



Foreword

Written by Sir Charlie Mayfield on behalf of the Productivity Leadership Group.



Productivity is vital not just in driving the growth agenda, but increasing social prosperity and improving living standards, too. Yet our current productivity trajectory is flat. The global crisis and recession that followed has left a severe impression on the business world and the turbulence following Britain's vote to leave the EU risks more economic uncertainty in the months and years ahead. If productivity growth was important before 23 June, it is even more so now.

Although our lacklustre productivity performance has been much analysed and discussed we are a long way from it being resolved. That resolution will come mainly from business and it is time for concerted action. The routes to improvement are many and varied but they all depend on strong ambitious business leadership and enduring action on the ground.

In July 2015 a group including some of Britain's most senior business leaders came together to explore what practically could be done: a move welcomed by the Chancellor of Exchequer and the Business Secretary. We have explored what potential there is in business-driven, "bottom-up" change and

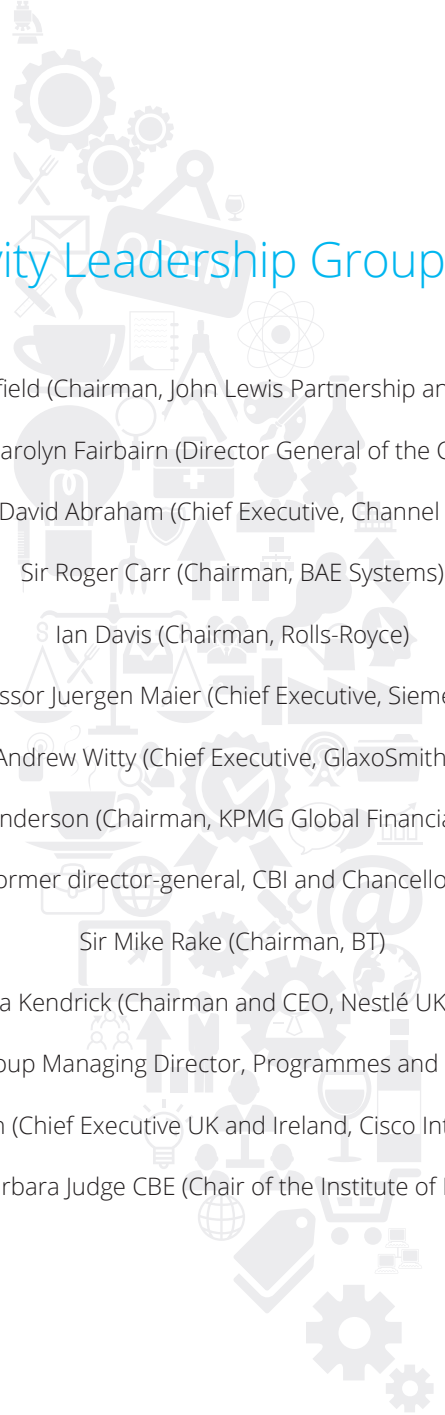
continuous improvement among individual businesses. Our analysis confirms that productivity should be better in businesses of all sizes and sectors. Unlocking the opportunity could be extremely valuable, perhaps adding as much as £130bn in GVA to the UK economy each year. The question is how?

Everything starts with engagement. For many people 'productivity' is a term used by economists. For others it has connotations of cost reduction or job losses. To engage people 'productivity' needs to be positive and aspirational. It has to be something that businesses care about. And for that reason we have chosen to pose a question: How good is your business really? While that might not be as pithy, it speaks to the entrepreneurial and competitive spirit of business people.

We want more businesses to ask and importantly to answer that question. To help, we have developed tools that enable businesses in different sectors to do that quickly. We have then worked with a number of business groups in sectors ranging from advanced manufacturing, retail, food and drink to the creative industries to develop practical ways of supporting businesses to improve their business practices. These include addressing themes such as management and leadership, innovation, digitisation, work organisation and measurement. We have had the advocacy of some of the UK's most senior business leaders and we are confident the approach we have developed will make a difference. But equally delivering wider impact means we need to find ways to secure take up and leadership in other sectors and to scale up and extend our reach widely across the economy.

We therefore want to turn this into a movement involving thousands of businesses who want to address How good is your business? This movement will be 'open source' rather than prescriptive, but it must be about results. The first examples of activity that will make up the movement are underway. We now want to engage a broader group of businesses, trade associations, unions, universities and business groups in making productivity improvements.

If we are to learn from successes of other countries, the movement itself needs sustained business leadership. We have therefore called for a small high quality Productivity Council to ensure our initial work has a life beyond July. With such leadership we can close the gap on international competitors. But for the movement to build momentum quickly and grow fast, partnership is key. With Government support we can secure recognition as the UK's answer to Industrie 4.0 and create the conditions for broader engagement. More generally, the response of wider partners to this work has already been encouraging including amongst businesses, industry associations, banks, universities and Local Enterprise Partnerships. We now need to link to businesses more widely through established networks, trade and professional bodies, and through supply chains. This work is the starting point for us to make progress on critical business issues. The invitation is now to join in, and working together to be a catalyst for more better run business across the UK.



Productivity Leadership Group members

Sir Charlie Mayfield (Chairman, John Lewis Partnership and UKCES) – Chair

Carolyn Fairbairn (Director General of the CBI)

David Abraham (Chief Executive, Channel 4)

Sir Roger Carr (Chairman, BAE Systems)

Ian Davis (Chairman, Rolls-Royce)

Professor Juergen Maier (Chief Executive, Siemens UK)

Sir Andrew Witty (Chief Executive, GlaxoSmithKline)

Jeremy Anderson (Chairman, KPMG Global Financial Services)

Sir Richard Lambert (former director-general, CBI and Chancellor, University of Warwick)

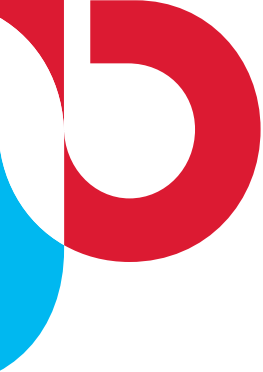
Sir Mike Rake (Chairman, BT)

Dame Fiona Kendrick (Chairman and CEO, Nestlé UK and Ireland)

Nigel Whitehead (Group Managing Director, Programmes and Support, BAE Systems)

Phil Smith (Chief Executive UK and Ireland, Cisco International)

Lady Barbara Judge CBE (Chair of the Institute of Directors)



Executive summary

'The productivity performance of the UK economy will be the single most significant factor in driving the growth agenda and social prosperity.'

The opportunity

The productivity performance of the UK economy will be the single most significant factor in driving the growth agenda and social prosperity. Higher productivity means higher profits and wages and in turn higher tax revenues and stronger public finances. Its effects are far reaching socially as well as economically too, being a source of growing opportunities and living standards. Yet for some years now, the UK's productivity trajectory is flat. The global financial crisis, and recession that followed, has left a severe impression on industry.

The UK isn't alone in this. Almost every advanced economy has seen a sharp slowdown in productivity. But the UK has been amongst the most affected and the gap with competing economies is significant and getting wider. Within the G7 group of the seven largest economies the UK went from having the fastest growing productivity in the years before the recession to the second slowest growing in the years since. Our analysis confirms our view that productivity should be better in businesses of all sizes and across all sectors. Much of Britain's productivity problem rests within businesses and only business has the knowledge and ability to tackle it, with government, universities and others working to enable their efforts. What's more, ongoing innovation, emerging trends in digital connectivity and the challenge of

rapidly developing economies are disrupting business models and transforming global markets: acting now is necessary before the productivity gap with leading economies widens still further.

The opportunity is significant. As an indication, if less productive businesses improved their performance to match the performance of a company ranked 10 percent above them today, that would result in around a 10 percent boost to productivity. Whilst the potential prize is large, there are no simple or single solutions. The opportunities of a modern global economy, allow businesses to think afresh about how to improve and innovate in how they operate, not only within their own individual businesses but working together too to find customised solutions. In a more dynamic and connected business world, securing success and competitive advantage is not just reliant on developing unique internal capabilities but finding the right networks and partners too. More businesses taking a lead in stepping up to collaborate to raise their performance, as well as acting individually, through industries, supply chains and local areas is essential to making any tangible progress against the UK's productivity problems.

In raising the sights and ambition of more businesses across the UK we must learn from the progress made by other leading nations

such as the US, Singapore, Australia as well as those closer to home like Germany. At a time when digital technologies and the Internet of Things are transforming the economy at a frenetic pace, Industrie 4.0 describes an ambitious programme by German manufacturers working together to transform their strategy, products and working practices. The goal is to enhance the industry's international competitiveness offering smarter factories, making customised products, with the efficiency and effectiveness of mass production. Progress has been driven by business, but has been enabled by government, universities and wider industry experts – all working to a vision created by leading businesses. We will only be able to turn the productivity position around in the UK with a similar ambition, driving hundreds of thousands of business stories of sustained and continuous improvements over the long term. We need more of our businesses learning from our high performing frontiers in the UK, thinking afresh about what they can do to make workplaces more competitive, more innovative, more high-tech and smarter, with workforces that are more motivated and ultimately more productive. A key question, then is how to create the conditions for this to happen to transform business performance in scale and, in what areas do we need to focus?



The task

In April 2015, Sir Charlie Mayfield and Sir Richard Lambert hosted a breakfast to bring together some of Britain's most senior business leaders to discuss what businesses could do about the productivity problem. The Productivity Leadership Group started work in earnest in September, after the Government signalled its support for our work in the Productivity Plan on 10 July*. Since then, the Group has been working with businesses, within seven Business Leadership Groups, to explore what practical action they can take on the ground to share learning and secure business improvements. This isn't about another Government-funded programme, but building a market place for business improvement to support networking and knowledge transfer, in a way that engages business leaders, managers and employees. The work of the group is meant to be the first step on a much longer journey, seeking to provide a catalyst for transforming business culture, focusing action and securing more better run businesses across the UK. The Productivity Leadership Group

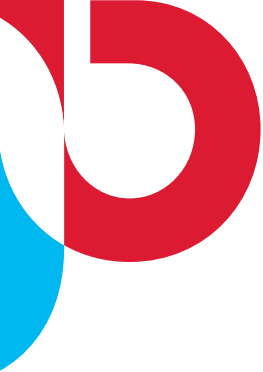
have agreed the need to scale up the impact and this is the next challenge – how to build from the first tangible examples of business action to a growing business movement, involving thousands of businesses. For this we need to establish the leadership to ensure the initial work started gains traction beyond July, which is when the Group, as it exists today, will disband.

The proposition

A key to our approach is engagement but for many businesses 'productivity' is not enough of a priority. Few businesses measure it, and, when asked, most businesses say they are above average. We therefore need an approach that is simultaneously practical, engaging and ambitious at scale. Practical engagement comes in three steps. First, we need businesses across the country to have an informed view on how good they are. Second, we want them to be able to see, and ideally experience, what good looks like. And third, we want them to have access to the support they need to make improvements.

Businesses working together have developed specific tools and initiatives to make these steps tangible and relevant. Each of the seven business led groups has addressed this with plans at various stages of development. We are beginning to share these practical steps and stories of what can be done over the long term to build a quality assured, business backed marketplace for better business engagement and collaboration to inspire more businesses to act. This will form the basis to encourage wider businesses to join and thus engagement to organically grow. There is already a real enthusiasm for the potential in key sectors such as manufacturing and food and drink, retail and the creative industries, but also on cross cutting themes supporting management and leadership, better working practices, innovation and digitisation. Everything therefore starts with engagement and we have started to develop a modern way for businesses to assess How good is your business really? From there we are developing practical ways of supporting businesses to improve how they are run more widely.

*HM Treasury (2015). Fixing the foundations: Creating a more prosperous nation. Cm. 9098.



The Productivity Leadership Group

The Productivity Leadership Group came together to work out how they could work together to improve productivity in their own businesses and across their industries. The approach was explicitly bottom-up, with business leaders coming together in specific Business Leadership Groups to focus on shared problems and opportunities:

The **Manufacturing** group, led by Juergen Maier of Siemens, focused on the need to improve improvement management, skills and culture within the industry.

The **Digitisation** group, led by Phil Smith of Cisco with the support of the Tech Partnership, looked at how to break down the barriers to adopting the latest technologies in manufacturing and retail industries.

The **Food and Drink** group, led by Dame Fiona Kendrick of Nestle with the support of the Food and Drink Federation, looked at the talent pipeline for the industry and how to ensure that food and drink manufacturers can continue to get the people and skills it needs.

The **Measurement** group, led by Jeremy Anderson of KPMG and Ian Davis of Rolls-Royce, with support from McKinsey & Company, Inc., investigated the role of measurement and benchmarking in driving improvement, and developed an online tool to offer an initial step on the journey.

The **Better Workplace Practices** group, led by Sir Nigel Whitehead of BAE Systems with the support of the Trade Union Congress among others, looked at the power of employee engagement to deliver lasting productivity gains, focusing on the aerospace industry.

The **Retail** group, led by Sir Charlie Mayfield with the support of the British Retail Consortium, looked at the future workforce needs for the retail sector, especially in the

context of the National Living Wage, and explored the potential to raise the skill and productivity of employees.

The **Creative** group, led by David Abraham of Channel 4, looked at the role of 'absorptive capacity' and the importance of collaboration in driving innovation.

Each of the groups started by exploring the evidence on their industry's productivity issues, and since then have been exploring how to develop the tools and networks to tackle those problems.

But this initial work, while valuable, will not on its own come close to achieving the scale of impact across the economy we need. For that to happen these early moves must be seen as the first wave of a movement that businesses want to join. This will depend on businesses' confidence in the value of doing so, in the movement itself being dynamic and on a broad supporting network that signposts, encourages and rewards engagement. So we hope to add to the actions that we are already developing through the business groups engaged in this project and to embrace and connect to wider partners and initiatives.

The movement will need to build momentum over the long term. We will need a campaign, with many supporters, to encourage businesses to join the movement so that it can organically evolve. The CBI, IoD, EEF, the TUC and other business partners will need to promote activities taking place and play an active role in developing broader engagement. There will already be wider business-led action taking place of which we are not yet aware and to which we need to connect, strengthening the reach of the marketplace over time. Bigger businesses will want to make this a requirement of their supply chains. Established industry councils, trade and professional bodies and trade unions will want to link businesses to their active communities. Universities and

research institutes will look for opportunities to leverage their research and development work. Banks should make it a part of their lending decisions. Investors will expect companies to engage to realise their growth ambitions. HMRC should signpost this, for example via online tax returns. Local Enterprise Partnerships and regional groups will be seeking to spread good practice across their local business communities. Other Government agencies like Innovate UK will be seeking to support greater innovation and knowledge transfer. And, perhaps most important of all, the Government must endorse this as the UK equivalent of business-led initiatives in other countries such as Industrie 4.0.

The leadership

None of this will happen on its own and certain requirements will need to be in place to build this business-led movement and ensure its success; not least it must:

- **Secure strong and sustained leadership.**

A Productivity Council must be established with the authority and accountability for developing the movement and building momentum post July.

- **Be business led.** It is proposed that it is chaired by an experienced and senior business leader, with a small but senior advisory board, similar to that of the Infrastructure Commission in size and seniority.

- **Be responsible for the movement.**

This means the Council must play a role in championing engagement, building the campaign, promoting good practice and connecting businesses to practical business networks, advice and tools.

- **Be financially independent.** The majority of the activity within the movement must be resourced by businesses and self funding so that it is not dependent on public funds.

- **Progress demonstrable action around a few cross-cutting priorities.**

It is essential that the movement is able to focus its attention and resources and convene work in areas where there is the most pressing business need so that it can build momentum on the back of achieving of real business improvements and productivity impacts.

- **Own the 'brand' and ensure quality.**

This means the Council must be responsible for measuring progress and regularly refreshing data sources and insight.

- **Be accountable.** This will need to be built in to the Council from the outset in two directions – to members of the movement and to Government.

The Invitation

This proposal is supported by many stakeholders such as the CBI, the TUC, the FSB and others.* Its purpose is to give a glimpse of what can be achieved when leaders set high ambitions for their business, their industry and wider communities. They are vital first steps of businesses committing to work together, and smarter to drive forward continuous improvement over the long term.

For example, the stories and practical action developed through this project represent an invitation to the many thousands of leaders out there who want their business to better compete and their country to prosper, to join in making a change to Britain's business climate. There is already wider business-led action taking place of which we need to connect moving forward. Some undoubtedly too we are not yet even aware of so we hope to add to the actions that we are already developing and to evolve business engagement over time. The invitation is to join in. Start by raising ambitions, measuring, improving, innovating, and then reaching out to others to share and collaborate: **howgoodisyourbusinessreally.co.uk** to find out how you can get involved.

*A full list of stakeholders is at the end of this report.



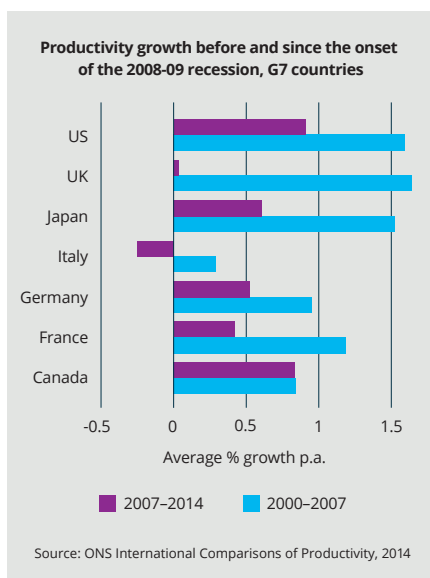


Introduction

The financial crisis and the recession which followed it has left a sharp impression on industry just as it has the public. For thirty years before, British business had seen continuing gains in productivity; year in, year out. Sweeping structural and technological change and two recessions had not got in the way of sustained progress.

But this time really has been different. In the eight years since the start of recession, productivity growth has seen a slowdown close to a stop, with only some recent, stuttering, signs of recovery. By the end of 2015, productivity was 14 percent lower than where it would have been had growth continued at the rate we had grown used to in the preceding decade.

Britain isn't alone in this. Almost every other advanced economy has seen a sharp slowdown in productivity growth. But for whatever reason – be it our exposure to the financial crisis, to the changing global economy, or something else – Britain has been among the most affected. Within the G7 group of the seven largest economies, Britain went from having the fastest-growing productivity in the years before recession to having the second slowest-growing in the years since then.



Lower productivity means lower profits and lower wages, and in turn that means lower tax revenues and worse public finances. Living standards and opportunities all reflect the pinch of lower productivity and its effects are far-reaching socially as well as economic. It's a problem for government, but it's also a problem for all of us as managers, employees and those with their own businesses. Slower productivity growth challenges us to think afresh about what we can do to make our workplaces more competitive, more innovative, and happier places to be, with motivated people and ultimately, more productive.

Understanding productivity:

When we say productivity we're really talking about labour productivity, which is defined as the value of the goods and services we supply, over the amount of working time used to produce them.

When we say the 'value of the goods and services we supply', that isn't turnover, because that includes the value of goods and services produced by others. Instead, we're interested in the value added within businesses, by managers and employees using the buildings and equipment available to them to deliver to customers. Gross value added is defined as revenues minus the consumption of intermediate inputs.

Intermediate inputs are all those goods and services bought from businesses in other industries. GVA in turn is roughly equal to the industry's total wages bill, indirect taxes bill, and profits. Finally, we measure the amount of labour used by either some measure of the number of employees, or the total hours they work.

Sometimes, we talk about Total Factor Productivity, which is a little different. TFP looks at the value of goods and services, but as well as dividing it by the number of hours, it also controls for differences in the machinery and equipment available, and the skills of employees. That way, it gets closer

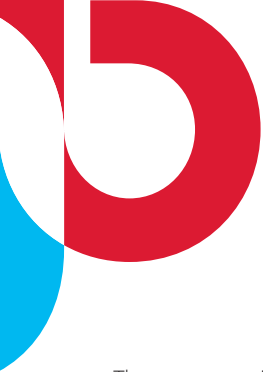
to underlying productivity in terms of how organisations and economies marshal their available inputs to create goods and services which people want to buy.

Why has productivity growth slowed down?

After nearly a decade of essentially stagnant productivity, there's been no shortage of efforts to investigate and understand the 'productivity puzzle': what has caused the slowdown. There certainly seems likely to be some lasting damage from the financial crisis, but that doesn't seem to be the whole story. Part of the explanation seems to be that new technologies, shifting demographics and the rise of massive emerging economies are transforming world markets and disrupting the way business is done – and British business needs to respond if it is to grasp the opportunities and tackle the risks these changes represent.

Certainly, there are specific stories about why individual industries have slowed down. In finance, the after-effects of the crisis and the need for tighter regulation have had an impact. In oil and gas, the challenges of the North Sea field and more recently the fall in world prices have also taken their toll. But then industries such as information and communications technology, while continuing to grow rapidly, have also seen a sharp slowdown in productivity growth without any obvious story.

In fact, every industry has seen slower productivity growth since the recession. But evidence within each industry tells us a different, perhaps more interesting story. During and since the recession, the highest productivity businesses – those pushing the boundaries of what can be achieved – have continued to improve in much the same way as they did before the recession. It's the wider number of businesses within the industry which are not making progress.



That means a widening productivity gap within each industry sector, with leading businesses gaining ground on industry-wide productivity. Where historically, some businesses would lead and others would follow, seeking to learn and adapt to catch-up with industry leaders, the 'diffusion' of best practice seems to have taken a real hit. Progress is still being made in each industry, but it's the preserve of too few businesses: as national productivity is simply an aggregate of individual businesses' productivity, the lead of a few is being weighed down by the stagnation of the many.

What has business got to do with it?

While that widening gap is a global trend, the problem of having much of our productivity locked up in a small number of leading businesses is a longstanding feature of the British economy. Britain has long seen a 'productivity gap' when compared to countries such as the US or Germany. But, whilst that gap was closing with our high growth before the recession, the slowdown since then has set the gap back to the levels seen in the early 1990s.

If the story is of too few businesses learning from the best, and if that story has a long history in Britain, then it seems that it's within business where productivity problems will need to be solved. There's certainly a lot that Government needs to be doing to create the right conditions: the decisions it makes on regulation, taxation, infrastructure, education and science are all critical to improving prospects for business performance. The Government last year set out many of its plans to make progress on these fronts. But, the most substantial progress will

come from seeing improvement in the 'long tail' of underperforming businesses which characterise every industry within the British economy. That long tail is no coincidence: it reflects the fact that many British businesses are poor at adopting best management practice; that too few managers think long term about talent; that many rest content with current products and working practices, rather than seeking to innovate; and that British business sometimes focuses too much on short-term survival and success, at the expense of long-term value creation.

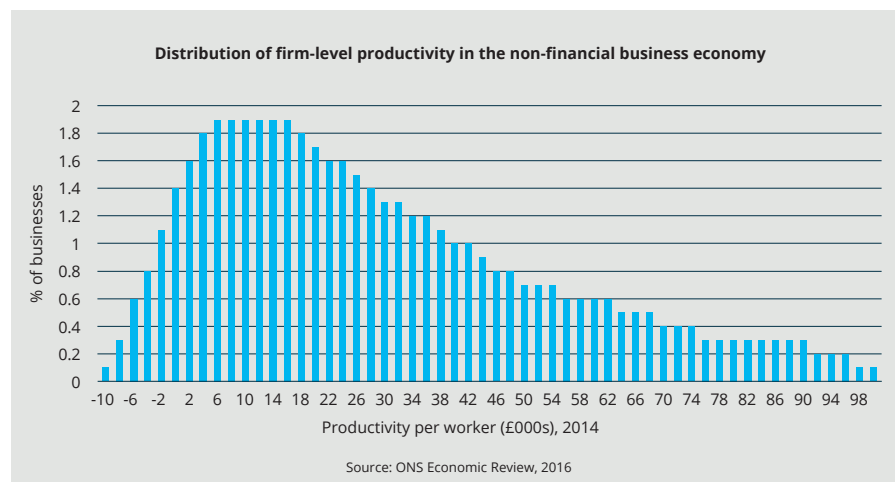
These problems aren't about small business versus large business: in fact, the evidence suggests that our high and low productivity businesses vary greatly in size and the problem is just as likely up and down the size range. The plain fact is that two thirds of our workforce is employed in businesses with productivity below the industry average: whichever businesses they are working in, their work is not as productive as it might be elsewhere.

Government cannot solve these problems: it can offer help and encouragement, but ultimately progress depends on leaders and managers committing to, and implementing, lasting changes in the way they do business. Some of the necessary changes are about what happens within the workplace: will leaders and managers work with their employees to investigate how well they operate, and seek out improvements? Will they create the space for innovation to blossom? Some of the other changes are about overcoming British reserve and working together within industry, to work together on setting ambitions and standards, or sharing the costs of investing in new assets.

What can businesses do?

The productivity gap British business faces is large: if over the next ten years, the US and Germany were to continue to grow productivity as slowly as they have since 2010, then British productivity would have to grow by 2.9 percent each year to close down the gap with them. Only by every business playing its part and looking to see where and how it can improve the way it operates will Britain have a genuine prospect of making this kind of progress.

With an economy of over 5.2 million businesses, the full answer to the productivity gap will therefore only come in hundreds of thousands of stories of sustained and continuous business development and improvement. What we do in this report is set out some first practical steps in the right direction, of businesses coming together to work better to improve performance. Arranged around a number of crucial areas identified by businesses as priorities for action, we share some early success from the work of the Productivity Leadership Group convened by Sir Charlie Mayfield, Chairman of the John Lewis Partnership. The purpose of sharing these practical steps and stories is to give a glimpse of what can be done when leaders step outside of the day-to-day and set high ambitions for their business and their industry. But these actions, while valuable, will not on their own come close to achieving the scale of impact across the economy we need. So we hope to add to the actions developed by the businesses working with the Productivity Leadership Group and to embrace and connect to wider partners and initiatives to amplify and accelerate impact. This report aims to set out how.



The example of those already seeking to improve, represents an invitation to the many thousands of leaders out there who want their business to better compete and their country to prosper, to join in making a change to Britain's business climate. That invitation is to join in: start by raising ambitions, measuring, improving, innovating, and then reach out to others to share and collaborate. Yes, of course, businesses need to build their own unique competitive advantage but in a more connected, dynamic global economy, where networking and the diffusion of ideas is essential to making progress, businesses also need to collaborate to keep abreast of, and ideally ahead of ongoing developments.



Ambition

- Digital connectivity, emerging economy growth and demographic change are transforming global markets and disrupting traditional business models.
- Industries need to respond by embracing the need for change, taking a long-term and ambitious view, and committing to the necessary investments.
- The kind of leadership and collaboration necessary is rare at industry level – but British business sometimes does show it on a smaller scale.
- Businesses need to lead, but the necessary advice and expertise should be available through a rich, vibrant marketplace for business engagement.

Why is ambition important?

Raising the ambition and sights of more businesses across the UK is a key part of solving the productivity problem and embedding a culture of continuous improvement associated with high performance. But what does this mean? What insights can we draw from other leading nations? Founded nearly a century ago, Trumpf's business, as a successful

German manufacturer, has been to make things to help its customers make other things. From motorised hand shears to lasers which can be used to precision-cut metal, the family-owned German manufacturer has a long history of working at the cutting edge, in its products as well as its technology.

Its latest product is no exception: Axoom is an online platform which connects machines – some built by Trumpf, some by other manufacturers. Axoom collects data from these different machines to help Trumpf's customers to understand exactly what's going on in their production process, to help them constantly reshape and adapt it to improve.

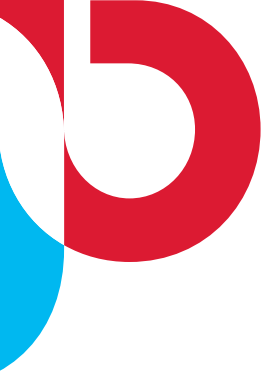
For Trumpf, Axoom represents a continuing move in its focus: from tools to terabytes. Whereas historically it considered its unique selling proposition to consist solely in the quality of its machine tools, increasingly it sees its ability to offer advanced digital technology as critical to what it does.

Trumpf is one of many examples of how German manufacturers are responding to increased competition and the opportunities of digital technology. Like many of its peers, Trumpf has become well aware that if it does not help its customers to take a hold of the data its machines can produce, then other

companies from around the world will be quick to move in on its customers.

The company's efforts were not in isolation. First floated in 2013, Industrie 4.0 describes an ambitious programme by Germany manufacturers to transform their strategy, products and working practices to enhance the industry's international competitiveness in the face of new challenges. Industrie 4.0 offers a vision of smart factories making individually customised products with the costs and efficiency we associate with mass production.

Industrie 4.0 highlights the power of businesses to transform their own circumstances, by setting ambitious long-term challenges and working together and alone to tackle them. Industrie 4.0 wasn't just about business – government, universities and research institutes all played critical roles – but it was driven by business, and depended upon business leadership to be successful. But, Germany is not alone and other advanced economies such as the US, Australia, New Zealand and Singapore are also taking steps to strengthen business leadership to drive productivity improvements and to forge better collaboration with Government and wider partners. It's this kind of ambition and leadership British business needs if it is to make progress on productivity.



Global challenges and local opportunities

The apparent stagnation in productivity since 2008 masks the rapid pace of change transforming economies and societies around the world. Since the fall of the Berlin Wall, the trends we package together under 'globalisation' have been intensifying and accelerating and will, for years to come, radically disrupt business models and drastically change the way we work.

For much of the 1990s and 2000s, the internet began to change the way we communicated and bought and sold. But in this decade, and onto the next, its full potential is coming to pass. Before the financial crisis, the internet was something we accessed through a laptop or desktop computer. Since then, we have now reached the point where there are more than 1.5bn smartphones in the world, allowing access wherever we are, whenever we need it.

The shift to smartphones is heralding a larger trend, with greater use of information and communications to connect not only people, but machines and devices. Service providers will be able to monitor how well the machines they maintain are operating and optimise them without being present. Retail distributors will be able to monitor all of their items as they move from warehouse to customer. The flow of data from devices around homes and workplaces can combine with unprecedented processing power to unlock new understandings about consumer behaviour, anticipating choices and accelerating processes.

While digital technology is the most profound disruption to the global economy,

it is far from the only source of innovation. Be it drone technology, genome sequencing, or new materials like graphene, there continue to be major breakthroughs which allow for new possibilities for businesses and their customers.

As if this technological change weren't dramatic enough, the human world is subject to vast changes too. After the rapid catch-up growth of the 1990s and 2000s the major emerging economies – like China and India – are now maturing into major industrial economies, with major cities growing fast and creating burgeoning new middle-class markets. Around the world, better healthcare and falling birthrates are reshaping the demographic structure with great consequences for consumption, production and government.

Head start

All of these changes, left unattended, threaten many businesses content to stay in established markets and static operating models. As developments since the financial crisis have highlighted, they create great opportunities for the businesses prepared to innovate and push the frontier; but also the conditions to stagnate and fade away for those unwilling to do so.

Industrie 4.0 highlights what manufacturers in Germany have sought to do to respond to the challenge of these changes. Because the changes are disruptive, because their full consequences will not be known for many years, there is little government can do to shield industry from them. Only through businesses using their local knowledge and taking risks to experiment – sometimes alone, sometimes together – and share their success can industries make the necessary shift to adapt.

Germany isn't alone in taking these kinds of steps. In countries such as Australia, Norway, New Zealand, and Denmark, there are Productivity Commissions tasked with understanding the constraints on growth within particular industries. The model varies in terms of the level of government involvement and whether permanent or temporary, but the focus is the same: identifying the potential breakthroughs for productivity. Singapore offers another model with its National Productivity Council, which builds on a long tradition of national campaigns to improve industry performance.

The good news is that British business isn't always so far away from demonstrating that ambition and leadership. The problem at present is that there are too few British businesses, spread too thinly across industries, to achieve the sort of decisive move Industrie 4.0 represents for German manufacturing. But at a smaller scale, there are signs that, when British businesses put their mind to it, they can deliver just this sort of long-term, collaborative investment. In fact, in some of our industries there's evidence it can be done: the Automotive Council started in the midst of recession in 2009 and is now pursuing its strategy through programmes looking at Technology, Supply Chain, and the Business Environment and Skills, with the participation of leading players from across the industry.

A more recent development is that driven by Robert Woodhead, a medium-sized construction firm based in Nottinghamshire, launched their Good to Gold programme in early 2015 to support their suppliers develop stronger management and leadership skills. As the prime contractor in the supply chain, Robert Woodhead was able to shape their suppliers to share



in developing and using a management programme to improve decision-making through the chain. Suppliers welcomed Robert Woodhead's leadership: not only to raise skill levels, but also the opportunity to work more closely together, to strengthen the supply chain for the future.

Communities of employers also come together at a local level. Jamie Oliver's Fifteen in Cornwall, a restaurant that trains young apprentice chefs, has partnered with a local brewery, St Austell's, and a hotel, Watgate Bay Hotel, to think through the way work is done in the hospitality trade. Quite rightly they have high, lofty ambitions, to create a hospitality industry that becomes a first sector of choice where people want to work. A significant impetus was the continual churn of talent in a highly seasonal business which generates additional costs and inefficiency in forever training new employees. By working together to better understand

how to ensure employees have long run career opportunities alongside sustainable business models, the three businesses have transformed the way they manage talent and improved their operating performance. They hope in the long term to extend what they have done in other parts of the economy.

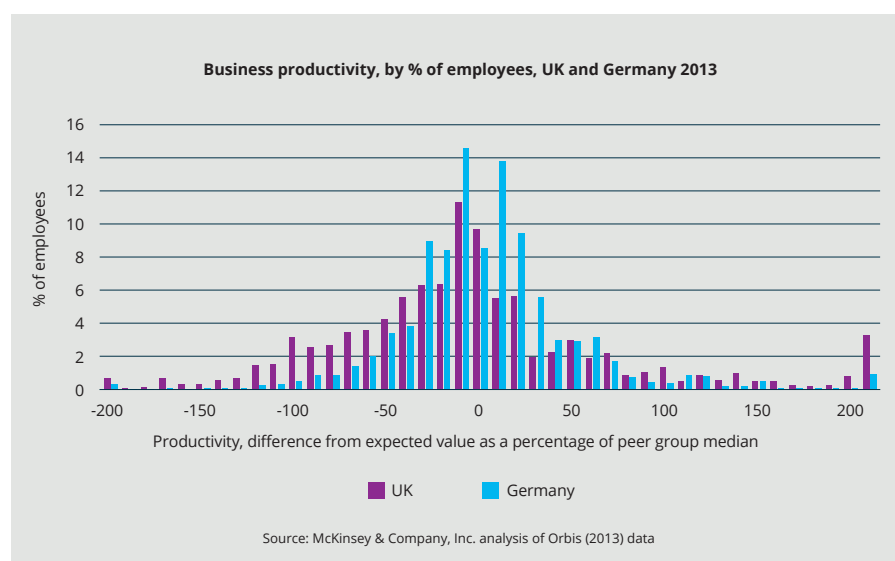
There are other local examples, some of them enabled by Local Enterprise Partnerships' growth hubs. In Stoke-on-Trent, for example, specialist mentoring from Growth Hub advisers have helped Assured Packaging to increase their sales and create three new jobs. Founded in 2009, the company had made great strides but recognised that it had limitations in sales and marketing. Working with the Growth Hub team, Assured went through a diagnostic process to understand its needs and then began working with a strategic sales and marketing specialist to identify and implement the successful changes.

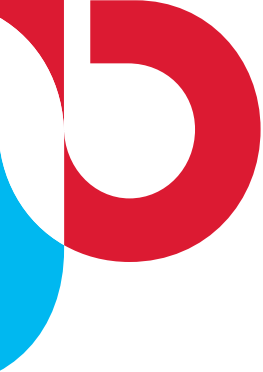
In it for the long run

These stories show just how powerful ambition and leadership across business communities can be in transforming prospects within an industry, part of an industry, a supply chain or a local cluster. There are many more such stories, and there will need to be many more besides if more British businesses are to make genuine headway in tackling the productivity problem.

But developing the ambition is only the first part. Clearly, the issue of raising productivity is so complex and deep rooted that there will be no quick fix or easy solution but sustainable and concerted action over the long term to test and trial new practices and get implementation right. There is a real risk that lots of efforts in different industries and areas could all be expended, but much of the energy and commitment will be lost in the initial work to come together and to find the right solutions. So, we need to find the right approach to support businesses in making the right connections and sharing the appropriate know-how to build strong business partnerships with lasting benefits.

There is much that can be achieved here. Analysis by McKinsey & Company, Inc., provided to the Productivity Leadership Group, demonstrates the nature of the problem but also what difference ambition can make. Taking account of their industry and workforce size, all businesses vary in terms of productivity. But what's clear from the data is that Britain has too many low-performing businesses – in fact, two-thirds of British workers are in businesses with productivity below average for their size and sector, significantly more than in Germany.





That's a worrying sign; it isn't just a few businesses which need to change, but many of them. But on the other hand, relatively small changes can have large consequences. Leaving aside our best 25 percent of businesses, if all of the other businesses were able to match the performance of businesses ranked 10 percent above them, then in 2013 they could have produced £130bn in additional goods and services, a 10 percent gain in productivity for each of the industries involved*.

Where next for ambition?

The Productivity Leadership Group's work is meant to be a first step in a journey. If the Group has demonstrated anything, it's the value of linking business leadership across industries and business communities, to share learning and focus action. The experience has backed up what has been found elsewhere – that successful business improvement approaches need to make use of the expert knowledge and commitment of employers themselves, not their participation in otherwise top-down initiatives**. The emphasis on collaboration again confirms what the research says:

that bringing businesses together magnifies the potential for learning, makes room for experimentation and takes impact to scale[†].

What does that look like? It isn't another government-funded programme, but a business movement supporting a marketplace for business improvement ideas, practical tools, help and support and services to engage leaders, managers and employees. These offerings could take any number of forms – case studies, discussion groups, toolkits, blog posts, videos, events – but would all be backed by business, so that business could be assured of their authority, quality, independence and integrity.

The marketplace won't look to create new schemes to reach businesses – it will link to businesses through established networks through trade and professional bodies, and through working with lead companies in supply chains. So having active business communities to shape and improve the practical offerings and advice and to support businesses implementing changes over time as an essential part of the marketplace. At the same time, it will set the pace amongst

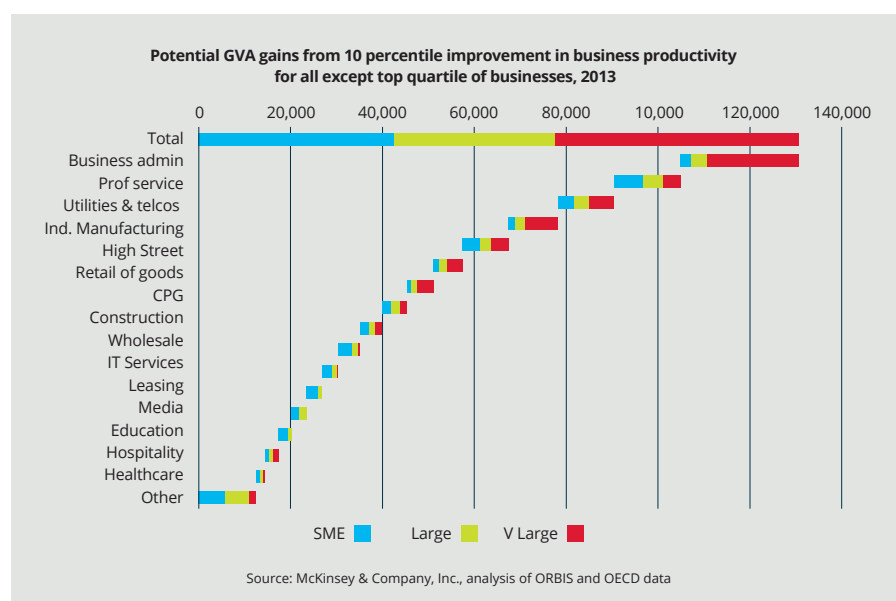
those bodies by reporting on progress on productivity across industries, and by bringing different voices together to foster an exchange of ideas.

Businesses need to step up and work together, to achieve tangible progress against the UK's productivity problems, to form a business movement embracing higher ambition and pursuing action to realise it. That means businesses committing to work together to challenge their own practices and raise their performance, but also to lead within their supply chains, markets and communities to identify and tackle the barriers to growth.

We need to maintain and extend business leadership across industries and broader business communities to give this movement momentum. We need to aim to improve its reach with the ability to engage a much greater number of businesses and to spread best practice, rapidly and effectively. This will help provide a catalyst for the transformation in British business culture which is necessary. Moreover, it would act as an entry point for other businesses keen to join those already offering leadership, and a vehicle to co-ordinate and leverage efforts by businesses from very different backgrounds but with valuable shared interests.

The movement needs strong strategic leadership. We suggest this is achieved through a productivity council distilling the key conditions for success seen in other leading economies. This should be business-led and warm to amplify and accelerate impact, establishing a common purpose for the movement and winning a broad base of followers.

Government needs to recognise the significance of the movement in productivity council as the UK answer to international initiatives such as Industries 4.0, where working together we can enhance international competitiveness of UK industry to rival and surpass other world leaders.



*Analysis by McKinsey & Co., Inc. using ORBIS and OECD data for 2013. **See e.g. Crafts and Hughes (2013). 'Industrial policy for the medium to long-term', Future of Manufacturing Evidence Paper 37. †James et al (2011). 'From learning for the knowledge-based economy to learning for growth: re-examining clusters, innovation and qualifications', Research Paper 29, Centre for Research on Learning and Life Chances.



Measurement

- Britain has a long tail of underperforming businesses in all industries, with much greater variation than in France or Germany.
- Businesses need to drive business decisions and benchmark what they do with robust data – but are uncertain where to find it, and doubt whether it will help them.
- British business can be less ambitious and more short-term in outlook, reducing the commitment to measure and improve.
- Measurement is powerful when it is continuous and leads directly to improvements in practice and performance – and only businesses can make this happen.

The problem seems to be that while the 'best' companies continue to excel, the 'rest' have become stagnant and are falling further behind. That's a problem for every advanced economy, but for British business it adds to a persistent problem: a long-tail of underperforming businesses which bring down average productivity.

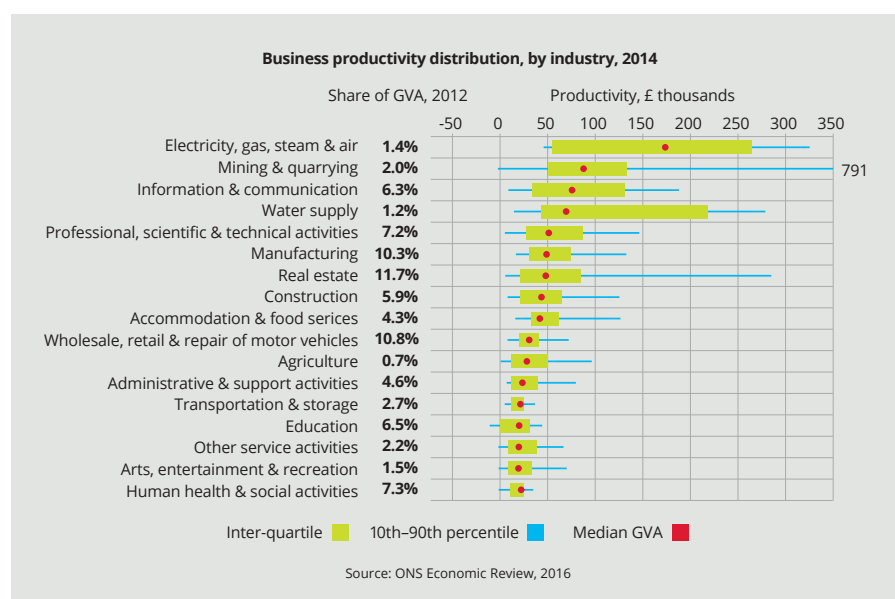
Performance varies in every industry in every country, but British businesses seem particularly variable compared to their French or German counterparts, in ways which can't be explained by differences in size or sector. Every industry sees the same wide distribution – and simply bringing up

the bottom quarter of businesses in each industry to the same performance level would result in a gain in productivity.

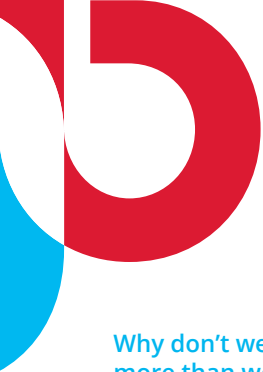
What the new OECD evidence adds is that the global trend is reinforcing this particular problem for British business, making action to address it all the more pressing. The wide variation in business performance tells us that there are many businesses which could be doing better. But if that's the case, why don't they take the necessary action to improve? Why don't they look to learn from others, adopt their industry's best practice, and achieve sustained gains in profit and productivity?

Why does measurement matter?

The productivity slowdown has hit all industries in almost all advanced economies, and Britain is no exception here. But when we look at individual businesses, that's far from the whole story. While most businesses have shared in the slowdown, many of the best businesses have continued to plough on, innovating and improving to new highs in performance. Evidence published last year by the Organisation for Economic Co-operation and Development (OECD), the advanced economies' think-tank, shows 'global frontier' firms – the top 100 companies in each industry, around the world – managing to keep improving performance much as they did before the recession^{††}.



^{††}OECD (2015). The future of productivity. Paris: Organisation for Economic Co-operation and Development.



Why don't we measure more than we do?

Having the knowledge of what could be better, and how, would be an important first step. Getting objective benchmarks against which to compare business practice and performance is critical to driving improvement. Alongside the long tail of underperforming businesses, Britain also has too many businesses which aren't adopting management best practice (see next chapter). Evidence from the World Management Survey* shows that managers' intuitive evaluations of their own business practice are often wide of the mark: regardless of how well they run their businesses, managers can always learn more when they have the right tools available to help them measure what they do.

But for many managers, getting a handle on how well the business is run and how well it performs is far from straightforward. Sir Charlie Bean's recent review of economic statistics highlighted that many of our ideas about measurement are rooted in production industries while our economy is increasingly dominated by service industries and being transformed by digital products**. The growing range of available data can be part of the problem – if you don't know which ones are relevant or reliable, having more and more measures doesn't help.

Alongside that uncertainty about getting the right benchmarks, there are other barriers frustrating a wider commitment to measure. For many businesses, there is the fear that the difficulty in finding the right measures can lead to an endless cycle of navel-gazing, with the search for improvement resulting in a lost focus on delivery. For others, there's the doubt that measurement will be worthwhile – that the expense of investigating where and how improvements could be made will yield relatively little return.

Breaking through these barriers takes ambition and long-term commitment. Compared with their counterparts in other advanced economies, British businesses can often suffer from a lack of ambition, even among those just starting out in business. Relatively few British entrepreneurs envisage substantial growth, when compared to their counterparts in other advanced economies:† Low ambition can in turn mean less

willingness to seek out comparisons and use them to drive improvements.

The lack of growth ambition and short-termism are key issues in larger businesses too. The work of the Investment Association (see final chapter) on the role of corporate governance in driving management decision-making is important here. At present, we emphasise too much the quarterly cycle of financial results, without taking into account the longer view on a company's development capital structure and its use of skills and innovation to generate lasting value. That in turn drives managers to focus on short-term wins and not to investigate the potential for deeper change which can take time and effort to bear fruit.

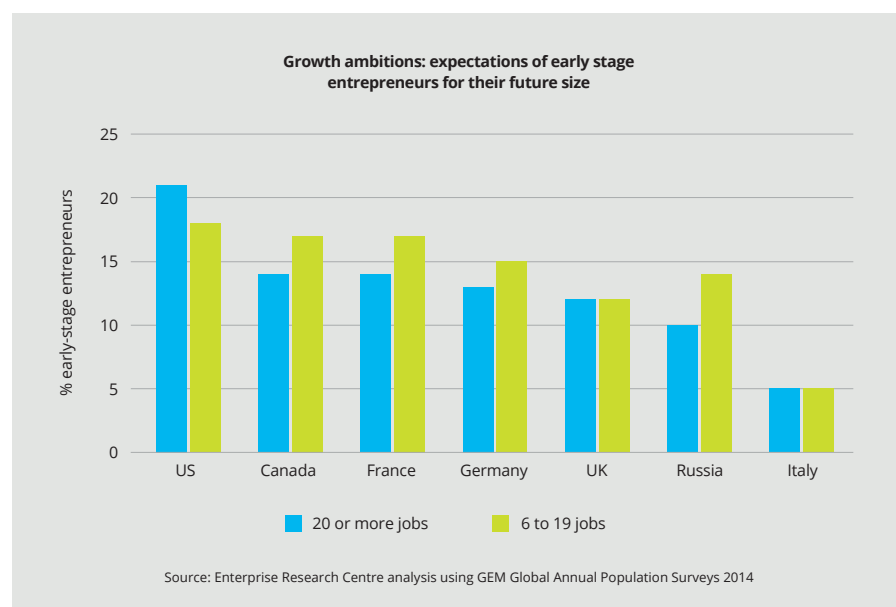
What should be measured?

Measurement isn't about navel-gazing – it's about understanding how well a business is doing, how and where it could be better, and ideally, what paths there could be to improve. In this way, measurement needs to cover practice and performance: it's not enough to know how well your business is doing – you also want to know what the practical reasons are, so that you can do something to address them.

Another reason why benchmarking business practice matters is that we know that performance can vary with changes in the market, and luck has a part to play. In any

one year, performance can be high or low – and so getting a handle on how well a business's practice compares to the best in its industry can often give us a clearer sense of how well it will perform over the long term. Comparing performance then helps to identify how successfully best practice has been implemented, and also to identify the potential performance gain there might be from further investments in improvement.

For both practice and performance, the pressing need is for available, reliable sources for comparison. In a digital economy with an abundance of data, this might appear a strange request, but the problem is making sense of the 'right' data and cutting through the data 'noise'. The most intelligent sources will need to allow comparison and support better problem diagnosis and decision making in the right business areas. Following on from the Bean Review, there is much that Government can do on understanding performance through the Office for National Statistics to ensure that data on the level and distribution of business productivity, for different industries, is shared and made available in a comparable way. Getting to grips with the service industries and the different measurement needs of the digital economy, as the Bean Review highlighted, will be critical in giving businesses the data they need to understand how well they are doing.



*www.worldmanagementsurvey.org **Bean, C. (2016) The independent review of economic statistics. London: HM Treasury.
†Enterprise Research Centre (2015). Unlocking UK productivity: Internationalisation and innovation in SMEs. Bean, C. (2016)

In terms of measuring practice, much depends on businesses themselves being willing to share if they want to compare. There is an important role here for business communities, be they respected trade and professional bodies, supply chains, or new networks, to enable sharing and comparison. That can range from support to help businesses improve measurement, but also identifying and sharing benchmark levels.

The Business Leadership Group focused on measurement has developed online benchmarking tools for sub-sectors in hospitality and industrial manufacturing as a proof of concept so that businesses can assess different aspects of their performance using robust data and benchmark their position against competitors as a way of diagnosing where to improve. As this gains traction with business, and is used, clearly, the same thinking needs to be taken forward for different industries. These are the kinds of tools that can become the starting point for the new marketplace, providing ways to share knowledge on best practice, and also making links. So where businesses' develop the will to improve, the tools are there to take it forward to diagnose priorities and measure results.

Where next for measurement?

The greatest gains from measurement will come not from the release of better data, or even more businesses taking the first step of seeking to benchmark their practice and performance. Certainly, there is a lot that can be done in all these cases – and the good



news is that new digital technology will create vast new opportunities for measurement. But the greatest gains will come when many more businesses come to see measurement less as a special activity, and more a part of their ongoing business as usual.

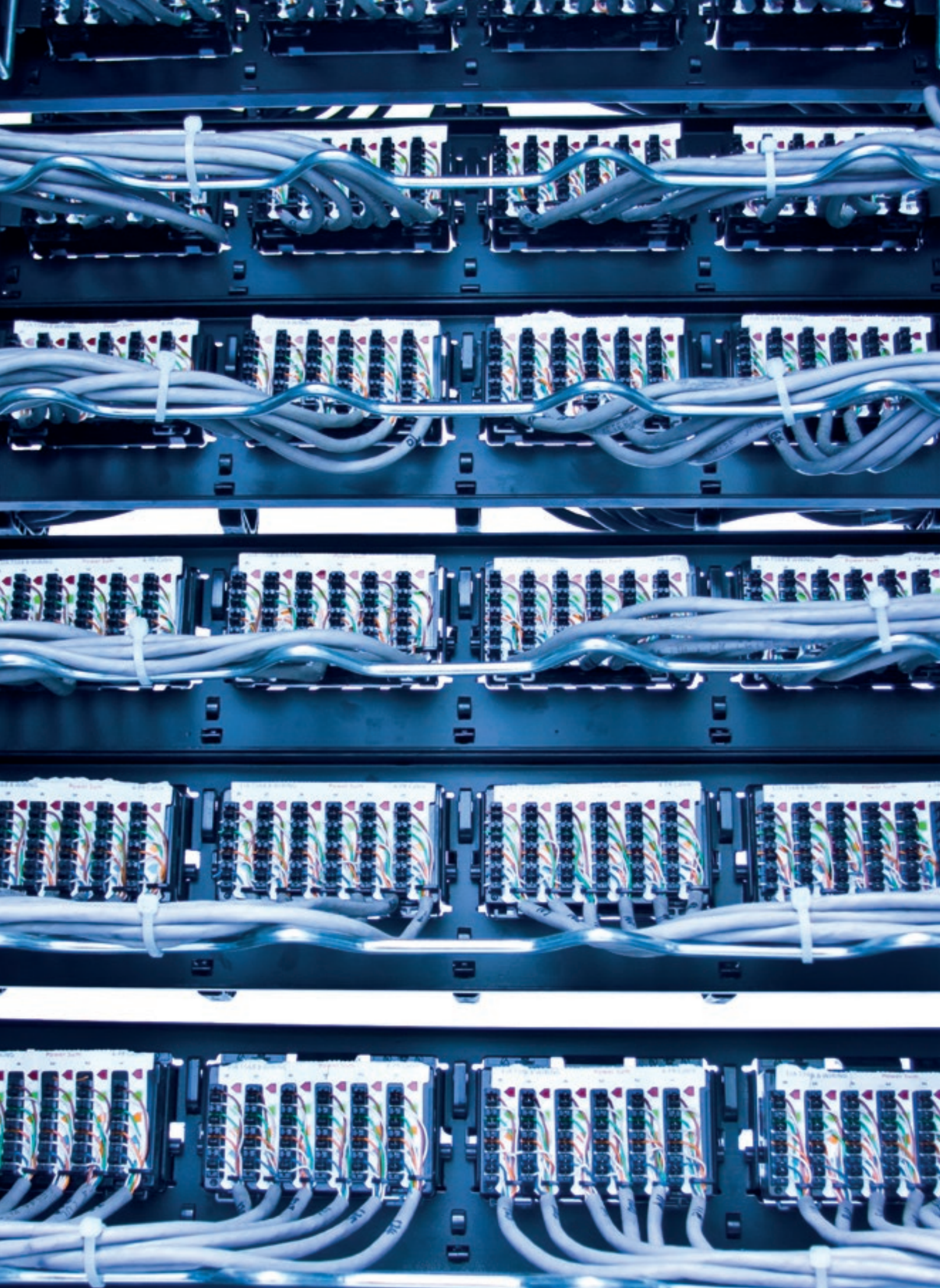
To do that, it needs to be followed through – measurement should be the first step in a continuing cycle of improvement. The very best businesses have improvement at the heart of what they do, with managers and employees motivated to seek out and enact measurable improvements. The more businesses Britain has with that mindset and

that way of working, the more we will see British industries driving up performance towards world-class levels.

For businesses, the imperative is to commit to the discipline of benchmarking practice and performance. Within the business, that means looking to identify performance indicators, set targets and monitor performance against them. Beyond the business, it means seeking out knowledge of how similar, successful businesses operate and compare both the approach and the results. The Productivity Leadership online measurement tool provides an important first step to explore these questions, and by connecting this to the evolving marketplace, there are many other ways to access wider knowledge for businesses to identify the path to business improvement – benchmarking clubs, assessment against a quality framework, independent consultancy. The new leadership body can share learning and make the links to proven improvement interventions. But managers within businesses need to be willing to measure and compare what they do, to be critical, and to act on the improvement opportunities as they find them.

Government can help, working with key agencies such as ONS, by bringing its data on industry and business performance up-to-date and ensuring that it is accessible and comparable for businesses. Businesses can work together across industries to share more about how they work and what results it gives them.





Organisational capability

- Businesses can have good products and good equipment, but they need a workplace with management, talent and organisation to achieve sustainable performance gains.
- Management practice is highly variable in Britain, and explains a large part of the underlying productivity gap with the US.
- Management and working practices can be improved with commitment and lasting discipline – frameworks like Investors in People can help to maintain focus.
- Talent needs to be deployed effectively, with employees engaged and their skills used – also skills need to be developed to ensure skills needs do not become a barrier to improvement.
- Developing and deploying talent achieves the greatest results when it is involved – when the employee voice is sought and the workforce engaged in improvement.

But there has always been uncertainty because of the difficulties in comparing management practices from one business to another.

The World Management Survey, started in 2004 by academic economists at the London School of Economics, has made real progress in providing some definitive answers to this question not only within countries but between them. Whether looking at the way targets are set, and performance or people are managed, the World Management Survey finds that the average British business, while not poorly managed, is far from being the 'best of the rest'. Management practices are rated significantly more highly in the US, Japan and Germany.

Perhaps more important given the concern over the number of poorly performing British businesses is that Britain's management practices follow the same pattern: compared to other countries, Britain has a large share

of world-class companies, but also plenty of businesses with weak management practices.

Do these differences in management matter for productivity? In a sceptical country like Britain, it's understandable that many managers are cautious in adopting all management techniques. But the World Management Survey has finally allowed for robust analysis of the links between management practice and business performance. The results are clear: management practices have a direct link with differences in productivity.

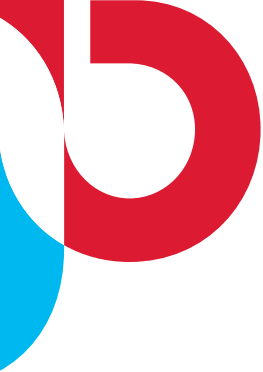
In fact, making up the management practice gap would go some way to making up the productivity gap. Looking at what economists call 'total factor productivity' – that element which can't be explained by differences in workforce skills or capital equipment – some three quarters of the gap between the UK and the US can be explained by weaker management practices in British business.

Are British businesses managed as well as they could be?

Measurement matters because businesses need to understand where their capabilities lie and how they perform. But regardless of how well measured they are, businesses' organisational capabilities will determine their ability to compete and succeed. Capability springs from businesses' leadership, their development and management of a talented workforce, and their ability to organise work in concert with tools, technology and process to deliver for customers.

For many decades, there's been a lingering question over how well British businesses are managed. There are common reported weaknesses in the way too many British businesses are managed – a preference for informality and short-termism; an emphasis on theory and concepts that are often too distant from practice; an avoidance of performance data; a preoccupation with short term transactions; and a resistance to change and adaptation because following the status quo is perceived to be easier.





How could management practices improve?

It can sometimes seem that organisations are difficult to change, but that doesn't have to be the case. Toyota Motor Manufacturing (UK) set about improving problem solving in the automotive industry, and led the creation of an 'Advanced Problem Solving' programme.

Stadco was one of the manufacturers which took part, sending 24 of its employees from across its four plants. They learned new ways of thinking and acting on problem solving. Some of them brought those lessons back to Stadco's electrophoretic paint facility, which is used to apply a protective coating to parts used for vehicle manufacture. The company had low utilisation and high running costs and after APS, one of the plant's employees devised a way of doubling efficiency and reducing costs. Mike Khanna, Business Planning and Improvement Director at Stadco, estimates that "the benefit to the business so far is £400,000 – the training has been very cost effective".

The challenges can differ by industry, and sometimes collaboration can help to unlock much greater, faster progress. In construction, the Offsite Management School represents a good example of what can be achieved. An online learning platform launched last year, the school provides offsite construction managers with a range of e-learning, case study and workshop opportunities across 14 recognised competencies, ranging from the offsite process to supply chain management and leadership and culture. Developed by leading employers, trade associations and academics, the training modules help to develop skills and raise standards, available to suppliers of all sizes in the offsite field. None of it would have happened without the leadership and investment of five supply chain 'prime' construction companies – Skanska, Costain, Carillion, Laing O'Rourke and Siemens – who came together in recognition of the need to



improve offsite capability if the industry was to improve its sustainability performance.

But improving management practice takes time, commitment and discipline. Many successful businesses find it useful to use business development and management tools to connect their work in different parts of their business and keep track of what they do as a way to help prioritise further improvement over time. The Investors in People standard defines what it takes to lead, support and manage people well for sustainable results. Investors in People work with businesses of all sizes to help them improve their performance. Each business receives a tailored report which identifies areas for improvement, and is provided with on-going support to implement changes. The Standard covers three areas: leading; supporting; and improving.



The right discipline will look different in each industry and local environment. Some of Britain's most well-known manufacturers, like Siemens, Rolls-Royce, and GlaxoSmithKline have been working together as part of the Business Leadership Group to identify

the critical factors for their industry. They have identified a framework to inspire improvements in leadership and ambition, skills, culture and technology. They are now looking to work with the industry's wide range of employers to apply this framework in the workplace, to drive productivity gains over the next three years.



How can businesses make better use of talent?

In a primarily service-based, knowledge-intensive economy, workforce talent becomes a critical factor for business success. Talent drives good work, but it also creates the capacity to measure and improve, to innovate, and is necessary to take advantage of the latest technologies. There are certainly well-known issues in getting the right people, but there are also issues in making sure that talent is being properly deployed. We know that many workers report that they have skills which aren't being used effectively. And in fact many business also report the same: they know they have underemployed workers who could have their talents used more effectively*.

*See e.g. UKCES Employer Skills Survey 2015 and Skills and Employment Survey 2012.

Getting the right people to the right work is difficult – but it's also important for productivity. People who aren't in jobs suited to them, with their skills properly used, are less likely to be engaged. And research shows that businesses where employees are engaged in what they are doing perform better: businesses in the top quartile for engagement have 18 percent higher productivity than businesses in the bottom quartile.

Acas, the government's independent body looking at improving workplace practice, recently set out seven 'levers' for improving productivity. Beyond having skilled managers and treating employees fairly, Acas highlighted the need for well-designed work which makes the most of employees' skills and promoting high-trust relationships with employers and employees sharing information.

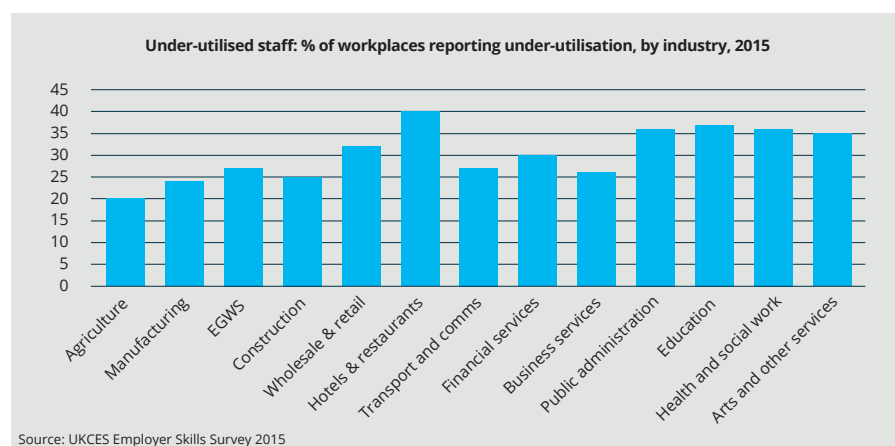
Yet too many businesses aren't adopting the working practices which can help to improve workplace performance**. So-called high performance working practices stretch from job design to reward strategies to ensure employee autonomy. Their intention is to engage employees and gain that additional effort from them. But few businesses embrace high performance working – while many adopt a practice here or there, the full benefits are felt only by ensuring that the practices translate into a high-involvement, high-performing culture.

It's that involvement element which is missed by many organisations which do pursue high performance. Engaging employees in the work they do and solving improvement problems can be powerful not only in securing their additional effort, but also grasping their insights. Moving from command and control to a culture of involvement can take time and effort from both managers and employees, but can achieve lasting results. In different organisations it will take different forms – in some workplaces employees will be eager to take part, whereas in others there is value in organising and structuring involvement, and the efforts of trade unions like Unite and GMB have shown some of the potential routes here.

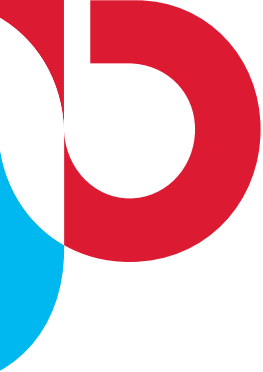
Many businesses are already taking steps to improve involvement – Engage for Success¹ is a voluntary movement of employers and unions working together to share ideas and experiences in championing employer engagement. Engage for Success and IPA have worked with the Better Workplace Practices Business Leadership Group to identify some of the concrete steps which can be taken to use employee engagement to raise productivity. BAE Systems, leading the Group, have themselves been investing in high-performance working – for example allowing teams the autonomy to manage and adjust their working environment, and determine their own hours, resulting in higher trust as well as higher productivity.

A good example of what can be achieved is Jaguar Land Rover's Team Improvement Circles. Like any manufacturer, JLR is under continuing pressure to drive up quality and cost performance. While the company had many plans to improve, few of them engaged directly with shopfloor employees. To fill the gap, they created TICs to identify steps to make up gaps identified in a benchmarking process. Each TIC involves up to six employees from the same work area working together over a number of months to identify and implement a solution to an improvement problem. TICs enter their ideas into local conventions for selection and scaling across the business: in the first round, some 32 TICs were selected with a projected saving of £5.3 million per annum.

These kinds of changes to working practices don't have to be confined to a single workplace, as the Business Leadership Groups have shown. Another example is retail. This Group has been focusing on how the industry might move away from the low skill low wage model widely adopted at present. They are mindful of the need to move up the value chain to make their sector more competitive in future and to optimise the opportunities of digital solutions in responding more efficiently to changing customer demands for more varied channels for purchasing products. So leading industry employers are working together through the British Retail Consortium to adapt ways of working. Having sought to research and understand future business developments they are exploring how job redesign and the development of new apprenticeship models can propel the industry to a more talent-intensive approach, where jobs and career pathways are enriched, staff are more motivated and engaged and there are greater chances for progression vertically and horizontally. Developing solutions in these areas are seen as essential to raised future performance across the sector.



**Vivian, D et al. (2016). Employer Skills Survey 2015: UK Results. Evidence Report 97. Wath-upon-Deane: UK Commission for Employment and Skills. www.engageforsuccess.org



How can business open up the talent pipeline?

While making the most of available talent is important, in many industries, businesses face protracted problems in getting the right skills they need to deliver on their plans. These businesses face persistent skills shortages in key occupations, such as intermediate and highly skilled STEM roles, and are only set to see these issues worsen, given the growing need for more workers in high-value jobs associated with a knowledge intensive economy, in the decade ahead*.

These aren't problems that are just in the process of being solved. We know, for example, from the international OECD Survey of Adult Skills that Britain's younger workers entering the labour market need to improve their skills if they are to be a more competitive workforce.

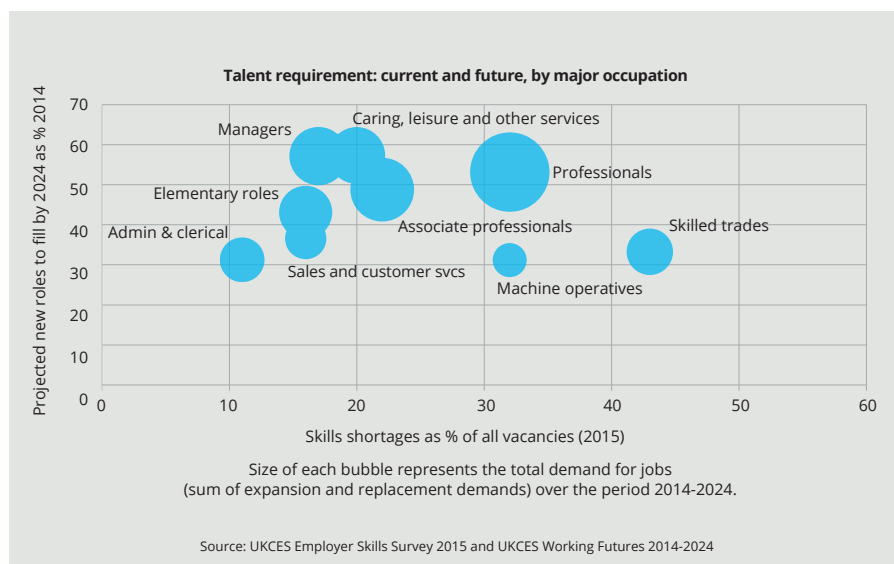
Some industries are showing the way that collaboration can create the infrastructure to support a better skilled workforce. In the science industry, the SMART apprenticeship programme is tailored to the needs of individual employers, who can take units from different apprenticeship frameworks, use non-accredited courses and access different elements of the framework from different providers. The Science Industry Partnership, including leading players from the sector, works with over 50 training providers and implements the quality assurance process.

Over 900 apprentices have been taken on to date. Employers have commented that they have started to see real talent coming through and the flexibility of the SMART model has made it easier to get what they want, when they want it. They see themselves in the driving seat because they have the purchasing power to secure what they need

for their business and a better understanding of price and what the money can buy.

The talent pipeline also means creating a career structure so that initial training isn't the end of development, and that skills acquired are transferable to other workplaces. Within hospitality, for example, People 1st is working with Whitbread, Accor, Hilton Worldwide and Mitchells and Butlers to develop a human capital model which develops analysis, behavioural and career coaching tools to help assess and develop employee skills. A key emphasis here is on ensuring the continued improvement of employees' skills to prepare them for the next step in their career.

Clearly, a strategic, long term approach by industries across the talent pipeline is key to supporting lifelong learning and the deployment of talent. The Food and Drink Federation have also been working with the Productivity Leadership Group to tackle their talent pipeline. A significant but distinctive part of manufacturing, the food and drink industry is highly dependent on getting the right skills in its workforce. Industry employers are now exploring the possibility of a number of collaborative initiatives across the food supply chain including an image campaign for potential new entrants, a strategic approach to schools engagement, a commitment to build the volume and quality of apprenticeships and a drive to embed business and university collaboration to support talent and innovation priorities.



*UKCES (2015). Growth through People: evidence and analysis. Wath-upon-Deane: UK Commission for Employment and Skills.



Where next for organisational capability?

Organisational capability is the foundation for all businesses in seeking to drive up their productivity: without the talent available to businesses, and without effective management, engagement and deployment, attempts to innovate or embrace new technologies will have only limited impact. On the other hand, the foundational nature of organisational capability means that it is much more open, much less expensive for businesses to invest in and improve. Changing business practice doesn't have to be costly but can have lasting effects on business performance.

For businesses, an obvious starting point is to reflect on how current practice fares against best practice in making plans, setting targets, and managing performance, and how they can do better. Much of this starts from the steps taken in improving measurement, but then needs to be complemented with other resources to understand what good

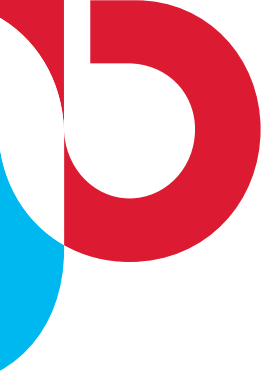
looks like and how to act. The initiatives of the Productivity Leadership Group – be it management training, a measurement and best practice toolkit, or peer-to-peer coaching and consultancy advice – provide important examples from which to build to improve management practice and capability.

Within the business, a closer look at what talent is available and how it is best used is important, and greater consideration of how investing in developing talent can anticipate future staffing issues. Alongside the skills and knowledge of individual workers, many businesses could benefit from thinking about how best to engage employees and involve them in developing their jobs and the business's performance. The highest performance comes from engaged employees, and they represent a rich seam of insight on how to improve workplace operation.

Across each industry, there are questions of future management challenges and how to anticipate future talent pipeline constraints,

and in each industry there is value in working together to investigate risks and identify and implement solutions to them. Leading industry players will have a key role to play, but success for a whole industry will depend on engagement from all sizes of business within the long tail of underperformance.

For government, there are many ways to work with business to connect them to national initiatives which extend the scale and reach of good practice. Education and skills is one such example. The commitment of governments across the UK to expanding apprenticeships and improving their quality and relevance is welcome. But there remains work to be done to make the new apprenticeship arrangements – including the levy – support and complement the work of businesses keen to invest in future talent as the basis for long-term growth.



Innovation

- Innovation is the lifeblood of long-term productivity growth – new products, new markets, and new ways of doing things create new opportunities.
- Britain is strong in many parts of innovation, and innovative businesses lead in productivity and exporting – but there are too few of them.
- Too few innovators not only matters because of raw numbers, but because innovation is a collaborative activity – innovators need other innovators to work with.
- There businesses can do to be more innovative, but also to bring innovators and create the space to bring ideas from the UK's research base into thriving, disruptive new businesses.

Why is innovation so important?

In an advanced economy like Britain, while there is potential to grow through 'catching up' with best practice frontier companies, further gains will depend on creating new opportunities for growth. For some decades now, technology has been the main factor behind economic growth. In all industries, Britain has its share of businesses with high productivity by international standards. These businesses are already models for best practice: their future growth prospects hinge on innovation, creating new products, services and business models to deliver to customers better, faster, stronger or cheaper. But in practice, there are too few businesses innovating successfully.

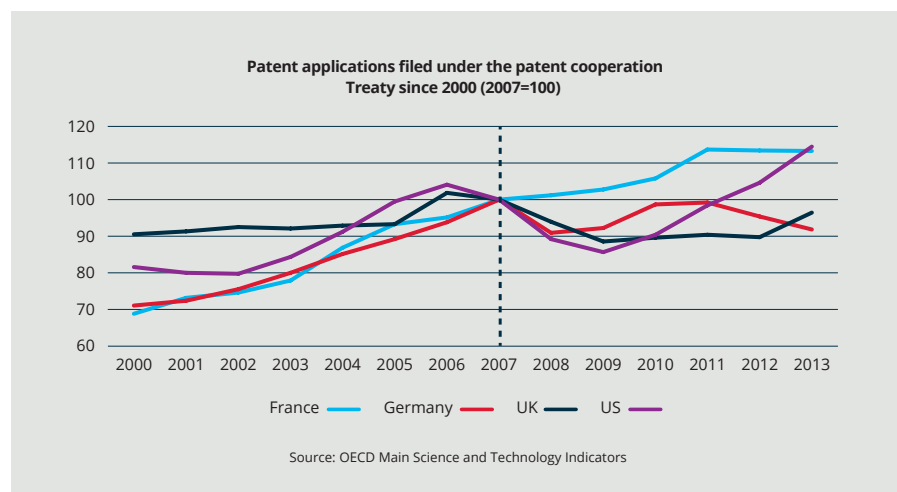
The business story is well-known: a new product or a new process allows a business to reshape our understanding of the market. Sometimes, innovators solve existing problems. The automatic washing machine transformed lives, taking hours out of a laborious household task faced by millions. Sometimes too, innovators solve problems that weren't known before the solution, offering not only new technology but new possibilities. The smartphone and the app economy developed around it is a great example, creating new markets where before there were none.

Innovative businesses are different. Firms which persistently invest in research and development have on average 13 percent higher productivity than non-innovative firms. Nearly a third of these innovative firms export, compared to seven percent of non-innovative firms. If we have concerns about the long tail of underperformers, it's typically the innovative firms which are leading the pack: the task is for more businesses to join their number.

What's the problem with innovation?

Britain is a leader in innovation – ranked in second in the world in the Global Innovation Index. We have some of the world's best universities and some world-class innovative businesses, with brand names renowned across the world for their new products. The business environment is rated highly in international comparisons for the support of innovation. But we have weaknesses: too few businesses are involved in innovation, and too little innovations seem to reach the wider number of businesses in terms of best practice and the adoption of new technologies.

Every few years, the Community Innovation Survey takes the pulse of businesses' creative impulses. The evidence isn't always easily comparable, but from what we can tell, British businesses in leading industries are less likely to innovate than their continental counterparts. Take the information and communications sector, for example: critical to the new wave of digital technologies, but whereas nearly 90 percent of German



businesses in the sector innovate, only around half of British businesses do. The story is similar in manufacturing and in finance and insurance.

These are all industries where British businesses count among leaders in the global economy. Innovators from the UK can lead the world with their ideas, but innovation in France and Germany and other countries is more widespread. That means not only more businesses on the look out for opportunities, but also more businesses with the capabilities to make the most of opportunities they do spot.

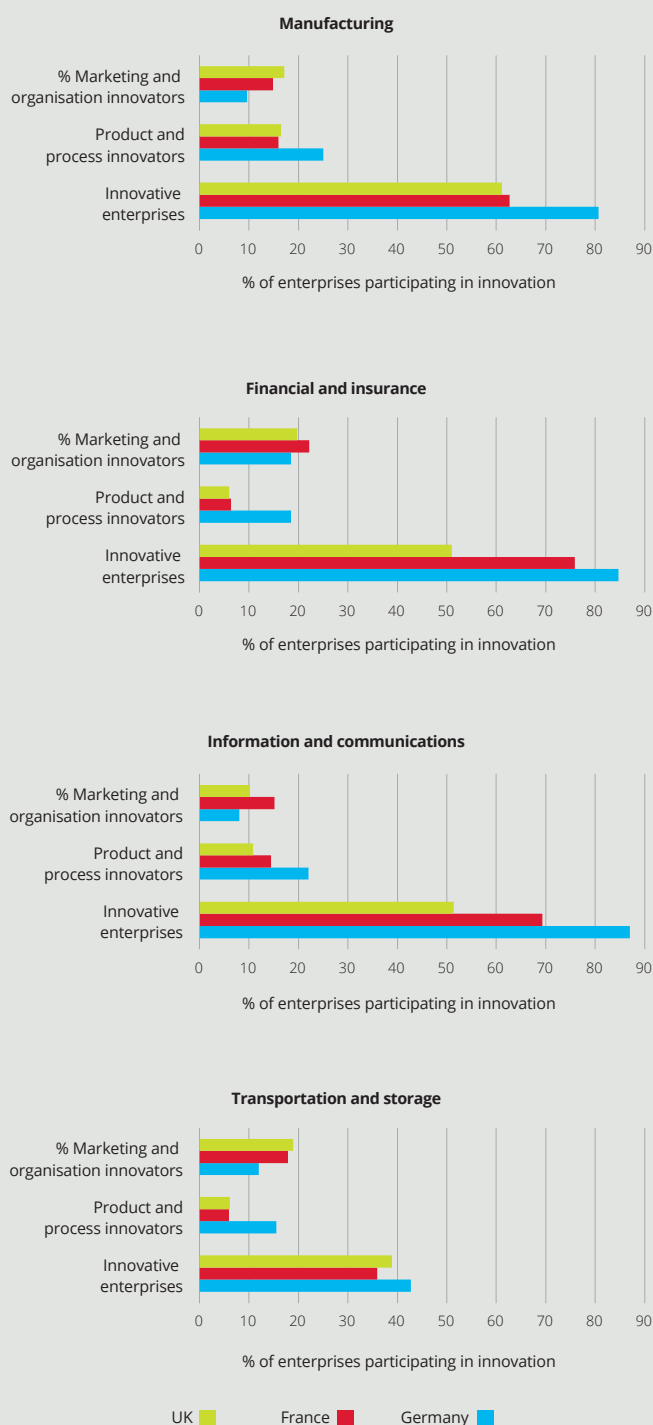
Those few businesses which do innovate tend to be the large, market leaders. Small and medium-sized business account for just 3.8 percent of total research and development spending.* It's no surprise that research and development is often also concentrated in the South East and East of England, where there are larger businesses in high technology industries. More and more varied innovative businesses would mean greater innovation across the regions.

That too few British businesses are innovators matters a lot for productivity growth. Most simply, it means fewer businesses creating new products and finding new and better ways of delivering. But within an industry, innovation offers a strength greater than the sum of its parts. Innovation is a collaborative activity: the power of ideas multiplies as it spreads between businesses with the capability to share and make use of them. More innovative businesses doesn't only mean more innovation individually, but more powerful innovation together.

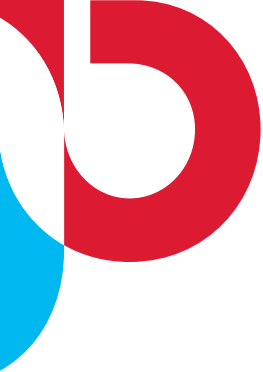
The power of collaboration to drive innovation matters all the more given the ongoing changes in the British economy. The shift to services, the increasing knowledge content and the greater role of small and micro businesses in many industries all promote the importance of working together to achieve successful innovation. And collaboration isn't only simply between businesses: various intermediaries, from professional associations through to university research labs, all can add to the mix of creation and discovery which marks out innovation.

*Office for National Statistics (2015).
Business Enterprise Research and Development, 2014

Innovation participation in four key industries, 2012



Source: Eurostat, 8th Community Innovation Survey, 2012



How can we make for more innovative industries?

Those same changes to the economy are also changing the kind of innovations businesses seek to create growth. Research and development remains critical, but in many service industries, intellectual property is not always as traditionally understood. Creative businesses for example face challenges because the industry's outputs are primarily intangible, and in many cases unique. They can be brands or TV commercials, but they are often difficult to value, and risks can be difficult to gauge. While knowledge-intensive, they do not always meet the traditional requirements expected for government R&D support or full protection under intellectual property law. Those kinds of challenge make the commercial side of innovation much

more important, and that's where many creative businesses struggle.

What can British businesses do to improve prospects for innovation? First, it starts from within, creating what innovation thinkers call 'absorptive capacity': the ability of an organisation to identify and acquire new knowledge, transform existing techniques and capabilities, and apply them commercially. Absorptive capacity cuts across culture, skill and working practices. Research for the creative industries Business Leadership Group, led by Channel 4, has highlighted how it can be boosted when creative, technical and commercial skills are brought together*. Absorptive capacity makes for businesses innovating regularly and often – they make for businesses on the frontier, always seeking to break new ground in their industry.

Second, it means thicker connections between and across businesses, to quicken the flow of new ideas and create new possibilities to act on them in concert with others. Making business boundaries porous to new thinking and new partnerships makes the most of absorptive capacity, all the more when the organisations involved bring a mix of roles and backgrounds. For British businesses, there is much to do to make sure their leaders and workforces have the necessary skills and autonomy to innovate and to forge innovative partnerships.

A number of organisations are currently working at a practical level to enable collaboration to take place. The National Centre for Universities and Business (NCUB), working with HEFCE and Research Councils UK has for example developed a new online tool called Konfer, to help SMEs see opportunities for collaboration and make connections to the research community. Helping businesses to work with universities and with each other is also the mission of Innovate UK, the government's agency for innovation. Over the past eight years, Innovate UK has focused on a mission to 'fund and connect' businesses, helping them to break through the sorts of barriers identified by Professor Dowling. Through support for the Catapult Centres focused on new technologies, and through Knowledge Transfer Partnerships to support collaborations, Innovate UK is an important motor for innovation.



*Frontier Economics (2016). 'Absorptive capacity: boosting productivity in the creative industries', paper sponsored by Channel 4 for the Creative Industries Business Leadership Group.



How can we smooth the way from research to business?

Only businesses can take the steps necessary to create absorptive capacity within their workplaces, and to embrace collaboration with others to pursue new ideas. But their efforts can be enabled by the right intermediaries, which can inject critical knowledge and assistance to accelerate businesses' own efforts to innovate, and bring together like-minded businesses to learn from one another.

On the university side of the equation, there are great strengths but also the same limitation of innovation needing to spread more widely. British universities are world-class research assets. While the UK accounts for 3.2 percent of global research and development spending and 4.1 percent of the research workforce, British universities have produced 15.9 percent of the world's most cited research articles**. British universities are also rated highly for their collaborations with business – the fourth best system, according to the World Economic Forum.

Those collaborations have brought impressive results. The University of Nottingham's research identified ways to reduce contamination in food and drink manufacturing and improve the protection of products. Applied on the production

line for Lucozade and Ribena through a knowledge transfer partnership with the University, these kinds of changes contributed to the £1.35bn price tag attached to the business when it was sold by GlaxoSmithKline to Japanese giant Suntory in 2013.

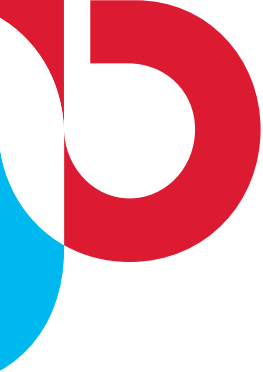
Another example is the work of the University of Bristol to better understand how to manage the implications of volcanic ash clouds for air travel following the Eyjafjallajökull eruption in 2010. Thanks to the university's research, shared with Rolls-Royce and the Civil Aviation Authority, lessons were learned with far fewer flights cancelled or disrupted in the Grímsvötn volcano erupted just a year later in 2011. Direct cost savings were estimated at nearly £3 billion.

There are many more such examples, including some with smaller businesses, but the general pattern is that while university-business collaboration is a success story, it reflects the focus of innovation in too few, often large and well-known businesses. Why is collaboration so patchy? Professor Dame Ann Dowling's review in 2015 offers some possibilities. Businesses often find it too complex to find the right academic partners, to negotiate the intellectual properties, to fund the work and align timescales and objectives. Universities share many of those concerns, but especially find it difficult to square the need for focused attention in

amongst the need to deliver academic outputs, whether teaching or research.

These kind of barriers can be surmounted for large companies, because the scale of collaboration makes it worthwhile for both parties to invest in doing so. But for smaller companies, the small scale of any collaboration and issues in financing a partnership which will often take a long time to deliver the necessary returns frustrate collaboration even when the ambition is present. The Dowling review also recommended that universities look to create scale by thinking about collaboration as a longer term, multi-project activity, and foster a more positive environment for collaboration within the university, including incentives to ensure that it is not lost in the push to deliver on academic research and teaching objectives.

**Nesta (2015). Innovation in the UK: Innovation Toolkit. London: Nesta.



But Innovate UK's view is that while promoting innovation in this way is valuable, it can do more by focusing on helping innovators to achieve their full productivity potential, and to work to enable the most disruptive ideas to come to market. Channelling its efforts around four strategic industry and technology groups – 'Emerging and Enabling', health and life sciences, infrastructure, and materials and manufacturing – Innovate UK has set out a new plan to accelerate growth through nurturing small, high-growth companies.

One aspect of Innovate UK's new approach is to recognise that supporting small companies has to link innovation to ambition. Reflecting the research evidence, they point out that medium-sized businesses are where most innovation happens; Innovate UK see their role as helping small business reach that optimum size. The UK's 'scale up' gap has been highlighted before, by Sherry Coutu's review in 2014: compared to other countries, too few British small businesses reach medium size, and innovation has to be part of filling that gap*.

Where next for innovation?

Whilst the innovative impulse which made Britain the home of the first Industrial Revolution still lives on here, the work of the Productivity Leadership Group has served to show where there are limitations and to highlight where we need to act. Innovation is

concentrated in too few businesses, typically larger and established and we need to exploit mechanisms to support greater collaboration and to enable this innovative practice to extend and grow. Work within the Creative Industries for the Productivity Leadership Group has highlighted that British businesses need to be ambitious, but they also need to foster the absorptive capability which will make their workplace ready to harness new ideas. But there is also much more to be done to support collaborations beyond businesses through various intermediaries and professional and expert bodies to widen the channels from Britain's impressive research base into thriving businesses – and that means key players such as universities making the effort to reach out to a wider range of businesses.

For businesses, the first imperative is to recognise that investing in innovative capacity is an important part of becoming a leading business. Finding the right combination of skills and capabilities internally, and combining them with the ambition and energy to pursue improvements all make for businesses which are individually more productive and more likely to export. In too many of Britain's industries, innovation is too much a habit of the few and to see better economic performance, Britain needs more innovators.

As more businesses innovate, there will be greater opportunity for collaboration – but

innovators need to take it, as well. Whether because of the social nature of service industries or the critical dependencies of production supply chains, innovation in today's economy is a network activity: having collaborators increases the pace and reach of innovation.

Collaboration doesn't just mean between suppliers and customers – knowledge-creators like universities need to see themselves as part of the innovation network, not just providing research knowledge from a distance. Many universities have good stories to tell about their knowledge-transfer partnerships with recognised brands – but many find it difficult to be just as open and connected with smaller businesses.

For government, the role is through Innovate UK to continue to invest in small, high-growth innovators, to see more progress in tackling Britain's scale-up gap, and in creating the eco-system for sustained improvements in British research and development performance. The publication of the National Innovation Plan later this year will offer a new opportunity to highlight what is being achieved and to identify how else things can be improved.

*Coutu, S. (2014). The scale-up report on UK economic growth. London: Information Economy Council.

Digitisation

- British consumers lead the world in making full use of new digital technology to get what they want; but British businesses are very much average in Europe for their digital adoption.
- Infrastructure plays a part – but a much bigger factor is the ‘fear, uncertainty and doubt’ facing business leaders, especially in small business, considering digital investments.
- Digitisation isn't just a matter of investing in computers and software – it relies on getting the right skills too, and those skills are hard to come by, requiring long-term thinking.
- Understanding and realising the value of a business's data is becoming increasingly important to driving productivity improvements.

Digital is what economists call a ‘general purpose technology’. It doesn't just change a single product, but changes the way we work and live, reshaping the way we produce and distribute goods and services. Like steam power, electricity, railways or automobiles, digital changes how we do business. It's for this reason that investments in information and communications technology have been a leading factor powering productivity growth in Britain as elsewhere.

New applications of digital technologies will accelerate change within the business environment, and not always predictably. Some of our leading companies will struggle to adapt to the disruption, while those who can embrace the opportunities of digital will see it define their future growth. While recent decades have seen efficiency gains come from process re-engineering, future productivity improvements will need to come from the value creation that digital technologies will release from new products, services and experiences.

per head on the internet, some 50 percent more than even their US counterparts. British shoppers are spending £1 out of every £5 spent on the internet. Over a third of British consumers use the internet to shop at least once every week.

Yet if British consumers are pioneering in the digital economy, most British businesses are very much average. In European league tables, British businesses rarely rank highly on a wide range of measures: whether using cloud computing, adopting business applications like customer relationship management (CRM), enterprise resource planning (ERP) or even making use of social networks, British businesses rarely break into the top five among EU economies.

With current and emerging technologies, the prospect for robotics and digitally connected systems to transform production is opening up great potential gains for those businesses willing to invest – but here, many British manufacturers are often some way behind their counterparts overseas in investing in automation. Looking across British business, and comparing it across the EU, we see that digitisation is reasonably high across the board – at or around average levels. But what's clear is that British business doesn't lead in adoption of any of these major digital technologies.

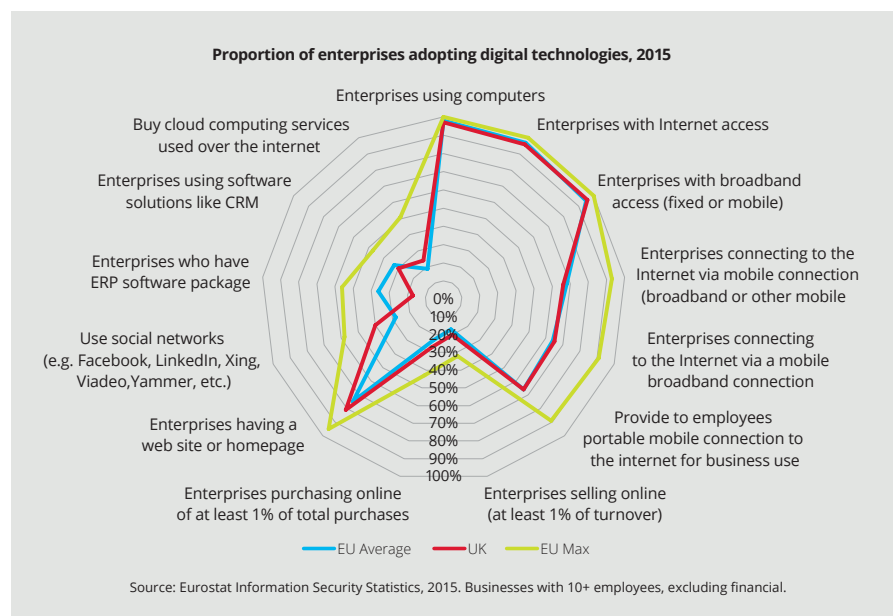
What is the UK digital landscape?

‘Digital’ means here the transformation driven by digital technology, connectivity and data across all business sectors. These technologies are transforming society at a frenetic pace. A decade ago, the iPhone had yet to be released. Now, two-thirds of Britons use a smartphone and nearly a third have a high-speed 4G connection. Those with tablets use them for an average 32 hours each month to browse the web. More than 80 percent of people use the web each month to watch TV or films.

In the background, the underlying technology is changing in other ways: cloud computing is now an \$80 billion industry, set to grow to \$500 billion over the next decade. The Internet of Things, where internet data communication will become embedded in a wide range of tools, objects and equipment, will transform our understanding of the digital realm: Gartner estimates that there are already 6.4 billion ‘things’ connected today, and this number will triple by 2020. The combination of connected robotics, sensors and real time data analysis will increase the productivity and flexibility of many industries.

How digital is British business?

In some areas the UK has been quick at embracing digitisation. The UK is something of a world leader in digital consumption. In 2014, British consumers spent nearly £1,600







At the same time, there is clear evidence that investing in these technologies can drive significant productivity gains:

- **Access to the Internet:** Analysis by the Office for National Statistics finds businesses with more employees having access to the internet have significantly higher productivity*. There is hard evidence from German businesses that employee access to mobile internet access improves company productivity – this in a technology adopted by 66 percent of British businesses compared with 95 percent in Finland**.
- **Use of Data:** Research looking at British businesses' ability to use and analyse data found that those companies in the top quartile were some 13 percent more productive than those in the bottom quartile. Those performing deeper data analysis see more than £3,000 per employee in greater profits†.
- **Robot Intensity:** A 2011 study by Copenhagen Business School estimated the growth potential should different countries' manufacturers each adopt the level of robot intensity leading for their industry – and it found that the UK had the greatest potential, with the prospect of a 22 percent gain in performance from investing in automation††.

Barriers to digital adoption

Forming the Digitisation Business Leadership Group, Cisco and the Tech Partnership joined forces to investigate the potential opportunity for British business to raise productivity through digitisation. To understand the barriers to digital adoption a number of Digital User Groups were formed, engaging first with a cross-sector group of businesses and then homing in on the retail and manufacturing industries. The groups, formed of large

and small businesses, examined the productivity opportunities presented by technology and the barriers to adoption.

The Group's work identified a number of constraints to digital acceleration that include legacy infrastructure, cost, confidence in technology and skills. Although connectivity has improved significantly the demand on bandwidth from new applications continues to increase. Infrastructure issues certainly slow down digitisation however they don't explain the whole story. Many businesses have access to superfast broadband and don't use it to its full potential.

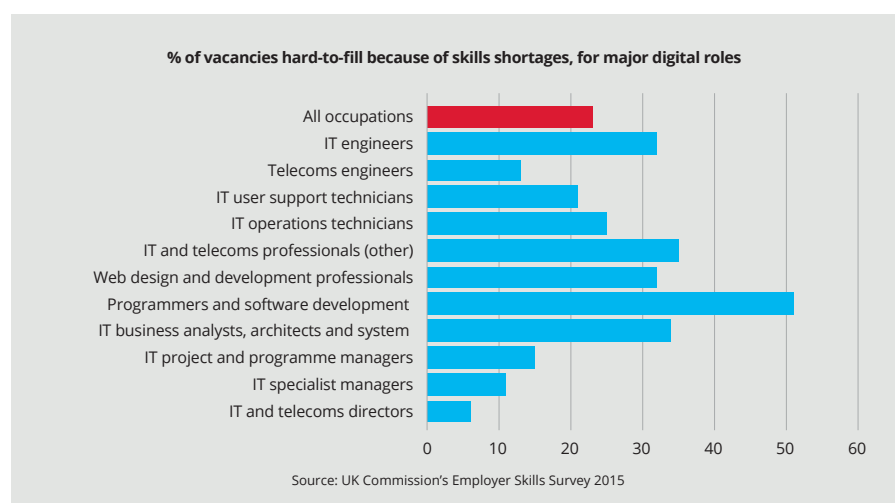
Several factors seem to be at play. Although the cost and availability of technology is decreasing due to cloud and software as a service models the knowledge to build the technology business cases is scarce and cost will always be a challenge. At a basic level, the complexity and rapid change of digital technology can deter investment by business leaders without digital expertise.

So-called FUD – fear, uncertainty, doubt – creeps in and prevents businesses from identifying and implementing investments; it's especially the case in smaller businesses. Part of this is the recognition that the initial

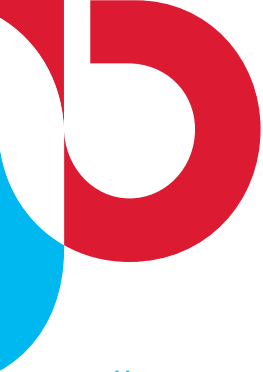
investment in new computing equipment or software is only half the story; realising the full return on digital investment often requires rethinking organisation, process and skills to take advantage of the capabilities on offer. This complexity and the sunk cost of legacy systems also provide a barrier to change.

That need for further investment links to the other big barrier: getting the people with the skills and know-how to make use of digital technology. Digital skills are some of the most sought-after and businesses struggle to recruit and retain employees in such high demand. Indeed, according to analysis by the Tech Partnership, a network of leading employers from the digital industry, more than two-fifths of employers recruiting tech specialists struggle to fill their vacancies – with a price tag of around £2 billion in lost output every year.

Nor is that problem confined to tech specialist employees such as IT engineers, application developers or database managers. Digital should no longer be viewed as a support function. It is what the business will increasingly do. There is a need for hybrid employees who can bring tech skills into a wide range of operational roles in the core business.



*Field and Franklin (2013). 'Micro-data perspectives on the UK productivity conundrum – an update'. Newport: Office for National Statistics. **Bertschek and Niebel (2015). 'Mobile and more productive? Firm-level evidence on the productivity effects of mobile internet use'. ZEW Discussion Paper No.15-090. Mannheim: ZEW. †Bakshi, Braco-Biosca and Mateos-Garcia (2014). 'Inside the datavores: estimating the effect of data and online analytics on firm performance'. Technical Report. London: Nesta. ††Kromen, Skaksen and Sørensen (2011). 'Automation, labor productivity and employment: A cross-country comparison'. Working Paper. Fredriksberg: Centre for Economic and Business Research, Copenhagen Business School.



How can more businesses get the know-how to digitise?

Breaking through FUD means more businesses linking to the right knowledge at the right time and on the right basis. Worryingly, a study by Durham University finds that, despite the complexity of getting digital right, around half of small businesses are resistant to getting external support. The businesses on the Productivity Leadership User Groups reported just that problem; many said that they found it difficult to get good advice on the application of new technology, and on the surrounding concerns such as digital transition or managing change.

While there are worries here, there is also progress. Some large technology companies are investing in the spread of digital know-how in the UK. For example:

- Google launched its Digital Garages to provide over 200,000 smaller businesses with digital skills training, partnering with organisations such as the CBI, FSB, Chambers of Commerce and LEAs. The Digital Garages offer masterclass presentations by Google UK staff on 'telling your story online' by web design and 'getting new customers online' through search engine optimisation.
- Cisco runs a Networking Academy, which is an IT skills school and career building program for learning institutions and

individuals. It teaches students networking and other information technology-related skills, preparing them for jobs as well as for higher education in engineering, computer science and related fields.

- The Tech Partnership is a network of UK employers creating the skills for the digital economy. It has formed two boards of UK business executives. The first comprises the heads of organisations in the technology industry. The second is a board of technology executives from businesses right across the economy, along with representation from smaller companies. The aim is to inspire young people about technology, accelerate the flow of talented people from all backgrounds into technology careers and help companies develop the technology skills they need for the future.

These are just a few examples of companies working to bridge the knowledge gap, but there are many more besides. The Digitisation Business Leadership Group's two Digital User Groups also found some valuable innovations at a sector specific level:

Manufacturing. The Manufacturing Digital User Group and engaged with the High Value Manufacturing Catapult's Manufacturing Technology Centre (MTC) to see how Digital is transforming their sector. Key areas of development that drive productivity include virtualisation and modelling in advance of production, connected robotics, flexible automation and remote maintenance. The combination of IOT and data analytics has started to create whole new service and business models for the industry.

Retail. The Retail Digital User Group identified digitisation opportunities for small and large retailers. For larger retailers the digitisation of the supply chain was seen as key. Connecting the end to end eco system while digitally managing logistics was a significant productivity opportunity. Technologies such as RFID tracking and digital shelf edge pricing have been more heavily adopted in other countries. For smaller retailers too, there are opportunities to use digital to shape a more inviting, attractive retail experience: the entire high street can be digitised, and the group set out to understand the IOT opportunities for smart parking, shared logistics, wifi-connectivity, analytics, multi-channel customer journeys and online customer engagement. The Digital High Street and smart city initiatives are making progress in these areas.

The industry consultations with the Digital User Groups proposed a number of potential interventions that could boost business performance. The work has resulted in a more detailed report on digitisation 'Accelerating the Impact of Digitisation' along with a toolkit detailing the methodology that was followed. The intention is that this will produce a replicable process that can be applied to other sectors and businesses to help them make more realistic decisions about the costs and benefits of using digital technologies.



How can businesses get the tech skills they need?

Tackling digital skills isn't always straightforward. But in the long run, as digital becomes more and more a part of everyday business life, bridging this gap – between tech expertise and the skills needed in the rest of the business – will become a critical success factor for high-performing businesses.

Within the digital industry, some progress is being made. Leading employers have come together through the Tech Partnership to work with education providers to design, deliver and quality assure programmes in occupations ranging from software to big data analysts. For example, in September 2015, 160 apprentices enrolled on a Degree Apprenticeship involving seven universities and 16 digital employers. This kind of collaboration can help ensure that the needs of both businesses and apprentices are met, while building a highly-skilled workforce for the future.

Where next for digitisation?

Digitisation is clearly critical for the lasting future of British business; its power to disrupt and transform makes engagement essential for most businesses and most industries. The initial work of the Productivity Leadership Digitisation User Group has helped to highlight the business case, and highlight some lessons and opportunities for business to do better, and government to help.

For businesses, the clear signal is to put the digital agenda at the heart of the business. That will take different forms in different

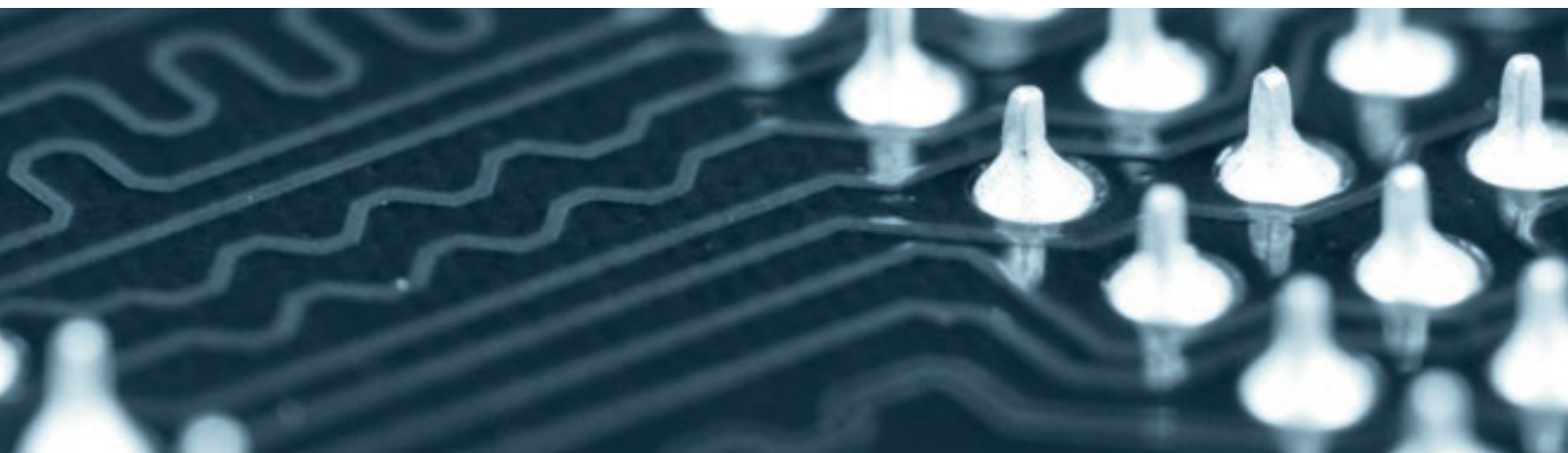
businesses: large companies should be looking to have a Chief Digital Officer (CDO) to negotiate the opportunities and risks of new technology; smaller companies need to just make sure it's part of their plans. In either case, the issue is to have a roadmap of how digital can Enable, Differentiate and Define the business: enabling means enhancing what the business does already; differentiating adds new dimensions be they in transforming customer reach or rethinking the product; defining means making these new dimensions central to the business's long term vision.

Within the business, there's much to be done. Most businesses are already generating data – but the challenge is spotting how to capture and apply the value of business data. Understanding what data can be collected from the business and its surroundings, and thinking how it can be mobilised is important. So too is thinking whether the business has the right digital platform to collaborate with suppliers and customers, and how to ensure digital security. Thinking long term, all businesses looking to grow through digital technology need to have a digital skills plan to match: not just limited to the IT department, but thinking about what and how digital skills can cascade from senior management down to the shop floor.

For the digital industry, there's much that can be done to respond to businesses' worries about finding the expert advice they need. Technology companies need to ensure the space to understand customers' business challenges if they are to provide the solutions they need. Given the FUD concerns of many businesses, the increasing move to innovative

service pricing models can help: by lowering the initial capital outlay and sharing risk, more businesses will be able to experiment with the promise of digital.

For government, the role is to enable and enhance. Some of this concerns better coordination of programmes – whether delivered by Catapults, Innovate UK or other public bodies – to make them more comprehensible, more accessible to businesses. Ensuring digital opportunities take a high-profile place within the Productivity Leadership Group's proposed marketplace is critical. Beyond that contribution, government's role is to continue to drive further progress on the availability of high speed broadband and 4G infrastructure, and also ensure the opportunities for employees affected by digital disruption to rapidly reskill and find new roles.





Governance and finance

- Britain has deep, sophisticated capital markets which focus on holding companies accountable for their performance – but the measures used can impede long term capability.
- In the long term, listed companies need to invest in skills, culture, innovation and capital assets, but investors do not have comparable measures by which to evaluate those decisions.
- When the right measures can be found, companies and investors need to take the opportunity they offer, and approach a more engaged, stewardship approach to governance.
- Greater engagement together with efforts to lower costs and improve access could give a much wider number of small and medium sized growth companies the opportunity to gain investment from capital markets.

What difference could better governance make?

If too many smaller businesses lack ambition, the problem with larger business is that ambition may be misdirected. Making the most of a business for its shareholders to invest in and drive through improvements can take time and carry risk before tangible results are delivered. Yet too often plans to do so can be blown off course by a wish to deliver quick returns. This often means many large British companies are not given the space or time to experiment and reach their full potential.

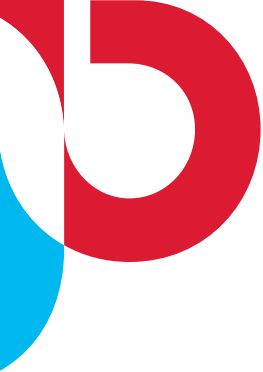
Larger companies which can access broader resources and expertise and secure greater economies of scale can be better able to overcome some of the problems which affect the greater number of British businesses. However, short-termist financial pressures can compel managers to seek out quick wins, and investor pressure provides many incentives to ensure managers seek out and exploit business opportunities.

Indeed, public listing, private equity and venture capital are all parts of the kind of financial system an advanced economy needs to support innovation and share risks

and rewards with investors. With the City of London, Britain has a sophisticated and vibrant financial system with access to deep capital markets. For those businesses with the scale and growth to benefit from these forms of investment, finance can power sustained growth.

But too much short-termism, particularly for companies listed on stock markets, can undermine the efforts of managers to develop their business in the long term. For an advanced, service-driven and knowledge-intensive economy like Britain's, success comes through innovation in products, services and processes. It also depends on sufficient investment in relationships that foster knowledge transfer and the diffusion of ideas and hence accumulating the human and physical capital which can put those innovations into practice.

It's this creative element in management which the current corporate governance climate may be limiting. Managers are rewarded for their ability to act quickly, delivering new revenues or cost savings in short times. But often the company's potential for long-term value creation will be better served by patient investment in new ideas, skills or equipment.



What measures do we need?

Enhancing company reporting to enable the efficient allocation of capital is a priority for the Investment Association (IA), the industry body representing the interests of UK investment managers whose members manage more than £5.5 trillion for clients around the globe. As the IA says, company reporting “should provide a real understanding of a business and its drivers, its financial strength, and the quality of management and their decisions”. Investors look to the annual report to provide the building blocks on which they make investment decisions. The quality of these reports really matters for the efficient allocation of capital.

While we may have strong and sophisticated capital markets, investor decisions depend on having the right information about long-term prospects for each company. Investors therefore need to have clear, transparent reporting on the company's current and evolving financial health. For that reason, recent reforms to company law have quite properly focused on improving that sort of information. But the current framework for company reporting performs well on financial health but offers little on the underlying capital management of the company.

At the highest level, research on annual reporting by EY found a large number of companies which did not explain how the company made money, and very few offering a clear, linked discussion of strategy, performance, risk and reward. The dearth of information on strategy, let alone plans for physical, human, organisational and intellectual capital inclines investors to focus on short run changes in financial performance, and that in turn shifts

incentives for managers to maximise short-term results at the expense of long-term value creation. The shift to quarterly reporting reinforced this imbalance.

Making progress here requires effort on both sides. The commitments in the IA's Productivity Action Plan to develop proposals for measuring the long-term drivers of productivity and performance are a first step. The IA plans to develop Long-Term Reporting Guidance which will set out Key Performance Indicators (KPIs) linked to productivity, and how companies can improve their reporting on human capital, culture, long-term strategy, capital management decisions and outcomes. Through the IA, the guidance will set out investors' views on how these strategic drivers of performance can be reported credibly and robustly.

Why aren't we already measuring these factors?

While investors can make clear their expectations for longer-term measurement, it will be incumbent upon those managing listed companies to grasp the opportunity on offer. As the IA notes in its Productivity Action Plan, while quarterly reporting is no longer mandatory, most UK listed companies continue the practice. Other listed companies need to follow the lead of Unilever plc and others who have curtailed their quarterly reporting, to focus on longer term performance.

The wider shift is good news, but the details may be tricky. The reason why reporting focuses on financial performance is because measurement conventions are well established. Questions of culture, skills, innovation and capital all inject a greater level of uncertainty. There's long been

agreement that these factors are critical in determining long-term success – the business bookshelves provide ample testimony to that. But arriving at robust, comparable measures which can adequately capture how company is performing on them is no simple matter.

Skills and human capital demonstrate the sort of problems involved. In an increasingly service-intensive, knowledge-intensive economy, there's no doubt that human capital is now a critical performance driver. Equally, there has been no shortage of effort to improve how companies measure human capital – the challenge has been to get sufficient agreement on an approach to the problem.

Some progress has been made in recent years. A group of leading organisations including the Chartered Institute for Personnel and Development and the Chartered Institute of Management Accountants have been working together on Valuing your Talent, ‘a new framework for human capital measurement’. Recognising the problem of continuing inconsistencies in how human capital data is collected, analysed and reported, the Valuing your Talent group have developed a framework very much as a starting point for further work.

What the Valuing your Talent framework does is set out the major elements – inputs, activities, outputs and outcomes – for talent development driving sustainable business performance. It's been designed to dovetail with the global Integrated Reporting Initiative, but at the moment it's still broad and indicative, not prescriptive. The reason for that is that the Valuing your Talent group want the framework to form the basis for a future consensus, and so the details will need to be evolved through efforts at implementing the framework.

What can investors do?

Whatever the right methods for each kind of factor, companies need to make the effort to report on them if there is to be a greater attention to long term capability by investors. Whitbread plc gives a good example here – since 2011 they have been setting out in their annual reports five-year growth milestones, and backing them up with clear objectives for their investment in people, customer experience and capital assets. Within the business they have also been looking to develop how they invest in the full range of assets – for example, looking at how they capture the impact of their apprenticeships programme and their WISE (Whitbread Investment in Skills and Employment) programme. The WISE programme, consisting of work experience placements, school visits, and apprenticeships, and engaging with Whitbread's supply chain, is bearing fruit for the company, opening up new pathways for recruits to develop their careers, and building the company's long-term talent base.

If companies start to report, investors then need to ensure that they take their responsibility to engage with them, to focus their research on whether companies' growth plans will succeed. As the IA's productivity plan recommends, investors need to enhance their stewardship role with listed companies. This won't always be straightforward – as the Kay Review highlighted, increasingly fragmented, globalised shareholding, let alone regulatory constraints on investor

communication, all impede efforts to engage directly with companies.

Following the IA's Productivity Action Plan recommendations, the investment industry can lead by being transparent about their approach to stewardship and their efforts to engage. The industry can also ensure that its research expenditure is focused on understanding long term drivers, rather than chasing short term results. The industry can help to ensure any new measures agreed to enhance long term reporting are implemented and refined, so that they can become reliable indicators of future prospects.

If that shift can be achieved, then capital markets more hospitable to companies facing short term uncertainty but with credible long term plans can also become accessible to a wider number of companies. Together with efforts to cut the cost of issuing equity capital and improve engagement with early stage companies, more and more growth companies could have access to the deep reserves of capital available in the financial markets, powering their growth and improving the prospects for productivity gain.

Where next for governance?

Getting the right framework and culture for corporate governance is critical to ensuring that managers have the right incentives and can find the capital investment they need to pursue plans for successful, sustainable

growth. The work of the Investment Association has been crucial in uncovering the underlying issues and in promoting effective action from companies and investors to tackle them.

For businesses, the need is to invest in finding the right measures to capture what it is that makes them successful. Measures need to be robust and reliable, and offer meaningful guidance to investors on progress made or not against the strategy. At the same time, they should use the process of finding the right measures to be clear with investors on what their strategy is and how it will use the full range of inputs – human capital, innovation and capital structure – to drive it.

For investors, there's not only a need to respond to the emergence and use of new measures, but to invest in engaging with managers and focus on long-term value creation. Successful, long-term growth needs investors with the mindset to back it, and the direct knowledge of the company's work to ensure accountability. That process goes both ways – working with companies they invest in, investors need to ensure managers understand their investment horizons.

The foundations of corporate governance have their roots in the regulatory and taxation structures we have, and so there's an important role for government in ensuring that those structures support the change we want to see in favour of taking a longer term view.



Where next?

That productivity growth remains elusive is well-known, much-analysed but a long way from being resolved. We have undertaken our analysis to get under the skin of the problem and focus on finding business led solutions for the challenges of a modern, fast changing and increasingly disruptive, global economy. Measurement, organisational capability, innovation, digitisation, governance and finance include the core areas in which we have focused – these are some of the key business challenges which can each individually unlock significant productivity gains to Britain's businesses. In doing so, we have found that there is opportunity in businesses of all sizes and across all sectors. Unlocking that opportunity could be extremely valuable, perhaps adding as much as £130bn in GVA to the UK economy each year.

The routes to accessing this are many and varied but they all require better business leadership, more ambition and concerted, enduring action on the ground with different business communities. It's no exaggeration to say that most businesses don't realise they have a problem with productivity, let alone an appreciation of the opportunity of tackling it. Everything therefore starts with engagement and we have started to develop a modern way for businesses to assess How good is your business really? From there we have developed practical ways of supporting businesses to improve in diverse sectors such as advanced manufacturing, food and drink and creative industries, focusing on a range of business practices especially better management and leadership, innovation, digitisation, work organisation and measurement.

We have had the advantage of advocacy from some of the UK's most senior business leaders and we are confident the approach we have developed will make a difference. But equally we realise that delivering impact only in the areas we have championed, while worthy, will not make sufficient inroads into the greater prize. We now need to meet the challenge of scaling up.

For this to happen, the work from the Productivity Leadership Group represents the first tangible examples of a movement involving thousands of businesses. This movement will be necessarily 'open source'

rather than prescriptive, but it must be unequivocally about results – measured in improved productivity. It must be business-driven and led, inspiring 'bottom-up' change within individual businesses, focused on making space to explore and experiment with how to be better, thus supporting continuous improvement amongst businesses at large.

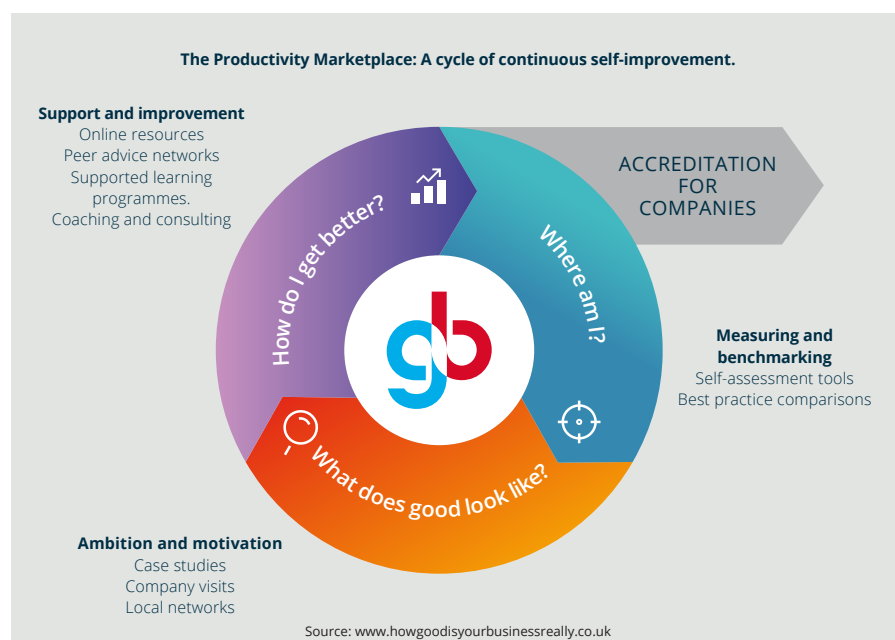
That's why the Productivity Leadership Group is calling for the development of a quality-assured marketplace: to make it easy for businesses to take those small first steps and to collaborate. The marketplace isn't an attempt to structure and control the many ways businesses already improve – the idea of the marketplace isn't to take over everything. Instead, it's a means to share knowledge, advice, tools and support from those with expertise and experience, to those who want to share them – with the assurance that only those with proven results will be admitted, and an emphasis on sharing between businesses with common interests and shared aims.

The movement needs momentum to organically evolve. It must start quickly and grow fast. There is every sign it will do so. The response we have had has been very encouraging, with wider businesses, industry associations, banks, investors, professional

bodies, universities and LEPs all asking to be involved. This is vital as it connects the initial work to wider business-led practical action taking place thus extending the scale and reach of what is possible.

The movement itself needs to be well led. We are calling for a small high quality Productivity Council to amplify and to accelerate impact, establishing a common purpose within the movement and winning a broad base of followers across the UK. It will seek to champion engagement, promote and share good practice, undertake research and offer insight and connect business to practical communities, advice, tools and key partners. With such leadership we can close the gap on international competitors. Without it we risk falling further behind for a generation. We cannot afford to.

The recommendations spelled out in this report offer some starting point around each of our critical issues. But the upshot is this: for Britain to realise the productivity gains available, many businesses need to raise their ambitions and then act upon them. The business movement and its associated marketplace offers a vehicle which we hope will allow many to begin to act upon those recommendations and show leadership in improving their own productivity and performance.



Acknowledgements

We are grateful for feedback from a number of stakeholders in the development of this report:

Advisory, Conciliation and Arbitration Service (ACAS)
British Chambers of Commerce
Chartered Institute of Personnel and Development (CIPD)
Chartered Management Institute (CMI)
Competition and Markets Authority (CMA)
Confederation of British Industry (CBI)
EEF – The Manufacturers' Association
Enterprise Research Centre
Federation of Small Businesses (FSB)
Innovate UK
Investment Association
Institute of Directors (IoD)
Involvement and Participation Association (IPA)
Learning and Work Institute
National Centre for Universities and Business (NCUB)
Russell Group
Scale Up Institute
The Behavioural Insights Team
Trades Union Congress (TUC)
Work Foundation
UKWON

howgoodisyourbusinessreally.co.uk