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# ISING DATA TO DRIVE MANUFACTURING PRODUCTIVITY

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## EXECUTIVE Summary

Long-term strategies are imperative to creating a competitive, predictable and stable economic environment for businesses. The new government has an incredible opportunity to reset the risk appetite of business and get investment flowing again. This means accelerating the digital transition through the mass adoption of industrial digital technologies, AI, data analytics, robotics, automation and making use of additive manufacturing techniques like 3D printing.

Manufacturers will play a central role in that opportunity by investing and acting as a channel for national growth, enabling the Government to achieve their mission for the UK to be the fastest growing economy in the G7. That goal is certainly achievable if manufacturing is set at the heart of any long-term industrial strategy.

As many of us know, this vibrant industry continues to invest more than £30bn a year in capital assets and around £20bn in R&D, accounting for nearly half of the private sector's total spend on innovation. On top of this, manufacturers invest heavily in skills both in retraining existing workers and supporting the pipeline of future talent through apprenticeships. It is important we ensure business investment is adequately supported, and this research helps us pinpoint what we need to do next.

Using the *Investment Monitor Survey*, we update and highlight what manufacturers' investment priorities are over the next 12 months. This data can help us understand the direction of investment, which we can use to inform supporting industries like finance, to fuel those ambitions. This feature also includes a focus on the use and benefits of data analytics in the sector, as well as a look at the fundraising aspect of investment.

The survey highlights that more than half continue to prioritise investment in plant and machinery and skills. However, investment in software, sustainability and R&D also rank high for businesses. As an interesting follow-up to Make UK and RSM UK's previous investment research, investment intensity in capital equipment expenditure has increased in the last two years indicating manufacturers are investing more in plant & machinery. This is a positive sign for the UK given business conditions are the most stable they've been in over half a decade. Though, there are surprising differences between UK-owned and foreign-owned companies.

But closing the productivity gap with our western competitors will not be easy. Over the last decade, as the fourth industrial revolution takes place, more organisations are using the power of data to discover efficiencies in the manufacturing process. The findings of this research shows that data analytics has penetrated every aspect of a manufacturing organisation, from the production process to all back-office functions like IT, finance and HR. Data is being used to accelerate productivity and reduce costs. Though, the next opportunity lies in how we take this further, as most manufacturers are only using data analytics for about half, or less, of processes within each department, and only an average of about 10-20% have gone beyond this threshold.

Government policy design can play a crucial role in enabling further adoption of data analytics. The key themes identified by manufacturers largely echo the ideas proposed by our previous investment research, encouraging investment incentives to be designed with longevity, generosity and accessibility. The findings of this survey show manufacturers want these ideas to extend to all types of incentives, which should be made simple, accessible and to stick for the long haul. In other words, the hallmarks of an industrial strategy.

## CONTENTS

Executive Summary	2
Part 1 – Investment Activity	4
Investment priorities	4
Investment intensity	5
Investment intensity in plant & machinery over time	б
Influence factors for investment	8
Bringing it all together	9
Part 2 – Investment and Digital Analytics	10
Advancing productivity with data power	10
The benefits of data analytics	13
It always boils back down to people	14
Data compatibility	16
So what should manufacturers do to overcome the barriers?	16
Part 3 – Investment and Financing	17
Different methods of funding investments	18
Funding research and development	19
Barriers to accessing finance	20
Part 4 – Government Support	21
Rule of three in policy-making	22
Conclusion	23
Recommendations	23
RSM Viewpoint	24
Making investments in digital technologies – 5 key steps	25

## PART 1 INVESTMENT ACTIVITY

## **INVESTMENT PRIORITIES**

Now that the dust has settled on the general election, manufacturers are looking forward as they prepare for the implementation of the UK Industrial Strategy, following its announcement at the recent Investment Summit.

Manufacturers achieve productivity growth through investment in capital, highly skilled labour, and taking risks on new ideas. More than half (53%) of manufacturers plan to prioritise investment in plant & machinery over the next 12 months, which would include equipment such as tooling machines, CNCs/PLCs, white goods and even office equipment such as computers, chairs or desks.

For manufacturers there is likely to be a greater focus on the productivity-enhancing capital equipment, which can be split into two categories. Either new investment to increase the capital stock of the business, or maintenance investment to update and replace depreciating assets. The former can result in improved productivity which the previous government had sought to accelerate with use of incentives such as attractive capital allowances.

Almost equal in priority is the investment in labour and skills (52%), specifically for production. The access of skills is one of the greatest barriers to growth that manufacturers face today, so it is expected that businesses continue to invest in this area. Today, there are still over 60,000 vacancies in the sector, with 2.5 roles vacant for every 100 roles.<sup>1</sup> Investment in labour can include both recruitment and retention as well as upskilling, training and apprenticeships to ensure a pipeline of future talent. Though, the Apprenticeship Levy has failed to meet its obligations to support training in new talent, with a nearly 40% decline in apprenticeship starts since the Levy's inception in 2017.

#### Chart 1: Manufacturers' investment priorities in the next 12 months

% share of responses



Source: Make UK/RSM UK Investment Monitor Survey 2024

<sup>1</sup>ONS

Investment in digital ranked relatively highly (third) amongst the list of priorities, which is somewhat unexpected, given R&D is usually one of the most important investments manufacturers make. Though only for 39%, the ranking of this priority sends a signal that the manufacturing sector is looking to accelerate the adoption of digital technologies and is willing to prioritise it ahead of innovation spend in the coming year.

This is a great opportunity for the industry to benefit

from optimisation strategies that could lead to massive productivity gains. Previous Make UK research found that one in four manufacturers were still at the "conception" stage of digitalising, meaning they were beginning to explore different solutions for their business. And nearly half were at the "evolution" phase indicating they were already implementing new digital solutions.<sup>2</sup> Now, manufacturers need to take these investments forward and reach the "revolution" stage when digital technologies return efficiency and productivity gains.

## **INVESTMENT INTENSITY**

Investing covers a wide range of ideas. As the priorities highlight, most investments will take the form of actions to help manufacturers achieve their goals, from digitalisation to decarbonisation. However, in terms of cost, not all investments are equal as some can require substantial funds, expertise and carry different risks. As a result, there is a difference in the share of a company's turnover that may be allocated to certain types of investments. Comparing investment in plant & machinery with R&D suggests that manufacturers spend more on capital equipment than innovation, as expected.

The average for plant & machinery is currently 8.1%, an increase from the last time this survey question was posed (in 2022) and reported an average of 7.5%. This is positive as it suggests that investment intensity may have increased in the last two years.



## AND 6.5% OF THEIR TURNOVER ON INNOVATION

R&D, alternatively, is slightly less investment intensive with the average manufacturer spending 6.5% of their turnover on innovation. The largest group of manufacturers (59%) sit within the 6% or less category. It is natural that the typical manufacturer would invest more in plant & machinery given the high cost nature of physical equipment, though in some cases this may be untrue as manufacturers in specific industries, like aerospace, pharmaceuticals or chemicals, may be substantially more R&D intensive.





% share of responses for each category

Source: Make UK/RSM UK Investment Monitor Survey 2024

<sup>2</sup>Make UK/AWS, Demystifying Digitalisation (2023)

## INVESTMENT INTENSITY IN PLANT & MACHINERY OVER TIME

Investment intensity as a share of turnover historically deviated around the 7% mark, which is consistent with national statistics that suggest the manufacturing investment intensity for capital is closer to 6%.<sup>3</sup> However, the survey findings now show that investment intensity in plant & machinery investment has exceeded 8% for the first time in a decade, which is a positive sign that the sector is investing more in productivity enhancing capital equipment. The need for new, energy efficient machinery and the rising interest in robotics and automation is fuelling investment in these areas.

A more stable political environment, combined with the absence of unwelcome economic shocks (such as a

pandemic or energy cost crisis) has given businesses more time and room to breathe. This has enabled sensible decision-making in the investment scene and resulted in greater capital expenditure. The collection of data for R&D intensity has only just begun but it will be interesting to see whether innovation spend takes a similar path.

Yet, it should be acknowledged that the increased share of turnover spend may also reflect rising interest rates which have restricted access to finance, especially for SMEs. As a result, it is possible that manufacturers are dipping into a greater share of their turnover to meet their investment needs.

#### Chart 3: Investment in plant & machinery as a share of turnover, weighted averages



Source: Make UK / RSM UK Investment monitor survey 2024, previous Investment monitor surveys

<sup>3</sup>Make UK calculations of ONS data (Business Investment as a share of turnover)

#### **UK-OWNED MANUFACTURERS BET MORE ON THE UK ECONOMY**

Does the type of ownership of a business make a difference to investment intensity? Breaking down the data for both plant & machinery and R&D we find surprising differences between companies that are wholly UK-owned, internationally-owned (with a UK presence) and UK owned (with international presence). The breakdown of this data draws out two main themes:

- UK-owned firms invest a greater share of their turnover on capital and innovation than internationally-owned companies.
- Larger UK organisations, with a more international presence, are more investment intensive than both UK firms without an overseas presence of internationally-owned firms.



#### Chart 2a: Average investment expenditure (% share of turnover), broken down by ownership type

Source: Make UK/RSM UK Investment Monitor Survey 2024

Based on this data alone, from a policy perspective, it is worth considering whether the Government should put greater focus on understanding the benefits of foreign ownership and ensure that they do gain from the domestic economy. The survey findings here would argue in favour of UK ownership of UK manufacturers, as well as focussing scaling up efforts on those UK-owned benefits. That is, of course, if we want to see more businesses increasing their investment here.

## **INFLUENCE FACTORS FOR INVESTMENT**

Cost, access to finance, skills, risk appetite, competition. There are many factors that can influence a business' investment choices, and generally it is not always possible to dictate investment by pulling on policy levers. However, longterm strategies from Government can provide certainty and predictability for industry, and visions such as achieving net zero and becoming an Al superpower can incentivise greater investment in productive activities. The recently published Industrial Strategy Green paper has named Advanced Manufacturing as a key sector that will drive the UK's strategy



## OF MANUFACTURERS SAY CONFIDENCE THAT DOMESTIC DEMAND HAS IMPROVED WILL INCREASE INVESTMENT

going forward. This messaging will help manufacturers direct their investment in a more appropriate direction.

For this reason, nearly six in ten manufacturers say that confidence in the domestic market is the most important factor which will influence their investment decisions, whether that is in plant & machinery, innovation or labour. Confidence in economic conditions supersedes even the need to upgrade and/or replace equipment, which is important for 43% of businesses.

However, there are other factors, including exporting conditions, the need to expand as well as Government incentives, such as capital allowances or R&D tax credits, which improve the potential return on investments (ROIs) for different projects. For each business, the most important factor may be slightly different, but it is clear external conditions play a more prominent role than internal business conditions.

#### Chart 4: Factors that will influence decisions to increase investment over the next 12 months

% share of responses



Source: Make UK/RSM UK Investment Monitor Survey 2024

## **BRINGING IT ALL TOGETHER**

Priorities for the medium term are clear for manufacturers. From a policy perspective, it is important that we don't pull the rug from under the feet of manufacturers with too many radical changes to existing incentives. This will help produce the domestic confidence manufacturers are looking for.

The Government should commit to keeping full expensing of capital allowances in place, making R&D tax credits easier to use, and directly tackling disincentives like unfair business rates. Despite the differences in investment intensity by organisation ownership, FDI will play a prominent role in achieving the Government's missions. Going forward, it is important we adapt our business environment to attract foreign investments of the highest quality which ultimately leads to greater prosperity for the UK. All of this good work should be coupled with proper campaigning to ensure businesses are also aware of the wider support ecosystem that exists, such as publicprivate funded institutions like the Catapults, Innovate UK, the British Business Bank or Made Smarter. Collaboration between these institutions can help accelerate the adoption of the technologies that will be key to economic progress.

## PART 2 INVESTMENT AND DIGITAL ANALYTICS

## **ADVANCING PRODUCTIVITY WITH DATA POWER**

Since the onset of electronic telecommunication technologies in the late 1800s, to modern internet services, the volume and value of data that businesses and people produce has reached unprecedented levels. The value of that data broadly depends on how it is analysed and used to inform decisions such as investment choices, recruitment, marketing strategies, or resource management. Manufacturing businesses are a life spring for data which grants great opportunity for data analytic solutions to provide support. Now many businesses are beginning to find unique ways to use the abundance of unstructured information they have to create both effectiveness and efficiency gains.

The use and impact of data analytic technologies in the manufacturing sector is one of the key themes of the Investment Monitor survey. Manufacturers make use of data analytic technologies in many different ways, from optimising the manufacturing process; planning stock levels across their supply chains; to developing social media campaigns and calculating return on investments for R&D. The applications are endless, though many SMEs remain behind the curve when it comes to maximising adoption of these technologies. Despite this, an overwhelming majority of manufacturers (66%) say that data analytics have made an overall positive contribution to their business which suggests there is largely a welcoming response for such technology amongst these businesses.

These are exciting times for the world of data, worth more than £15bn to the UK<sup>4</sup>, and manufacturers are exploring data analytics for all functions of their businesses to maximise their benefits. When asking manufacturers in which areas they had implemented data analytics, at least 50% said, encouragingly, all key departments had some level of data analytics built into their functionality. Chart 5: Has the use of data analytics made an overall positive contribution to your business?

% share of responses



Source: Make UK/RSM UK Investment Monitor Survey 2024

<sup>4</sup>Department for Business & Trade (Data analytics and artificial intelligence applications in Leeds City Region - great.gov.uk international)

For most it varied anywhere from 1% and 49% of the particular area whether it's in finance, IT or HR. One in four have implemented data analytics into 49-99% of the manufacturing process too, highlighting progress in the digitalisation journey. An illustration of data analytic examples in the manufacturing sector are also highlighted below.

Furthermore, we asked manufacturers, of these varying functions, which have benefited the most from data analytic technologies.

#### The results place the following in the top three:

**36%** said the **manufacturing process** (quality management, material/product processing)

31% said marketing and sales (e.g. CRM)

**30%** said **back office** (fiance, billing, invoicing, procurement etc.)

Whilst there was a mixed response, the top three indicates that data analytics have positively impacted manufacturers across front, middle and back office functions.



## EXAMPLES OF DATA ANALYTICS USES ACROSS THE MANUFACTURING BUSINESS

Energy Management and Emissions control tools are a growing sector for data analytics as more manufacturers implement ESG strategies to reduce their carbon footprint. The emergence of AI is also creating new opportunities in this area.

Quality Management Systems (QMS) can enable manufacturers to ensure products meet regulated standards, as well as support defect detection using machine learning techniques. Manufacturers can use Enterprise Resource planning (ERP) or Material Requirements planning (MRP) software to manage inputs/outputs. ERPs can connect MRPs to other parts of the business, such as energy management.

#### Chart 6: Data analytics penetration within various functions in a manufacturing business

% share of responses showing what share of processes currently make use of data analytics

■ None (0%) ■ Some (1-49%) ■ Most (49-99%) ■ All (100%)

The manufacturing process (quality management; material/product processing, finite scheduling) \_\_\_\_\_\_\_\_\_\_ Marketing and sales (e.g. CRM) \_\_\_\_\_\_\_\_\_\_ Supply chain management – planning, forecasting and capacity planning Manufacturing product design and development Customer Experience Back-office: eg: Finance, billing invoicing, reconciliations, etc. Compliance Transport and logistics Procurement (supplier selection/performance management, inventory monitoring) \_\_\_\_\_\_\_\_ Energy management Skills training HR: recruitment, payroll, staff management



Source: Make UK/RSM UK Investment Monitor Survey 2024

Predictive maintenance software can help manage plant & machinery performance by using data to detect instances of repair/maintenance. This can significantly reduce repair costs, as well as extend the life of assets.

Gamification of training is supported heavily by data analytics. Businesses can use data on user characteristics to tailor training schemes to maximise their impact. So far, mainly training centres have used these techniques.

Customer Relationship Management (CRM) is one of the most common software used by almost all businesses. Manufacturers can use it to manage customers/suppliers, collect data and identify opportunities for engagement.

## THE BENEFITS OF DATA ANALYTICS

The benefits of data analytics are numerous and sometimes can be unexpected. For manufacturers, investment in any modern technologies must result in some positive returns, such as productivity increases, to be worthwhile.



The majority of manufacturers cite exactly the type of efficiency gains that businesses look for in prospective investments. 56% highlight more efficient use of resources due to data analytics, followed by 49% pointing to improved productivity. Although not covered in detail, analytics supports both the identification of where to automate and make tactical improvements that are efficiency based, and, more importantly, analytics supports the decision support systems needed for those who need to plan and allocate often scarce capacity and resources. These are all about being more effective in the deployment and yield gained through both capital and resource utilisation. The rest of the benefits all relate to a form of efficiency gain covering other aspects such as profitability or quality. Only 7% of manufacturers have indicated that they have not invested in digital analytics.

Nearly two in five (38%) manufacturers highlighted that the benefits exceeded their own expectations. This is an important point, particularly when reviewing investment projects, as the element of uncertainty can go in either direction, despite many assuming risk comes with only negative connotations. More than half (58%) said the benefits were as they expected.

This is, so far, really good news, but as reported earlier, most manufacturers have only implemented data analytics to around half of their business processes. This means there exists opportunities to expand on the adoption of data analytics and integrate them further into processes. One area that needs to be looked at more closely is how data analytics can fit within wider technological adoption, such as automation/robotics, Al or energy efficiency and ensure that data collected in any one part of the business can be used to benefit other parts as well. The flow of data, the power of computing, and the decisions made to take advantage of such knowledge will be the key drivers to propelling productivity growth in the sector.

## **38% OF MANUFACTURERS** SAID THE BENEFITS OF DATA ANALYTICS WERE **BETTER THAN EXPECTED**

## 58% SAID THEY WERE AS EXPECTED



#### Chart 7: The benefits of data analytics

Source: Make UK/RSM UK Investment Monitor Survey 2024

## **IT ALWAYS BOILS BACK DOWN TO PEOPLE**

Data analytics is evidently widely accepted by the manufacturing community. The next step is pushing the limits of data analytics and better integrating them into businesses so that manufacturers can gain those efficiency benefits highlighted.

As with all types of investments, there may be barriers that restrict access, particularly in smaller businesses that may lack sufficient knowledge or capital to support those leaps of faith.

The top reason manufacturers have not been able to maximise the value of data analytics is a lack of digital skills. Programming, software, big data and engineering skills are critical to enabling the adoption of new digital technologies. The demand for such skillsets is growing in every sector from retail to construction and even banking and healthcare. Though there is little evidence on the true skills gap, it is estimated that there could be nearly 180,000 vacant roles that require data skills in the UK, more than twice the number of vacancies in the manufacturing sector<sup>5</sup>.

Alongside the lack of skilled bodies, the existing stock of human capital with data skills mainly includes people who use primarily Microsoft Excel, with fewer people knowing how to make use of tools such as Power BI, Tableau or Python. It is estimated that workers in manufacturing spend up to three hours a day on data tasks, but one third of that time is managed inefficiently due to low quality data skills<sup>6</sup>. Solving the skills challenge with a combination on retraining schemes and ensuring the education system's curriculums for young people are meeting the needs of a future work force will play a central role in accessing the opportunities that data brings.

### Chart 8: The main barriers that have limited a manufacturer's ability to make full use of data analytics

% share of responses



Source: Make UK/RSM UK Investment Monitor Survey 2024

<sup>5</sup>Data science skills in the UK workforce - POST (parliament.uk) <sup>6</sup>Multiverse, Mapping the data skills gap, 2024

### **IDENTIFYING WHAT COMES FIRST: THE PEOPLE OR THE TECHNOLOGY?**

The surprising twist in how skills impact the adoption of data analytic technologies, is how the adoption of data analytics impacts the need for skills.

Nearly three fifths of manufacturers say that adopting data analytics increases the need for high skill labour, whilst a similar share (54%) say the need for low skill staff will decrease. This suggests that overall, the net change in employment could be positive though it is difficult to say this with certainty. According to the Made Smarter review, the impact of adopting industrial digital technologies (IDTs), which cover more than just data analytics, on jobs growth is about 1.5%-3% per annum, or a net gain of 175,000 jobs throughout the economy. And yet, the lack of skills is itself a barrier to adopting and using digital analytic technologies.

The impact of data analytics on jobs is likely to be less nuanced than, say robotics or automation which can directly replace roles. Data analytics instead can improve efficiency within existing tasks and enable workers to focus more on value-add activities, such as innovation, marketing or sales. Generally, it is not jobs that are replaced by technologies but specific, laborious tasks like data entry.

In the case where jobs are replaced, however, it is not generally that those who were previously employed in "low skill" roles can easily transfer into the newly vacant "high skill" roles. In such circumstances, retraining programmes become a key policy consideration for Government, something it would need to consider closely if it is to appropriately incentivise a digital revolution.



#### Chart 9: Impact on hiring needs due to the adoption of data analytics

## DATA COMPATIBILITY

The second barrier disabling progress in data analytics is the lack of integration with existing software. Manufacturers use many different types of solutions for different areas of the business, such as specific software for accounting and billing which will likely differ to the programmes used to manage supply chains or health and safety. Most data analytic programmes typically tap into a small number of platforms, such as Microsoft, Google, or AWS which, in theory, should enable different data products to mix with each other. The problem is many SMEs, nearly three quarters, continue to rely on legacy systems to operate machinery, which make it more difficult for modern solutions to integrate without a full house system upgrade.<sup>7</sup>

Furthermore, the lack of awareness or understanding of how these products work can make integration challenges worse. In this case, skills become an issue again as knowledge of how to integrate such software is often the trade of an expert.

## SO WHAT SHOULD MANUFACTURERS DO TO OVERCOME THE BARRIERS?

Learn from success stories, seek advice and explore every nook and cranny to make sure all avenues have been considered.

As part of this report, RSM UK have created a simple five-step process that can help any manufacturing business take that next step on their digitalisation journey, whether they are only at the beginning or already experienced. This can be found on page 25.

<sup>7</sup>Intoware, "Why Is Disconnected Data Holding Your Business Back?", 2023

## PART 3 INVESTMENT AND FINANCING

A key ingredient in the investment cycle is how business access and use finance to support their capital expenditures. Finance is critical to enable the adoption of data analytics as well as purchasing plant & machinery or developing new products.

Following 14 back-to-back increases in interest rates since 2021, there was a growing concern that access to finance would become more restricted for businesses, particularly for smaller businesses that may have challenging liquidity positions or lack awareness of where to seek additional support. However, finance is recognised to play a hugely important role for investment, with 70% of manufacturers highlighting that they would have invested less, or none, if access to finance was reduced.<sup>8</sup>

Fortunately, over half (58%) surveyed said that raising funds for investment has been very or somewhat easy.

Overall, it is positive to see that many manufacturers are active in fundraising for investments, which can support investment in plant & machinery, R&D or even adopting data analytics.

#### Chart 10: The ease of raising funds for investment

% share of responses



Source: Make UK/RSM UK Investment Monitor Survey 2024

<sup>8</sup>Make UK/NatWest, Finance: Opening Doors to Investment in Manufacturing (2024)

## **DIFFERENT METHODS OF FUNDING INVESTMENTS**

Manufacturers can access many different types of finance to fund specific projects. Previous Make UK research found that the most common investment that requires access to finance is capital equipment (i.e. plant & machinery), which leads naturally to most manufacturers using asset finance (39%) and debt (27%) for investment.<sup>9</sup>

Plant & machinery can be divided into different categories, which cover Basic, Advanced and Long-term capital. The types of finance that are most likely to be used can differ based on the type of investment<sup>10</sup>. As the survey findings illustrate below.

The data finds manufacturers use short-term credit more to invest in basic capital, but as the size of the investment grows into advanced or long-term fixed capital, businesses become more reliant on more material external finance (such as loans, equity, or cash injections from parent organisations). These results are as expected for manufacturers.

#### Chart 11: Methods used to fund different types of plant & machinery

Basic capital (e.g. computers and equipment for staff)
 Advanced capital (e.g. onsite machinery for production and processing)
 Long-term fixed capital (factory space, warehouses etc.)



Source: Make UK/RSM UK Investment Monitor Survey 2024



<sup>9</sup>Make UK/NatWest, Finance: Opening Doors to Investment in Manufacturing (2024)
<sup>10</sup>Make UK/RSM, Investment Health (2022)

## FUNDING RESEARCH AND DEVELOPMENT

The findings differ to the types of finance manufacturers would use to fund R&D and innovation spend.

#### Types of finance manufacturers tend to use for R&D

% share of responses



The main difference between investment in plant & machinery and R&D is that the latter carries greater risk. When a manufacturer invests in R&D, often the greatest share of costs is accumulated by the research element. This is the process where ideas are brainstormed, experimentations occur, and products are tested through trials and errors. As a result, many ideas may even fail and never see the light of day. Once a winning idea has been discovered with a proof of concept, the development stage can begin. Because of this it is incredibly important for state support to encourage investing in innovation.

R&D tax credits are a major support mechanism for manufacturers, who account for 47% of all R&D expenditures. In 2022, manufacturers claimed over £1.7bn in R&D tax credits, making them the second largest claimant in the UK<sup>11</sup>. This demonstrates how much this sector relies on such support, and so it is critical that Government policy is aligned to ensure these incentives continue to be accessed by manufacturers. That said, just 46% of respondents rely on it.

## **BARRIERS TO ACCESSING FINANCE**

Challenges faced when accessing finance in the last 12 months

% share of responses



#### Source: Make UK/RSM UK Investment Monitor Survey 2024

There will always be some challenge to accessing finance, and the biggest one for manufacturers is higher interest rates. Though, interest rates are on their way down so more businesses may expect to find access to finance improves overtime. Other factors, such as strict lending criteria, or complex application processes will be a bigger problem for smaller businesses. These issues are unlikely to be solved even if interest rates were lowered.

**38% OF MANUFACTURERS FACED NO CHALLENGES ACCESSING FINANCE IN THE LAST 12 MONTHS** 

## DART 4 GOVERNMENT SUPPORT

The findings of this survey make clear that manufacturers have bold investment plans, and are accepting digital technologies, such as data analytics, with open arms. There is a significant opportunity to help businesses along this journey by ensuring that Government policy is creating a supportive business environment.

Recent developments to capital allowances in the UK have been far more encouraging than in any decade prior. Following the announcement that the £1 million threshold for the Annual Investment Allowance would be made permanent, the previous Government also introduced full expensing (100%) of capital allowances to replace the unprecedented super-deduction policy. It showed that the Government was beginning to understand the value of being generous by creating policies that serve long-term growth agendas and are accessible to a wide variety of businesses. This change alone put the UK in the top five amongst OECD countries for how we treated capital expenditure by businesses.

These changes should be applauded, but we must avoid assuming the job is done. To retain the UK's competitive advantage in tax reliefs for capital allowances it is imperative we continue to advance the policy so that it can serve more businesses and generate the investment needed to boost productivity.

## Policy changes that manufacturers believe will help further incentivise investment activity

% share of responses



Source: Make UK/RSM UK Investment Monitor Survey 2024

## RULE OF THREE IN POLICY-MAKING

In 2022, Make UK and RSM developed the Principles of Capital Investment Incentive Design, these were: **Longevity, Generosity, Accessibility**.

In the latest survey findings, we see similar themes continue to be highlighted by manufacturers, which can help give policy makers direction on implementing an industrial strategy.

## **MAKE IT SIMPLE**

Outside of cutting Corporation Tax, which is the most preferred policy change, manufacturers want capital allowances to be simplified and easier to use. For example, according to the Capital Allowances Manual, software can be considered as "plant" under certain conditions even if there is no physical asset. Many manufacturers do not know this, and therefore are unaware of the potential to use capital allowances to accelerate the digital revolution. Improving information and clarification of such details can support investment in the manufacturing sector.

The same applies to R&D tax credits, which are known to be quite complex. Many manufacturers (43%) would like to see R&D tax credits also made to be more generous, especially if certain innovation tasks could yield positive benefits that progress the sustainability or decarbonisation challenge. By making such policies both simple and rewarding, we can enable manufacturers to have the confidence they need to invest in what matters.

## MAKE IT ACCESSIBLE

A large share (46%) wants full expensing of capital allowances to be expanded and allow for the leasing of plant and machinery assets. Following the announcement that full expensing would be made permanent, the Treasury indicated there would be consultation on the scheme's expansion to leasing. Research shows that a small proportion of manufacturers, about 15%, prefer to lease than buy brand new and this is especially true for smaller businesses<sup>12</sup>. By expanding the policy, whilst also making it easier to understand, we can ensure that no manufacturer is left behind.

Additionally, it is not the Government's role to decide whether a business should buy or lease equipment. Therefore, to maximise the efficiency of capital allowances, manufacturers should be entrusted to make the right choices for themselves. This thought process should apply to any policy lever pulled to incentivise growth and investment whether it is capital allowances, Corporation Tax, R&D tax credits or even business rates. A fair system is critical for prosperity. For example, 23% of manufacturers also want export finance to be easier to access, another area of concern for SMEs. Many Make UK members have highlighted that accessing export finance has become extremely challenging for small businesses recently, and with less than one in four manufacturers currently exporting,<sup>13</sup> there is an accessibility challenge that clearly needs to be solved.

## **MAKE IT STICK**

Longevity was previously identified as a key ingredient in the investment process.<sup>14</sup> Short-term, piecemeal supports that look great on paper did little to motivate manufacturers to make serious investments that could drive genuine growth. This lesson became clear to Government eventually, and with an industrial strategy on the horizon, the new Government has a perfect opportunity to take these ideas forward. It is the Government's role to set the national agenda and make it clear what the UK's ambitions are. Whether it be a net zero economy or an AI superpower, by setting a clear objective we can mobilise manufacturers to invest in the areas that will lead to better jobs growth, higher productivity, and improved well-being for society.

<sup>12</sup>Make UK/RSM, Investment Health (2022)
 <sup>13</sup>ONS
 <sup>14</sup>Make UK/RSM, Investment Health (2022)

## CONCLUSION

The approach we take to solving the investment challenge will be key in solving many other challenges. Other western nations are more open to this idea, as we have seen in Europe with the release of the Draghi report and the US's Inflation Reduction Act. The UK must demonstrate that it is a key player in the race to create the solutions that will help us decarbonise and digitalise. The industrial strategy will be a part of that story, and as the results of this survey show, manufacturers are ready to invest and capitalise on the power of data.

Data gives businesses power. When analysed, the insights of data can open opportunities that were not previously visible to managers. As we now know, data analytics is clearly important to manufacturers, but we can go further with the right incentives and create a supportive business environment. With the right tools, data analytics can improve supply chain resilience, find energy efficiencies, and even support the training of staff. It is imperative that we take advantage of a calmer economic climate to push business investment further. This must include taking capital allowances and R&D tax credits further, looking at the apprenticeship system, and pushing the boundaries of trade so British made goods can go global. Capital equipment, R&D and labour will always be priority, but it's sometimes the smaller steps we take that have the greatest impact. Using the power of data to drive productivity growth is that next step.

## RECOMMENDATIONS

#### **CAPITAL INVESTMENT SUPPORT**

- Simplify access to capital allowances so more manufacturers can use it for a wider variety of investments, including software and digital.
- Expand full expensing of capital allowances to allow for the leasing of equipment, as well as upcycled/refurbished second-hand machinery to support sustainability.

### R&D

- Introduce enhanced deductions to R&D tax credits for specific classes of innovation investment, such as those for accelerating decarbonisation or digitalisation.
- Review the changes made to R&D tax credits in 2023, and revise the changes that negatively impacted support for SMEs.
- Keep the commitment to roll out the Made Smarter adoption programme to the remaining English nations.

#### LABOUR/SKILLS

- Ring fence Apprenticeship Levy funds, and ensure funding bands are reviewed to appropriately fund training courses.
- Ensure there is sufficient flexibility within the Levy to allow for access to shorter/modular courses. This will help to address the reskilling challenge, particularly for digital skills.

## **RSM VIEWPOINT**

## RSM

The manufacturing sector has endured its fair share of turbulence in recent times. Geopolitical tensions, supply chain challenges, slow demand, and inflationary pressures have all played their part in the sector lagging behind the UK's general economic recovery. To this backdrop, it's hugely encouraging to see such clear investment intentions outlined within our Investment Monitor.

The industry already invests nearly half of the private sector's total spend on innovation with around £30bn a year in capital assets and £20bn in R&D. So, the labour government has strong foundations to build upon and it's only right that the focus is on embedding an industrial strategy, providing further confidence to the industry and, in the long run, stimulating even greater investment.

#### The push towards automation and digitisation

While investments in plant and machinery, skills and R&D will always rank highly on the list of investment priorities for manufacturers, one of the key messages that jumps off the page within this report is the extent to which investments in digital technologies are being prioritised. This shift isn't just about modernising operations—it's about fundamentally transforming the way manufacturers approach production, resource management, and innovation, and it appears investments in data analytics are taking centre stage.

#### Investment in Skills and Workforce Development

Of course, one of the major barriers to broader adoption of digital technologies remains a lack of digital skills, and it's therefore encouraging to see the emphasis manufacturers are placing on workforce investments. The gap in high-level digital skills presents a challenge, but it also represents an opportunity for businesses to invest in training and development programs that will enable them to harness the full benefits of digital transformation.

In addition to upskilling current employees, manufacturers continue to invest in apprenticeships and recruitment to ensure they maintain a steady pipeline of talent.

#### **Financing Challenges and Opportunities**

While improving economic conditions have bolstered manufacturers' confidence, 27% of survey respondents cited difficulties in raising finance. Helping our clients navigate these challenges has become more and more important as the myriad of financing options continues to shift and as testing market conditions have complicated matters further. The importance of investment incentive schemes should not be overlooked as a source of capital too. We regularly assist our clients with their innovation and capital tax relief claims, dispelling myths that they do not undertake any qualifying activities, or that it's too difficult to make a successful claim. In our experience, businesses taking a proactive approach to exploring multiple avenues of finance are more likely to secure the capital they need to invest in growth and innovation.

#### The future

Our 2024 Investment Monitor survey shows that manufacturers are cautiously optimistic about the year ahead. With a focus on digital technologies, skills development, and strategic investments, the industry is positioning itself to lead in innovation and productivity - but it needs support. Embedding an industrial strategy that delivers long-term and sustainable growth right across the UK must be the focus for Government, with greater collaboration taking place between industry, Government and the finance sector one of the most crucial components.



15https://www.rsmuk.com/our-people/mike-thornton

## **MAKING INVESTMENTS IN DIGITAL TECHNOLOGIES - 5 KEY STEPS**

The impact of data analytics extends beyond the production floor to back-office functions such as finance, HR, and supply chain management and our findings indicate most manufacturers have only implemented data analytics to around half of their business processes, meaning there is still more to do if they are to make full use of these technologies. We are certainly seeing increasing adoption taking place across our manufacturing clients, and for those business that are yet to take that leap, we believe there are 5 clear steps for manufacturers to consider.

### Step 1 – Vision, Strategy, and Operating Model

This step will help companies address any anxieties with the beginning of the digitalisation journey, by defining goals that consider budgeting, resource allocation, and timelines as well as the target (or future) operating model they need to deliver the vision. We call this the WHY and WHAT in their problem statement.

### Step 2 – Insight and Data Discovery

At this step a business should ask questions around WHICH processes need to be improved and around what tools and data they will need and what outcomes are expected as a result of the investment. This should form part of a portfolio of changes to their operating model in terms of digitising areas such as manufacturing processes, back office or customer service areas. Ultimately the portfolio will come about from the difference to what they have today to determine what changes in systems require updates and what the future re-imagination of these areas could be through the application of technology and data.

Sometimes this can start by identifying a small problem which we often term a digital use-case, that could be solved with a new or replacement digital and data solution.

### Step 3 – Establishing Governance and Support Processes to Secure Success

Identify the people who will have ownership of responsibilities (IT manager, head of procurement, head of operations etc.) This will require evaluating your understanding of data and establishing data management practices. Such as data collection, storage, analysis, and ensuring a cyber secure infrastructure is in place. It may also require building knowledge of regulations and standards to ensure businesses do not contravene in any areas (e.g. GDPR).

### Step 4 – Transformation, Implementation and Execution

Successful implementation requires managing how people will need to embrace and make the shift on the transformation journey needed around future data and technology needs. Often this requires change management, which involves providing support, training and communication to employees to make sure they understand the benefits of digital solutions. For example, gather data directly from shop floor staff to build insights that can lead to operational change and demonstrate how data insights can be used to enable this. Additionally, a company can create a series of change workshops that involve employees directly in the digitalisation journey.

### Step 5 – Optimisation and Innovation

Keep track of progress. For example, once a new technology has been piloted, a manufacturer should consider whether replication of this technology would be appropriate in other areas of a business or expansion into the current process. This requires understanding ROIs and the benefits of wider adoption which may not be the same in all departments of a business. These decisions should be taken by leaders with input from shop floor staff.

#### Joel Segal, Head of Business Transformation, RSM<sup>16</sup>

<sup>16</sup>https://www.rsmuk.com/our-people/joel-segal





Make UK, The Manufacturers' Organisation, is the representative voice of UK manufacturing, with offices in London, every English region and Wales.

Collectively we represent 20,000 companies of all sizes, from start-ups to multinationals, across engineering, manufacturing, technology and the wider industrial sector. Everything we do – from providing essential business support and training to championing the manufacturing industry in the UK and internationally – is designed to help British manufacturers compete, innovate and grow.

From HR and employment law, health and safety to environmental and productivity improvement, our advice, expertise and influence enables businesses to remain safe, compliant and future-focused.

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RSM UK is a leading audit, tax and consulting firm to the middle market with 5,420 partners and staff operating from 31 locations throughout the UK. For the year ending 31 March 2024, RSM generated revenues in excess of £543m. RSM UK is a member firm of RSM International - the sixth largest network of assurance, tax and consulting firms globally. The network spans more than 120 countries, over 800 offices and more than 64,000 people, with global revenues of \$9.4 billion (US).

As an integrated team, they share skills, insight and resources, as well as a client-centric, collaborative approach that's based on a deep understanding of clients' businesses. This is how they empower their clients to move forward with confidence and realise their full potential.

Manufacturing is one of RSM's key sectors, providing services to more than 1500 manufacturing businesses each year. Their experience in the sector has been built up over many years by serving the needs of their manufacturing clients and providing proactive solutions to their compliance and business advisory requirements.

RSM understands the complexity of the demands the industry is facing, whether it's managing supply chain disruption, productivity challenges, labour shortages, environmental pressures, or making investments in digital technologies.

RSM also focusses on specific sub-sectors within the manufacturing industry to improve their service to clients. These include: aerospace and defence, automotive and food and drink. They have national sub sector groups that regularly provide insights and events for these parts of the manufacturing sector.

Combining their industry knowledge, deep resources and personalised service, they offer solutions to help their clients achieve their objectives.

For further information, please visit the RSM website or opt in for their manufacturing mailings.

For more information, please contact:

Fhaheen Khan Senior Economist fkhan@makeuk.org

Make UK Central Policy MakeUKCentralPolicy@makeuk.org

To speak with RSM about the challenges and opportunities that your manufacturing business is currently facing, please contact:

#### **Mike Thornton**

Head of Manufacturing, RSM UK +44 7725 258094 michael.thornton@rsmuk.com

#### Joel Segal

Head of Business Transformation, RSM UK +44 7590 354090 joel.segal@rsmuk.com





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