MAKE uk
The Manufacturers' Organisation

START-UP TO SCALE-UP: SUPPORTING SMES TO GROW

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CONTENTS

FOREWORD

UK manufacturing plays a vital role in stimulating innovation, generating good jobs and is an engine for regional economic growth. So, I welcome the Make UK Start Up to Scale Up report that illustrates the opportunities that exist to unleash the potential of smaller manufacturers as we level up every part of the UK, while recognising the challenges they face.

Accounting for 99% of manufacturing firms and providing 58% of manufacturing employment, SMEs are the life blood of UK manufacturing. Despite the significant challenges of the last 18 months and the effects of COVID-19, manufacturers have adapted. Through innovation and diversification, manufacturers-micro to large- have been resilient, demonstrating their importance to society and to the economy. They are essential in our efforts to build back better from the pandemic.

We recognise the challenges outlined in the report that are faced by manufacturers and that these barriers can be particularly acute for SMEs. These include securing and retaining skills, engaging in innovation activity and adopting technology to improve competitiveness. These challenges exist at a time when it is also imperative to transition to cleaner manufacturing processes and product to support our net zero goals.

To address these barriers, the government has set out an ambitious programme of activity to make the UK the best place to start and scale a business. This includes publishing our Innovation Strategy*, the government's vision to make the UK a global hub for innovation by 2035.

This year's Spending Review includes commitments which will cement our status as a science superpower. We are committing to a £5 billion increase in government investment in research and development per year by 2024 to 2025 which will be a welcome boost for UK manufacturing given that it accounts for 64% of all business expenditure on UK R&D. I was particularly pleased to see new funding made available for SME manufacturers to adopt industrial digital technology through Made Smarter, the UK's national industrial digitalisation programme.

More broadly, we have announced an extension of the Annual Investment Allowance to 31 March 2023 at its higher level of £1 million which, together with the super-deduction capital allowance, will encourage firms to invest in productivity-enhancing plant and machinery. We have also continued to invest in relevant skills, quadrupling places on skills bootcamps, expanding T-Levels and increasing funding for apprenticeships.

One of our key aims in bolstering the business ecosystem is to promote a culture of enterprise across the UK. This will ensure that every business, including those in the manufacturing sector, that want to invest and grow have the means and know-how to do so.

Through our Help to Grow schemes, we're helping businesses to boost their productivity and reach their full potential through training and software that is proven to get results. The Help to Grow: Digital scheme offers smaller businesses discounts worth up to £5,000 toward the purchase of approved software products from a range of leading technology suppliers, while our Help to Grow: Management scheme offers senior business leaders management and leadership training delivered by leading business schools across the UK. I encourage businesses across the UK to explore the support on offer to them.

As we look ahead, we are committed to working collaboratively with industry and business bodies such as Make UK, to tackle barriers to scale up and success within UK manufacturing.

Paul Scully MP, Minister for Small Business, Consumers and Labour Markets

* https://www.gov.uk/government/publications/uk-innovation-strategy-leading-the-future-by-creating-it/uk-innovation-strategy-leading-the-future-by-creating-it-accessible-webpage

START-UP TO SCALE-UP: SUPPORTING SMES TO GROW

THE MANUFACTURING BUSINESS POPULATION IS DOMINATED BY MICRO AND SME FIRMS

MORE THAN 140,000 active manufacturing businesses in the UK

Micro and SME manufacturers account for **99%** of all manufacturers

SMEs account for **1/3** of all manufacturing businesses

The number of micro manufacturers increased by **2,570** between 2020 and 2021

These businesses are small but powerful

38% of manufacturers are potentially scale-up or fast-growing firms (based on turnover growth)

23% of SME manufacturers plan to expand their business into a large business within the next 5-10 years

And across every region and devolved nation micro and SME manufacturers are looking to scale up and simultaneously, level up the UK

THE BARRIERS SMES FACE

Just under **1/2** of manufacturers say access to skills is the top barrier to growth

This is followed by: access to overseas markets **27%**, domestic markets **23%**, physical space **18%** and Finance **17%**

Finance

2/3 of SME manufacturers grow by re-investing past profits

31% would prioritise investment in developing products and expanding capacity if they were able to access finance

Space

18% of SME manufacturers say they lack the physical space to upscale

HALF believe the Government should prioritise infrastructure investment in domestic transport and connectivity

Trade

MORE THAN 1/3 indicated costs associated with tariffs, quotas, taxation and logistics dominate barriers to exporting

Productivity and leadership

SMEs prefer to invest more in people than in technology when looking to improve productivity

97% believe the ambition and vision of a leader is critical to upscaling a business

TAKE UP OF SUPPORT REMAINS LOW

Overcoming a lack of awareness

AN AVERAGE OF 60% of manufacturers were unaware of available business support schemes or programmes

The best way to grow

60% believe joining a trade association like Make UK is the most useful step to achieving their growth ambitions

Contact us to find out more:
makeukcentralpolicy@makeuk.org

INTRODUCTION

For more than a decade, the slow growth of the UK's productivity has baffled economists and policymakers alike as the economic gap between the UK and other developed nations has continued to widen. The recent global pandemic has expanded this debate even further, with the increase in flexible working among the business population. Even within the manufacturing sector, some workers have benefited from the changes the crisis enforced on the sector.

Today, we find that some companies can scale up by being 100% remote while others cannot grow at all without access to physical space. Improving our productivity is only part of the answer. But doing so could yield great benefits, as estimated by the Bank of England: if the UK were to move the productivity distribution up into the next quartile, it would result in boosting GDP by around £270 billion.

The Government is expected to release its Enterprise Strategy in the coming months, and we hope that the actions therein will go some way to addressing the challenges faced by SME manufacturers. In 2019, the Business Productivity Review highlighted the fact that 1,075 businesses start every single day in Britain.[1] If the UK can scale up even half of these firms by maximising their potential, it will lead to significant gains in our output.

The UK is a global hub for technology and innovation. Today, the UK's tech start-up and scale-up ecosystem is worth $585 billion – 120% more than it was in 2017.[2] However, many of the scale-ups in the UK take place within the technology and software industries, and although the manufacturing sector does contribute to this growth, its members face more unique barriers than may be faced by their digital counterparts.

As the UK bounces back from one of our greatest global crises, the need to support our SMEs has never been greater. Post crisis, many countries observe an increase in start-ups, as individuals who have either lost employment or identify new opportunities make decisions to start businesses. In fact, there were 2,570 new micro businesses in the manufacturing sector alone operating between 2020 and 2021.[3] Many of these new firms may become SMEs soon, and some could grow to be large firms too, contributing substantially to job creation and economic output.

Many new and existing manufacturers will face challenges when they expand, from access to skills and to finance and even to adequate real estate. Some challenges are expected, and naturally serve to allow the best businesses to thrive. Where interventions are necessary, these are to solve problems or remove barriers that may hinder businesses from attempting to start or expand at all. As a nation, our goal should be to ensure that the journey from start-up to scale-up is as smooth as is feasibly possible, without removing the challenges that make UK businesses so great.

This is Make UK's first research aimed at exclusively Micro and SME manufacturers,[4] with an objective to understand the barriers businesses face when looking to grow and scale up. As such, the research does not discriminate between the types of SME manufacturers, and considers the views of normal, modestly growing and upscaling manufacturers to better inform policymakers on support for business. The definition of scale-ups includes firms that have achieved a year-on-year growth of at least 20% in either turnover or employment or both.[5] For this piece, we maintain this definition for scale-up firms. We define firms that have achieved 10–20% growth as modest-growth manufacturers, in order to consider a wider range of businesses that may not be scaling up but are still growing quickly.

Over time, we expect to dive deeper into the issues highlighted in this survey to expand on the challenges that micro and SME manufacturers have highlighted as barriers to growth, as well as to better understand what types of solutions are working and what types are not.

[1] "Business Productivity Review", HM Government, November 2019 (https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/844506/business-productivity-review.pdf).
[2] "The Future UK Tech Built", Tech Nation Report 2021 (https://technation.io/report2021/)
[3] Make UK analysis of IDBR data (2020-2021).
[4] Micro manufacturers include firms with 0-9 employees; SMEs have between 10 and 249 employees.
[5] Sherry Coutu CBE, "The Scale-Up Report on UK Economic Growth", 2014 (https://www.scaleupinstitute.org.uk/wp-content/uploads/2019/12/scaleup-report_2014.pdf).

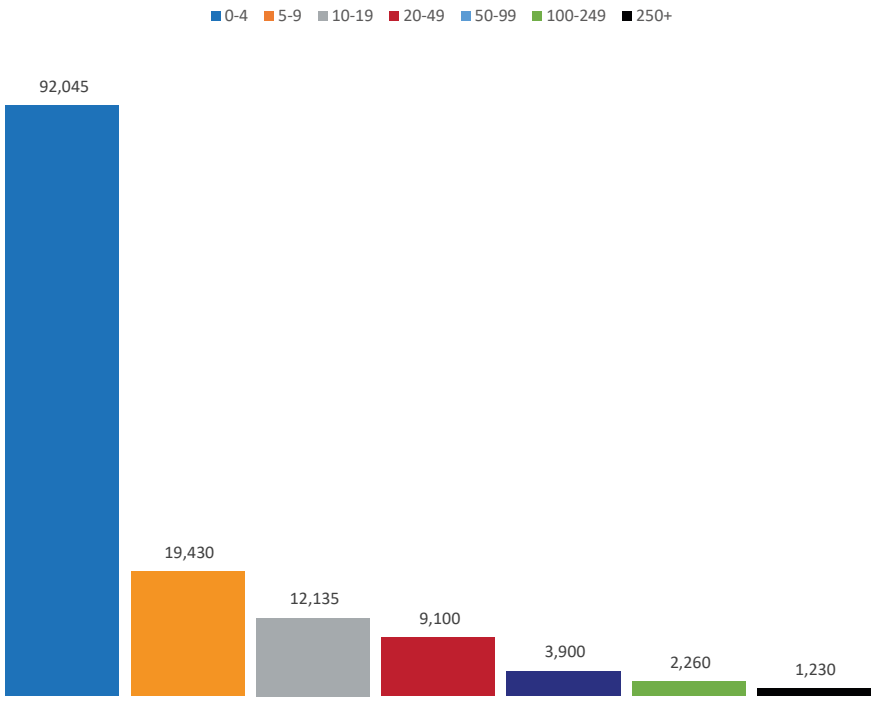
THE SME MANUFACTURING ENVIRONMENT

The manufacturing business population is much like many other industries in the UK, dominated by micro and SME firms across the country. Regionally, it is one of the statistics in manufacturing that is shared equally across the nation. Therefore, every region and devolved nation has an opportunity for micro and SME manufacturers to scale up and simultaneously to level up the UK. According to the ONS, micro (fewer than 10 employees) and SME (10-249 employees) manufacturers make up approximately 99% of all manufacturing enterprises in the UK. This is true for each UK region, including Scotland, Wales and Northern Ireland.

It should be noted, however, that 76% of businesses do not employ any workers apart from the owner.[6] It is the large companies that contribute the most to employment; hence tremendous benefits can be gained from supporting SMEs, which do employ workers, to scale up.

The vast majority of micro, small and medium-sized manufacturers are accounted for by the smaller of those businesses, with SMEs (excluding micro) accounting for one in five of all manufacturing enterprises. This is based on the employment definition of business size, but the results are similar when analysing them from a turnover view.

Chart 1: Number of manufacturing enterprises in the UK, by employment bands



Source: ONS Inter-Departmental Business Register (2021)

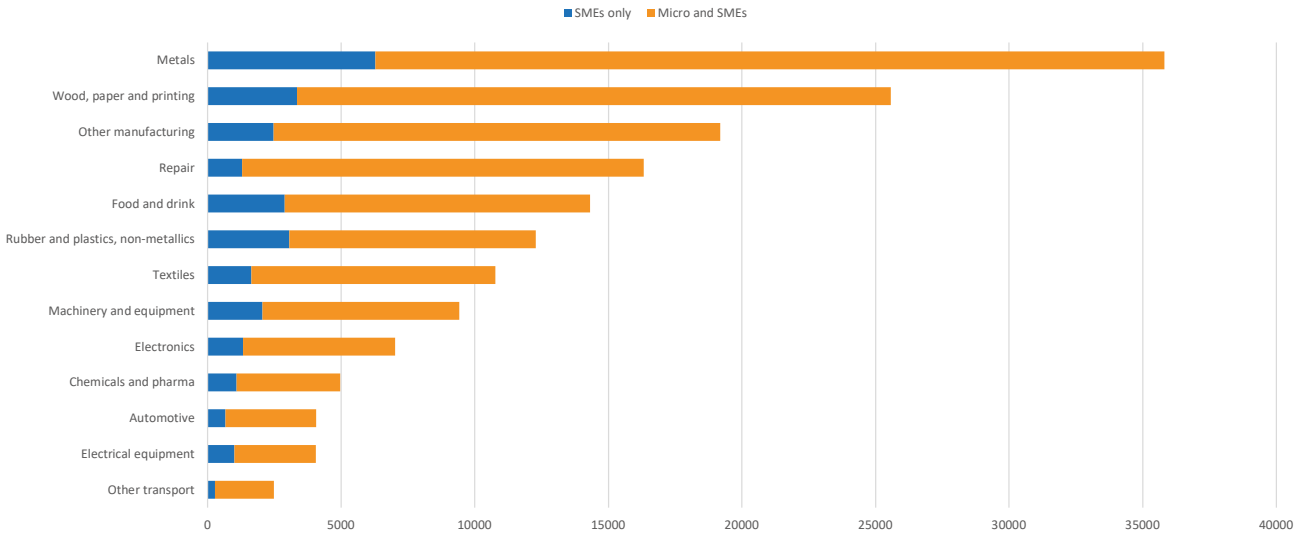
[6] "Business population estimates for the UK and regions: 2019 statistical release", ONS, HM Government, 2019, updated 14 January 2020 (https://www.gov.uk/government/statistics/business-population-estimates-2019/business-population-estimates-for-the-uk-and-regions-2019-statistical-release-html).

THERE ARE MORE THAN 140,000 ACTIVE MANUFACTURING BUSINESSES IN THE UK

MICRO AND SME MANUFACTURERS MAKE UP 99% OF ALL MANUFACTURING BUSINESSES

EXCLUDING MICRO BUSINESSES, SMES MAKE UP ONLY 20% OF THE MANUFACTURING BUSINESS POPULATION

Chart 2: The majority of micro and SME manufacturers are within labour-intensive industries



Source: ONS Inter-Departmental Business Register (2021)

- Of the 140,000 manufacturing businesses across the UK, using the employment banding definition, more than 110,000 are micro manufacturers with fewer than 10 employees.
- Around 27,000 are SMEs with between 10 and 249 employees.

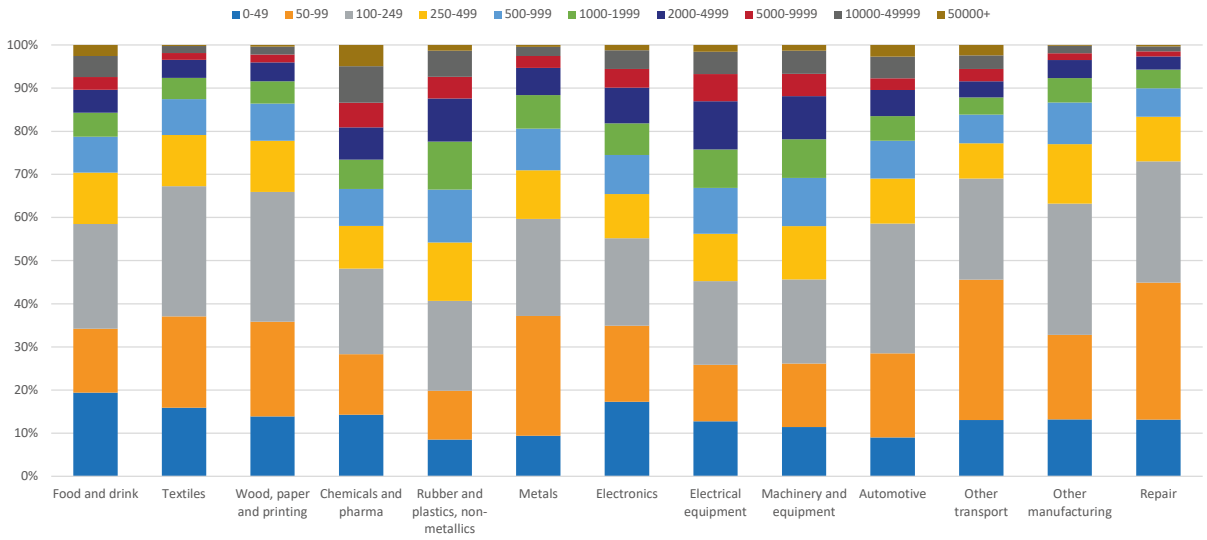
Although the ONS data is less clear from a turnover banding, the figures suggest a similar breakdown of micro and SME manufacturers across the UK.

- There are approximately 113,000 manufacturers who turn over less than £1 million.
- Just under 27,000 are generating more than £1 million.

The latter figure will include both large SMEs and large firms that generate billions in turnover too.

There are a greater number of high-turnover manufacturers in the technology, chemicals and pharmaceutical subsectors

Chart 3: Share of UK manufacturers, by turnover (£000s) and subsectors



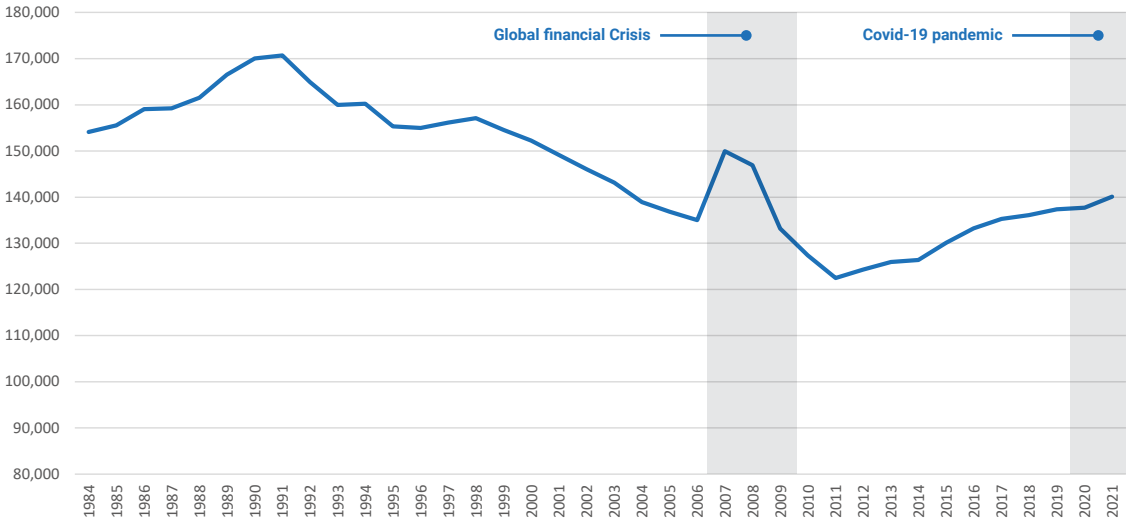
Source: ONS Inter-Departmental Business Register (2021)

SCALE-UP COMPANIES GENERATE MORE THAN £1 TRILLION IN TURNOVER FOR THE UK – SCALE-UP INSTITUTE (2020)

According to the ScaleUp Institute, the manufacturing industry is one of the biggest players contributing scale-up firms to the UK economy. Up to 60% of manufacturing scale-ups were identified based on turnover, while only 22% were classified as scale-ups by employment. Only 18% met the scale-up criteria for both turnover and employment.[7] This may indicate that manufacturing scale-ups generate greater value for the UK, but it does not mean that they do not lead to significant job creation as well. The ScaleUp Institute is currently conducting further research to more accurately highlight the economic gains that come from scale up companies.

[7] "ScaleUp Insights", ScaleUp Institute, 2020. (ScaleUp Index 2020 - ScaleUp Institute)

Chart 4: Manufacturing business births tend to jump during and following a crisis, # of active manufacturing enterprises (1984-2021)



Source: ONS Inter-Departmental Business Register (2021)

Every crisis brings opportunity to start anew

The pandemic had a profound impact on businesses across the UK, with a minority of firms benefitting from the new state of trade.

BETWEEN 2020 AND 2021 THERE WERE 2,390 NEW MANUFACTURING BUSINESSES OPERATING IN THE UK

This is the largest one-year increase since 2015, when more than 3,000 new manufacturing businesses were started. As expected, the pandemic resulted in redundancies and insolvencies across many sectors, leading to people choosing to start a business. Some of these new manufacturers may be potential scale-ups, and it is better to recognise and support them now if we are to build resilience in the industry from the ground up.

There were several interesting changes (based on employment bands) within the data between 2020 and 2021.

- There was a decrease of large manufacturers (250+ employees) by 55 firms during the pandemic. This in some cases reflect the large number of redundancies made, resulting in some large companies now being classified as SME.
- The number of manufacturing SMEs declined by 125, with most of the falls seen within the printing (-50), fabricated metals (-45) and furniture (-30) subsectors.
- Most industries in the SME group saw no change during the pandemic in the number of active manufacturers, while some even grew, including food and drink (+35), chemicals (+20) and electronics (+10).

What's not clear is whether the increase in SMEs within these industries is a result of new businesses or micro manufacturers that have achieved scaled growth and hired enough workers to now be considered SMEs.

The largest increase in the of number of manufacturers came from micro manufacturers (0-9 employees), which saw 2,570 new manufacturers compared to 2020. As before, some of the changes may be down to SME manufacturers downsizing to fewer than 10 employees, meaning that in 2021 they would be a micro firm by the employment band definition, potentially excluding them from many business support tools.

But more likely is an increase in new businesses that are at the start-up stage. For some owners, starting a business is a means to put food on the table. Many others may have ambitions to grow into large manufacturers in the future. It is imperative that we recognise where these businesses are and whether we can support them to grow.

It is evident from the latest official data that there is a large number of manufacturers out there, and each one has the potential to scale up and contribute significant economic value and job creation for the UK economy.

The challenges and benefits of supporting SMEs and scale-up manufacturers

One of the biggest issues to supporting scale-up firms to achieve their potential is the challenge of identifying them in the first place. This results in the creation of policies that may be suitable for the average business but fall short for fast-growing firms in the UK who may require access to more finance, more skills and more opportunities. It is possible, however, for HMRC to directly identify these firms from its own databases on turnover and employment.

Sometimes this can result in governments being wary of overproducing business support, leading to stretched resources also supporting slow-growth firms or those with poor productivity levels – known by some as zombie firms.

However, the fear of supporting low productivity companies should not deter from supporting the high productivity ones, particularly as, over time, the good businesses will likely out-compete those low productivity businesses, leaving the most productive firms active in the long run. This is what should happen, theoretically, as successful scale-ups will naturally cannibalise competition within their own sector and reduce the room for new firms to grow. This could be a negative impact of scale-ups, but essentially is an outcome of normal competition.

According to a study by Deloitte,[8] an increase in scale-up growth leads to some creative destruction as the growth of some industries means the decline of others. However, as the net benefit is generally positive, it is a worthy cause to support fast-growing businesses as much as possible, particularly in the manufacturing sector, which is a significant source of technology and innovation in the UK.

Currently, the definition of a scale-up is a business with at least 10 employees at the start of an observation period achieving a growth of at least 20% year on year in turnover or employment over a three-year period.[9] This places a strict criterion on what should be classified as a "winning" business when firms can also scale more slowly. For example, large industrial manufacturers that invest heavily in plant and machinery may very well observe modest growth over time, or even losses, before they realise any level of scale-up growth. However, because of this, they can easily be excluded from available business support that may be targeting a set of firms that meet a specific criterion. A lack of available support for manufacturers at such stages could prevent them from achieving scale-up growth at all in the future. In addition, the definition excludes micro businesses, but these firms can be supported in other ways to reach the size of an SME first, before receiving scale-up support.

[8] "The Scale-up Challenge", Deloitte, November 2014 (https://www2.deloitte.com/content/dam/Deloitte/uk/Documents/strategy/deloitte-uk-scale-up-challenge.pdf).
[9] Coutu, "The Scale-Up Report on UK Economic Growth".

It is difficult to say what exactly might happen in the absence of scale-up support, as it would require experiments to understand the counterfactual situation where no support ever existed. The challenge involved in identifying fast-growing, or scale-up, companies in the UK means that often when support is available, we rely on businesses to "self-select" into available support. This means we assume businesses that are high performing, and probable scale-ups, are likely to be actively seeking support for their situation. This leaves the onus of accessing support on the businesses themselves, and less on the providers. Though this is sensible from the Government's perspective, as it reduces requirements on labour and limits access to firms that may not be fast growing, it also risks a great number of firms that may be qualified to access support either not getting it or not even realising it exists.

The risk of supporting low-productivity firms is outweighed by the benefits of supporting high-productivity firms, whether they are a scale-up by definition or not. Success can create a virtuous and prosperous cycle, as the role model effect of successful businesses encourages and incentivises other businesses to follow suit. In addition, the indirect impact of supporting fast-growing manufacturers can positively inspire increased production across the supply chain. For example, a hypothetical manufacturer looking to double its output may need to double its input, leading to opportunities for suppliers to scale up too, and so on. When supported appropriately, the complex nature of manufacturing supply chains means the wider industry could scale up by supporting the right firms to grow.

Based on this, it could be argued that an active approach to identifying and supporting fast-growing firms, even if they do not actively seek help, could lead to wider benefits in the future.

Make UK's survey of SMEs

For this report, the research uses the standard classification of SMEs of 10-249 employees, and micro businesses as fewer than 10 employees. The survey does not include responses from large manufacturers, that is, those with more than 249 employees.

In addition, the report's findings will highlight the challenges faced by all SME and micro manufacturers and will refer to the views of both scale-up manufacturers (20% year-on-year growth in employment or turnover over a three-year period) and modest growth manufacturers (10-15% growth).

As a result, 38% of the survey sample includes manufacturers that meet the criteria for scale-up or modest growth based on turnover and 22% of manufacturers meet the same criteria for employment. Given the small sample size for these firms, it is recommended that the results for scale-up and modest-growth manufacturers are treated with greater caution owing to the higher level of potential sampling bias within the figures.

For the rest of this paper, micro and SME manufacturers will be referred to as just SME manufacturers for ease.

START-UP TO SCALE-UP: AMBITION

FOREWORD

The first step for any entrepreneur starting a business today, to be successful, is to have ambition and a vision for the future of that business. But the definition of ambition can change from person to person, as it's not the same wherever you look. For some, the ambition that pushes an individual to start a business is a means to putting food on the table. It is an alternative option to having a job and may provide a better quality of life.

For others, the ambition is to grow the business into something of value to more than one or a few individuals. These types of businesses create value in communities by developing products or services that are of use to others, by providing jobs and collectively improving the prosperity of regions, resulting in other businesses prospering as well. This ultimately increases the economic value and output of nations and proliferates into greater benefits for society and an increase in opportunities for more entrepreneurs with ambition.

Manufacturing businesses would not exist if it were not for such individuals who strive for growth. Manufacturing is capital intensive and requires skills that are often considered to be at the peak of knowledge and expertise. It's a high-risk, high-reward environment that puts innovation at the forefront of growth and is becoming increasingly digitalised and greener.

However, the industry is dominated by SMEs and presents significant opportunities for manufacturers to scale up and increase their contribution to output and jobs. Ambition in our report is defined as whether SMEs had plans to grow their business into a large business (based on employment or turnover or both) in the next 5-10 years. The latest research shows that 17% of SME manufacturers plan to grow their turnover (more than £50 million) into the size of a large business within that time frame. Only 4% plan to do the same with their workforce, while 22% have ambitions for scaling up both elements. This means almost half of the manufacturing industry has a craving for scaled growth and reaching the size of a large business.

But many of these firms will face challenges along the way. As expected, our figures indicate that manufacturers are well aware of the blockades that exist on their journey to upscaling. Just under half identified access to skills as the biggest barrier to achieving their ambitions for growth. This has been an issue for decades now, and with today's labour shortages the problems appear to be worsening. Following changes to the trading environment, SME manufacturers have highlighted access to overseas markets as the second biggest barrier, followed by access to the domestic market, access to physical space and real estate, and finally access to finance, to complete the five biggest issues facing small and medium-sized businesses today.

Some of these issues affect non-manufacturing industries at a broad level too, but they can differ significantly at the granular level when looking at manufacturing. The types of skills, physical space and finance needed to support manufacturers make the sector unique in the UK. And if we are to ensure that entrepreneurs are not disincentivised from acting on their ambitions for business, then it is imperative that the social and economic environment built by the Government and industry is as supportive of that journey as possible.

Stephen Phipson, CEO, Make UK

A CRAVING FOR GROWTH: MANUFACTURERS' GROWTH AMBITIONS

Without ambition and a desire for growth, it is very difficult to grow a business. For an SME, scaling up to a large business is not always the end game. Sometimes running a business is about survival; at other times it is about generating enough growth to enable owners to live the lifestyle they desire. Ambition is the source of all the different paths businesses take and includes those that do strive to grow their business exponentially. What business owners with differing ambitions have in common are the barriers they face when they do attempt to grow, whether that be to scale up or to grow modestly. This chapter looks at the level of ambition in the industry and focusses on the top five barriers faced by businesses when they grow.

There are significant benefits to be gained from scaling up SME manufacturers in terms of economic value and job creation. However, no matter how much support there is from the Government and the private sector to encourage or help businesses to grow to their potential, the impact of the effort would be mute if businesses themselves did not have the appetite and ambition for scaling up.

Fortunately, many SME manufacturers do not fall into the category of low appetite for growth. Just under half (43%) of SME manufacturers aspire to grow their business (in terms of turnover or employment or both) into a large business within the next 5-10 years, and a further 33% aspire to grow but not into a large business.

SME ambitions to grow into a large business in the next 5-10 years

17% plan to expand their turnover

4% plan to expand their workforce

22% plan to expand both turnover and workforce

33% want to expand, but not into a large business

11% have no plans to expand in this timeframe

12% feel their business is already at the right size

ONLY 1% plans to de-scale their business

The small proportion of manufacturers that indicated a lack of interest in achieving growth covered several reasons for doing so, from owners nearing retirement to views that suggest bigger is not always better. For most manufacturers within that group, it is largely a belief that there is not sufficient demand or market share to be gained from upscaling.

12% of SME manufacturers sit comfortably in the "Goldilocks" zone

For some manufacturers, there is a size that could be considered the right size: when that business is not so small it cannot compete and generate a profit, and not so large that it becomes inefficient and overproduces for the market. These businesses have either reached the optimal size based on the demand available or are just big enough to meet the needs of the owners. In other words, the business is neither too hot nor too cold, but at just the right temperature.

The challenge with SMEs that sit within the "Goldilocks" zone is that some may still have the potential to scale up but the objectives of the current owners may not align with significant growth aspirations. It is possible that a change in regime or a transfer of ownership may lead to significant growth if the new owners have such ambitions. But changes of this type usually occur naturally, particularly with family-owned businesses and owners passing on the business to a relative.

The main impact of this is that when support for growth and upscaling is available, these types of companies are less likely to come forward to access it. Targeted scale-up support may not be appropriate for these firms, but fortunately this is the situation for only 12% of SME manufacturers.

Growing a business to sell it in the long haul

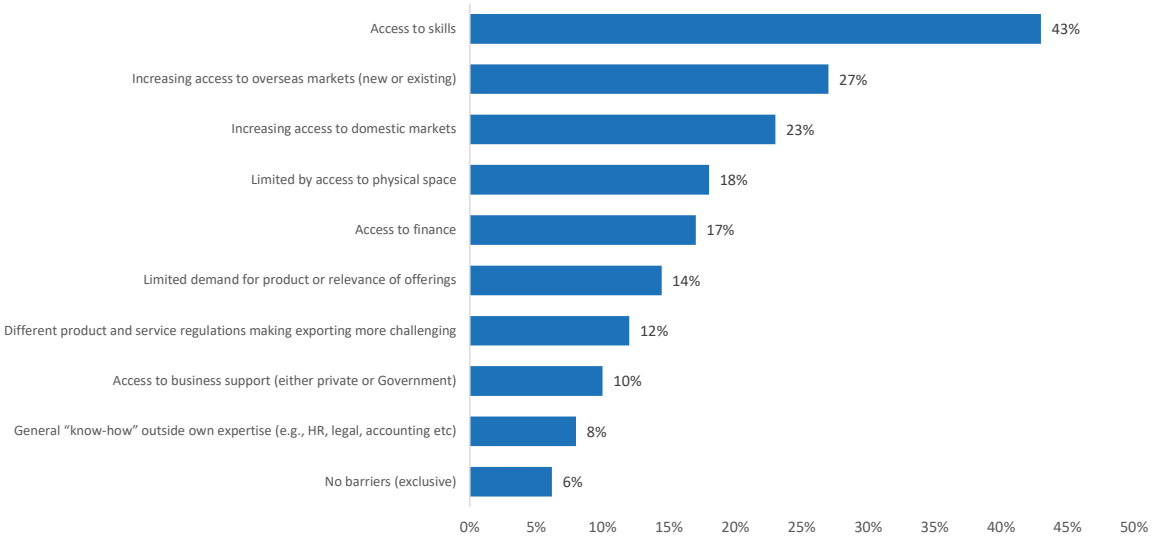
In some cases, business owners strive to grow a company to sell it in the future, after a specific time frame, once it has reached a certain value or when potential investors believe that the business is worth something great. Sometimes this is a positive step, as one ambitious owner transfers their company to another ambitious owner, who may indeed have the skills needed to scale up. However, what has been growing in frequency is the greater number of foreign investors buying up UK businesses, with little intention to grow them or to keep them in the UK. It should be acknowledged that this is a growing problem and should be addressed with further research into its impact, and policymakers should explore incentives to encourage these companies to remain and grow in the UK.

THE AGE-OLD QUESTION: BARRIERS TO GROWTH

There already exists a plethora of research and anecdotes that have identified the biggest barriers to growth for businesses, whether that be in workforce or turnover or both, in all industries, and past surveys have often shown similar results.

Make UK's latest survey of SME manufacturers across the UK indicated that access to skills is the number one barrier to scaling a business. Challenges around exporting, access to domestic markets, lack of physical space and finance follow that list down to complete the top five biggest barriers.

Chart 5: Top barriers to a manufacturer's growth ambition



Source: Make UK Start-up to Scale-up survey 2021

ALMOST HALF OF SME MANUFACTURERS SAY ACCESS TO SKILLS IS THE BIGGEST BARRIER TO GROWTH

Access to technical and leadership skills are the main barriers to growth.

From a skills perspective, it is unsurprising that it tops manufacturers' concerns, as highly skilled labour has been a bane in the industry for decades now. Recent challenges because of the pandemic and the UK's new relationship with the EU have aggravated these issues even faster than before. This barrier to growth for manufacturing is unique, when compared to other sectors. Workers in manufacturing are in most cases within the upper quartile of skill levels, with technicians, engineers and more recently software and programming skills being the most difficult to fill. The latter skill set is in line with a positive trend towards digitalisation within manufacturing, resulting in the industry competing with other industries, such as software or Big Tech firms, to capture individuals with digital skills.

In addition, the industry faces a shortfall of leadership skills that are critical to initiating transformational change in the sector. Manufacturers recognise that the education sector has a role to play in filling the need for technical skills, but access to top management and leadership skills have been more challenging to find, particularly as education must be combined with experience to achieve success. Also, SME manufacturers are often family owned and rely on members or individuals who have worked in the business for a long time to take over management duties.

© This is Engineering

SMEs recognise the value of exporting to expand

One in four manufacturers indicated access to overseas markets as a barrier to its growth ambitions.

The timing of this result is interesting, given the seismic shift in the trading environment that took place at the start of 2021 as UK manufacturers faced new frictions when exporting and importing goods to and from the EU. However, this barrier to growth is not exclusive to our UK–EU challenges as it can refer to any country UK manufacturers wish to trade with. SME manufacturers in the UK face an uphill battle to scale up if they underestimate the value of going "global", which presents tremendous opportunity for growth. Given that this issue stands second to access to skills indicates that manufacturers recognise this value, and desire to grow through exporting. It is imperative that we ensure there is ample support available to ease challenges to the best degree that is achievable.

But there are challenges when expanding domestically too

Looking inward, just under one in four manufacturers finds it challenging to grow domestically.

This raises important questions on what the likely limitations are to cause such an issue. One explanation could be related to manufacturers that produce a specialist product for a niche market, and therefore have already reached an acceptable size to saturate the market. Or it may indicate those manufacturers that struggle to compete with an incumbent larger firm that already has a significant market share. The challenges firms face when looking to expand domestically may be a combination of the other challenges that affect them directly, or indirectly affect their customers. It is difficult to concur what would be the best approach to solve these issues; however, Make UK's recent quarterly Manufacturing Outlook Survey[10] has been indicating that the domestic market is expanding rapidly.

Manufacturers struggle to grow without access to space

Almost one in five SME manufacturers says it is limited by a lack of physical space to grow.

This challenge is particularly unique to manufacturers, as well as to other physical businesses such as retail and hospitality, as it places a strict limitation on the maximum size a company could achieve based on available land. However, for manufacturers specifically, it is not just the quantity of space available that prevents growth, but also the quality of land for prospective new plants and machinery. Manufacturing is highly energy intensive and requires access to adequate infrastructure, such as high voltage and amp ports to run energy-intensive machines, and access to gas pipes from multiple areas of a new site. In many cases, a decision to expand through the acquisition of a new site will require additional investment to get the physical space operationally ready – something businesses that access traditional office space do not need to deal with. As such, SMEs can be deterred from even attempting a step change as the finance required would be astronomical. There is also a question of the surrounding infrastructure, such as roads and access for Heavy Goods Vehicles (HGVs), which is explored further in this report.

Access to finance is access to opportunity

Only 17% of SME manufacturers indicated access to finance was a barrier to growth.

This is quite surprisingly low on the list of priorities given that SMEs, and particularly start-up manufacturers, have some of the greatest potential gains to be made from increasing use of finance in growth and productivity. Despite this, finance is one of the top five issues cited by SME manufacturers, and it is possible that many businesses are not aware of the opportunities that could exist if they were to seek out finance more aggressively. Research by the Enterprise Research Centre (ERC), which conducted a survey of SMEs across the UK in 2016, found that only one in five firms actively sought finance – in most cases this was for working capital and equipment purposes.[11] The number of SMEs that seek finance specifically for growth appears to be lower.

It is interesting that our research shows little has changed since then, with access to finance specifically for growth purposes remaining low today. It may be down to red tape or a lack of information that results in the finance barrier not being a higher priority. If SME manufacturers can see the benefits of accessing finance, it may solve the issues on the demand side for growth finance allowing the supply side to focus its efforts on providing attractive options.

[10] "Manufacturing Outlook 2021 Q3", Make UK, 2021
[11] "Exploring the success and barriers to SME access to finance and its potential role in achieving growth: ERC Research Paper 53", Enterprise Research Centre, November 2016 (https://www.enterpriseresearch.ac.uk/wp-content/uploads/2016/12/ERC-ResPap53-OwenBotelhoAnwar-03.01.pdf).

START-UPS MAY FACE DIFFERENT BARRIERS FROM THOSE FACED BY SMES

Tosho & Co is a two-year-old design and manufacturing start-up in the UK specialising in the design of innovative products, such as plugs that are more suitable for disabled users. The business was financed by personal capital from the owner and did not seek additional finance through loans or grants to meet start-up costs.

Tosho & Co specialises in the design and innovation of new products. It achieves this through the adoption of technologies such as 3D printing which enables it to reduce R&D costs by producing prototypes of innovative ideas – highlighting the benefit adoption of technologies by start-ups and SMEs can have on reducing barriers to growth. According to Tosho & Co, once you have an idea and a prototype, it is more challenging to find a suitable supplier / manufacturer in the UK that is willing to produce that product than in a country like China, which boasts a speedy turnaround time and a plethora of manufacturers willing to take risks on new ideas. This issue results in a growing trend among new manufacturing start-ups who are increasingly focussed on design and innovation in the UK but prefer to outsource physical production overseas. This is not necessarily a negative outcome, depending on the perspective, but it does result in the UK losing capacity to produce its own goods over time.

Nevertheless, Tosho & Co's ethos was against the idea of outsourcing production, and despite the high-cost nature of seeking a suitable supplier, the company sourced production locally. However, the process of finding a suitable supplier was incredibly time consuming, as there was little information available about which manufacturers in the UK had the tools and equipment available to produce its goods. Even when a supplier was successfully found, there was a lot of work involved in convincing the manufacturer to take a risk on a new product. The problems this created led to Tosho & Co taking on the burden of packaging its goods without access to a facility.

These issues highlight the significant challenges start-ups face when expanding for the first time, as a lack of knowledge and the substantial search costs associated with finding suppliers and customers create barriers to growth.

Start-up organisations such as Tosho still face other barriers to growth too, which bear similarities to more established SMEs as well as many differences. For example, Tosho & Co faced initial barriers to fill the skills gap around understanding finance and legal. According to the firm, there is plenty of support and mentorship available to assist the starting of a business, but not much to offer advice on these other critical areas. In addition, the business views networking as critical to its success, but indicates that the significant search costs for new customers and suppliers is a barrier to domestic growth as well as to exporting. However, online exchange platforms, such as Amazon, have reduced costs on achieving B2C growth – highlighting the benefits of accessing digital technologies to expand.

Scale-ups and modest-growth manufacturers face similar barriers

Looking at the survey results for only manufacturers that have achieved at least 10% growth or more than 20% growth in employment year on year for the last three years (2016-2019), the results were as follows:

- More than half (54%) identified skills as the top barrier to their growth ambitions.
- One-third (32%) cited physical space.
- One-third (32%) cited overseas markets.
- Access to finance, business support and domestic demand were cited by almost a quarter (23%) of firms.

It is evident that fast-growing manufacturers share many similarities to slow-growing manufacturers but place access to physical space and business support higher on the agenda.

From the perspective of turnover, scale-up and modest-growth manufacturers reported an identical order of priorities to the average, although they place greater importance on exports than the sample average.

However, as noted previously, the sample for scale-up and modest-growth manufacturers is small,[12] and only serves to indicate whether the order of preference changes in comparison to the economy-wide average for manufacturing SMEs. The figures offer a useful indicator of how priority challenges change as manufacturers grow faster.

[12] Only 21% of the sample (based on the employment definition) and 38% of the sample (based on the turnover definition).

START-UP TO SCALE-UP: FINANCE

FOREWORD

The UK is currently the ninth largest manufacturing nation in the world, creating employment, wealth and community cohesion. Businesses in the sector are strategically important to the banking and finance industry, with many of our members providing dedicated teams of sector specialists.

Lenders are providing funding to support growth, innovation, international trading opportunities and the transition to net zero. Addressing climate change will only be effective if communities in each devolved nation and region are supported in the transition and have a fair share of the benefits. This is why we have worked with the Grantham Institute at the London School of Economics as part of the Financing a Just Transition Alliance.

There is a wide range of financing products available in the market, including loans and overdrafts, hire purchase, leasing, invoice finance and export finance. There are also many suppliers, ranging from well-known high-street brands to specialist providers and non-banks.

According to the Bank of England, the finance industry has lent around £43 billion in loans and overdrafts, of which some £12 billion is provided to SMEs. This is an increase of 26% since the pandemic and includes £6.4 billion borrowed by nearly 103,000 manufacturers under the Covid loan schemes. While manufacturers represent 5% of the UK business population, this figure constitutes 9% of drawings by value.

Alongside loan and overdraft finance, businesses are making extensive use of other financing options, such as asset and invoice finance. Total asset finance for new business (primarily leasing and hire purchase) in the nine months to September 2021 was 20% higher than in the same period in 2020. Invoice finance is also playing a key role in supporting business growth. Total advances as at 30th June were £14.8 billion, with additional headroom of £12.7 billion, which is readily available cash. Total advances have increased by 15% in the last 12 months. Around 25% of all invoice finance facilities are provided to manufacturers who are taking advantage of the flexibility and scalability of this product. An estimated £3.7 billion is advanced to manufacturers at any point in time, which equates to an estimated average advance per client of £425,000.

The industry has worked closely with UK Export Finance to launch the General Export Facility, a new scheme designed to provide to exporting SMEs access to a wide range of trade finance products, including trade loans, bonds and letter of credit lines with maximum repayment terms of up to five years.

Approval rates for finance are high; the latest data reported by businesses themselves stands at 87% according to the independent SME Finance Monitor survey of SMEs. However, there are firms that are very liquid, and there has been a significant rise in deposits and credit balances across the sector as companies have built reserves in the face of uncertainty.

Debt finance is not always the most appropriate form of funding, despite its popularity. For early-stage businesses and scale-ups, equity finance plays a crucial role. From business angels at the smaller and newer end of the investment ladder through venture capital and private equity to equity markets, there are options for businesses of all sizes, although availability can be thinner outside London and the South East. Finance providers are well placed for introductions and can operate alongside equity investors.

The Business Growth Fund (BGF), which is entirely funded by major banks and has offices across the UK, has provided £2 billion to SMEs, including vital patient capital to many successful manufacturers.

Although there is a deep pool of finance available in the market, there is more that can be done to ensure that businesses are aware of their options, that the sources of finance are well coordinated and that support is available to ensure businesses are investment ready. Innovate UK and the Catapults are crucial bridges, and by working together, finance, business support, public funding and investment can help develop the UK's competitive position in international markets and help a thriving industry contribute across the UK.

Mike Conroy, Director, Commercial Finance, UK Finance

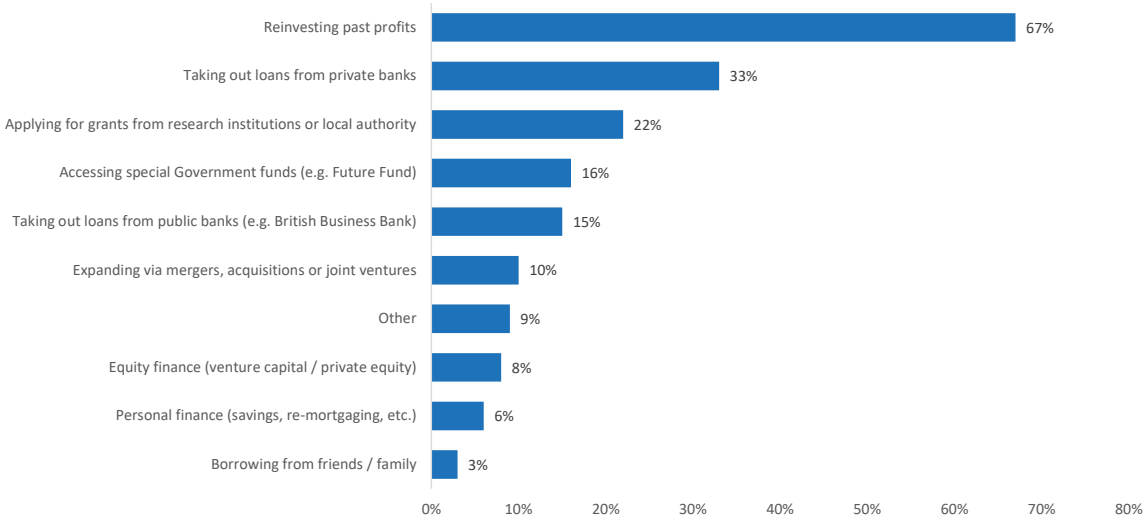
FINANCIAL PREFERENCES

A key ingredient in the journey from start-up to scale-up for many manufacturers is finance, which bridges the gap between ambition and action. Without access to finance, as well as expertise on how best to make use of it, many manufacturers may simply fail to grow, even if they are not challenged by other barriers to growth, such as skills or exporting. This chapter explores SME manufacturers' preferred methods of financing, how the pandemic may have impacted the risk profile of small businesses, the reasons SMEs fail to access finance and what those firms would do if they had access to finance.

SME manufacturers in the UK overwhelmingly prefer to finance expansion using past profits

Two-thirds of SME manufacturers said they expand by reinvesting past profits. This is common for small businesses who generally lack the collateral necessary to guarantee private loans, as well as the know-how to access finance from alternative sources.

Chart 6: Manufacturers' preferred sources of finance



Source: Make UK Start-up to Scale-up survey 2021

REINVESTING PAST PROFITS IS A SOUND STRATEGY FOR ANY BUSINESS TO EXPAND, AS IT ALLOWS IT TO COMPOUND ITS GROWTH OVER TIME. IF EXECUTED SUCCESSFULLY, IT'S POSSIBLE TO ACHIEVE SCALED GROWTH.

A study conducted by Allica Bank covering more than 1,000 SME companies across the UK found that 25% of firms believe reinvestment is critical to a business's success.[13]

According to Allica, the most successful companies reinvested on average 9% of their profits into the business, compared to less-successful businesses that only reinvested 5%. To best support SMEs, it may be beneficial to utilise their preferred method by giving advice on how to reinvest into their business before offering additional lines of credit, which should be used to fill gaps in finance.

[13] "Small businesses should re-invest 9% of profits to succeed, finds new study", Global Banking and Finance Review, undated (https://www.globalbankingandfinance.com/small-businesses-should-re-invest-9-of-profits-to-succeed-finds-new-study/).

However, one of the issues of this strategy for SMEs is that the availability of this type of finance may be a question of luck or of being in the right place at the right time. Smaller firms do not generally have the luxury of planning their future profits, particularly in uncertain economic environments. Therefore, this would mean SME manufacturers may rely on profit windfalls, for example as the medical devices industry did during the Covid-19 pandemic, and reinvest those profits on an ad hoc basis depending on whether the situation allows it. Conversely, larger manufacturers have the capacity to forecast cash flow more accurately, enabling them to plan better how and when to reinvest past profits. To get over this hurdle, it is important that ambitious SMEs with intentions to grow significantly are willing to take that risk to expand instead of waiting for the right opportunity.

WHEN CONSIDERING THE ALTERNATIVE CHOICES, ONLY 33% OF SME MANUFACTURERS INDICATED TAKING OUT LOANS FROM PRIVATE BANKS AS PREFERABLE.

22% INDICATED A PREFERENCE TO ACCESS GRANTS FROM INSTITUTIONS LIKE INNOVATE UK.

Few consider multiple sources of finance together

Examining the top three options cited together, the survey results indicate that only 24% of manufacturers who preferred to reinvest past profits also chose to take out private loans.

This suggests that the more likely a manufacturer is to prefer reinvesting past profits or taking out a private loan, the less likely it is to choose the alternative method, despite the potential in combining two sources to fund greater ventures.

Similarly, manufacturers who prefer reinvestment of past profits are even less likely to consider accessing grants too (only 7% of manufacturers opted for both methods). Whether this is owing to a lack of information on available grants, to bureaucratic processes or to business investments being less innovative, disqualifying them from grants entirely, is uncertain. Finally, only 4% of SME manufacturers chose both private loans and grants as preferred sources of finance (but not past profits). Based on this, it seems SME manufacturers prefer to combine profits with loans more than profits with grants.

It is also worth acknowledging the other options highlighted, which indicate that manufacturers do consider sources such as bespoke Government funds, the British Business Bank or equity finance.

The pandemic may have changed the algorithms to assess financial risk

The Covid-19 pandemic led to many businesses across the UK feeling the brunt of reduced demand, supply-chain disruptions, and limited access to labour, which affected SME manufacturers generally more negatively than their larger counterparts, as evidenced by Make UK's Manufacturing Outlook survey[14] (Chart 7).

According to recent data, smaller manufacturers with less than £10 million in turnover saw output levels decline at a faster rate than manufacturers whose turnover was more than £25 million during the pandemic. Mid-sized firms (£10m-£24m) reported a more mixed performance in the same period, where they didn't fare as badly during the peak of the pandemic but have experienced a more subdued bounce back in activity since the start of the year, where gains appear to be accruing more quickly to manufacturers with turnover of more than £25 million.

[14] "Manufacturing outlook", Make UK, 2019-2021

Chart 7: From record-breaking lows to record-breaking highs, % balance of change in output

Source: Manufacturing Outlook Survey (2019Q4-2021Q3)

The data illustrates how smaller companies tend to fare worse during a crisis, as well as face a more challenging road to recovery post-crisis – highlighting the increased level of risk associated with SME manufacturers. How financial risk is assessed has changed significantly over the last few decades, with each crisis bringing forward new considerations for creditors when assessing whether a business should be granted access to finance, and at what level of severity conditions should be attached to that finance.

Businesses that have accessed Government support, even if just as a precautionary measure, have reported being offered more stringent conditions or higher fees when looking to access new finance, whether that is to expand or to stay afloat as the economic recovery kicks in. It is likely that underwriters within financial institutions have adapted the algorithms used to assess financial risk, with the data indicating that SMEs are more risky than larger firms.

It seems inappropriate to disadvantage firms that faced the greatest difficulties during a crisis by increasing the barriers they face to access opportunities. If history has taught us anything, businesses require access to capital during the recovery stage of a crisis rather than before it; whether that is for growth finance or asset finance to maintain the value of depreciating capital is irrelevant. The Government has already partially addressed these issues with the Recovery Loan Scheme (RLS) to businesses reopening after the pandemic, and even extended it by six months following the Autumn Budget 2021. The RLS is specifically for accessing finance for short-term cash flow needs by providing small loans, overdrafts, or invoice or asset finance. Although this does not address the financial needs for growing a business, manufacturers that are able to manage short-term risks are better able to plan for long-term growth. The UK is still going through the motions of bouncing back, with the manufacturing sector facing some of the biggest challenges (supply chains, freight, labour, energy, etc.).

The next few years will be crucial for manufacturers and scale-ups. For the UK manufacturing industry to achieve true growth at scale, it is imperative that we reduce the barriers to expansion during the early stages of the pandemic bounce-back, as this is where the greatest opportunities lie. One way to do this is for lenders to incorporate a forward-looking outlook on business potential, rather than solely consider historical performance when assessing risk.

HYMID MULTI-SHOT LTD DEMONSTRATES THE IMPORTANCE OF INVESTING TO STAY AFLOAT

Despite the increasing level of digitalisation taking place across all industries, 21st-century manufacturing remains very asset- and capital-intensive when compared to other sectors. This places significant investment demands on manufacturing SMEs which offer a combination of manufacturing and service-based products.

Most SMEs are privately funded in the UK, with many owners / managers likely to have invested their own money into their businesses on start-up, and to have signed up to Personal Guarantees (PGs) to fund growth. Given that they must continually invest to stand still, accelerated growth usually requires further capital expenditure to provide the means to upscale that growth. In the absence of other sources, owners / managers will usually approach banks and mainstream lenders to help asset-finance their equipment, a form of secured loan that is less risky than an unsecured loan.

Hymid Multi-Shot Ltd is a successful manufacturing SME providing innovative component design, precision tooling and technical plastic injection moulding services to blue-chip hi-tech companies across a range of sectors. Based in the South-West of England, it has a track record of steady, profitable growth with several successful asset-finance agreements under its belt, the usual requirement being a 10% deposit. It is often overlooked that a significant portion of manufacturers' investment pertains to the maintenance and upkeep of existing machinery, which depreciates over time and diminishes its output capacity through wear and tear. Therefore, many manufactures must continuously invest to maintain a minimum level of output and quality before they are able to consider new investments.

During the Covid-19 pandemic, Hymid successfully applied for a £200,000 CBILS loan with no requirement for PGs. The company has continued to grow and recently secured a new tooling project that required investment in a larger injection moulding machine to fulfil moulding orders from the new tooling. When Hymid approached its preferred mainstream asset-finance house, which had previously supported every asset-finance application (only requiring a 10% deposit), it found itself being required to provide a 25% deposit. No reason for this was given, but this sudden change in the required deposit is likely a result of the pandemic increasing the risk profile of manufacturing SMEs as financial institution underwriters factor in an assumed higher level of risk. This results in a new system, where businesses must offer greater guarantees to secure finance.

This change in financial risk assessment for asset financing creates a new layer of challenges for SMEs and scale-ups in manufacturing that would not be faced by SMEs in other industries. It does not consider the future potential of an organisation when making finance available, and it hinders the manufacturing sector's efforts to digitise, to build back green and to support the wider economic recovery.

Access to finance needs to be localised to level up

Make UK members often say one of the key methods of accessing private finance is through relationships with local banks or funding institutions. As recent research from WPI Economics (below) highlights, there is a gap in the market for local lenders to meet the needs of SME finance, resulting in low access to, or even low awareness of, the benefits of financing.

Manufacturing is a highly diverse industry, with concentrations of SMEs across the UK. In every region and devolved nation of the UK, SME manufacturers (0-249 employees) account for 99% of the business population. Of those that employ workers and have ambitions to grow, many could be better served with a more personal offering of finance options at the local level.

Research by WPI Economics described the UK banking system as highly concentrated, centralised and non-relationship based. Its research highlighted a critical need to develop local finance options for every business in the UK, specifically though Community Development Financial Institutions (CDFIs) and mutual banks.

Feature of the UK banking system	Description
Concentration	SME banking in the UK has been characterised as a four-firm oligopoly in the past, with the CMA finding in 2015 that the big four banks accounted for approximately 80% of all lending to SMEs in the UK. Recently we have seen some challenge to this rising from FinTechs, with the share of the big four banks dropping significantly following the financial crisis, before rebounding during the pandemic.
Centralisation	Banks can be characterised as centralised or decentralised based on the distance between different agents of the bank, the physical or geographic distance between the various banking establishments and – crucially – the functional distance between a bank's customers and where decisions in relation to those customers are made. Based on this, the major UK banks can be considered highly centralised institutions.
Non-relationship based	As a consequence of this centralisation, the financial system in the UK does not in the main rely on the development of relationships between banks and their customers, which allow for long-term two-way exchanges of information. This means that the UK banks and their customers miss out on the benefits that arise from this, such as the building of trust and creation of high-quality information and data on which to make better financial and business decisions.

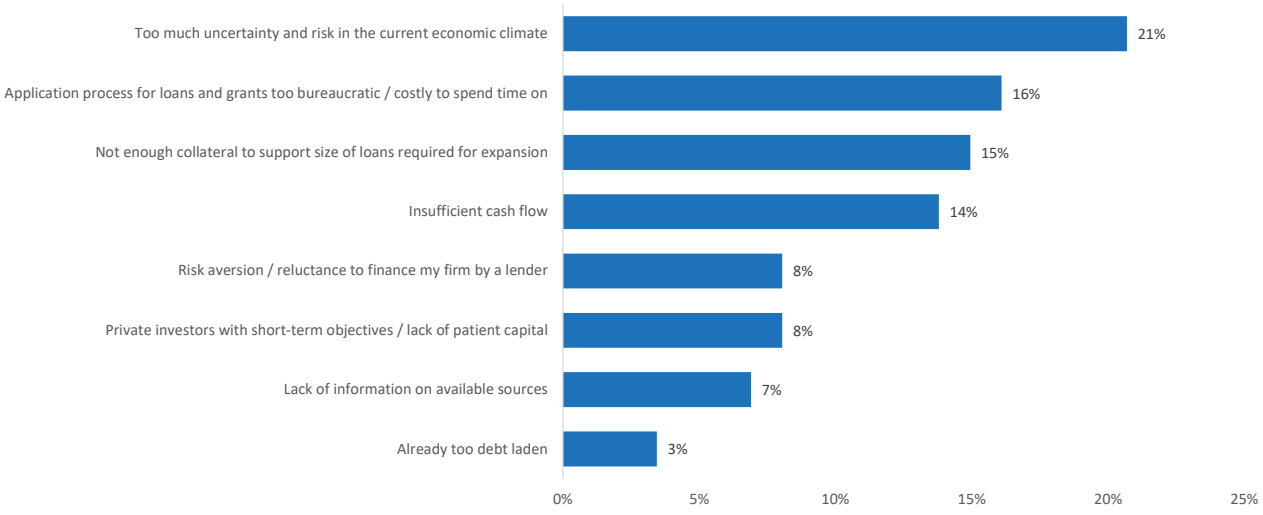
Source: "Scale Up to Level Up: Reforming SME finance WPI Economics", 2021, chapter one (http://wpieconomics.com/site/wp-content/uploads/2021/09/Scale-up-to-Level-Up-Final-Report-for-the-APPG-on-Fair-Business-Banking_amended.pdf)

SHOW ME THE MONEY

ONE IN FIVE SME MANUFACTURERS INDICATED THAT CURRENT MARKET UNCERTAINTY AND RISK IS THE PRIMARY REASON FOR NOT BEING ABLE TO, OR NOT ATTEMPTING TO, ACCESS FINANCE.

This is sensible, based on the challenges businesses have faced in the last two years, but equally is representative of "waiting for the right moment", which for many businesses just never seems to arrive. This is unfortunately difficult to change for most manufacturers, and therefore access to finance is more dependent on a general appetite for growth.

Chart 8: SME manufacturers' reasons for not accessing finance



Source: Make UK Start-up to Scale-up survey 2021

It is possible to nudge manufacturers towards a mindset of risk-taking even under difficult circumstances by tapping into the role model effect of other scale-ups and successful businesses, which in turn can incentivise others to follow suit.

16% OF SME MANUFACTURERS INDICATED BUREAUCRATIC APPLICATION PROCESSES AND THE COST OF TIME ASSOCIATED WITH ACCESSING LOANS AND GRANTS AS A BARRIER TO GROWTH

SME manufacturers often lack the expertise and capacity to devote labour to searching, applying for and using the capital that may be available. The value for those that do pay that price may find the pool of finance available to make productivity-enhancing investments increasing, but the potential cost is "lost time" should that search be too difficult or an application fails. This leaves SME manufacturers dealing with an opportunity cost that larger firms do not face as regularly, given that they have more resources available to devote to overcoming these barriers.

Similarly, SME manufacturers indicated challenges such as limited collateral, insufficient cash flow and lenders being too risk averse or reluctant to lend, as some of the barriers to accessing finance. Many of these issues could be eased if the credit market were to be more willing to take risks on the future potential of innovative manufacturers, but this does place a greater level of risk on lenders. Since the global financial crisis, credit markets have become increasingly shy of taking on risks.

Despite the challenges cited above, there was no true dominating factor recognised as a barrier to accessing finance, with a large share of manufacturers indicating that they do not need access to external finance. This complies with the previous result on SME manufacturers preferring to reinvest past profits, indicating either a low appetite to achieve scaled growth or a lack of awareness of the opportunities that accessing finance could bring.

WHAT SME MANUFACTURERS WOULD DO WITH FINANCE

SME manufacturers indicate that, if they had access to finance, they would prioritise investment in expanding capacity, develop their existing and new products as well as invest in training and upgrade existing technologies.

START-UP TO SCALE-UP: PHYSICAL SPACE

FOREWORD

Finding a home for their business is one of the most stressful events that a business owner can go through. For many, finding that first property comes with a whole host of additional, often unplanned, expenses. Meanwhile, those who are looking to expand to bigger or to additional premises know all too well the trials and tribulations that may come their way.

The challenges involved for small businesses with complex models, especially those in manufacturing, are even higher. Not only are the physical spaces important but also other factors – such as humidity control, power supply, transportation links and specialist lighting, to name but a few – often reduce the number of potential properties. Small manufacturers rely more than most on a good-quality, pothole-free, local road network, but FSB research shows that, despite many announcements, the quality locally continues to fall. Gigabit broadband and 5G connectivity finally reached the threshold for being promised on the steps of Downing Street; however, the promised £5 billion of funding has been knocked back beyond the current Spending Review period and has yet to materialise. The downgrade of previously promised connectivity in HS2 and Northern Powerhouse Rail affects freight capacity across the nation that would have been freed up for manufacturers to use.

Added to this, the ever-increasing demand for new residential homes places even greater pressure on sites with good transportation links to be redeveloped into residential housing. This squeezes manufacturing and industry bases further and further away from vital transportation links and results in fewer and fewer possible sites and properties for these types of businesses.

Even when a suitable property has been identified, the costs in securing that new home for the business can mount up. One of the largest and often most complex is understanding the new business rates liability. Manufacturing businesses are more likely to have complex assessments, owing to the nature of the properties used and the amount of rateable plant and machinery. Often this means increased costs, and possibly the loss of previously held reliefs. As a result, a business looking to move to another property to increase productivity, or because its previous home is now marked for residential development, could be facing an annual tax increase of tens of thousands of pounds.

In his Autumn Budget Speech, Chancellor Rishi Sunak credited FSB for our proposals for a new investment relief to encourage businesses to adopt net zero technologies such as solar panels. Business rates until now have provided a perverse disincentive to investing in net zero measures, as the Valuation Office Agency would increase a premises' annual bill – a helpful yearly reminder that the business could have saved money by not tackling carbon emissions. With this absurdity addressed, the principle should be built upon for other areas where small firms invest in good things the Government wants to see, such as ventilation for better, safer, Covid-19-tackling working conditions for employees.

The moment of moving or setting up, however, remains the peak moment for steep and sudden cost increases. Many firms simply do not have the upfront capital to expand their business, leading some to seek financing elsewhere or to write off the possibility altogether.

Without suitable properties for businesses at reasonable prices, we risk these sectors being forced away from their current locations and priced out. This would have a devastating impact on the levelling-up agenda and risks creating a society where the only jobs available are those in towns and city centres.

This is especially pertinent for those areas with a historically strong manufacturing base that have seen this decline in recent decades. We cannot afford to lose what manufacturing industry we still have, and should do all we can to encourage more small, new manufacturers to set up in the UK.

If we are to encourage our manufacturing businesses in the UK to grow and diversify our local economies, then we must provide them with suitable homes to do so.

Martin McTague,
National Vice Chair Policy and Advocacy, FSB

NO ROOM TO GROW

Manufacturing requires physical space to grow organically, whether that be through expansions in sites or developments in the quality of real estate. Physical space is an issue for both scale-ups and non-scale-up manufacturers who may be deterred from expanding their output or employment if they lack the level of space needed. In some cases, it is Government policies that directly deter productivity-enhancing investments in property. This chapter discusses the issues around access to physical space and the quality of infrastructure.

18% OF SME MANUFACTURERS INDICATED PHYSICAL SPACE IS A BARRIER TO ACHIEVING THEIR GROWTH AMBITIONS

This is by no means a majority view, which may be reflective of the limited number of fast-growing scale-up firms within the manufacturing industry. Physical space is important to manufacturing because of the tangible nature of production, which requires room for both machinery and labour to work together. Acquiring new sites is a reliable strategic method of achieving organic growth; it requires significant capital to finance, but when executed allows a business to scale up production and grow its labour force.

Access to space is not always about the total quantity of land available, as many other factors need to be accounted for, such as the surrounding infrastructure, access to power and energy, the conditions of the property, business rates, the availability of labour, and cost. Sometimes it may be something as simple as the ceiling not being high enough to fit large equipment on the premises. All these factors and more influence where manufacturers choose to be based, and where they choose to expand to if they have the means to do so.

Understanding these challenges will be key to achieving the levelling-up agenda in the UK, as manufacturers offer some of the most highly skilled jobs in industry, paying an average wage of more than £34,000 to their workers. Many manufacturers are already based in regions where the Government is seeking to level up, but there is potential for even more growth in these areas. If we are to incentivise manufacturers to set up and grow in locations that stand to benefit the most from levelling up, then we must aim to understand the barriers preventing them from taking that step. A strategy to level up through scale-up would offer a sound basis to achieving the UK's long-term goals.

What kind of space do we mean?

The needs of physical space differ from firm to firm, with some manufacturers, for example metal products / fabricators, requiring larger sites to fit heavy machinery and needing access to adequate power supply in terms of both gas and electricity to weld and process materials. On the other hand, a manufacturer assembling electronic components or processing smaller products may more easily be able to set up shop in a traditional office base. These two types of manufacturers sit on opposite ends of a spectrum of the type of real estate required to meet their needs. Many manufacturers operate somewhere in between, where facilities need to be set up to operate heavy machinery as well as meet the needs of a traditional office space. And this raises the question whether the types of real estate or land available may be blocking certain industries from setting up more in under-developed locations.

Even if a manufacturer can source a suitable site to expand, and assuming it has the capital to finance that acquisition, not all properties are suitable for operation on day one. For example, manufacturers stress the importance of having access to adequate power supply as their machines generally require more voltage and amps to power different types of equipment. A traditional wall socket may be suitable to power an everyday appliance like a kettle, but not a large machine that specialises in moulding raw materials. A manufacturer can make an additional investment into readying the property to fit its energy needs, but this raises the cost threshold required to make that step towards growth and can result in SME manufacturers avoiding opportunities to scale up.

Business rates changes from 2023

One of the most common frictions manufacturers face when looking to expand or improve the quality of a site is an increase in business rates. Business rates have historically deterred investments in factory spaces, and for a long while now, Make UK has called for a reform of the system to be more flexible for manufacturers. The Chancellor recently announced some positive developments in the Autumn Budget 2021, such as an increase in the frequency of re-evaluation of rates, from every six years to three years. This will not be an easy task for the Valuation Office Agency to deliver and will likely require an increase in agents available to conduct more evaluations.

Additionally, the Government included a new investment relief, from April 2023, that will exempt businesses investing in green real estate improvements. This is a problem that Make UK has regularly highlighted, as several members have faced barriers to installing new solar panels on their property to avoid the risk of higher business rates. Alongside this is an improvement relief that will exempt increases in business rates by 12 months for businesses that have expanded or improved their property. This is a small step in the right direction, but the list of improvements that are exempt should be expanded over time if we are to reach our green objectives. Manufacturers do not become green through direct investment in green technologies only; they can also reduce their emissions by improving the general quality of machinery by investing to reduce energy usage, increasing efficiencies or managing waste, indirectly also resulting in reducing the climate impact.

If physical space is fixed, focus on productivity

For an SME, expanding through the acquisition of physical space may be too large a task without the capital and ambition to see it through for the long haul. To scale-up, you may first need to accept a period of slower growth when investing in capital intended for future gains. However, for many SMEs across the UK, physical space is fixed and unchangeable. Instead, manufacturers can upscale through innovation and improvements in productivity, which leads to the question of whether the definition of "scale-up" (which focusses on employment and turnover growth) is too narrow a definition for manufacturing, as firms within the sector can also scale up through expanding productive capacity.

Scale-ups in manufacturing can be seen as multi-dimensional, achieving growth through improvements in technology, processes, firm size and value chains. Before a manufacturer can scale up through greater employment and turnover, it would need to scale up its technology and processes. As a result, the new large company can support the scaling-up of other manufacturers across the supply chain. While physical space is fixed, improvements in productivity are controllable and can support the growth of a manufacturer without increasing its employment or turnover. The steps manufacturers have taken to improve productivity are discussed further in the section 'Productivity, leadership and skills'.

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An example of the multi-dimensional nature of “scale-up” in manufacturing

1. TECHNOLOGY DEVELOPMENT SCALE-UP

For innovative technologies, manufacturers face significant technical uncertainties and risks in the process of transforming a laboratory prototype into a product with a demonstrable potential for full-scale production.

2. PROCESS / PRODUCTION SCALE-UP

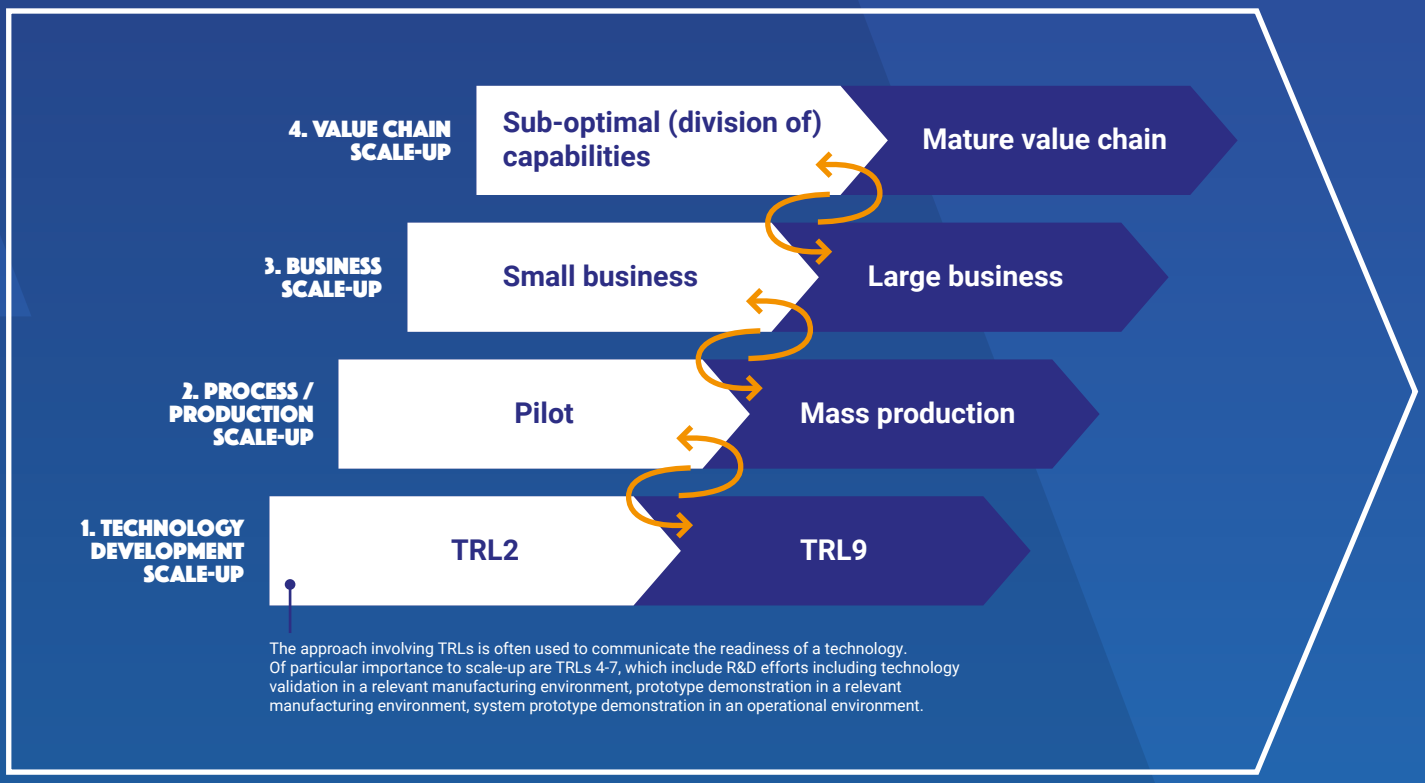
Achieving scaled growth requires a significant R&D effort for novel production or process technologies (e.g., additive manufacturing). Many novel production technologies and processes require demonstration of their functionality, applicability and cost-effectiveness at greater production volumes. Without evidence of the practicality of scaling up production, it becomes unfeasible to scale up the business.

3. BUSINESS SCALE-UP

Firms will expand their technical and operational capabilities and their organisational structures when emerging technologies move from prototype to full-scale development and production. This is where the challenge accelerates for many manufacturers who need to expand to meet growing demand (e.g., through hiring skills, building management teams, accessing customers in new markets, finance and working with the infrastructure that is available).

4. VALUE CHAIN SCALE-UP

Once emerging technologies are effectively industrialised, it can lead to new value chains. Manufacturing scale-up innovation may require cooperation across an entire industrial value chain, with suppliers of inputs and equipment / tool vendors needing to synchronise their innovation efforts, engaging closely with end users. According to the Institute for Manufacturing (IfM), there could be a significant role to be played by linkage programmes, institutions and diffusion mechanisms (e.g., intermediate R&D institutes, technology diffusion organisations and technology roadmaps).



The approach involving TRLs is often used to communicate the readiness of a technology. Of particular importance to scale-up are TRLs 4-7, which include R&D efforts including technology validation in a relevant manufacturing environment, prototype demonstration in a relevant manufacturing environment, system prototype demonstration in an operational environment.

Source: "An international review of emerging manufacturing R&D priorities and policies for the next production revolution", in The Next Production Revolution: Implications for Governments and Business (Paris: OECD Publishing, 2017 (https://www.oecd-ilibrary.org/science-and-technology/the-next-production-revolution/an-international-review-of-emerging-manufacturing-r-amp-d-priorities-and-policies-for-the-next-production-revolution_9789264271036-14-en)

CONTRACTS ENGINEERING LTD WORKS WITH FANUC UK AND CYBERWELD ON ITS FIRST ROBOT WELDER

Contracts Engineering Ltd (CEL) is an SME sheet metal volume and fabrication manufacturer based in Sittingbourne, Kent, UK, which focusses exclusively on manufacturing other companies' products. It performs all fabrication in-house using modern CNC machines and welding capabilities to meet the needs of other manufacturers, specialising in light infrastructure, street furniture, construction, design installations and hard landscaping equipment.

In late 2019, CEL saw a significant increase in demand for its goods and services. To meet this new demand, CEL sought to implement its first automated welder, the FANUC ARC Mate 100i/8L. Coupled with a conscious effort to engage with employees, CEL saw significant gains in productivity.

A key element to creating the incentive for this step change in production was a core customer increasing its orders from CEL, enabling the SME to justify automation to scale production. But this investment also enables CEL to stay ahead of changing market trends favouring automated welding more and more.

The adoption of technology is a critical ingredient for achieving scale-up growth within the SME manufacturing community. When executed successfully, manufacturers can grow at scale through improvements in production where space and labour may be fixed. For SMEs like CEL, which is taking this step for the first time, having the capital available to finance this investment is only part of the challenge. The other parts include engagement with staff and having access to the expertise and knowledge needed to integrate that technology into the business.

While in this case CEL had that support, it is not the case for all SMEs, and this presents a significant barrier to manufacturers who may have the capital available to adopt new technologies but are not aware of how to access support, if any exists, to overcome those barriers. Thanks to the successful implementation of an automated welder, productivity more than doubled, with weld time cut by as much as 60-70%, depending on the various welded assemblies being processed.

Logistics and the surrounding infrastructure matter too

Just as important to the suitability of real estate for different manufacturers is the infrastructure surrounding a location, such as roads and access for logistics and heavy goods vehicles (HGVs), which can be a greater problem for manufacturers based in urban areas. Manufacturers rely as much on their own ability to produce goods efficiently as they do on the logistics industry to transport goods within and outside the UK as efficiently as possible. The bounce-back that has followed the pandemic has noticeably exposed issues within the logistics industry, which have already been boiling for many years, from a shortage of drivers to an insufficient number of lorries and vans being produced, thanks to scarce resources within the automotive subsector.

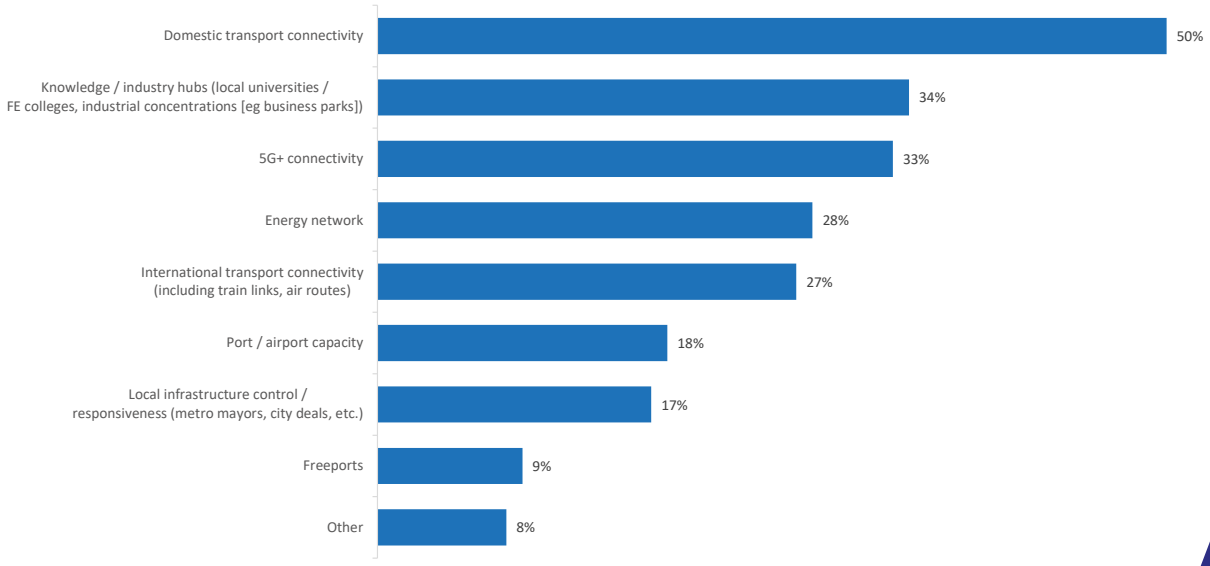
Just like having access to power, manufacturers base their location choices on access to roads, and the ease with which delivery vehicles, including HGVs, can access sites. This is critical mainly for the reason of unloading and loading products and materials off of and on to vehicles. This can be less of a challenge for manufacturers producing goods in small batches, but its main purpose is to maximise speed and efficiency of the movement of goods within and across borders.

Optimising the efficiency at which logistics operates will not only support manufacturers to grow and scale up but will also help the UK move towards its net zero goals. In London, Transport for London (TfL) estimates that almost 25% of road transport carbon emissions come from goods vehicles alone. Without access to freight and room for vehicles to move more freely on the road, and access to different sites across the country, the manufacturing sector would certainly descale at a much faster rate. Reducing the barriers logistic vehicles face when moving from any point A to any point B, as well as increasing the rate of electrification of vehicles, could materially reduce the industry's impact on the climate and the environment.

Since the pandemic, the needs of consumers and businesses have changed dramatically in terms of access to transport and roads. With more people working from home and an increased adoption of online shopping, there are expectations that over time UK roads may see fewer passenger vehicles and more HGVs. To ensure that HGVs do not clog up our roads and are able to move freely so that consumers are able to access their needs more digitally, it is important to start thinking about vehicle priorities in the UK. In a similar way as buses and taxis have access to priority lanes in London, delivery vans could benefit from priority access on some roads to allow the movement of goods and services to flow more freely, leading to benefits to UK SME manufacturers too. The Centre for London is currently looking at this idea of "working vehicles" specifically for London, and any practical outcomes should be considered for wider application across the UK as manufacturers rely on access to freight in all parts of the UK.

50% OF SME MANUFACTURERS SAY GOVERNMENT INVESTMENT IN DOMESTIC TRANSPORT CONNECTIVITY (ROADS, TRAINS, AIRPORTS) SHOULD BE A PRIORITY

Chart 9: Infrastructure priorities for SMEs and scale-ups



Source: Make UK Start-up to Scale-up survey 2021

After this, priorities include investment in knowledge or industry hubs, such as business parks that allow manufacturers to benefit from local network effects, as well as increased access to logistics. A third of SME manufacturers also believe 5G connectivity should be a priority. As manufacturers become more digital, the online infrastructure should be just as important as the physical infrastructure.

A total of 28% of SME manufacturers highlighted investment in the energy network as critical to creating an ideal environment for growth. With the current energy crisis that has pushed gas prices up to record levels, energy-intensive sectors like manufacturing face a challenging road ahead as they recover from the pandemic. For manufacturing, investment in energy cannot be ignored if we are to support our SMEs to become scale-ups. However, we must ensure that we do not compromise on our climate change objectives either, which manufacturers also consider to be a priority today. This includes accelerating our investment in renewable infrastructure, hydrogen and other clean energy sources so manufacturers can scale up without exponentially increasing their negative impact on the environment.

Scale-ups and modest-growth firms prioritise digital infrastructure over physical

Breaking down the data to focus specifically on modest-growth and scale-up manufacturers indicates a slight difference in preferences for infrastructure priorities. Half of SME manufacturers (50% based on employment growth and 45% based on turnover growth) believe investment in 5G connectivity should be a Government priority to enable UK SME manufacturers to scale up. However, whether we use employment or turnover as the criteria for defining scale-ups, investment in domestic transport still ranks high on priorities (second) for fast-growing firms.

START-UP TO SCALE-UP: GLOBAL SMES

FOREWORD

SMEs are the backbone of the global economy and are fundamental to the day-to-day provision of goods and services around the world, employing circa 70% of the global workforce.

The unprecedent crisis of Covid-19 has, however, severely disrupted supply chains around the world, with businesses of all sizes having to cope with unexpected challenges related to border closures, trade restrictions, travel bans and necessary public lockdowns. Despite the gradual reopening of many economies, formidable logistical challenges remain and are likely to become the "new normal" for businesses.

In response to these uncertain trade conditions created by Covid-19, the International Chamber of Commerce (ICC) has called upon governments and customs authorities to adopt concrete measures to help SMEs, advocating for the adoption of a risk-based approach to compliance management, and effective support for the digitalisation of trade.

As the global economy now builds back better in the wake of Covid-19, many businesses are more convinced than ever that international expansion must be at the centre of their growth plans. And the rise of global value chains (GVCs) and the digital transformation offer new opportunities for SMEs to integrate into the global economy.

While larger firms and multinationals are the driving force behind GVCs, there are a number of ways in which smaller firms are also participating in, and benefitting from, GVCs. For example, SMEs can take advantage of GVCs by specialising in specific segments of production, rather than having to master all the processes required to produce finished goods. SMEs can also benefit from greater flexibility than larger firms, and often have the capacity to customise and differentiate products and to respond rapidly to changing market conditions and shortening product life cycles.

The digital transformation has also given SMEs new avenues to join the global economy. Access to digital technologies lowers the barriers of entry into global markets, enabling SMEs to internationalise at a fraction of the cost; digital technologies can thus make it easier for small firms to participate in GVCs, to find customers abroad and to make international payments. Promoting digital connectivity, by increasing the quality of digital infrastructure and decreasing the cost of access, will empower smaller firms to take full advantage of the digital trade revolution. One of our recent studies has demonstrated that a modern digital trade ecosystem could deliver £250 billion in extra trade to the UK by 2026.

Inclusive fair trade is a force for good, and ICC United Kingdom is delighted to collaborate with Make UK and multiple other business organisations to support a conducive business environment where companies of all sizes can thrive and deliver for Global Britain.

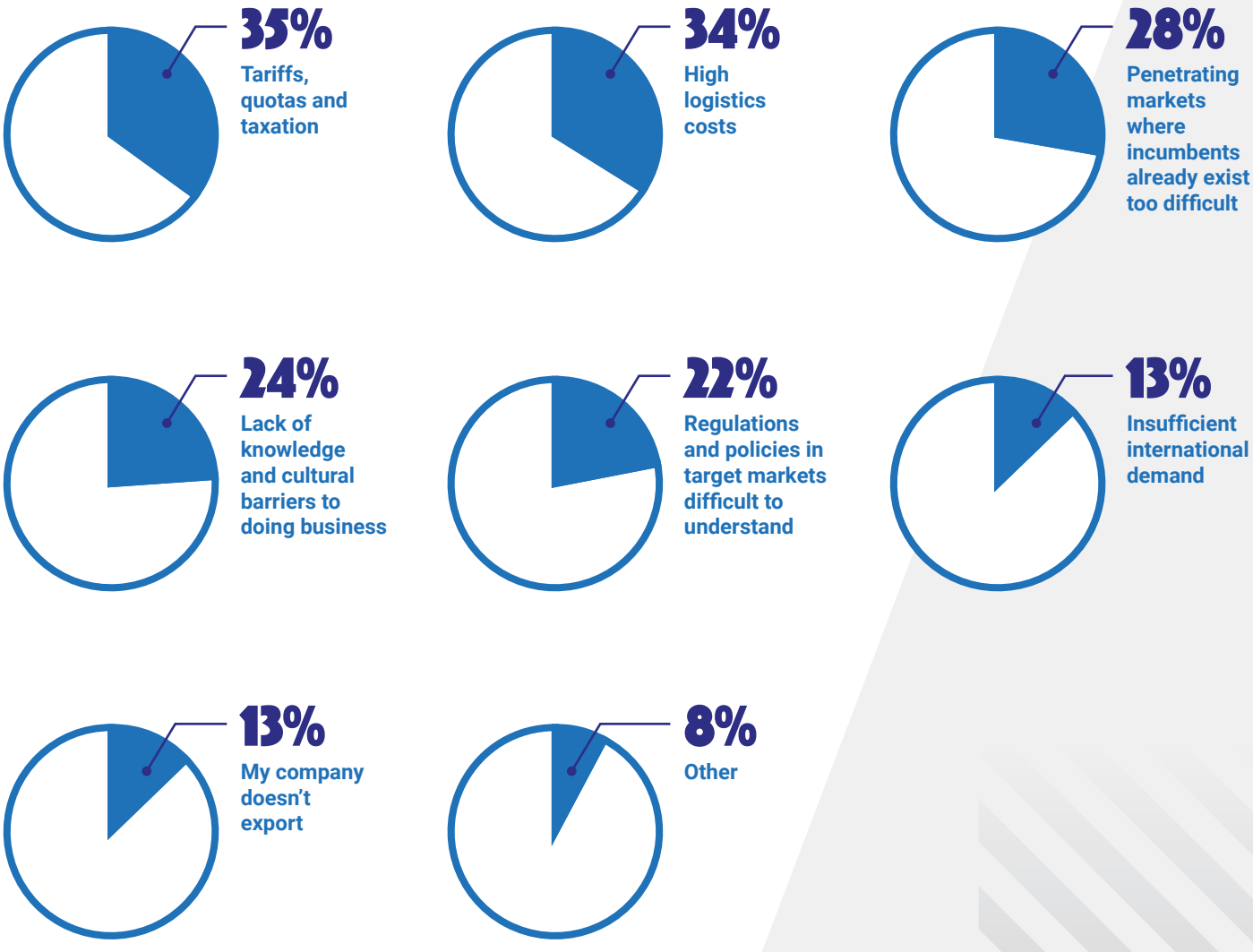
Rogerio Ghesti, International Policy Director,
ICC United Kingdom

GLOBAL SMES

In the new trading environment for UK manufacturers, there is a massive opportunity for SMEs to scale up through exporting. Access to overseas markets and challenges when growing domestically were cited as the second and third biggest barriers to growth for SMEs that aspire to expand. Both issues could be solved by reducing barriers to trade and encouraging domestic producers to seek new markets abroad. This section explores the issues cited by SME manufacturers on the barriers to trade and what could be done to support manufacturers.

UK manufacturers, big and small, can achieve significant growth through exporting. Exports of manufactured goods accounted for 54% of total UK exports,[15] totalling more £311 billion, in 2020.[16] The global market presents almost limitless opportunities for SME manufacturers with ambitions to grow, but unfortunately barriers do exist, such as tariffs, quotas, differing regulations and many others. However, it is not so simple to ease the barriers to exporting for business – for example, introducing additional support domestically can result in destination countries increasing barriers to protect their own industries. From their perspective, this may be a rational decision, and Free Trade Agreements (FTAs) can help ease those barriers by improving trade in both directions and allowing countries to focus on building a comparative, or relatively comparative, advantage.

Barriers preventing export growth



[15] ONS, UK Trade Tables, 2020. (UK total trade: all countries, non-seasonally adjusted - Office for National Statistics (ons.gov.uk))
[16] UKtradeinfo, 2021.

Main export barriers correlate with recent events

Only 13% of SME manufacturers believe there is insufficient demand to expand through exports, which first indicates that few SMEs believe no opportunities to grow exist outside our borders. Second, the reasons that those that do not believe there is enough demand may be either a lack of knowledge of the value of exporting or that these manufacturers produce specialist products for a niche market.

Unsurprisingly, the top barrier cited by SME manufacturers is tariffs, quotas and taxation, which affects 35% of the sample. And a close second to this are logistics costs. Both areas have witnessed an incredible intensification following the UK's exit from the EU, and the post-pandemic boom resulted in significant worsening of lead times, reduced access to space on shipping containers and rising prices for freight, leading to greater challenges when exporting. Given that many of these issues are very recent presents additional challenges to start-ups and young SMEs that already have less experience of exporting. If we do not tread carefully, the UK risks a generation of businesses that struggle to scale up through exporting. Successful scaling, levelling up and meeting our net zero goals will be simpler if we place the right incentives for UK SME manufacturers to think globally, which will enable a global Britain too.

Make UK's "Trade and Cooperation with the EU: Six Months On"[17] report found that only 4% of manufacturers faced no difficulties in trading following the start of the Trade Cooperation Agreement (TCA). The report highlighted that SMEs were more likely to face difficulties accessing logistics services than larger companies. Additionally, 31% of manufacturers reported difficulties arising from customs procedures, such as understanding rules of origin, identifying correct commodity codes and completing commercial invoices.

Make UK recommended that the Government should broaden support for SMEs by removing limitations on the SME fund and extending the deadline for applications. Also, the Government should consider further support if new customs controls are applied this year and in 2022.

Access to knowledge and information on how to manoeuvre in new environments could solve many of the issues SMEs face when exporting

Additional areas where industry and Government can work together to address the non-tariff barriers SME manufacturers face should focus on knowledge and education. The next three biggest challenges for SMEs include:

- difficulties in penetrating new markets, where an incumbent competitor is already established (28%);
- cultural barriers (24%);
- differing regulations or policies within target markets (22%).

Each of these barriers could be eased to an extent with clear access to and support to obtain information that enables SMEs to understand the markets to which they desire to export. The Department for International Trade (DIT) already produces and publishes a plethora of information on export guidance, foreign country profiles and general advice for UK businesses. However, SME manufacturers rarely have the in-house expertise to take advantage of that information and cannot easily allocate the resources necessary to conduct in-depth research.

There is no simple solution to increasing our access to markets that are already saturated, but a focus on incentivising innovation in new and existing products can help UK SME manufacturers gain a competitive advantage to enter new markets. Access to information about and research into these markets can support SMEs to target new markets more effectively and improve decision-making regarding the allocation of R&D spend.

Solving the informational gap on cultural barriers should be a higher priority for the Government to improve the rate at which UK manufacturers increase their trade with non-EU countries.

On regulation, though, cooperation with foreign governments can lead to commonalities. This should certainly be one of the UK's long-term goals to minimising barriers to exporting. But in the short term, access to information that makes it as simple as possible for SME manufacturers to understand regulations and policies in new markets may enable them to act more independently and pursue their own exporting goals.

Scale-ups with fast turnover growth see market penetration as the top barrier to exporting

Breaking down the survey data to inspect only those SME manufacturers that have been identified as either scale-ups or modest-growth manufacturers finds a slightly different set of priorities for exports. Interestingly, manufactures with fast-turnover growth identified market penetration in countries with existing incumbents (42%) to be the greatest barrier to growth. The rest of their priorities followed as normal, with tariffs, logistics costs, regulations, differing regulations, cultural barriers and insufficient demand.

However, scale-up and modest-growth manufacturers, based on fast employment growth, identified a list of main barriers that mirror the average view of the sample.

[17] "Trade and Cooperation with the EU: Six Months On", Make UK, 2021. (Trade and cooperation with the EU: Six Months on | Make UK)

START-UP TO SCALE-UP: PRODUCTIVITY, LEADERSHIP AND SKILLS

FOREWORD

The pandemic has brought serious challenges to the UK economy. But, as the ONS has found, better-led businesses have fared better and have been more resilient throughout these uncertain times. SME manufacturers place great emphasis on investment in their people to improve productivity. To scale up post pandemic, investing in management and leadership skills will be vitally important.

Management skills such as communication, team-working and problem-solving are essential skills: they enable manufacturing SMEs to make the most of their employees' technical skills and will help workers progress within their roles and within the organisation. Good leadership will also be central to the ability of SMEs to enhance their firms' capacity to innovate and remain competitive in an increasingly hybrid and digital world.

Good leadership is not a 'nice to have'. It is vital to the success of individuals and businesses across the manufacturing sector to scale up. To increase your firm's productivity and competitiveness, or to sharpen your management skills, please visit the CMI's Education and Learning page:

www.managers.org.uk/education-and-learning/

Ann Francke, Chief Executive, Chartered Management Institute

PRODUCTIVITY, LEADERSHIP AND SKILLS

For years now, manufacturers have identified access to skills as one of the biggest challenges faced by businesses today. Whether that is to grow and scale, or just to stay afloat, current shortages in labour are having an impact on businesses on a day-to-day basis. A key element of productivity and skills that is often overlooked in manufacturing is leadership, but this is recognised as a relevant factor for the wider scale-up community. This chapter highlights the views of manufacturers on how they improve productivity, the role of digitalisation, their priorities for leadership skills and how a lack of skills affects a business at the incremental level.

Scale-up companies tend to demonstrate greater levels of productivity than companies that are not scale-up. This is one of the key differences between companies that scale up quickly and companies that may grow modestly, or in a linear fashion. When a business scales up, it is in effect increasing its output substantially, while the use of inputs, such as labour and capital, increases at a slower rate. This leads to economies of scale.

In the last three years, SME manufacturers have taken several steps to materially improve productivity in their businesses.

ONLY 11% OF SME MANUFACTURERS HAVE DONE NOTHING TO MAKE PRODUCTIVITY IMPROVEMENTS

SME manufacturers prefer to invest in people more than in technology or products and operations to improve productivity

Types of productivity improvements: from most common actions to least common

PEOPLE

- Training to upskill existing staff (51%)
- Leadership strategies to increase motivation (42%)
- Hiring new workers (36%)

TECHNOLOGY

- Introducing new advanced technologies (e.g., 3D printing or AI) (30%)
- Introducing / incorporating more simple technologies (e.g., smartphones) (23%)

PRODUCTS AND OPERATIONS

- Streamlined product offering (23%)
- Prioritising cost cutting over higher output (17%)

Source: Make UK Start-up to Scale-up survey 2021

Just over half of SME manufacturers indicated that they prioritise investment in training to upskill existing workers to improve productivity. While second to this was utilising leadership strategies to increase worker productivity, this includes using various motivation tactics and established models such as "Kaizen". The top three is completed by the hiring of new workers with relevant skills, with 36% of manufacturers indicating that they do so.

It is intriguing that SME manufacturers place greater emphasis on investment in people to improve productivity, rather than on more reliance on technology adoption and innovation of processes. However, 30% of SME manufacturers did indicate that advanced technologies, such as 3D printing, machine learning or automation, have been applied to improve productivity. Moreover, 23% indicated relying on the introduction of simple technologies to improve productivity – for example, connecting operating machinery to smartphones or tablets through cloud services to better monitor the conditions of machinery and reduce the costs of repair and maintenance.

The choice of favouring skills-based solutions to productivity over technology-based ones may be down to the perceived costs of both options. Applying leadership techniques and upskilling may seem more cost effective in the short run for manufacturers, given that there is a lower cost to failure, whereas the introduction of technologies may be a risky investment and have a high cost of entry.

It is not a bad thing that SME manufacturers value the contributions of skills and people to their productivity. As already highlighted, skills are the biggest barrier hindering SME manufacturers from achieving their growth ambitions, so it stands to reason that many of their productivity investments focus on solving those challenges. However, the priorities may also highlight either that SMEs undervalue the productivity-enhancing opportunities technology could bring, or that the barriers to adopt are so great that people-based options are just easier to access. The two should be utilised in combination as the manufacturing industry is both highly skilled and increasingly digitalised.

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The role of digitalisation and technology in scaling up

Make UK evidence shows that manufacturers who invest in and adopt new digital technologies are more productive, efficient and resilient. The pandemic, without a doubt, put that to the test. For manufacturers who are planning to increase their production and expand into new markets, advanced digital technologies are the best tools for growth. Our recent report, "Industry 4.0 Green Manufacturing: an Enabler", shows the impact of adopting technologies such as additive manufacturing (3D printing), robotics, AI or digital twins.[18] Most manufacturers in the report see significant benefits to adopting these technologies. For example, 56% of manufacturers say they have helped to reduce costs and improve their productivity. In addition, 38% have benefited from greater flexibility and innovation, and 33% are witnessing better energy efficiency.

The research highlighted that manufacturers are turning to innovative new financing models to help overcome barriers such as access to finance. For example, if the upfront costs of investing in new, digital equipment are prohibitive, it may be worth exploring a leasing or "equipment as a service" contract, eliminating commitment restrictions and allowing manufacturers to spread costs over time. Such examples demonstrate the ways in which digitalisation can support manufacturing scale-ups, and how easing other barriers to entry, such as finance or skills, can help manufactures overcome their technology challenges.

Training costs are not cheap, and manufacturers could benefit from a tax credit system to reduce costs such as R&D Tax Credits

Contracts Engineering Ltd (CEL) recently completed the first stage of a lean / 5S training at a cost of approximately £5,000, and the business is going through an additional team development training that is running at a cost of £1,200 per day over three days in 2021Q3. CEL could not access any grant funding to support the costs of this training, and historically, if CEL could get a grant, the bureaucratic application process involved, to achieve only 25-33% of funding, deterred access.

A mechanism like R&D Tax Credits, which would allow growing SMEs like CEL to substantially increase spend on training allowing them to also reduce taxes, would lead to an improvement in terms of savings and would eliminate the extra steps needed to communicate with grant consultants.

[18] "Industry 4.0 Green Manufacturing: an Enabler", Make UK, 9 November 2021 (https://makeuk.org/insights/publications/industry-4-0-the-enabler-to-green).

Made Smarter needs to be rolled out nationally

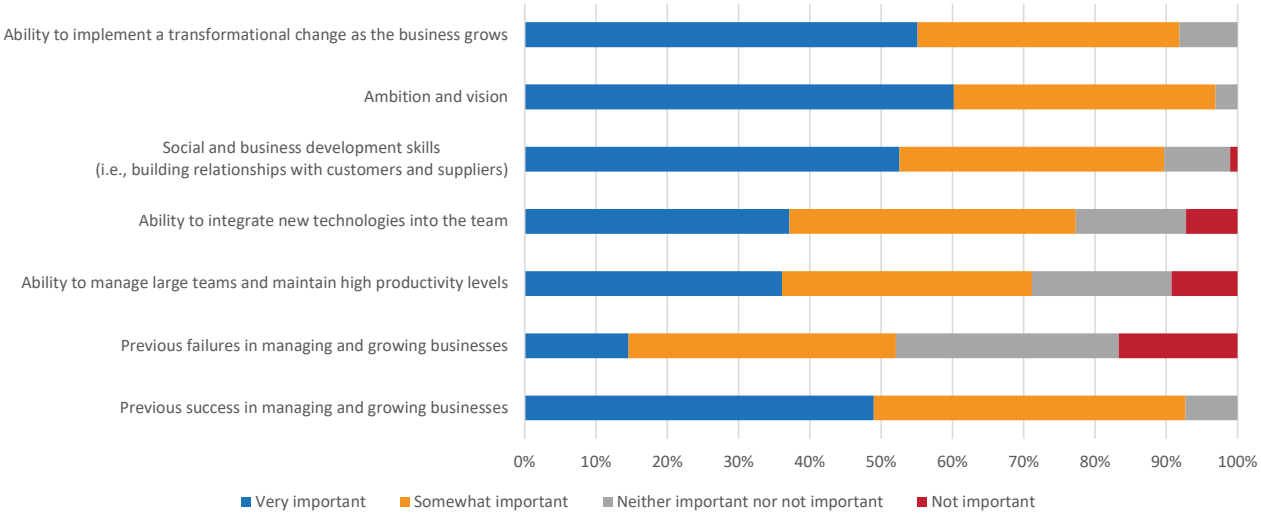
There are a few solutions already available to help SME manufacturers take that critical step forward in adopting technology. One of these includes the successful Made Smarter programme, which places significant values on its pillars – Leadership, Innovation, Adoption and Skills – and has demonstrated that supporting SME manufacturers to adopt emerging technologies can bring about a material change in a business's productivity. For example, ELE Advanced Technologies (ELE), a manufacturer of components for aerospace, power and automotive subsectors, found that productivity increased by 10% after introducing a condition monitoring solution. It also led to new jobs.

The new technology, which was supported by Made Smarter, used real-time data to predict problems, enabling a faster turnaround to repair and to prevent breakdowns.[19]

Though the programme is not nationally available yet, it is well established in the North West, and access has recently increased to further UK regions, including the West Midlands, Yorkshire and the Humber, and the North East, which is a positive development for the manufacturing sector. Going forward, Make UK would like to see the Made Smarter programme rolled out nationally so that all manufacturers could benefit from the programme.

Leadership is critical to the success of a business

Chart 10: The importance of leadership qualities to the success of a business



Source: Make UK Start-up to Scale-up survey 2021

[19] See full case study: "ELE Advanced Technologies: Powering growth through technology", Made Smarter, undated (https://www.madesmarter.uk/resources/case-study-ele-advanced-technologies/).

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97% of SME manufactures say ambition and vision is very or somewhat important to the success of their business

Naturally, without clear goals to grow, and without leaders within a business who have the vision and direction to achieve those goals, it becomes impossible to scale up. As expected, most SME manufacturers believe ambition is critical to growing.

Alongside ambition and vision, 93% of SME manufacturers said past success of growing a business is very or somewhat important. The fundamental difference when comparing technical and engineering skills with leadership skills is a greater emphasis on previous experience for the latter. While experience is important to both, the added risk associated with a failure in leadership means SME manufacturers are less willing to compromise on this aspect.

Interestingly, a much smaller share (52%) of manufacturers place value on leadership experience that includes the failure to grow as important. This may be down to a cultural difference in the UK business environment, which may often punish failure more than it rewards success. Although a riskier venture, there is value in the experience of failure, and SME manufacturers should consider whether their future leaders might be able to come from such a group.

The only other qualities to gather a share of less than 90% of SME manufactures indicating very or somewhat important include the ability to manage teams (71%) and the ability to integrate new technologies (77%). Though both sit within a majority view for SME manufacturers, more SMEs (90%) indicated that having social and business development skills is critical to being successful.

HELP TO GROW: DIGITAL

Earlier this year, the Government announced the Help to Grow: Digital scheme (along with Help to Grow: Management) to support the growth of SMEs looking to take a step towards digitalisation. The scheme aims to support 100,000 SMEs over three years with online advice and guidance, and a voucher worth up to £5,000 to cover the cost of eligible software enhancements. For the time being, the scheme is not fully suitable for manufacturers who access a more diverse range of software to improve productivity, but we believe that over time there is capacity for this scheme to evolve into a useful tool for the industry.

In addition, linking elements of the Digital scheme with Help to Grow: Management (HtGM) can be an enabler to coupling management skills with effective digital adoption.

The key to improving the pool of quality leaders can be influenced by the Government by increasing opportunities to network and offering schemes that allow leaders to access mentors and training. This should be done in partnership with industries and with trade associations like Make UK, who can help support the building of networks for new and existing leaders.

In terms of training and support, many solutions already exist that allow firms to seek out mentors and training for leadership. For example, the recent HtGM scheme includes a set of courses designed to support leaders in SME businesses to improve decision making and productivity. To understand whether such schemes are effective, it is important that the Government aims to maximise take-up. Without high-quality leaders, the UK manufacturing industry will not only struggle to scale up but will also struggle to meet the UK's other targets, such as levelling up, net zero and a global Britain.

Going forward, the HtGM or similar solutions should be expanded, if there is growing evidence of its effectiveness, by increasing access as well as widening the pool of talent that qualifies, such as young people, to develop our future leaders. For example, recently the Chartered Management Institute (CMI) published research on "Work Ready Graduates", that highlighted 78% of employers believe that graduates are not fully equipped with the skills they needed to be work ready.[20] In the long term, these same graduates may not be ready to be our future leaders. Alongside soft skills, building management and leadership skills from an early age is critical to the success of building an environment for SME manufacturers to scale up, and solutions such as HtGM may offer a short-term answer. In the long term, the shortage of graduates with the skills the manufacturing industry needs should be addressed by higher-education institutions.

HELP TO GROW: MANAGEMENT

The Government announced the Help to Grow: Management (along with the Digital scheme) in 2021 to support small businesses to improve their management skills. This is an executive development programme to support SMEs to boost their business performance and growth potential. SME business leaders will develop their strategic skills to increase their business's long-term productivity, resilience and capacity to innovate. The objective is to upskill 30,000 SMEs over the next three years.

Currently, the programme is targeting SMEs with between 5 and 249 employees and which have been operating for at least one year. It is aimed at senior decision-makers and will be 90% funded by the Government and delivered by universities across the UK. This scheme can be particularly useful to manufacturers who often lack leadership skills as much as technical skills.

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How a lack of access to skills affects businesses at an incremental level

There is a lot of debate around how a lack of skills has affected the growth of the manufacturing industry. But there is little information on how the inability to access a specific skill today impacts the productivity of a business today. This is because it is difficult to measure the impact at an incremental level, but it's the day-to-day impact that accumulates to a long-term systemic issue, like the one we face now. The example below highlights how difficulties in accessing software skills affects workstreams in a manufacturing business.

[20] "Work Ready Graduates: Building Employability Skills for a Hybrid World", CMI, September 2021 (https://www.managers.org.uk/wp-content/uploads/2021/09/employability-skills-research_work-ready-graduates.pdf).

PYRONIX DEMONSTRATES HOW A LACK OF SOFTWARE SKILLS AFFECTS DAY-TO-DAY BUSINESS OPERATIONS

Pyronix is a leading manufacturer of electronic security equipment, such as alarms, for various markets, including for residential, commercial and industrial use. The manufacturer is a leading innovator of new technologies within the security market. The organisation turnover is approximately £36 million, with 250 employees, and has been in operation for around 30 years.

As many manufacturers will agree, a lack of available skills, particularly in the area of software and programming, has resulted in a material impact in business performance than otherwise would have been the case should those vacancies have been easier to fill. Sebastian Herrera, CEO of Pyronix, explains how access to skills affects the business on a more incremental, day-to-day level.

More specifically, the current lack of developers is affecting live projects in the business, such as a lack of VUE JavaScript developers, or VUE 3 developers, creating barriers to Pyronix being able to progress new LAN / WAN control panel configurators to the market, with an estimated delay of six months to the overall project. A second project, known as Pyronix HomeControl2.0, a mobile app, was forced to be delayed by approximately six months owing to a failure to recruit the necessary talent. However, as some good news, the company has recently successfully offered the role to an Android developer, which will bring about much-needed progress in its development plans.

Such impacts may appear trivial on the grand scale of the scale-up debate, but they emphasise today the challenges manufacturers face that in turn affect their goals in the future. This example shows that even the most innovative companies face challenges that could have been avoided with the appropriate level of investment in creating the ideal environment for SME growth. Within those six months, the UK risks a competing international entity that is not challenged by the same skills constraints entering the market with a substitute product before Pyronix is able to complete that project.

Make UK has published several reports recently covering various issues in skills, which readers are encouraged to explore further as they are relevant to supporting the growth of SMEs. These are:

- Green Skills Guiding Principles
- Unlocking the Skills Needed for a Digital and Green Future
- Digital Skills for a Digital Manufacturing Future
- Retain, Recruit, Revise: Four Years on from the Apprenticeship Levy

START-UP TO SCALE-UP: AWARENESS

FOREWORD

The UK is home to some of the most productive manufacturing businesses in the world, as well as many that have a huge opportunity to improve their performance, but is awareness of support a barrier?

I am therefore delighted that Make UK is investigating the challenge of increasing awareness of business support for manufacturing firms.

As noted in the 2019 Business Productivity Review, the task of increasing demand for business support requires much more than publicity campaigns. The user journey from lack of awareness of business support through different levels of engagement, especially in sectors as diverse as those in which SMEs operate, requires repeated touchpoints in a range of channels. Ultimately, we need businesses to begin a cycle of continuous business improvement activity.

Over the past four years, Be the Business has worked with businesses of every sector, of every size and in every corner of the UK. One of our mantras from the start has been that we need to understand things from business leaders' perspectives.

Leaders of small and medium-sized businesses are some of the most impressive and hardest-working people you could ever meet. From the extensive work that we do with these incredible leaders, we have learned a few things:

1. Lack of awareness is a key barrier to improvement. Like many of us, business leaders don't always know when they need help, or what type of help they need. It is critical that business leaders are made aware of both the improvements that could be made and the resources available to them.

2. Business leaders sometimes do not realise where they can improve until they investigate how others do things. Indeed, four in five small business leaders believe they are as productive than their peers, if not more so. By inviting comparison, business leaders will become aware of the need for improvement within their business.

3. Not every business owner leads in the same way or requires the same kind of support. We recently conducted what we believe is the most sophisticated behavioural segmentation ever for this audience. It identified six distinct leadership typologies. Tailoring communications based on leadership approach has huge potential to increase engagement.

4. You need to reach people at the right time, in the right way, with the right offer of support. Most of the time, business leaders are too busy with the day-to-day to seek help. It tends to happen at specific moments. This can be when they have growth opportunities, are faced with stiffer competition or when a significant external event, such as a public health crisis, occurs. It's at these points, or triggers, when business leaders are open to support – and that's when they need to have options immediately available.

5. Real world examples are powerful. Showing businesses examples of firms that have successfully adopted new behaviours provides models to follow. Trade associations and membership bodies can play a pivotal role in sharing examples of best practice that can be copied – including how companies they work with benefit from high-quality business support.

If we are to achieve the ambition of becoming a higher-wage, higher-skill economy, it is clear that things need to change. We need to improve awareness of high-quality business support on a large scale – and fast. Make UK's practical recommendations are undoubtedly an important step in the right direction, and I urge the business support ecosystem to help take them forward.

Anthony Impey MBE, CEO, Be the Business

SUPPORTING START-UPS TO SCALE UP: IS AWARENESS THE TRUE BARRIER?

Many institutions are aware that knowledge of and education concerning available support, and how to access it, are important to supporting small businesses in the UK. Both the Government and trade associations like Make UK spend significant resources to ensure that the right level of signposting exists so that all those who can benefit from support are able to do so. And yet, it appears that take-up of many solutions remains low, with many businesses unaware of what exists. This raises one of the most undiscussed issues in business support: is a lack of awareness the real barrier to growth? This chapter highlights the level of "lack of awareness" in the industry, the possible explanations for the results, what could be done about it and what SME manufacturers say is useful for business growth.

It seems that, no matter how many schemes are invented by the Government or the private sector, there will always be an issue of low take-up of support by SME businesses, even within the manufacturing industry. This makes it difficult to assess what types of support are effective and what is helping manufacturers along their scale-up journey.

We could hypothesise that the true barriers to growth are awareness and more behavioural reasons, but it is not simple to test this. Our latest survey proposed a non-exhaustive list of nationally available schemes and programmes to SME manufacturers to get a sense of whether there is a common issue that still exists and to understand what types of mechanisms achieve a greater rate of market penetration (chart 11).

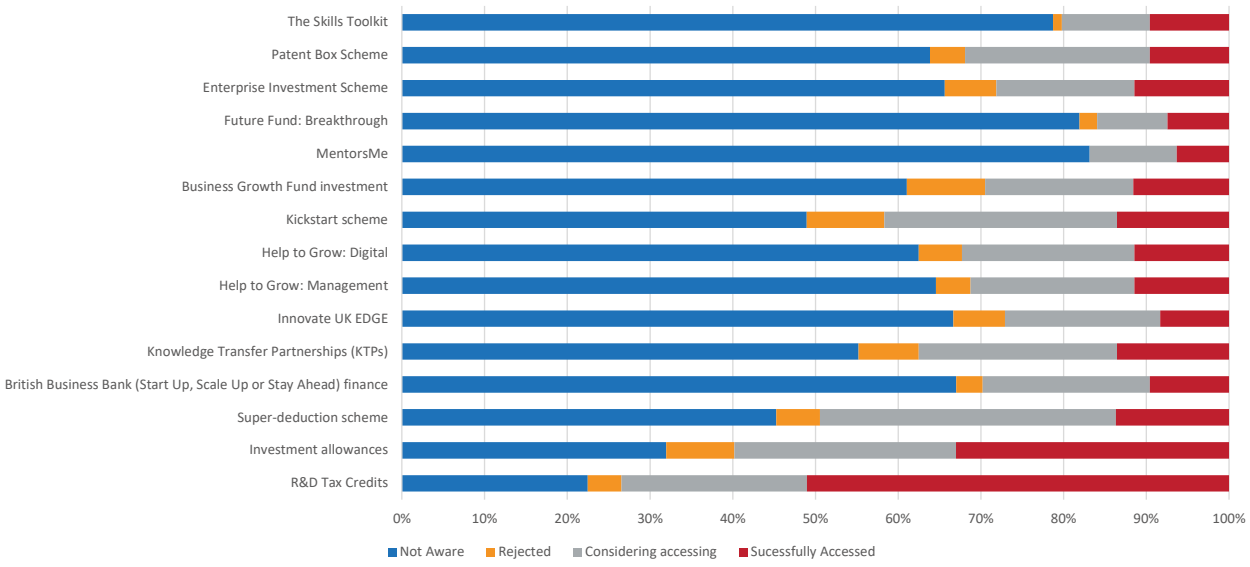
The results are shocking for most of the schemes proposed, indicating that a large share of manufacturers are unaware of their existence (on average 60%). Some of the schemes proposed (like the Skills Toolkit and MentorsMe) are not directly targeting manufacturers, nor are they marketed widely, which may explain the low awareness. The reason such schemes were included was to offer a type of counterfactual scenario for schemes we "expect" SMEs to be aware of and those we do not expect them to be aware of. Although the schemes we do not expect them to be aware of did indicate a lower take-up than those that we believe are more useful for manufacturers, no single solution had a zero rate of successful take-up.

However, other support mechanisms, such as Kickstart, Help to Grow and Knowledge Transfer Partnerships (KTPs), have had a positive impact on manufacturers that have successfully accessed the schemes and have received some greater level of marketing. Yet these schemes are also largely unknown to most SME manufacturers, indicating that there may be something else at play which is affecting access to or interest in Government support.

Some of the schemes are relatively new, which may explain the lack of awareness (Figure 1 shows the order in which the scheme and programmes were announced).

A study by GAMBICA in 2013, which included a more complete list of schemes available, found similar results, with an average of 66% of businesses unaware of available schemes.[21] Eight years later, it appears little has changed in that respect.

Chart 11: The awareness of support, a selection of solutions



Source: Make UK Start-up to Scale-up survey 2021

[21] "Manufacturing Support Scheme Awareness Survey", GAMBICA, 2013.

Timeline of a selection of available solutions from oldest to most recent

The relationship between time and awareness is important, as industry has had less time to digest the newer support available for business growth. This explains the low level of awareness for solutions such as Help to Grow, Innovate UK EDGE or the Future Fund. However, it is interesting to observe the difference in awareness that exists between schemes that have been around for a long time too, such as KTPs, the Enterprise Investment Scheme and R&D Tax Credits.

One further explanation may be the method of communication that works best for manufacturers. According to the data, schemes such as R&D Tax Credits, investment allowances and the super-deduction have relatively achieved the least share of "not aware" and the largest shares of "considering" or "successfully" accessing. It is not surprising that R&D Tax Credits are popular, as manufacturing is an R&D intensive industry, accounting for two-thirds of total private sector R&D spend in the UK.[22]

R&D Tax Credits have been available for two decades now, enabling the industry to develop familiarity with the scheme. Conversely, a scheme such as super-deduction, which is relatively new, achieved a greater awareness and impact among manufacturers than other popular schemes, which may indicate that SME manufacturers communicate best through a tax-based system. It may also be reflective of the investment and R&D-intensive nature of manufacturing that incentivises them to seek out cost-saving mechanisms, but that would not explain why the Patent Box Scheme take-up is low in contrast. Additionally, given that access to skills is identified as the biggest barrier to growth, it is interesting to note that SME manufacturers do not seek out solutions such as KTPs or Kickstarts as vigorously as they do investment-related schemes.

[22] "UK Manufacturing, The Facts 2020/21", Make UK, 10 September 2020 (https://www.makeuk.org/insights/publications/uk-manufacturing-the-facts-2020-21).

Remove the sludge, and accelerate with a nudge

It is possible that the fundamental barrier to achieving scale is intangible. It may be a matter of several behavioural ideas, such as ambition, desire to find solutions, willingness to accept schemes that are easy to access, or something else entirely.

The solutions to such problems and improving the level of awareness may be difficult to ascertain. Certainly, relying on self-selection in the hope that all the right firms would come forward themselves to access the schemes they have a right to would be ideal. Behavioural sciences may have a role in contributing to manufacturers' lack of awareness and lack of interest in the available support, by understanding the frictions that create "sludge" for manufacturers deterring them from accessing, or even from seeking to understand what is available to them.

DEFINITIONS

Nudge theory:
An idea in which, by shaping an environment, known as the choice architecture, one can influence the likelihood that one option is chosen over another by individuals. A key factor of nudge theory is the ability of an individual to maintain freedom of choice and to feel in control of the decisions they make. – Imperial College London

Sludge theory:
Frictions that make making good decisions harder. – Thaler, 2018

Since the popular emergence of nudge theory in 2008,[23] many governments around the world, including the UK, developed their own nudge units. This was to better understand the impact of policy and to apply behavioural sciences to increase adoption of policies, and sometimes to nudge people away from certain behaviours. For example, the UK Government made use of these ideas extensively during the pandemic, such as encouraging handwashing by implanting specific words, like "disgust", to increase the likelihood that an individual would follow through on simple solutions. Of course, not every nudge is perfectly effective, but most are not designed to be perfect solutions to problems. Rather they bring the impact of policies closer to their optimal level by directing them closer to where they need to be.

In business, this may be applying subtle indications about where business support exists, without overbearing on companies that do not wish to feel as if their choice has been taken away. Some suggestions include:

- Highlighting the success of manufacturers that have made use of schemes to grow, and emphasising the risk of falling behind to manufacturers that are not using what is available.
- Reducing the window for the availability of a solution to increase take-up (e.g., a promotion or sale, which is similar to how the super-deduction was marketed).
- Applying default options so manufacturers who engage in productive behaviour automatically receive any benefits they are entitled to.

The solution to encourage scale-up growth to proliferate exponentially may simply be a question of how we encourage businesses to seek out support when they need it.

A more recent, and growing, popular theory is related to "sludge". These are frictions that make it more difficult to make a decision or that direct an individual towards actions that may not be beneficial to them. In the context of business, this often relates to bureaucracy and long-winded processes that deter firms from accessing support or maximising its use. Among SME manufacturers, 16% have already indicated bureaucracy and the cost of time being a barrier to accessing finance and support.

Of course, occasionally some "sludge" may be intentional, to ensure that those firms that have the greatest desire and ambition to grow also have the right level of motivation to go through the red tape.

Yet now the economy is attempting to bounce back from a pandemic. And with industry tackling a growing list of challenges in supply chains, logistics, trade, energy and labour supply, it may be preferable to minimise red tape as much as possible to maximise access and take-up of support, as the key to the UK's return will be to generate growth in scale.

Going forward, institutions such as the UK's Behavioural Insights team, Be the Business and Nesta should conduct further research on whether behavioural barriers are hindering the growth of business, and whether behavioural-focussed solutions can be applied to increase business take-up of services. Make UK would be willing to support research in this field. In addition, the industry should work with the Government to identify the "sludges" that reduce take-up of solutions.

[23] Richard Thaler and Cass Sunstein, Nudge: Improving Decisions About Health, Wealth, and Happiness (New Haven and London: Yale University Press, 2008).

What manufacturers say is useful for growth

We asked SME manufacturers across the UK what types of resources or institutions they believe to be most useful when wanting to grow the size of their business (either in turnover, employment or output capacity).

The results were curiously revealing, indicating that SME manufacturers place significant value on resources that enable them to benefit from networking.

6/10

believe joining a trade association (like Make UK) is most useful

1/3

believe funding institutions like Innovate UK are most useful for growing

1/3

say joining business support groups are useful for growth

28%

say that LEPs and Local Government Initiatives are important

28%

highlight mentorship schemes and peer-to-peer networks as useful

The remaining choices are completed by Help to Grow Schemes (23%), KTPs (23%), public benchmarking tools (22%, such as ONS data), reading research materials (15%), support for patent applications (14%) and accessing Catapult Centres (9%).

SME manufacturers scale alongside their networks

Of the top five choices of what SME manufacturers say are most useful for achieving business growth, three are accounted for by functions that enable networking opportunities.

Despite the role of manufacturing in producing tangible goods, the industry is more relationship driven than many realise. Manufacturers need to build relationships with customers and suppliers, and in some cases the opportunity to scale is dependent on whether an SME's current network of suppliers can meet the new demand for inputs. Indeed, SMEs even indicated that one of the most important skills of a leader is the ability to do business development. If not, the ambitious SME would need to be able to secure additional sources of supply, which can involve significant search costs.

The desire to network more may also be a result of manufacturers being aware of their own "lack of awareness" of the support that is available and viewing networking with other manufacturers as the best method of filling in the knowledge gaps.

These problems offer an explanation as to why joining a trade association like Make UK is viewed as the most useful for achieving growth. Trade associations are an industry-led solution to industry problems and can connect businesses at scale, allowing them to prosper at a greater rate. In addition to this, SME manufacturers say that joining business groups and accessing mentorship schemes or peer-to-peer networks are important for growing their businesses. These types of solutions offer businesses opportunities to share their experiences and to obtain knowledge and skills as to how best to navigate uncertain economic conditions. Institutions like Make UK and the Government can work together to create more opportunities for manufacturers to network and share knowledge, incentivising firms to scale organically.

A small percentage of SMEs interact with publicly available research and data to inform their decisions

A surprising 22% of SME manufacturers conduct self-analysis of performance using benchmarking tools such as data available from the Office of National Statistics (ONS) to support their growth, while 15% also access research reports (such as research published by think tanks, consultancies or public institutions) to do the same. Though only a minority of manufacturers are taking such steps, the figures highlight the valuable role both the private sector and Government bodies such as the ONS can play in indirectly supporting the upscaling of firms.

To maximise the potential of utilising data and research, it is imperative that information is released in as timely a way as is feasibly possible. The ONS demonstrated during the pandemic that timely data can be collected and released to help inform decision-makers and the public. Key sources of data, such as inflation, GDP, wages, employment and others, often lag by two months or more, with more granular data (e.g., by region or industry) sometimes lagging by a year or more. We can improve the impact of public data by reducing that time gap. In addition, expanding the granularity of the types of data available will serve to better inform businesses.

Further research will need to be conducted to better understand what types of data and research SMEs find most useful for growth, to better inform policymakers on how to advance the access of information.

Catapults ranked low for SMEs

The reasons why only 9% of SME manufacturers indicated that Catapult Centres are useful for achieving business growth are not exactly clear. The most likely explanation is the lack of awareness of Catapults within the SME community rather than the quality of the service provided, which helps to solve many of the innovation challenges manufacturers face today.

The Catapults should assess whether a more targeted marketing strategy is required to get the word out and to make businesses more aware of the solutions available to them. As we have seen, an awareness of available support is potentially one of the biggest challenges to maximising the benefits of state interventions in industry.

CONCLUDING REMARKS

It's clear that SME manufacturers are very much aware of the issues that prevent them from growing to their potential. This report focussed on the top five barriers to growth identified and expanded on certain aspects of each idea. However, each of the top barriers are fundamentally much broader than what is highlighted here, and consequently requires further investigation to shed light on the issues around skills, exporting, domestic growth, finance, and physical space.

Additionally, what is also evident is that despite being aware of the problems, few manufacturers have an awareness of the solutions. Government can support solving many of these issues, but their success will be limited if industry does not also act in tandem towards similar goals. Going forward Make UK will continue to add to the research on support for manufacturing SMEs to grow and scale-up, as well as meet our levelling up, net zero and global Britain ambitions.

RECOMMENDATIONS

1. GOVERNMENT POLICY

Finance

- Ensure businesses that have accessed Covid support are not disadvantaged from accessing financial support, public or private, to ensure they are able to bounce back and grow.
- Extend the increase of the annual investment allowance to £1 million for five years.
- Incentivise banks as well as new financial technology firms to set up more local shops across the UK. This will improve the access of other types of finance, such as green finance, to support SMEs to invest in meeting our climate goals.
- Make Government support conditional on beneficiaries adhering to the Prompt Payment Code.

Physical space and infrastructure

- Business rates "improvement relief" for the expansion of premises to be extended by more than 12 months so manufacturers can invest more strategically.
- Business rates new "investment relief" exemptions to include improvements in energy infrastructure that improve energy usage (even if the investment is not directly green).
- Continue to review business rates periodically to ensure their application can still meet societies' needs without diminishing incentives to invest in new and emerging technologies that improve site productivity.
- Consultation on availability of land and factory space in the UK, and which areas lack quality surrounding infrastructure (transport, digital, energy).
- Review in partnership with industry whether it is possible to build factory space "up", like residential flats, for capital-intensive manufacturers.
- Consultation on priority lanes for working vehicles (e.g., HGVs) to improve flow of logistics across the UK.

Trade

- Reinstate trade access programmes or immediately introduce replacements.
- Explore the introduction of an export tax credit to support successful exports.
- Bring forward a package of grants and practical support to assist exporters to attend trade shows and similar events.
- Establish a cross-government unit to monitor and track market access regulations in key export markets, including the EU.

Productivity, leadership and skills

- Expand the Help to Grow: Management scheme to allow access for more than one employee based on the size of the business. Also expand the scheme to include junior staff and help create future leaders.
- Expand the Help to Grow: Digital scheme to include a greater range of software relevant to manufacturers.
- Promote existing mentor schemes and peer-to-peer networks more effectively.
- Work with industry and trade associations to develop opportunities for leaders to network and build management skills through knowledge sharing.
- Introduce the green skills tax credits and expand to include wider training so manufacturers can upskill at scale.

Awareness

- The Government should take an active approach to target support for fast-growing manufacturers. For example, the Treasury could track firms by tax and National Insurance receipts to monitor the rate of growth and stay in touch with firms that reach certain milestones on their scale-up journey. This would enable micro-level support to be reached by the right firms. Additionally, the Government should consider automating this process so that firms are reached out to about available Government schemes at the right time without significantly increasing the resource demand on the public sector.
- Increase investment in marketing and communication for current Government support.
- Investigate which types of support, such as tax-based solutions, achieve the widest coverage and develop future solutions based on these types to support SME manufacturers.
- Work with trade associations to promote available support and improve knowledge sharing and best practice with an increase in networking opportunities.
- The Government's nudge unit should investigate whether behavioural solutions can be applied to increase awareness and take-up of available support for growth.
- Improve the quality and frequency of available public data that is produced by bodies such as the ONS.

RECOMMENDATIONS

2. ACTION FOR MANUFACTURERS

- SMEs should more actively engage with their trade association, LEPs or local authorities to seek out information about available support.
- SME manufacturers should engage more with digital forms of communication (social media) to stay up to date on the latest available information on support for business.
- SME manufacturers should commit to sharing best practice and attend networking events as often as possible.

3. ACTION FOR WIDER STAKEHOLDERS

Finance

- Lenders should take a forward-looking outlook on business potential rather than solely consider historical performance when assessing the risk profile of SME manufacturers.

Physical space and infrastructure

- Developers should be more aware of the types of properties that are in demand for manufacturing and consult on which regions of the UK lack access to relevant real estate to achieve levelling up. Developers and construction firms should also investigate whether it is possible to build factory space upwards (similar to a block of flats), and what would be needed to achieve this.

Awareness

- Work with the Government and other trade associations to disseminate and signpost to available business support.

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.

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