Germany shows how to tackle the puzzle of productivity



An apprentice at ThyssenKrupp in Germany. UK productivity trails behind that of Germany and some analysts think German vocational training is a key factor © FT montage; Bloomberg

"Our lead times are four to 12 working days," says Carina Schneppenheim. "If we are not able to meet these, we will no longer be competitive, because the competition does not sleep."

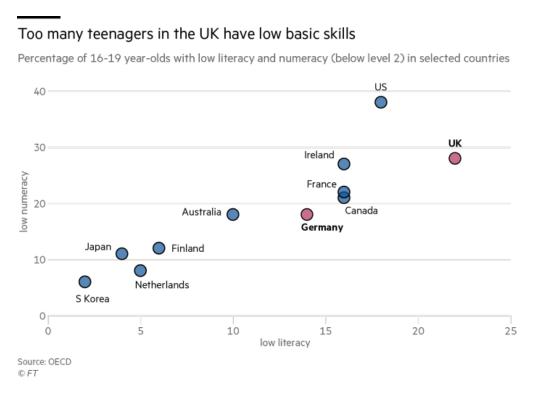
Ms Schneppenheim is the HR director — and managing director-in-waiting — of a manufacturing and design company founded by her grandfather nearly 50 years ago in Pulheim, between Cologne and Düsseldorf.

Trying to improve productivity at the company, Kunststoffverarbeitung Schneppenheim, is an unrelenting challenge, which has been made even tougher by the rise of new Asian rivals.

But it is one in which German companies have fared better than European counterparts, most notably those in the UK, which by 2025 — if it continues to lag at the same rate — will be nearly a third less productive per hour worked than Germany, according to McKinsey.

Paul Wenham, managing director of Geometric Manufacturing near Tewkesbury in the UK, which makes precision-machined components for the defence industry and other sectors, says British companies face big hurdles in a country where the productivity challenge is often described as a "puzzle".

This is because no British sector or region can be singled out as responsible for the underperformance.



However, comparisons between Germany and the UK in terms of managerial skills, institutional support, and history cast light on what both countries' companies can learn from each other.

"It's clear that Germany has very distinct differences in its business structure and cultural make-up," says Tony Danker, chief executive of Be The Business, which campaigns to spread best practice on productivity to British companies.

"There is real interest in continuous improvement and building business networks and institutions that focus on this. This spirit and activity feels eminently replicable even if the institutions are not."

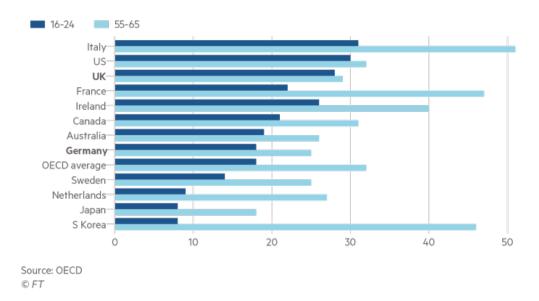
Mr Wenham thinks it is not just having the financial firepower to make investments, but "having the people who can see the need and buy in to it".

"We want to look at robotics, but it's a big capital investment as well as a big learning curve," he says.

Geometric uses the *kanban* system, which involves an email being sent once a customer uses a container of their products, which triggers the company to replace it. The system has speeded up response times, as well as reducing inventory.

Both the UK's older and younger generation have similar basic skill levels

Percentage of adults with low skills (literacy and/or numeracy below level 2) in different age groups ${\sf S}$



But for Mr Wenham, the key to improving productivity has been less about adopting new processes and more about the training and insight that he himself has gained and then disseminated to his team.

Indeed, a key difference between the UK and Germany lies in the training that workers receive.

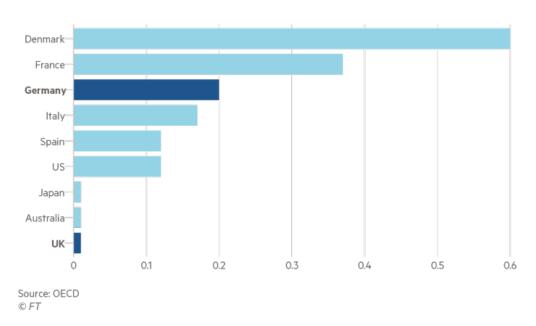
Although German managers are less likely to have higher educational qualifications, they have often received vocational training that builds workplace expertise. And despite the UK having more tertiary-educated managers than Germany, OECD data show their actual skills, in literacy and data management, are lower.

Tera Allas, a senior fellow at the McKinsey Center for Government, says the UK has one of the highest skill mismatches in the OECD. "We spend too little on training as a percentage of GDP," she says. "It is a ticking time-bomb." In comparison, the apprenticeship system in Germany is far more developed than in the UK, which is still struggling to find a system that <u>works</u>. Half of German school leavers have a vocational qualifications, and 327 different training occupations are recognised within the country's dual vocational and educational scheme.

Employers themselves play a key role. While the government pays for vocational schools and the teaching in them, employers pay other costs such as apprentices' wages.

Total public spending on worker training

Per cent of GDP (2015)



Meanwhile, examiners for the most prestigious high-level exams are experienced professionals from companies such as BMW who volunteer for the role, according to Frank Dollendorf, international economic affairs director at IHK, Munich's chamber of commerce and industry.

Mr Dollendorf estimates that more than a third of managers have some kind of vocational qualification.

"Vocational training has a good image," he says. "The heart and soul of the chamber is the vocational training programme."

The network of chambers of commerce to which IHK belongs is another feature of the business landscape that differentiates Germany from the UK.

Membership of a chamber is compulsory for German companies, most of them from the <u>Mittelstand</u> of small and medium-sized businesses that make up the vast majority of German employers.

Bavaria's IHK, for example, has nearly 400,000 members, while across Germany's 16 states there are 79 chambers of commerce and industry, representing 3.6m companies. Compare that with the British Chambers of Commerce, which represents just 75,000 businesses across the whole of the UK.

The chambers provide a powerful lobbying voice on behalf of business, as well as a channel through which companies can access generous state funding, for example for digitisation. Meanwhile, the fact that many Mittelstand companies are family-owned means relationships with suppliers tend to be long-term, encouraging innovation to be shared up and down the supply chain.

But the headline facts and figures mask some very similar challenges facing German and UK companies. For both, improving productivity is not just about processes.

Kunststoffverarbeitung Schneppenheim uses an error-identification system, to which it partly credits an increase in sales of a 10th over the past year and a reduction of a quarter in lead times. The company uses quality-management methods such as Ishikawa diagrams — causal charts created by Kaoru Ishikawa that help prevent defects — and addresses problems in small "error management" teams.

But Ms Schneppenheim says the most difficult part is that "you have to be absolutely honest with yourself in terms of how good your processes are". She says it took her about a year and a half to properly explain her goals to her 20-strong team, and to bring every member of it along with her.

Back in the UK, Geometric's Mr Wenham has been just as rigorous in trying to tackle the productivity puzzle.

Starting in 2015, he took part first in Goldman Sachs' 10,000 Small Business <u>programme</u>, then in a 12-month programme supported by Be The Business. Mr Wenham visited Rolls-Royce, Babcock and BAE Systems, and the results of studying best practice elsewhere, as well as the changes in his own approach, may have contributed to a steady improvement in profit margins.

While UK firms look to German productivity growth as a beacon, companies in Germany feel gripped by a productivity crisis of their own. Output per worker may be growing faster in Germany than it is in the UK, but company bosses and policymakers still fear this is not fast enough to maintain the country's competitiveness against fiercer rivals outside of Europe.

For employers in both Germany and the UK, the key to sustained productivity growth lies in increasing the number of workers with the skills they need.

Geometric has recently employed its first <u>degree-level apprentice</u>, whom Mr Wenham describes as a "bright spark". But the apprentice has to travel 70 miles to the nearest university to do his day a week studying mechanical engineering.

In Germany, apprenticeships are becoming less appealing. Although a well-funded advertising campaign appears to have slowed the fall, the IHK estimates that, by 2030, 524,000 degree-level vacancies will be unfilled in Upper Bavaria alone.

This is the main challenge for any sustained improvement in productivity, not just for the UK and Germany but for many other economies, says Ms Allas at McKinsey, who argues that new processes and machinery can only be properly taken advantage of by managers with the skills to do so.

"Rather than a pure technological challenge, the challenge is to change management."

German companies seek succession advice

If you run a construction company, or a hairdressers, in Munich or Upper Bavaria, you have to be a member of the regional chamber of trade and crafts. For an average of ϵ 200 (or as little as ϵ 98) a year, its 80,000 members get a range of advice.

"You can come to us for help on starting a business, getting funding, how to write a business plan, form strategy," says Hartmut Drexel, who manages its business advice services.

"We want to have people come to us from the beginning of their business, through growth, when it goes down, when it moves to the next generation."

The chamber does not suggest specific advisers and prides itself on its neutrality. An example of the practical help it provides is if a company wants to apply for a loan from a bank, the chamber's advisers will help prepare the loan application, and then check the loan conditions offered.

With the chambers' central association in Berlin and an office in Brussels, it also lobbies on behalf of its members.

With Germany's economy growing strongly, the main advice sought by companies is around succession rather than founding a new business.

Many Mittelstand companies are family-owned, and were often founded after the second world war. They are now approaching the handover to the third generation, many of whom are uninterested in running a company.

"Most family-owned company founders are now over 60," says Mr Drexel. "The younger generation wants a different work/life balance and it is more and more common to hand over to external managers."

Sarah Gordon