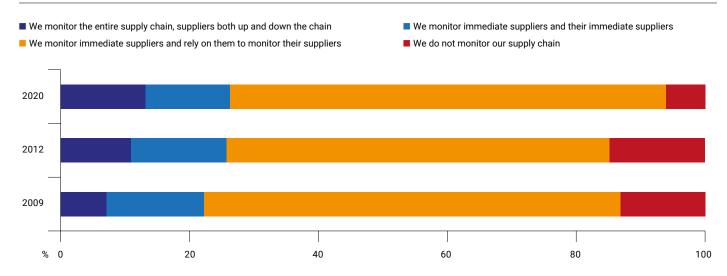
As the impact continued to unfold, supply chains and networks slowed to a halt. Supplier lead-in times dramatically increased, and freight costs became significantly more expensive. Desynchronised supply chains meant that manufacturers who had been able to maintain their workforce

in place and had the capacity to produce, soon found that some or all of their suppliers had closed or reduced their activity and could therefore not ensure the supply of sometimes key components for the manufacture of their products.

Manufacturers also faced a considerable challenge seeing consumer demand shift dramatically. The lockdowns imposed by countries across the world meant that in a very short space of time, demand for retail products went up sharply while demand for wholesale products fell owing to the closure of offices, schools, restaurants, shops and hotels. This switch was largely behind the early shortages of consumer items such as toilet paper and tinned goods where wholesale supply chains, such as industrial catering suppliers, took time to shift their focus to the retail market. The demand for medical equipment also rose, driven by hospitals and front-line line staff and the need for PPE.

The pandemic also highlighted the importance of understanding supply chains as well as continually reviewing them.

Chart 4: How closely do manufacturers monitor their suppliers to help assess risk?



Source: Make UK / Oracle survey, May 2020; EEF Business Resilience survey, 2009 and 2012

This applies to the Government's national approach in mapping supply chains and understanding critical sectors and components, and also to businesses, which need to have visibility of and to take the necessary steps to build resilience into their supply chains. In a recent survey of manufacturers across all regions of the UK:

- more than half (53%) said they were already reviewing their supply chains as a direct result of the Covid-19 pandemic; and

 a further 33% committed to reviewing them in next 12 months.¹²

This data shows that manufacturers are actively seeking ways to improve and to build resilience into their supply chains. It is vital that Government supports this work through its own supply chain mapping exercise for the UK.

¹¹Make UK YouGov survey of 244 manufacturers between 4th and 16th March 2020

²Make UK survey of 200 manufacturers April – May 2020.

Prioritising health and safety while operations continued

Manufacturers were exempt from the Government's lockdown measures, to ensure that vital medical equipment could be manufactured and delivered, as well as to meet the needs of critical sectors such as energy, oil and gas. This meant that the first challenge faced by many manufacturers who had maintained their operations to meet this critical demand was to obtain (non-NHS standard) PPE for their own employees. This proved particularly challenging in sectors such as chemicals and food and drink.

In addition to the PPE requirements they had for their own employees, manufacturers were called upon to help produce additional PPE for front-line staff. The PPE shortage meant manufacturers shifted production lines to meet the escalating demands in very short spaces of time. Many even donated stockpiles of their own PPE to support front-line workers, including hospitals and care homes. The Make UK #ManufacturingHeroes campaign demonstrated the lengths that manufacturers went to in order to support communities, employees and front-line staff.13

Make UK #ManufacturingHeroes campaign - March to April 2020

During the Covid-19 pandemic manufacturers went to extraordinary lengths to support communities, employees and front-line staff. As one of only a few sectors able to continue working, manufacturers took it upon themselves to repurpose production lines, ramp up production to meet PPE demands and even donate their existing PPE. Hundreds of manufacturers got involved, from large, multinational engineering companies to small, family-run businesses, each keen to do their bit. The #ManufacturingHeroes campaign celebrated the sector's ability to adapt, innovate and deliver in a time of crisis.

REACHED MORE THAN





ALMOST



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INTERACTIONS

The campaign helped to change the narrative around employers, recognising that businesses are in fact stepping up to the plate and supporting communities. It also shone a light on best practices for businesses when prioritising their employees' health and safety when returning to work - as 90% of manufacturers remained operational during the crisis and were early implementers of successful social distancing in the workplace.

Follow us on twitter to get involved in the conversation @MakeUKCampaigns

Manufacturers united to support the NHS

Throughout the coronavirus pandemic, it quickly became apparent that many manufacturers had capacity and equipment to support the national effort to produce the approved PPE equipment, and other medical supplies for the NHS. Santander's customer support team was able to help them to gain official supplier status, and in just a few weeks, over 40 UK suppliers and manufacturers were connected to the Covid-19 response team to support the production and delivery of critical equipment to help frontline NHS staff to stay safe and save lives. Additionally, Santander's network of manufacturers was put to use accessing raw materials and sharing materials, recipes, processes and repurposing their supplies for the benefit of the NHS.

³Make UK twitter campaign: https://twitter.com/search?q=%23manufacturingheroes&src=typeahead_click.

Preparing for new measures

Ensuring a safe return to work was and remains of paramount importance to manufacturers. Guaranteeing workers' return to work quickly, safely and flexibly meant there was an urgent need for clear guidance on safety measures for returning to work. Prior to the guidance being published by the UK Government, many larger manufacturers adopted models from other European countries to ensure best practice. This included temperature testing, although this is not yet the case for the UK Government guidance.

Government guidance published in May provides risk assessment and places the emphasis on social distancing, 'buddying-up' and clearly communicating with employees. Despite the guidance not recommending additional PPE and temperature checks, many, although not all, employers have decided they will provide masks and take daily temperature checks.

It is clear that manufacturers are going above and beyond in measures to protect their employees, recognising that this will establish the trust that is required for workers to feel safe. Make UK research found that more than half of manufacturers were worried about potential legal claims in respect of health and safety at work and Covid-19.14 Manufacturers continue to face a real challenge in regard to safeguarding confidence in being safe at work while balancing the need to reopen. The challenges manufacturers are still faced with include the following:

- The Government's guidance remains unclear about what steps employers should take in the unfortunate event that an employee is diagnosed with Covid-19. The impact of having entire shifts or production lines having to isolate if an employee is diagnosed with Covid-19 could be damaging.
- Where workers cannot perform a task at a safe distance for example, installing capital equipment – and PPE is not sufficient to mitigate the risk, how best can manufacturers protect workers?
- As lockdowns gradually begin to ease, business travel, including posting of workers, training employees and even servicing and maintenance of equipment will be restricted. We have already seen this with the UK quarantine rules. Different countries will ease lockdown rules at different paces; therefore, along with supply chains being desynchronised, so will travel restrictions and the movement of people.

Accessing finance to stay operational

While production facilities have been allowed to remain open, there have been significant reductions in demand, exacerbated by major disruption to global and domestic supply chains, along with reductions in cash flow and credit. Those firms that have expanded or repurposed production to support the response to Covid-19 will face further disruptions as they revert their factories and return to normal operations.

To date, manufacturers have raised concerns around:

- Accessing sufficient finance to continue to be operational.
 While the Government's various loan schemes (Covid-19
 Business Interruption Loan Scheme (CBILS), Covid-19 Large

 Business Interruption Loan Scheme (CLBILS), bounce back loans) and additional flexibilities have helped manufacturers to remain functional, maintaining that support while demand recovers and supply chains begin to move again will be critical.
- The withdrawal of trade credit insurance. Manufacturers face an uphill struggle if their customers fail to pay their debts. Despite support from the Government to temporarily guarantee business-to-business transactions currently supported by trade credit insurance, it is failing to support those already struggling. These are often small, end-of-thesupply-chain businesses.
- Cash reserves are dwindling. While most businesses had enough cash reserves for the first few weeks after the lockdown started, maintaining sufficient levels to be able to pay their bills and their suppliers has been of growing concern and challenge. Urgent financial government support to access quickly the finance they need to return to production and to kick-start demand across the economy will be key.

Santander's financial support during Covid-19

Santander has worked at pace to deliver overdrafts and new loans, such as those available through the Government-backed schemes; to access new lending and additional working capital to help UK manufacturers and their supply chains; and in some cases have approved businesses repayment holidays for the next six months to help address issues of cash flows through this unprecedented crisis. Alongside financial support they have continued to support manufacturers with nonfinancial solutions, such as making trusted international connections to support global growth, helping to navigate local customs and bureaucracy overseas, and providing tips to avoid scams and legal resources.

ACTIONS MANUFACTURERS HAVE TAKEN TO OVERCOME COVID-19 CHALLENGES

Prioritising the health and safety of staff while operations continued

Case Study 1



Swiftool Precision Engineering (SPE) Ltd, supplies high-integrity, precision-machined, safety-critical parts to the nuclear, petrochemical, aerospace and defence markets worldwide. During the outbreak of Covid-19 the business was considered critical in the supply chain for the Ministry of Defence and the plant was maintained and remained open throughout the lockdown period without a break in production and supply. The company's Covid-19 Business Continuity Plan had been put in place prior to March 2020 and was communicated to staff prior to lockdown to enable complete clarity on safety measures and reassurance.

Employees were informed of every measure taken, including sustainability plans (People, Profit, Principles) and forward Covid-19 safety plans up until January 2022. Safety plans included all tactical issues, such as the need to screen all external visitors and the requirements for two isolation rooms, one-way circulation, daily temperature checks, screens for highrisk areas, PPE measures, wearing gloves to open the mail, and health updates on the numbers of new Covid-19 cases (employees affected gave their permission as they wanted to reassure others). The company also communicated regularly the UK Government updates relevant to the manufacturing industry, including the letter from BEIS to manufacturers and most recently the Government guidelines on safe working.



"Owing to staffing situations and isolation our employees quickly stepped up when asked to perform a particular job one day and another the next. Their resilience in the past eight weeks has been remarkable. Furthermore, leadership teams, management and staff were actively engaged in the process. Above all, the company ensured all staff understood that the key to managing the situation successfully was to be transparent and honest and to champion change."

Sam Handley, Director at SPE Swiftool Precision Engineering Ltd

Case Study 2





Viking Signs offers the largest range of safety signs in the UK, along with printed and engraved sign and label components to other manufacturing businesses. When the lockdown was announced, Viking Signs moved immediately to remote working for the majority of staff, keeping a minimum core team to operate the production facilities. In the first three weeks of the Covid-19 crisis it launched more than 1,000 new infection prevention and social distancing sign products. Initially, around 25% of staff were furloughed, but increasing demand for relevant and essential products, now above twice normal production levels, along with the need to operate safely, has required a move to shift working and unfurloughing of the staff.

Viking, via its eCommerce site, safetysignsupplies.co.uk, and by supplying directly to Amazon, has been able to support social distancing measures with signage and floor graphics for many UK businesses. However, these lacked the flexibility of floor-marking tape to adapt to the requirements of many situations.

Advance Tapes is a leading independent manufacturer of pressure-sensitive adhesive tape for use in industrial and professional markets. When France and Spain ordered the Covid-19 lockdown, this significantly impacted the company's export business to the EU, which accounts for more than 70% of total sales. Many of its customers decided to close (more than 70), particularly in France, which meant orders couldn't be delivered and payments were delayed.

Advance was particularly impacted by the effects of Covid-19 on one of its key markets – the entertainment industry – for which it has a dedicated range of products called Advance Gaffa. The virus has caused the cancellation of many entertainment events across Europe, including festivals, exhibitions and concerts, and the sector is likely to be affected to some degree for a long time to come.

It quickly became apparent that some of Advance's products were deemed critical to the fight against coronavirus, both in the manufacture of PPE and for social distancing. Its products have been supplied to the NHS Nightingale Hospital in Birmingham and to the Royal Mint, who had repurposed its own production to make face visors with Advance double-sided tape. At the height of the lockdown, Advance also received special documentation to enter Spain to deliver tape to its hospitals for use in air-conditioning units. It is registered with the Government's Coronavirus Business Volunteer Programme.

Advance quickly adapted production to respect social distancing guidance and has continued to successfully manufacture throughout the whole of lockdown. Through a Make UK Business Leaders round-table discussion over Zoom, the business leaders of Advance Tapes and Viking Signs met for the first time. Within days they began to collaborate, and went on to launch a new product in a matter of weeks. Combining their knowledge and expertise to create solutions for both the industrial and retail sectors, the partners created a ready-to-use Industrial Social Distancing Kit and a Retail Social Distancing Kit that helps ensure that all reopening businesses and organisations can adhere to social distancing rules. The kit includes general Covid-19 measures signs, floor graphics, sticker sheets and social distancing tape.





"This shows how a more in-depth knowledge of the supply chain and good communication within it is important to maximise opportunities and how it will play a key role in creating future resilience to such crises."

Mike Ayres, CEO and Chairman of Advance Tapes Group Ltd, and Darren Joint, Managing Director of Viking Signs Ltd

Managing complex, integrated supply chains that had come to a halt

Case Study 1



Autocraft Drivetrain Solutions is Europe's largest independent engine remanufacturer supplying into various global OE manufacturers. During the pandemic it has remained fairly operational. With hundreds of global suppliers, it had been contending with the Covid-19 crisis since the turn of this year owing to suppliers being based in China. It has a global supply chain with more than 600 suppliers who, between them, span every continent.

The company has furloughed only 50% of its workforce, which has been forced owing to the closure of some critical suppliers. Uniquely, its order book has remained buoyant across most of its customer base and its business resilient in the face of impacted supply chains. This is for two main reasons: firstly, the use of digital manufacturing; secondly, its ability to remanufacture components.

The long-term plan of the business was to become a highly digitalised operation by 2020. This strategy was decided in late

2014 as outlined in its last five-year plan. Digital manufacturing has led to a high degree of flexibility within production. This has allowed the company to switch between different engine families quickly in reaction to order changes and challenges relating to the availability of parts. Of particular benefit has been the ability to use the digital controls to retrain members of the workforce within weeks, in circumstances where a different engine supply chain may be struggling.

Additionally, as an established remanufacturer, its capability to remanufacture engines and critical components has resulted in an increased order book from some customers. The company's ability to build both new and remanufactured engines has allowed it to secure the orders that other companies could not fulfil; this underlines the benefits of building the circular economy into a company's capability not just for its well-known environmental benefits but in this case for business resilience too.



"The Covid-19 resilience of Autocraft has been clearly determined by the longer-term digital and innovative vision of the organisation that has been embraced by employees who have bought into the company's growth strategy."

Mike Hague-Morgan, Co-owner and Commercial Director, Autocraft Drivetrain Solutions Ltd

Case Study 2



For Schneider Electric, the pandemic brought some challenges to its supply chains. The pandemic has driven the need for large projects to be delivered in very short lead times against a background of shutdowns at a country level across global supply chains. Although levels of demand have generally reduced, it has been noticeable that some business segments – for example, Food Production and Distribution and Healthcare – have had higher levels of demand for specific product families. This has created challenges to supply chains in sustaining availability.

Schneider's policy of holding a wide range of stock locally to support local demand in the UK and Ireland has meant that service for these items has been maintained at high levels. A significant challenge has been around the supply of products that are sourced from outside the UK and are configured against customers' individual orders. In an increasingly digitised economy and reliant on information that is regularly updated, supply chain information is dependent on a number of interactions between upstream suppliers, plant manufacturing capacity, transport and cross-border transactions. All of these have been and continue to be impacted by Covid-19-related impacts – quite often that being availability of key personnel, and particularly of those who can support the translation of available data and communicate the information to the customer.

The challenges that have been raised by the Covid-19 pandemic in servicing critical projects have driven all the actors in the supply chain – both internal and external – to collaborate at a high level, and we have seen many success stories in delivering these challenges. The lessons learnt will, we are sure, shape supply-chain strategy long after the pandemic has been addressed.

Case Study 3

Micro-Mesh Filtration is a leading UK filter manufacturer that has been producing high-quality hydraulic and air filters for a wide range of industrial applications for more than fifty years. By continuously investing in innovative technologies and machinery, the business has expanded its exporting activity to more than 35 countries over the years.

When the lockdown was announced, on the one hand, orders for the railway network remained stable, as Micro-Mesh Filtration is classified as one of its key suppliers, and the business was able to maintain its key workers. On the other hand,

orders for the construction equipment sector drastically decreased as its customers shut down, and the company had to put 65% of its workforce on furlough.

Exports were able to continue initially. However, price hikes on shipping and delays owing to a lack of containers and no ships to transport them (at one point 9 million containers were stuck in China in the initial phase of the pandemic) immediately affected cash flow. The delay in getting the goods despatched is where the impact was, both on storage in the UK and on the fact that letters of credit could not be settled until the goods had been shipped. Also, owing to lockdown in India, the original BoLs (bills of lading) could not be sent to the bank, as no couriers were delivering, which caused considerable issues for both the company and its customers. The total delay from despatch to payment has been around two months, when payments would usually be expected within two or three weeks. Obviously, suppliers still had to be paid, which caused cash-flow issues.

At first, the Government's CIBLS loan was not considered, as export loans were agreed beforehand. As a result, the business had to rely on letters of credit. However, the CJRS enabled the company to consider the outlook for the first four months as relatively positive.



"The CJRS has enabled the retention of jobs as intended and Micro-Mesh has already started to initialise return to work for some employees. However, with many of our customers experiencing major downturns in orders, the company foresees we will need to use the CJRS for its full term. With the very gradual restart of the economy (e.g. construction, oil and gas sectors) and major uncertainty ahead, it will be essential that the scheme does not end abruptly in October."

James Underwood, Managing Director, Micro-Mesh Engineering Ltd

Protecting manufacturing workforces both during pandemic and when planning for reopening

Case Study 1



Autins is an acoustic, thermal and filtration specialist which is part of the automotive supply chain operating across Europe. It is an SME with around 200 employees in the UK and a further 55 employees in Germany and Sweden. Like large swathes of the automotive sector, the company has furloughed a majority of its workforce owing to a decline in demand. However, noting the pressures on the PPE supply chain, Autins has leveraged its material and filtration capabilities to produce face masks to meet both medical and FFP standards, and accreditation testing is well advanced.

As a result of the high demand for its new face masks, Autins began to call some furloughed members of staff back to work. Its leadership team placed safe working measures at the heart of reopening some of its operations to alleviate staff concerns and so that employees would feel safe in the workplace.

"Our employees were actively informed of the very different working environment they were returning to. We used videos and our own Autins app to communicate social distancing measures, temperature testing, PPE stations, a one-way system, staggered shifts and risk assessments undertaken. Communication has been key to a successful return of staff to work by showing them our appreciation of employees in as many ways as possible. This has involved contact with long-term, vulnerable, furloughed colleagues and the families of many staff, through HR, line managers and direct colleagues. Many staff have received direct contact from me to ensure transparent communication.



"Being a business that was largely closed, we were extremely conscious of the mental preparedness and confidence of those who have returned to work. We are delighted and very thankful with the positive response and feedback of our employees, which has led to a high efficiency in our operation." Gareth Kaminski-Cook, CEO, Autins

Case Study 2

Siemens Mobility Limited manufactures intelligent road infrastructure and traffic solutions at its factory in Poole, Dorset. The site supplies customers globally, exporting around 55%. As a result, despite the COVID-19 crisis, the company has continued production on site, responding to urgent maintenance requirements as well as the need to support new installations and ongoing projects around the globe.

Employee engagement was key during this challenging period. In addition to meeting social distancing requirements and using PPE as necessary, a series of project videos (led by the Managing Director and his senior team with support from the service teams) highlighted the importance of maintaining critical national infrastructure and keeping roads moving. This ensured factory colleagues were aware of the importance of the work that they were doing.

Understanding employee feedback was also essential. The factory head walked the site every day, talking to people about how they were feeling. General feedback was that people felt safe at work but were anxious about what was going on outside of the factory. This personal communication was supported by a weekly newsletter to ensure all 'offline' employees felt up to date with developments. Teams were also provided with free lunches to ensure the on-site restaurant could remain closed. By implementing a suite of measures the company kept staff calm and reduced anxiety, listening to feedback and quickly adapting the measures where needed.

Throughout this challenging period and more broadly the Poole site worked hard to support the government response right across the UK. This included focusing on keeping road networks open to facilitate the safe passage of emergency and key workers and providing advice and guidance for Siemens colleagues internally who were working on the UK Government's 'ventilator challenge', as part of the Ventilator Challenge UK consortium that helped to scale up production of existing ventilator designs.

Ensuring access to sufficient finance to stay operational

Case Study 1

focus sb

Based in St Leonards-on-Sea, East Sussex, Focus SB employs 67 full-time-equivalent employees across three sites. The company designs, develops, tests and manufactures premium electrical accessories, combining traditional methods with the latest technology and offering specialist hand-finished solutions for hotel, heritage and residential construction projects. Despite an exceptionally good 2019, an excellent first three months of 2020 and a solid order book, Focus SB was forced into drastic action to preserve the business and protect jobs.

Working with reduced staffing levels throughout the lockdown period, the company furloughed approximately 70% of its employees, retaining a skeleton staff of approximately 16 over two sites. It closed one site and enabled two people to work from home. The company was impacted by a fall in customer orders as a result of construction sites closing down. Focus SB's management negotiated payment holidays on premises rents and some capital finance, deferred VAT payment in April and applied for a loan via the Government's Coronavirus Business Interruption Loan Scheme (CBILS). The company also accessed business support, including advice, guidance and webinars from Make UK and local organisation Locate East Sussex to support it through this challenging time.



"All the above actions were taken because at the time we had no idea how long this lockdown period was going to last, so we took the view that we would be better off securing as much cash within the business as possible so that we could ride out any storm and preserve jobs."

Gary Stevens, Managing Director, Focus SB

Case Study 2

Top Gear Consumables (TGC) has been in business for over 16 years and is now one of the largest suppliers of consumable products across several industries (automotive and home care being key). They supply high quality disposable products which are manufactured in the UK and Asia. These include disposable gloves, masking film, seat covers, aprons, coveralls, shoe protectors. However, bespoke products are their real speciality and they work hard to offer their clients solutions to meet any of the more specific requirements they have. TGC forms part of a group of businesses with the sister companies including DV8 Works, Sterling Gap and 4X4 Tyres.

At the end of March, TGC saw an increase in Personal Protective Equipment (PPE) orders and consumables however this demand did not account for the downturn in their other business areas. Sister companies DV8 Works was forced to close as part of the government's lockdown restrictions and 4X4 Tyres experienced a decrease in sales volume due to reduction in demand for 4 x 4 wheels and tyres. In April, when Santander launched its NHS PPE project, Top Gear Consumables and their ability to supply PPE were top of the list as a potential supplier. Santander's Stewart Ward, who was leading the project, introduced TGC to the government's Covid-19 PPE Response Team.

"We've very recently partnered up with Santander to source Forex and funding solutions in order to help our business stay fluid during uncertain times. In forming this partnership, it became apparent that TGC was a perfect fit to help solve unique purchasing requirements created by Covid-19 and we were introduced to the Covid-19 Response Team. Since then Santander have been instrumental in our successful delivery of Personal Protective Equipment supplies to the NHS. Our collaboration with them has not only yielded the necessary funding to keep our business winning contract after contract but has also allowed us to raise our profile publicly and in the healthcare sector."



"A total of five contracts with the NHS have been won so far, making us one of the largest suppliers of PPE to the NHS during the pandemic – and it's Santander who has helped the NHS recognise the benefits of dealing with a nimble supplier with market experience. Strategically this has helped position TGC for future negotiations on long term supply post Covid-19 and possible UK manufacturing solutions."

Dan Thompson – Director of Top Gear Consumables

Case Study 3



Britlift specialises in the design and manufacture of below-the-hook lifting equipment (lifting beams, lifting frames and spreader beams), steel gantry and davit systems. Its engineering services include custom design, lifting consultancy, test, inspection, installation, certification and structural calculations. During these unprecedented times, Britlift has had to reduce manufacturing staff to 30% and office staff to 75% capacity (through the furlough scheme), but from Monday 1st June manufacturing staffing levels increased to 70% and office staff were back to 100%. The remaining 30% of manufacturing staff returned mid-June.

During the lockdown, the company has utilised its spare capacity to manufacture more of its off-the-shelf modular spreader beams than ever before, while still maintaining its custom design/manufacture services and fulfilling all existing orders on time. The company invested heavily to increase levels of stock to ensure that orders could be fulfilled within a matter of one or two days. As a result, it saw an immediate cash flow return. The company also invested in a heavy spreader beam rental fleet, which is a slight pivot in service from just sale to sale and rental. This decision was made to access a new revenue stream and to bring in more new and diverse clients and business.

The company secured a bounceback loan to help with this investment, to assist in bringing staff back from furlough and to support the company's new office fit-out which had begun in March but was swiftly halted when lockdown began. The loan has also given the company the ability to begin to explore the possibility of employing an apprentice for September's intake, and it is in discussions with Bournemouth and Poole College, with a candidate already being considered.

OPPORTUNITIES IN A NEW ECONOMY

The Covid-19 pandemic has resulted in the UK manufacturing sector facing some of its stiffest challenges in generations. But, as with any geopolitical event, the pandemic also presents some opportunities for building a new economy with a renewed manufacturing sector at its heart. Manufacturers have proved to be natural problem-solvers, injecting fresh ideas to solve some of our biggest challenges. As we look to an impending stimulus package, now is the time for manufacturers to grasp the opportunities post Covid-19 to build a digital, global and green economy.



Rethinking supply chains

The Covid-19 pandemic has challenged supply chains and the global logistics that support the transport of parts and finished goods around the world. The current economic downturn is affecting global demand and supply. Global value chains have been disrupted as factories have shut down to protect workers. The suspension of commercial passenger air transport has substantially impacted the capacity for the airfreight of goods. Economic lockdown measures have caused the temporary shutdown of economies, limiting ocean freight frequencies and extending scheduled delivery times. Manufacturing supply chains are often long, complex and deeply integrated, so any disruption is damaging.

This has sparked a debate around how future resilience can be built into supply chains, refocusing suppliers closer to home and diversifying supplier options to help mitigate the impact of disruptions in the future. However, component parts and other primary resources in supply chains cannot only be sourced from local or regional suppliers. It would be unrealistic and uneconomical to reshore the manufacture of all of these components to the UK.

Instead, rethinking supply chains would mean diversifying supply bases and ensuring that manufacturers have a range of options available to them rather than relying on a single supplier or a single location. This will help improve resilience and support in mitigating the impact of external shocks in manufacturing supply chains. Furthermore, there is an opportunity to combine local suppliers with existing global supply chains to increase stocks of critical components. While UK manufacturers won't be able to produce or manufacture everything here in the UK, there are opportunities to dual-

or multi-source more components from local or regional suppliers in an effort to build resilience in supply chains.



A new approach to logistics management

The method through which goods, products and components move is integral to making supply chains work and keeping UK manufacturing going. The pandemic has highlighted logistical challenges that have to date led to increased congestion at ports and delays to airfreight and sea freight, as well as storage capacity concerns. It is likely over the coming months that we will see greater disruption as the full impacts of Covid-19 become apparent.

For many smaller manufacturers, outsourcing or subcontracting logistics management is common, as this requires expertise and skills that are not necessarily available in house. However, having visibility as to how products or components move from A to B and understanding how this can be improved should be encouraged among manufacturers. To date, manufacturers have used traditional forms of logistics such as lorries or sea freight to move products and components. However, a new economy could support manufacturers in using other physical forms of logistics, such as rail freight, especially within countries where this is currently underused.

With even more scrutiny of where potential disruption or risks may be, manufacturers should be proactive in managing their logistical challenges. It is also an opportunity for manufacturers to place a greater focus on managing their supply chains as well as the logistical aspects of these. This is no longer a corporate social responsibility exercise; it is critical to building business resilience.



Embracing a digital future

As well as using other physical forms of logistics, technology and digital capabilities mean we can begin to explore how electronic logistics can be deployed. For example, drone technology can be used for localised distribution – albeit this will rely on the technology to be able to carry more over larger distances. Cloud-based solutions can help to connect suppliers across countries, companies and sectors to provide better visibility of the movement of products and components.

In addition, the sector must embrace the need for new digital skills that can support both the adoption of technology and the way it is deployed to rethink existing systems and processes. Having these skills will support a digital transformation, which we know is now a strategic priority. This is an opportunity for the Government to support manufacturers, particularly SMEs, to understand the range of options, technologies and services available to them, as well as to provide them with impartial advice to make the digital future a reality.

Finally, during recovery manufacturers should look globally to growth opportunities that give them access to a greater range of markets, more opportunities to succeed, and improve resilience. In addition, embracing technological change and adopting new technologies can aid manufacturers in getting ready for the new international trading environment – though this new trading environment will take time to recover in the wake of the pandemic, and total exports will be impacted. Nonetheless, the key to overcoming some of the challenges will be having the agility to take advantage of new trends and growth opportunities as quickly as possible, and to utilise the emerging digital solutions that can enable manufacturers to tap into opportunities in new markets without any physical presence on the ground.



RECOMMENDATIONS TO BUILD A DIGITAL, GLOBAL AND GREEN ECONOMY

To build an economy that puts a strong domestic industrial base at its heart, we require a bold new vision for our economy as well as for business models – one that backs manufacturing to deliver a digital, green and global economy. The 'new normal' means manufacturers must adapt, evolve and innovate in the years ahead. For Government, it means recognising that sectors such as manufacturing are essential to boosting productivity, powering economic growth and delivering shared opportunities across all regions of the UK.

"Through ingenuity and innovation, UK manufacturers have been at the forefront of the national effort to tackle the Covid-19 outbreak."

Stephen Phipson CBE, CEO, Make UK

The case studies in this report demonstrate that manufacturers, as natural problem-solvers, can provide the solutions needed to get our economy going. Embracing technology, using smart data, upskilling and retraining workforces, and building resilience into supply chains to mitigate and overcome geopolitical challenges will be vital.

To support this transition, manufacturers should:



1. Build resilient, smart supply chains

Our findings show that traditional supply chains, which tend to be long and complex, spanning countries, sectors and companies, can lead to greater exposure to risks when encountering an external shock. For manufacturers, it is important to understand their supply chains as well as constantly reviewing them. Understanding your supply chains means knowing where you sit in the journeys. Reviewing your supply chains means regularly monitoring your position. Visibility will highlight pinch points and potential risks and flag any areas that need improvement – this can include identifying where the adoption of technology and smart data could be beneficial in understanding inventory levels, identifying alternative sources of supply and conducting scenario planning.



2. Plan workplaces and workforces of the future

People are central to UK manufacturing, driving change and powering growth. Manufacturers should accelerate upskilling and retraining their existing workforces to take advantage of technological change, and they also need to consider how they can attract the next generation of creators, makers and innovators. This means looking beyond traditional engineering and manufacturing skillsets to attract those with digital, technological and strong leadership skills. Workplaces should also reflect the new ways of working, implementing genuinely flexible working where possible and encouraging greater employee engagement, to name just a few.



3. Think about how to make it green

There is extremely high awareness of the Government's target of a net zero carbon economy by 2050, and a recognition among manufacturers that the Covid-19 pandemic presents an opportunity to build a green recovery. This means accepting that to save money in the longer term through green initiatives, capital and operational expenditure are required in the short term. This can no doubt be supported through Government fiscal incentives to 'go green', as well as rewarding those who do, as discussed in the Government recommendations below.

These are steps that manufacturers can take now to help to begin to adapt to the new normal. However, to effectively transition to this digital, global and green economy, we need bold action from Government.

Government should back manufacturing by:



1. Recognising UK manufacturing as a critical sector

The pandemic has shown us how vital a strong industrial base is to the overall health of the UK economy, as well as in manufacturing vital products for our critical sectors. From collaborating to meet the national demand for ventilators to keeping all food and drink supply chains moving, the UK's makers have played their part and have never been more important. The Government should recognise this by:

- identifying it as a critical sector for the UK economy and aiming for the UK to be in the top five manufacturing nations in the world;
- working with the sector to put manufacturing at the heart of the regional economic recovery, reviving manufacturing bases across the UK;
- working with the sector to effectively map out a global supply chain resilience programme, allowing manufacturers to make it global, agreeing coordinated action with key economic partner countries to maintain current trade flows and removing administrative restrictions;
- supporting manufacturers to move goods, products and services with ease through smart supply chains and global logistics.



2. Powering a digital future through data

Industrial Digital Technologies (IDTs) have the potential to transform our lives and our economy, making it more productive, resilient and sustainable. This sort of resilience will play a role in the manufacturing recovery post Covid-19. When new medical devices were needed, they were designed remotely and collaboratively. They were tested virtually, and, when disrupted supply chains meant a shortage of critical components coming from overseas, manufacturers turned to additive manufacturing processes to 'print' replacements in the UK. Government should:

- provide additional fiscal incentives to ensure that critical industrial R&D capacity and spend are safeguarded as a means of improving resilience;
- roll out the Made Smarter Review approach to SME digital adoption nationally, with simplified funding streams and a lead partner coordinating efforts within regions.



3. Encouraging and rewarding investment in the green economy

Even with the Covid-19 pandemic not yet over, the longstanding issue of climate change remains high on manufacturers' agendas. The unprecedented state economic and societal interventions have hugely contracted economic activity, but also reduced energy use and carbon emissions in the short term. In some ways, the crisis has proven that we can work in new, more sustainable ways and recover to a new normal where UK manufacturers are at the forefront of producing the innovative goods and services our economy needs to decarbonise. Government should therefore:

 encourage manufacturers to lead the green revolution by making grant schemes simpler, fewer and more accessible for SMEs so that more take the leap to invest in green solutions. Upfront investment costs remain the biggest barrier to implementing energy efficiency measures for manufacturers.



4. Developing a National Skills Taskforce to meet the skills needs for the future

Manufacturers already face a skills shortage, and the Covid-19 pandemic is likely to exacerbate this with the inevitable decline of apprenticeships and training – the lifeblood of manufacturing businesses. This will impede any recovery in the coming months. The vast majority of manufacturers have furloughed staff with signs that many have already planned to or are considering plans to make staff redundant in the next six months, with a number reporting that this could be up to 50% of their workforce. This is why Make UK recommends a National Skills Taskforce, comprising industry and skills experts and led by the Department for Business, Energy and Industrial Strategy alongside the Department for Education.

The Taskforce should:

- ensure that the surplus of skilled workers that will inevitably be leaving UK manufacturing businesses are matched with demand, including opening up opportunities for those skills to be transferred into other sectors where they are needed;
- support workers to identify jobs where their skills have relevance and cross over within both the manufacturing and wider sectors;
- develop a flagship upskilling programme that would see employees develop the digital skills they need for the new economy so the recovery can be future proofed.

¹⁵Make UK, Covid-19, Manufacturing Monitor, May 2020.



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For more information, please contact:

Bhavina Bharkhada

Senior Campaigns and Policy Manager bbharkhada@Makeuk.org

Fhaheen Khan

Economist fkhan@Makeuk.org

James Brougham

Economist jbrougham@Makeuk.org

@MakeUKCampaigns

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For more information, please contact:

Paul Brooks

Head of Manufacturing

07715 088384

paul.brooks@santander.co.uk

