techUK
FOR WHAT COMES NEXT

Growth Plan

A plan to boost economic growth by leveraging the tech sector, the UK's modern economic success story.

October 2024

Contents

A note to the Rt Hon Rachel Reeves MP, Chancellor of the Exchequer

The UK tech sector is the UK's modern economic success story, with its Gross Value Add (GVA) contribution to the economy rising by over 25% from 2010 to 2019 and now exceeding £150 billion per year.[1] techUK's own members employ 1.1 million people and had a combined turnover of £329 billion in 2023 with an estimated annual growth rate of 10%.[2]

The UK's digital sector is also on track to become the biggest single sector contributing to GVA, due to its size and a faster growth rate than other sectors and the wider UK economy. Artificial Intelligence (AI) technologies alone are projected to boost UK GDP by up to 10.3% by 2030[3] and bring significant benefits for UK businesses including increased productivity, efficiency and technological possibility.

You have indicated that your priority for this Government is economic growth. This central mission is the right one, and techUK stands behind your goal to harness economic stability and grow the economy. The tech sector is calling out for this, and, in us, the Chancellor has a willing partner to work together to deliver.

While business optimism is rising the UK economy is suffering from slow growth and lagging productivity in comparison to other G7 nations. Growth forecasts are mixed[4] and there is a risk that if our economic growth does not pick up it will result in a loss of competitiveness, cuts to public services and lower living standards.

Getting growth going again will not just come from advancing leading sectors in our economy, including tech, but also ensuring that new technology is diffused across the wider economy. Utilising the tide of new digital services and AI technologies will lift all boats.

As an example, the OBR has predicted that the widespread use of AI technology could support raising productivity by half a percentage point by 2028/29. In turn, the Government could expect to have an extra £39.9 billion of spending money while also reducing costs by £6.2 billion.[5]

In this paper, we set out how backing the UK tech sector will ensure growth for the benefit of every UK nation and region.

Julian David, CEO, techUK

techUK's members' contributions to the UK economy:

Employ **1.1 million** people

Have a combined turnover of **£329 billion** in 2023

Estimated annual growth **rate of 10%**

Transform international trade, enabling businesses to engage in **cross-border transactions** with ease

By taking decisive action, we could:

Create up to **678,000 new tech jobs** across all regions of the UK

Grow the UK tech sector so that it adds **£200 billion to the UK economy every year** by the end of the decade

Raise **£40 billion for the Government** through AI and digital technology adoption

Ensure the UK leads in the technologies that will **drive global economic growth in the next decade**

techUK's Growth Plan: Build, Empower and **Shoot for the Stars**

Despite tight fiscal conditions, investing in the tech sector can yield substantial returns. The UK's tech sector has consistently grown faster than the wider economy, with the sector reaching a combined market valuation of $1.1 trillion in Q1 2024.[6]

Additionally, virtually every other business sector has a 'growth plan' predicated on greater digitisation and the use of new and emerging technologies like AI and the cloud. Digitisation further enables inclusion and lowers barriers to accessing often critical public services for businesses and individuals, flowing through to economic growth. This is not only directly because of investment in digital services, but due to the impact use has on total factor productivity.

In 2023 and early 2024, the tech sector has shown resilience amid rising costs and regulatory challenges. techUK and Public First polling of 250 senior tech leaders[7] indicates cautious optimism regarding growth prospects. Growth is the primary focus of our leaders over the next five years. Their top ambition includes growing their business (45%), onboarding new technologies (30%) and expanding business capabilities, products or services (30%).

techUK and our members call on the Government to continue aiming high, keep pace with technological development and maintain the Government's ambitions for investing in research and innovation to meet our economic challenges. This is a pivotal moment, and we need to send out a clear signal that the UK intends to invest in the industries that will define the next decade of the global economy.

Having worked closely with our over 1000 members, this 'Growth Plan' brings together techUK's top recommendations for growth. In doing so, we have set out how the Government can **build** the right foundations, **empower** the competitiveness of the economy, and support the industries that will define the economy of the 2030's by **shooting for the stars.** These ideas are backed by practical interventions that consider the fiscal position the Treasury finds itself in during the early stages of this Government.

Key actions in our Growth Plan include:

Build

Get the foundations right, including the skills, digital adoption, infrastructure and investment incentives to boost productivity and enable firms to grow.

- **Reform the planning system** to enable billions of pounds of new investments in digital infrastructure, including for artificial intelligence, across all regions of the UK.
- **Improve the performance of the UK's R&D tax credit** and set out a five-year plan to reform an underperforming HMRC, improve take up and expand the coverage of the R&D tax credit. This will encourage more businesses to invest in R&D and receive a return of £2.70 for every £1 spent on R&D support.
- **Provide a boost of up to £232 billion to the UK economy by encouraging digital and AI adoption across the UK's SMEs.** Do this by setting out a comprehensive digital adoption strategy and identifying a Minister responsible for increasing digital adoption by 2030.
- **Deliver the new Growth and Skills Levy** and work with the tech sector to **create a Digital Skills Toolkit.** This will increase digital skills provision across the UK and encourage a more diverse and inclusive tech sector.

Empower

Take a place-based approach to develop tech clusters and improve the quality and efficiency of our public services to deliver better outcomes for UK citizens.

- Reform the processes for public procurement to **create more opportunities for UK scale-ups and SMEs to access contracts to provide Government technology projects.**
- **Deliver on the recommendations of the Harrington Review** to create a more joined up investment offer with the support of Metro Mayors and Devolved Governments.
- **Create a Connected Hubs programme,** similar to the scheme run in Ireland, opening remote and co-working locations across the UK.

Shoot for the stars

Shore up the UK's competitiveness by leveraging economic growth opportunities and capitalising on our unique advantages, including in net zero, AI and quantum.

- **Deliver a new AI Strategy,** sitting alongside the UK Industrial Strategy, to unlock the full benefits of AI technologies, potentially raising UK GDP by 10.3%.
- **Establish a permanent commercialisation of Tech Taskforce within the Regulatory Innovation Office** to run focused policy sprints and help commercialise new and emerging technologies.
- **Maintain the planned increase in the UK public R&D budget** and support critical technologies such as quantum and semiconductors.
- **Create a tailored scale-up support offer** to help close the UK scale-up gap.

Build, Empower and Shoot for the Stars

This Autumn, working with our members, we have identified areas of focus: building the right foundations, empowering the competitiveness of the UK's everyday economy and shooting for the stars.

To support delivery, our actions are divided into the **immediate term** (first 100 days following the Budget), **medium term** (first 12 months) and **longer term** (first parliamentary term). We have also outlined how these recommendations contribute to your five missions, including securing the highest sustained growth in the G7.

1

Build The Right Foundations

Get the foundations right, including the skills, digital adoption, infrastructure and investment incentives and enable firms to grow.

2

Empower The Competitiveness of UK's Everyday Economy

Place-based approach to deliver tech clusters and improve the quality and efficiency of our public services, delivering better outcomes for UK citizens.

3

Shoot For The Stars

Shore up the UK's competitiveness by leverageing economic growth opportunities and captilising on our unique advantages, including net zero AI and quantum.

Throughout the plan, we have shown how each policy objective supports your five missions using the below symbols.

Government mission	
 **Secure the highest sustained growth in the G7**	The tech sector and digitisation are crucial drivers of economic growth across all regions of the UK. They play a pivotal role in creating jobs, boosting productivity, fostering innovation, and enhancing the UK's global competitiveness.
 **Make Britain a clean energy superpower**	The tech sector plays a pivotal role in supporting the net zero target by 2050, developing renewable energy innovations, smart grids and climate monitoring and modelling.
 **Build the NHS fit for the future**	The tech sector supports the future of the NHS by driving innovation, improving efficiency and enhancing patient care. As healthcare challenges grow—such as aging populations, increasing demand, and resource constraints—technology offers solutions that can transform how the NHS delivers services.
 **Make Britain's streets safe**	The tech sector supports the UK police force and justice system, for instance, advancing technologies for public safety systems, crime prevention and emergency response.
 **Break down the barriers to opportunity at every stage**	The tech sector has a transformative role in breaking down barriers to opportunity by promoting greater access to education, jobs, financial resources and essential services.

1. Build the right foundations

This Government has already made significant progress on building the foundations for economic growth. The UK tech sector and business alike welcome the focus on stability, investment and reform.

Whether it's an action to overhaul the planning system[8] or reform the Apprenticeship Levy into a Growth and Skills Levy, these are welcome moves that we hope to see give the UK an economic boost and deliver on growth.

Alongside this, techUK are pleased to see that all Government departments, including the Department for Science, Innovation and Technology, are prioritising action to support the growth mission and provide nationwide benefits for all. There are reasons to be optimistic, and the UK has many of the foundations in place for a thriving digital economy.

In early 2024, techUK and Public First research with over 250 senior tech sector leaders found robust foundations to make the UK a more attractive place to invest. The top five most common benefits for operating in the UK were: a reliable customer base for their products and services (41%), the ecosystem and ability to work with other tech companies (33%), access to a skilled workforce (33%), digital infrastructure (32%) and the R&D environment (32%).

But as the digital economy evolves, it is vital to ensure that the building blocks are in place to support sustained leadership in existing and emerging technology, such as AI.

Recommendations in this section include

- Enable digital infrastructure to be built more quickly and reduce operating costs by reforming the planning system.
- Boost innovation and maximise growth through stability and effective delivery of R&D tax reliefs.
- Ensure the full expensing regime works for the UK tech sector with clear guidance.
- Deliver a pro-growth regulatory system that is smart and keeps pace with fast technological change.
- Support UK research and innovation through data reform, further encouraging more effective public services.
- Support the economic growth opportunity of cyber security through better awareness and built-in resilience.
- Show that the UK is an attractive and open destination for internationally mobile investment.
- Make digital pathways more accessible through a reformed Apprenticeship Levy and a Digital Skills Toolkit 2.0.
- Deliver education, skills and training by better embedding cyber security and resilience across the UK's supply chain.
- Address productivity challenges and enable SMEs to unleash the benefits that AI can bring with better SME digitisation support.
- Support and drive forward the Digital ID industry by ensuring that Digital Identity Technologies can be adopted and used across all sectors and industries.

techUK members' supporting the foundations for growth

Cornerstone: Driving Digital connectivity with sustainability at the core.

Cornerstone, the UK's leading mobile and digital infrastructure provider, manages over 15,700 sites for major telecoms operators, facilitating digital connectivity across the country. By streamlining infrastructure deployment and enhancing mobile coverage, particularly in remote areas, Cornerstone has played a pivotal role in improving broadband access, supporting local economies, and boosting tourism.

A testament to their innovation and commitment to environmental solutions, Cornerstone sites in central Glasgow are equipped with advanced sensors monitoring air quality and weather conditions, capturing data on gases such as CO2, NOx, ozone, and particulate matter every minute and due to the geographical spread through 10 sites they are also able to track the movement of these particulates. This quick, cable-free, SIM-based deployment collects crucial environmental data. This data can guide local authorities and national government in improving air quality and enhancing the wellbeing of communities.

STEM Learning and NCCE fostering a skilled workforce fit for the future.

STEM Learning are dedicated to empowering young people with the skills and knowledge to thrive through effective teaching and learning.

STEM Learning has been funded by the Department for Education to deliver national support for computing education in England since the inception of the National Centre for Computing Education (NCCE). As the tech industry continues to make an increasingly significant contribution to the UK's economy, it is important that computer science teachers are trained to teach the latest digital skills and to help the UK's workforce be better prepared for market developments.

The NCCE's work contributes to the UK's economic growth by fostering a skilled workforce in computing and technology. This includes providing access to quality computing education and partnerships with employers, universities and computing professionals. Demonstrating impact, since September 2020, over 1 million Teach Computing Curriculum resources were downloaded by schools in England.

Better support for SMEs digitisation could add an estimated £232 billion the economy

techUK's recent 'Small Enterprises, Big Impact' report emphasised the critical need for digitisation among the UK's small and medium-sized enterprises (SMEs) to drive economic growth. By leveraging digital tools, SMEs can not only enhance their productivity but also better position themselves to adopt emerging technologies like AI, ensuring they remain competitive in a rapidly evolving market.

An example of the obvious growth link through the adoption of e-invoicing, Sage's recent research surveyed over 9,000 businesses with 1- 999 employees in seven European markets (including the UK) as well as Australia, Finland, and Singapore and showed a potential increase in productivity of up to 3% annually in the UK because of the time saved from chasing payments.

Digital adoption across businesses also has widespread benefits for Government, helping to better understand what is going on in the economy. A more digitised economy during the Covid-19 pandemic, including completion of Making Tax Digital, widespread use of Digital Verification and e-invoicing would have enabled the Government to deliver more targeted support and more effectively combat fraud as well as reducing the impact of late payments for SMEs.

Experian share how GenAI is shaping the future of business

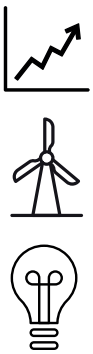
In Summer 2024, Experian surveyed 1,250 UK business professionals - including 250 CEOs and business leaders of large companies (250+ employees) and 1,000 employees - about their attitudes and behaviours towards GenAI. Results demonstrated that 93% of CEO and leaders report using GenAI across their operations and 27% of employees say that their company is using GenAI. Importantly, 84% of these leaders want their employees to use GenAI more prominently in their work as half admit they are concerned their competitors may be ahead of them in using this technology.

Among CEOs, leaders and employees surveyed, the main challenges getting in the way of their businesses' more effective use of GenAI included security, lack of regulation and data quality. To improve GenAI deployment, employees outlined the importance of clear policies and guidelines, and guidance from the Government and regulators.

The economic opportunity is there to seize, with the report finding that GenAI could be worth up to £120 billion per year to the UK's annual economic output over the next ten years.

BUILD THE RIGHT FOUNDATIONS

Drive investment into the UK tech sector by ensuring the right infrastructure and tax system is in place

Objective	Policy action	Growth benefit
Enable digital infrastructure to be built more quickly and reduce operating costs by reforming the planning system. 	**Immediate term: Deliver on the Planning and Infrastructure Bill to reform the planning system and make it fit-for-purpose to deliver our future digital and net zero economy.** Currently, the planning system is delaying delivery and stifling growth. For instance, various data centre operators have noted that planning remains an important barrier when dealing with local authorities. Since 2012, the average time it takes to get consent for national-infrastructure projects has increased by 65 per cent, rising to 4.2 years from 2.6 years.[9] The proposed reforms to the National Planning Policy Framework mark a step in the right direction to lay the foundations for a reformed system.[10] This should be principles based and inspired by successful models from Ireland and Norway. Reform should focus on 1) placing digitisation at the heart of improved planning inspectorate resourcing and delivery, 2) encouraging consistency across councils. **Specifically for digital infrastructure:** • For telecoms, the National Planning Policy Framework,[11] revised in December 2023, marked a step in the right direction by outlining the use of existing infrastructure should be encouraged. • For data centres, offer councils clear and consistent guidance for evaluating data centre planning applications. Areas of focus should include pre-application advice and planning officer engagement. • For data centres, establish a special Use Case category for data centre construction, separate from storage facilities, enabling councils to evaluate such applications more effectively. • For data centres, strengthen data centre related policy in the National Planning Policy Framework (NPPF) and in local plans.	Faster planning decisions can help deliver major projects and the infrastructure needed to deliver a vibrant digital economy. Showcasing investments that will deliver jobs and growth to their local economies, Google recently invested £1 billion investment in a new UK data centre[17] and Microsoft made a £2.5 billion investment in UK computer infrastructure.[18]

On some of the proposed reforms, techUK reiterates the need to reform grid connection approvals and accelerate energy connection timelines.

Immediate term: As part of the reformed National Planning Policy Framework, develop a new category for data centres and digital infrastructure under the Nationally Significant Infrastructure Projects regime(NSIP).

This should develop a new category from those defined in the Planning Act 2008.[12] NSIPs benefit from faster consenting process, streamlining the consenting process for big infrastructure schemes.[13] But this must ensure that it does not front load the process, with flexibility and certainty prioritised. For instance, making this optional, and not having a definitive threshold that would bring all DCs into the scope of NSIP.

The cost to the Exchequer for planning reform will be low. But an improved and reformed planning system would see benefits for all businesses and regions of the UK.

For more information, see **Seven Tech Priorities** p.20.

Immediate term: Place digital at the heart of the local plan development process. Advances in technology offer a chance to make local plans more innovative and responsive to social and economic objectives.

An action to deliver on this would be continuing to pilot the use of AI solutions, as mentioned in Spring 2024[14], to improve efficiency and streamline local plan development processes. This could also support in better communicating the impacts of planning and infrastructure development.

This should build on work to date to reduce planning office processing times by up to 30% per application and support the proposed increased resource of 300 new planners.[15]

The cost to the Exchequer would be low. However, there would be costs associated with upskilling planning officers with using AI solutions. Additionally, expanding the number of staff at the planning inspectorate is estimated to cost an additional £2.7 million per year resulting from staff costs.[16]

Data centers are essential to how we function as a society and economy, playing a critical role in our nation's operations.

They underpin everything that runs in the cloud or as an online service—from social media to NHS digital services, from online shopping to national rail ticketing, and from national crime agencies to critical infrastructure.

Analysis in Spring 2024[19] suggests that plans for digitising the local plan development processes could lead to plans being produced in 30 months rather than the current average of seven years.

Boost innovation and maximise growth through stability and effective delivery of R&D tax reliefs.

Immediate term: Use the 'R&D tax reliefs: Expert Advisory Panel' announced in Spring 2024[20] to inform recommendations around HMRC's administration, operation and delivery the R&D tax credit.

Currently, HMRC's services have been falling below expected service levels, raising a fundamental risk to UK competitiveness[21]. techUK have heard anecdotally that investments are being delayed, halted or missed due to services not supporting businesses.[22] This results in added costs for businesses and the Government.

While HMRC's initial efforts to address R&D tax credit fraud are commendable, there is a risk that a poorly regulated compliance process may be causing as much, if not more, harm to the UK economy than the fraud that HMRC initially allowed to proliferate. Specifically, on R&D tax credit claims, concerns have been raised about the appropriateness of the volume compliance approach to enquiries. This has led to legitimate claims being rejected and reports of qualifying companies being discouraged from accessing the scheme.

Instead of supporting a Government policy designed to promote growth, where the UK has a target to raise investment in R&D to 2.4% of UK GDP by 2027, the poor delivery is impacting firms' ability to operate successfully in the UK.

An expert advisory panel to make informed recommendations around HMRC's administration, operation and delivery of the R&D tax credit would help to address bottlenecks in the effectiveness of HMRC delivery and improve the stability of the UK business innovation.

R&D tax relief stimulates investment. Every £1 of tax forgone through R&D tax relief results in up to £2.70 of additional investment in R&D by UK companies.[26] For the corresponding research into the SME scheme, this showed an additionality ratio of £0.75 to £1.28.

According to the NAO's most recent customer service report,[16] poor customer service performance can have considerable impact. Customers spent the equivalent of 798 years (7 million hours) in 2022-23 waiting to speak to an adviser, up from 365 years (3.2 million hours) in 2019-20.

Improving delays to delivery of the R&D tax credit would have significant consequences on the cashflow situation of businesses and individuals.

Costs to the Exchequer associated with running the Expert Advisory Panel. This would generate benefits including reduced fraud, error and stimulate innovation. This will also ensure the Government regularly engage with claimants, advisors and professional bodies to increase transparency.

Immediate term: Re-introduce geography specific expert teams within HMRC, creating sector specialists due to the clustered nature of R&D investments.

Actioning this would help to understand the specific needs and challenges of businesses in different parts of the UK. As well as evaluating the impact of R&D tax relief on a sector-by-sector basis towards evaluating how the scheme supports the UK's high-growth industries.

This would also support regional incentives and advisory services to help businesses in undeserved regions access and benefit from R&D tax credit.

Costs to the Exchequer would be £Nil.

Immediate term: Introduce a de minimis qualifying R&D expenditure threshold for the R&D tax credits scheme, with the purpose of reducing HMRC caseload and removing wholly non-compliant claims.

Acting on this would support in reducing HMRC case load. Analysis has found introducing a £30,000 de minimis R&D threshold for the R&D tax credits scheme would reduce HMRC caseload by up to 25% and remove nearly half of wholly non-compliant claims.[23]

When R&D tax credits were first introduced in 2000, there was a minimum threshold of £25,000. This threshold was later lowered to £10,000 to encourage SMEs to pursue smaller R&D projects and was eventually removed entirely in 2012. However, by 2019-20, claims under £25,000 accounted for 50% of all claims, leading to an unsustainable increase in volume.

techUK advise that a de-minimis qualifying threshold should be explored to reduce HMRC case load. The threshold must be assessed through close consultation with industry and the latest HMRC data around the error and fraud rate for valued claims. Such an introduction must be wary of impacting on SMEs cashflow.

Cost to the Exchequer would need to be reviewed to introduce a de-minimis qualifying claim. However, this would generate significant savings for the Government by reducing HMRC caseload.

Research by the Start-Up Coalition[27] found HMRC's data showed a significant drop off in the error and fraud rate as an estimated percentage of the value of claims at £30,000. Indeed, an application valued under £30,000 in claim size is now twice as likely to be non-compliant than an applicated valued over £30,000 in claim size.

Medium term: Extend the qualifying categories for the R&D tax credits scheme to include capital expenditure, such as plant and machinery, used solely for R&D purposes.

Throughout HM Treasury's review on R&D tax reliefs, techUK called for the Government to introduce a globally competitive R&D tax credits scheme that drives investment into the UK, is simple, and provides confidence for innovative businesses of all sizes.

This action would support in anchoring investment in the UK and increase the competitiveness of our tax credit scheme in comparison to competing nations. techUK believes that capital expenditure, such as plant and machinery, play a vital role in advancing innovative projects and activities.

Costs to the Exchequer would need to be reviewed for extending the qualifying categories to include capital expenditure. Costs for this could be covered by improving HMRC efficiency and processes, along with introducing a de-minimis threshold for the R&D tax credit scheme.

A survey found that 61% of respondents said more tax relief for capital expenditure on R&D would incentivise their business to carry out more R&D.[28]

Medium term: Ensure continued support for SME innovation by expanding ERIS (Enhanced Research and Development intensive support) to include profitable SMEs and revisit the scheme to improve clarity around subcontracted R&D.

This option would improve the relief available to SMEs following the introduction of the merged scheme for R&D expenditure credit (RDEC) and enhanced R&D intensive scheme support (ERIS) from 1 April 2024.

Currently, the scheme only allows loss-making R&D intensive SMEs to deduct an extra 86% of their qualifying costs in calculating their adjusted trading loss and surrender corresponding losses for a payable tax credit at 14.5%.[17] Acting on this would help to address the cliff edge in the current scheme, where the amount of relief available reduces dramatically when a business commercialises its R&D.

Second, the Government should improve clarity around subcontracted R&D. techUK members anecdotally note implementation issues as the new rules around sub-contracting R&D bed in. Under the current scheme, where an SME is specifically sub-contracted by a large company to undertake R&D, the large company will be able to claim the R&D tax credit. Note, for periods beginning prior to 1 April 2024, the SME could claim the RDEC rather than the large company.

Costs to the Exchequer would need to be reviewed for expanding the ERIS to include profitable SMEs.

Demonstrating the importance of the tax credit to bolster SMEs R&D investment, research highlighted that 64% of small firms who applied for R&D tax relief in the last three years improved cashflow for their business, while over a half (55%) increased their investment in R&D.[29]

Longer term: Get started in a longer-term five-year plan for the delivery of R&D tax reliefs to restore

confidence and stability following a series of changes.

At the heart of providing confidence for the tech sector is longer-term policy certainty. We know this is a priority of this Government, and our members stand behind this ambition. Indeed, the Government previously stated a priority of 'stability' for R&D tax reliefs.[24]

Given the consultation process for a merged scheme has now ended, techUK and our members believe there is now an opportunity to ensure that the UK maintains a competitive R&D tax relief regime through a longer-term five-year plan.

To get started on this, techUK propose areas of focus to include:

- **Revisiting the policy objectives of the R&D tax relief scheme,** with inward investment and UK competitiveness at the heart of this. Alongside this, set out a plan for how the credit will be reviewed and the milestones and conditions under which reforms to the credit will be considered. This would allow businesses to understand the likely evolution of R&D support over a five-year period.
- **Providing policy certainty by setting a new target for R&D spend as a percentage of GDP**, with updated research from HMRC on additionality and spillover benefits. This should complement HMT's plans to review the credit over a five-year period.

Costs to the Exchequer would be £Nil as this would be driven by HMRC and DSIT. However, there will be costs attached to interventions to support delivery of the plan.

For more information, see Seven Tech Priorities p.24/25.

Ensure the full expensing regime works for the UK tech sector with clear guidance.

Immediate term: Encourage business investment, and that the tech sector reaps the full benefits of the full expensing regime by clearly including technology products in upcoming guidance.

Currently the UK full expensing regime covers capital expenditure on qualifying plant and machinery investments. This also includes technology products such as computers, printers, and other IT equipment.[30]

techUK members are supportive of a permanent full expensing regime in encouraging businesses to invest more in new technology and equipment, leading to increased innovation, productivity and competitiveness. The Government should therefore improve its guidance around qualifying investments under the full expensing scheme with associated promotional activity.

Higher levels of business investment stimulate economic growth.

As firms invest in new assets, they often expand operations, hire more staff and increase production capacity.

	Costs to the Exchequer for a full expensing regime already costed. Ensuring technology products within upcoming guidance would be £Nil, but costs associated with associated promotional activity.[31]	
Deliver a pro-growth regulatory system that is smart and keeps pace with fast technological change 	**Immediate term: Leverage the Growth Duty of UK regulators to deliver on innovation as a driver of economic growth.[33] Hold regulators to account in reporting against the statutory guidance for the Growth Duty.** Regulation plays a significant role in maintaining the UK's global competitiveness, attracting investors and supporting technological change and innovation. The UK Government estimates that the stability and predictability of the environment created by independent regulation has driven more than £450bn in investment over the last 30 years. However, over time, businesses have faced mounting regulatory costs, which some studies estimate could reach as high as 3 to 4% of GDP, or £70 billion in 2023 prices.[35] The Growth Duty should act to ensure regulatory conditions that drive business confidence and investment, along with sensible risk-taking and innovation. **The Costs to the Exchequer is £Nil.** **Immediate term: Utilise the Regulatory Innovation Office (RIO) to improve accountability and promote innovation in regulation across all sectors of the UK.** We call for the Government to go a step further than the updated Growth Duty and act on the recommendations of the House of Lords Industry and Regulators Committee[36] to further improve our regulatory climate through plans for the Regulatory Innovation Office (RIO). This includes (1) better mapping and consistent delivery of reviews of the regulatory system, (2) a mechanism for Government to provide a policy steer and continue to assess resourcing, (3) expertise and pooling of capabilities of the UK's regulators, whilst protecting the independence of regulators, critical to the investment climate.	A regulatory system that shows speed and agility to respond to changes in markets, whilst also providing certainty for investment, will support the UK's competitiveness and economic growth. This is especially important as the UK establishes a regulatory regime outside of the EU, as 45% of businesses see regulation as a burden on their success.[39]

Central to the role of the RIO should working across Government to ensure the UK's regulatory system supports responsible innovation. This should include the use of cross regulator sandboxes and temporary / issue specific policy sprints, as recommended by the Pro-innovation Regulation of Technologies Review.[37]

Costs to the Exchequer associated with resourcing the Regulatory Innovation Office.

Medium term: Work to establish a Regulatory Initiatives Grid for the tech sector.

To support the tech sector in keeping up with the complexity of the regulatory environment, we propose a Regulatory Initiatives Grid. This should clearly map out both the existing and upcoming regulatory initiatives, and how they interact, identifying current overlaps and gaps.

This could take lessons from, and be similar to, the Regulatory Initiatives Grid[38] provided by regulators to the financial services industry. This Grid outlines the upcoming regulatory initiatives over a 24-month period and aims at helping the financial services industry and includes contributions from regulatory bodies including the Bank of England, FCA, Prudential Regulation Authority and HM Treasury as an observer member.

Given the increasingly complex nature of tech policy and regulation, this Grid should be extended to the tech sector. This would help investors, and the sector, to anticipate regulatory changes. In turn, providing greater business confidence and likely spurring business investment.

Alongside this, a Grid would also have potential benefits of:

- Increased regulatory cooperation and awareness of the regulatory initiatives planned by other regulators;
- More clarity and certainty for companies trying to navigate what is a complex governance landscape, allowing them to better plan for the initiatives that may have a significant operational impact on them;
- Information for academics and the public who want to understand the right approach to responsible innovation.

Costs to the Exchequer would need to be estimated, however we would not expect additional costs as this project could be delivered using existing resources within Government Departments and UK regulators.

Support UK research and innovation through data reform, further encouraging more effective public services.

Immediate term: Modernise the UK data protection framework to support research and innovation, and encourage more effective public services, whilst ensuring the UK retains its data adequacy agreement with the EU.

Actions the Government can take to deliver this include:

- Clarifying how data can be better used to support scientific research and technology development in both the public and private sectors, including enabling safe and secure AI training and development;
- Providing legal certainty around the use of legitimate interests as a lawful basis for processing data, particularly for strong public interest reasons such as combating crime and safeguarding children;
- Removing consent requirements for non-intrusive uses of cookies and other identifiers;
- Updating the law to reflect the common, widespread use of low-risk automated decision-making,
- Creating a more flexible international data transfers regime that will allow the UK to better manage data flows with other countries, which are critical for economic growth.
- Supporting an effective and modernised ICO, bringing it in line with other UK regulators, and allowing it to better focus on responsible innovation and sustainable economic growth, in addition to its other regulatory functions.
- Enabling legislation for Smart Data Schemes to be introduced in appropriate sectors, such as finance, transport, and home buying, giving British consumers access to more products and services.
- Encouraging both public sector and companies to contribute to upstream open-source projects to accelerate UK's open innovation (10% increase in upstream contribution increases GDP by 0.4% - 0.6%).[40]

Costs to the Exchequer would be minimal.

Estimates that the average company affected by GDPR has suffered an 8.1% drop in profits and a 2.2% decline in sales.[41]

Reforming the GDPR could correct for some of this by removing some of the unnecessary prescriptiveness of the rules.

While it does not capture the full value that would expect the impact assessment for the Data Protection and Digital Information Bill No.2 estimated that pragmatic reforms to the UK GDPR could add £100 million to the economy every year. Along with range of benefits for consumers and public services.[42]

Support the economic growth opportunity of cyber security through better awareness and built-in resilience.

Immediate term: Develop a new Cyber Charter with the aim of building resilience and recovery into supply chains, in particular for SMEs.

As noted in the McPartland review of cyber security and economic growth,[43] this will also act to promote sharing of cyber expertise across the supply chain and with third party critical suppliers. This would be an opportunity to build on existing initiatives such as Cyber Essentials.

Cyber security is vital to prevent financial loss, boost consumer confidence and attract investment. Notably, strong cybersecurity practices create a more attractive environment for investors, where businesses and investors are more likely to invest in regions where their digital assets are protected.

One off costs would be borne by the Exchequer associated with creating a new Cyber Charter.

Immediate term: Embed cyber security awareness into the beginning of setting up a company in the UK.

The Government can do this by ensuring Companies House and GOV.UK provide information and guidance on 'how to be cyber secure' for any new UK company. Beginning with a pilot scheme could ensure that guidance is clear and delivers on awareness raising.

As companies become more digitised, cybersecurity becomes a foundational element that supports the safe adoption of new technologies. It is vital that firms are given the support needed to address issues such as technical debt, vulnerabilities and basic hygiene. Existing advice and material from the National Cyber Security Centre and UK Cyber Resilience Centre network could be used here.

Driven by cyber resilience, improved trust in the digital economy will drive productivity improvements and economic efficiency.

Costs to the Exchequer associated with developing guidance and ensuring smooth onboarding for companies.

Demonstrating robust economic performance, the UK Cyber Security Sectoral Analysis 2024 highlights a 13% increase in sector revenue, creating 2,700 new jobs.[44]

Over recent years, the geographical spread of cyber security firms across the UK has also promoted regional economic development.

Show that the UK is an attractive and open destination for internationally mobile investment.

Immediate term: Establish a new Investment Committee to work across Government, proposing improvements to the UK business environment based on investor feedback.

As mentioned in the Harrington Review of Foreign Direct Investment,[45] the Government must deliver on industry and local government's request for greater stability and visibility of changes to the strategic direction of investment priorities. Anecdotally, techUK members outline that investments can have a 10-20- year time horizon.

This permanent part of cross-government machinery would support in driving a strategic approach to investments and enable the fast-tracking of decision making when needed. For instance, building on recent action from the Chancellor to re-open the planning process for two previously rejected data centres – reviewing their potential gain for regional and national economies.

techUK follow steer of the Harrington Review and recommend this should be chaired by the Chancellor with the Business Secretary as deputy Chair, and include Cabinet Office, Number 10 and other relevant Secretaries of State.

Costs to the Exchequer would be low. However, costs associated with setting up and running the Investment Committee.

Foreign Direct Investment (FDI) is a key driver of economic growth for the UK, contributing to job creation, innovation and productivity improvements.

In 2023, 1,600 FDI projects created nearly 80,000 jobs across every part of the UK.[46]

Companies from North America along accounted for £868.9 billion of inward FDI investment in 2021.[47]

BUILD THE RIGHT FOUNDATIONS

Ensure that the UK can attract, train and re-train talent through a robust skills and digitisation offer.

Objective	Policy action	Growth benefit
Make digital pathways more accessible through a reformed Apprenticeship Levy and Digital Skills Toolkit 2.0.  	**Immediate term: Deliver a reformed 'Growth and Skills Levy' that prioritises flexibility, enabling employees to fund training through routes alongside apprenticeships.** The reformed Levy could include high-quality short courses focused on functional and digital skills, enabling existing employees to upskill and retrain. This would increase flexibility that employers have to fund training and bring the scheme in line with other comparable countries. The Apprenticeship Levy currently raises around £3.5 billion a year from large employers in the UK. But our members tell us the Levy is currently not working. The IFS, found that, despite large subsidies, around £550 million of the levy pot is not used to subsidise apprenticeships.[48] A freedom of information request in 2022 further showed that since May 2019, more than £3.3 billion of unused apprenticeship levy has been returned to the Treasury.[49] Reforming the Levy can help increase investment by Levy payers and support SMEs in hosting apprentices even though they do not pay into the Levy. techUK members highlight however that Levy cost to businesses should not increase. **Currently the Apprenticeship Levy costs between £200-300m annually for the Exchequer.[50] We expect a reformed Levy to cost similar annually to the Exchequer but deliver a better outcome on skills.** **For more information, see A UK Tech Plan, p.24.** **Medium term: Build on previous success of the Skills Toolkit launched in Spring 2020,[51] to build a 'Digital Skills Toolkit 2.0'.** This tool would enable people across all areas of society to understand the digital job opportunities available to them and access training. In turn, making digital opportunities and pathways more transparent and accessible to more people. The Government can get started on this from day one by opening a tender for the construction of the digital skills toolkit platform. **The Skills Toolkit cost the Exchequer just £1 million[52] (unsure on exact costings). A Digital Skills Toolkit 2.0**	Since 2011, average employer spending on training has fallen by 27% in real terms.[53] To keep up with the pace of technological advancement, the skills must be in place to leverage this. A survey by CBI shows levy-payers would invest an additional 30% of their levy over 12 months with a more flexible, reformed Levy.[54] The UK is losing out on £12.8 billion in extra growth with British workers earning whole £5.69 billion less due to a lack of digital skills.[55] The platform would be able to be utilised by a range of stakeholders and could be a significant tool to tackle the digital skills gap which is estimated to cost the UK up to £63 billion per year in lost GDP.[56]

	would likely cost similar to develop and promote the toolkit platform. Funding for the new toolkit could be drawn from the operational budgets of the Department for Education and Department for Science, Innovation and Technology. **For more information, see Seven Tech Priorities p.39.** **Medium term: Offer world-leading computing education by continuing to fund the National Centre for Computing Education (NCCE)** Continued funding would ensure that the UK offers world-leading computing education for every young person, aligning with the government's ambition of breaking down barriers to opportunity. The offer to schools in England can continue to support our teachers in preparing the future workforce for technological realities, with the potential of being expanded to support the growing need for digital skills and AI. techUK member STEM Learning has been funded by the Department for Education to deliver national support for computing education in England since the inception of the NCCE. As the tech industry continues to make an increasingly significant contribution to the UK's economy, it is important that computer science teachers are trained to teach the latest digital skills and to help the UK's workforce be better prepared for market developments. **Costs to the Exchequer would be variable.**	The NCCE's work contributes to the UK's economic growth by fostering a skilled workforce in computing and technology. This includes providing access to quality computing education and partnerships with employers, universities and computing professionals. Demonstrating impact, since September 2020, over 1 million Teach Computing Curriculum resources were downloaded by schools in England.[57]
Deliver education, skills and training by better embedding cyber security and resilience across the UK's supply chain.	**Immediate term: Engage in a review into the current cyber security skills gap with a specific focus on the challenges and opportunities to encourage diversity.** Necessary cyber security skills are essential for the protection and growth of the UK's digital economy. But the current gap in cyber security professionals poses a threat to the UK's increasing reliance on digital infrastructure, and the UK's economic stability, security and growth. Plugging this skills gap can be supported by more effective dissemination of the National Cyber Security Centre (NCSC)	According to the World Economic Forum, globally, we will need 3.4 million cybersecurity experts to support today's global economy.[58] Necessary cyber security skills are essential for the protection and growth of the UK's digital economy.

	Cyber toolkit and inclusion of cyber security and risks in higher education/MBA courses. **Cost to the Exchequer associated with the review. techUK recommend this come from DSIT departmental spending.**	
Implement the 3-month time limit on non-compete clauses.  	**Immediate term: Implement a statutory time limit in non-compete clauses of 3 months, acting on the conclusions of the Department for Business and Trade's 2023 consultation.**[59] There is no provision in UK employment law for non-compete clauses, meaning there are few constraints on the use of these clauses in employment contracts. Estimates by the Government found that 5 million employees are subject to a non-compete clause with a typical duration of around 6 months after the termination of employment. Non-compete clauses can adversely impact both the workers affected, and the wider economy due to the impacts on competition and innovation. By implementing a statutory limit of three months after the termination of employment, the Government can find a balance between increasing the flexibility of the UK's labour market and enabling the use of non-compete clauses where these are suitable. **The cost to the Exchequer is £Nil.**	Enable a more flexible labour market, greater competition between businesses and improve workers' rights.
Address productivity challenges and enable SMEs to unleash the benefits that AI can bring with better SME digitisation support.    	**Immediate term: Appoint a single Minister with responsibility for driving digitisation across the public sector and the economy.** Industry is already leading the way in supporting the digitisation of the economy, but to ensure all businesses reap the full benefits, the Government must act as the convenor to ensure delivery. This comes as currently over a quarter of UK SMEs still do not use basic digital tools. This is even though software such a customer relationship management (CRM), digital accounting and e-commerce software have been found to boost sales by 18%, 11.8% and 7.5% respectively over a 3-year period.[60] techUK advise that this responsibility should have a specific focus on micro and small businesses. In techUK's view, this should be the Department for Science, Innovation and Technology (DSIT) Parliamentary Under Secretary of State of the Future Digital Economy and Online Safety with other lines of responsibility into the Department for Business and Trade, HM Treasury and No10. Currently, responsibilities within this Ministerial portfolio already include the likes of economic security, technology diffusion, technology investment. **Costs to the Exchequer would be £Nil.**	techUK members have outlined benefits of digital adoption that range from reducing transaction costs by providing better and quicker access to information, increasing revenue and better communication between staff, suppliers, and networks.

Medium term: Deliver a comprehensive digital adoption plan with clearly defined targets by 2030.

The focus should be on the right underpinning infrastructure, regulation and skills needed to succeed. This will provide the right signals and longer-term certainty for businesses, especially SMEs, with often limited headroom.

This should include digitisation targets reinforced by incentives and support to drive up rates of tech adoption, using existing frameworks such as the European Commission's Digital Decade policy programme.

As an example, this includes specific skills for tech up-take (75% of EU companies using cloud, AI or Big Data) and late adopters (more than 90% of SMEs reach at least a basic level of digital intensity).[61] Along with the Digital Economy and Society Index (DESI) to measure progress towards 2030 targets and strategic roadmaps in which Member States outline adopted or planned actions to reach 2030 targets.

Openness in emerging technologies, and the value of approaches like open source for SMEs, should also be considered to support SMEs to go further with emerging technologies like AI.

Cost to the Exchequer associated with delivery of a Plan and associated recommendations.

Medium term: For SMEs to overcome obstacles to digitalisation, the UK Government should introduce a tax incentive to encourage new investment in digital technology.

A UK Small Business Digital Growth Fund could allow SMEs to claim an additional 140% deduction against their corporation tax bill for any net new digital products, services, software, and advice.

If a cap on claims were set at £50,000, this would allow SMEs to receive a tax saving of up to £5000 and be a vital boost for smaller businesses preparing to adopt new AI technologies.

Costed analysis suggests the Digital Growth Fund could be run for a year by reallocating the £300 million unspent after the closure of Help to Grow: Digital, equivalent to around £295 million, with the potential to benefit up to 600,000 SMEs.

For more information, see **A UK Tech Plan,** p.39.

A UK Small Business Digital Growth Fund has the potential to support UK SMEs better utilise digital adoption, adding an estimated £232 billion the economy.[65]

The North-West Made Smarter pilot programme, supporting technology adoption in the manufacturing sector, injected up to £115m in GVA to the region and boosted productivity for 80% of SMEs who work with Made Smarter by up to 25%.[66]

	Medium term: As previously advocated by techUK, the CBI and FSB, expand the Made Smarter Adoption Programme[63] to all sectors of the economy. This should be targeted at small and micro businesses (typically employs fewer than 10 people and generates less than $250,000 in revenue annually) to plug the UK's so-called 'long tail productivity' problem where the gap between the least and most productive firms in the UK is much bigger compared to other advanced economies.[64] Private sector experience and knowledge of business innovation will be key to the programme's successful expansion.[10] Funding should be allocated at the first Spending Review and assigned to the Department for Business and Trade. **Th CBI estimate that the fiscal cost of this measure to be £425 million annually. The expansion will support businesses with the advice and funding they need to adopt technologies and thrive.**	
Support and drive forward the Digital ID industry by ensuring that Digital Identity Technologies can be adopted and used across all sectors and industries. 	**Immediate term: Enact the proposed Digital Identity and Attributes Trust Framework (DIATF) and ensure that legislation allows for digital IDs to be used across all sectors of the economy. Enable full interoperability between public and private sector digital IDs.** It is estimated that widespread use of digital identity products could be worth around £800m per year to the UK economy.[67] Improving productivity in the private sector, providing better data security and increasing the efficiency of public services. The UK has a strong set of native digital ID companies and, with the right support, these companies could secure a slice of a global market predicted to value $40.44B billion by 2027. However, this is a highly competitive global market and jurisdictions such as Singapore, the EU, Australia are moving quicker than the UK to deliver on their digital identity programmes and the parity of acceptance of digital forms of verification with physical ID. Digital ID Schemes are already in place in the UK. Examples include the UK's Right to Work and Right to Rent checks, as well as initiatives seen in Scotland and Jersey where Digital IDs are reducing the cost and accelerating the delivery of public services. Trust is also a critical driver for economic growth.[68] The World Economic Forum (WEF) has estimated that "a 5%-point increase in digital trust results in an average increase in GDP	The widespread adoption and use of Digital ID is estimated to be valued at £800 million per year.[70] The UK has a strong digital ID industry and creating the conditions for the market to thrive could help UK companies seize a stake in a global market predicted to value $40.44B billion by 2027.[71] Countries with higher levels of trust, underpinned by secure access to services and data privacy, tend to have levels of per-capita GDP. The WEF estimates a 5% rise in digital trust results in an average increase in GDP per capita of $3,000.[72]

per capita of $3,000".[69] Digital IDs will play an important role in allowing citizens to securely access a wide range of public and private services easily and securely.

To enable the industry to grow, the Government will need to act to put in place certification through the proposed Digital Identity and Attributes Trust Framework (DIATF); create markets by allowing digital IDs to be used across all public and private services; ensure the interoperability of public and private sector digital IDs. The Government must also ensure the UK's approach to digital IDs aligns and operates alongside the EU Digital Wallet and the growing US mDL schemes. The UK's approach to digital ID should be backed by predictable independent regulation, helping encourage private sector investment.

Immediate term: DIATF must be established through the Digital Information and Smart Data Bill. The Bill should also change UK legislation to enable the widespread use of digital IDs, interoperability between the public and private sectors and support independent regulation.

Further steps can be taken ensure the UK's digital ID system works across the economy and is interoperable with schemes in other markets such as the EU Digital Wallet and the growing US mDL schemes.

For example, supporting the Financial Conduct Authority and Joint Money Laundering Steering Group (JMLSG) to formally incorporate the Digital Identity and Attributes Trust Framework into their guidance and by establishing reciprocal recognition agreements with the EU and US programmes.

Costs to the Exchequer – there will be some costs in establishing a new regulatory regime, however these will be significantly outweighed by the savings to the exchequer from the uptake of digital IDs.

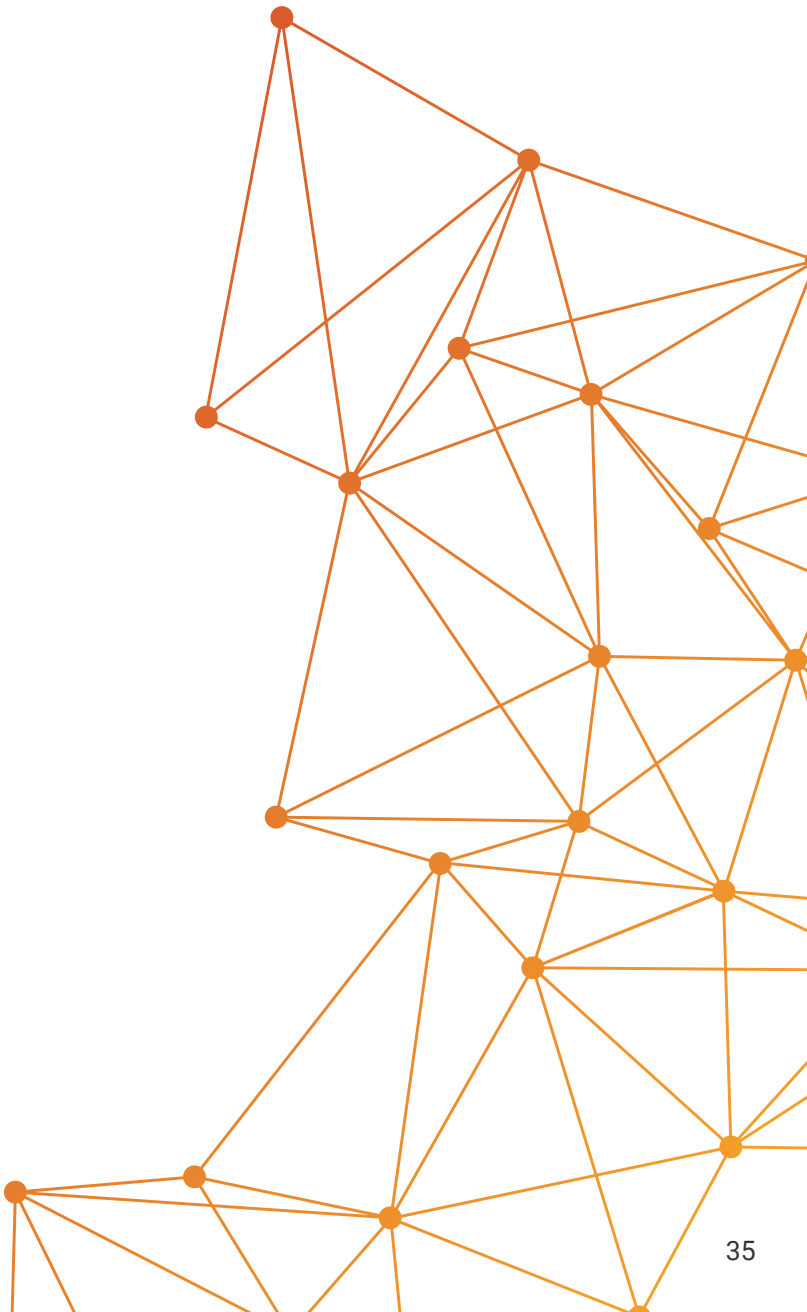
2. Empower the competitiveness of UK's everyday economy

The Government has announced a new partnership with businesses to stimulate growth nationwide, a move welcomed by the tech sector. To ensure successful implementation, our members advocate for robust institutions that drive growth across all UK regions, bolstering regional tech clusters and empowering local Governments to adopt a digital-first approach to growth.

Across the country, investments in venture capital and AI are improving public services and fostering the growth of innovative firms. Cities like Manchester, Nottingham, and Newcastle are seeing significant changes due to these investments. In Manchester, tech companies raised a record £532 million in 2022 alone, with a total of over £1.8 billion in venture capital funding from 2018 to 2023.[73]

Despite the UK's robust tech ecosystem, there are notable disparities in technology adoption and diffusion rates across regions. Greater London, for example, attracted $12.7 billion in VC investment, $2 billion in AI investment, and saw the emergence of 112 unicorns.[74] According to techUK's Local Digital Index, the digital sector's gross value added (GVA) per person in London was £9,083, compared to £2,055 in the West Midlands, £1,979 in Scotland, and £1,348 in Wales.[75] Ensuring that the entire UK benefits from technological advancements will pave a more sustainable path to growth.

techUK's LDI 2023 report found that if the six regions with the lowest digital GVA reached the UK median, it could potentially add £4.8 billion to the economy. This would specifically boost regional economies, creating new jobs, companies, opportunities, and growth.



Recommendations in this section include

- Improve access to day-to-day digital services.
- Ensure a level playing field for startup and scaling firms in the procurement process.
- Prioritise digital record keeping across tax, e-invoicing and other forms of record keeping.
- Deliver the digital transformation that the NHS and social care system need to improve services.
- Enable the criminal justice system services to better leverage digital tools and make policing more resilient to cyber threats and data hacks.
- Modernise public transport by investing in new infrastructure and placing innovation at the heart of delivery.
- Drive regional growth and build on the success of Metro Mayors to expand place-based offer to investors.
- Bring benefits of the tech sector to all regions of the UK through Connected Hubs.
- Better support the university spinout ecosystem to create economic impact from world-leading research.
- Prioritise the delivery of funds and institutional reform to better support scaling firms across the UK.
- Enable digital infrastructure to be built more quickly, with wide reaching benefits for everyone across the UK.

Spotlight on techUK members' empowering the UK's everyday economy

Apple Developer Academy provides a model for regional growth

San Giovanni a Teduccio had for decades been dependent upon industrial facilities. However, as industries shuttered across the region, the area struggled with high unemployment and increasing crime rates. Following decades of neglect, in 2015, the University of Naples Federico II opened a new campus for the faculty of Engineering in San Giovanni a Teduccio in an effort to revitalise the area. It was this location that Apple chose for its first Apple Developer Academy in Europe, aimed at helping higher education institutions integrate iOS development into their curricula.

The free nine-month programme requires no prior tech or coding experience and attracts students from a wide range of backgrounds, both local and international. The Academy was designed to help participants develop skills for the growing app economy. Participants learn the fundamentals of coding as well as core professional competencies, design and marketing, and newly added curriculum for artificial intelligence (AI) tools and technologies. This expansive curriculum ensures graduates have the full suite of skills needed to take advantage of career opportunities in the app economy and beyond. Since the opening of the Naples Developer Academy in 2016, over 2,000 students from over 50 countries have gone through the programme. They have graduated with the tools and training needed to find and create jobs in the iOS app economy, which supports more than 2.4 million jobs across Europe, and over half a million in the UK.

Datactics supporting the digitisation of public services

Datactics, a Belfast-based company, supports the digitisation of public services by offering a data quality improvement and matching platform. Its technology helps public sector organisations, such as the NHS, Home Office, and UK councils, integrate fragmented data from various sources without costly system overhauls. By providing a single view of citizens, Datactics enables more accurate and efficient service delivery in environments constrained by budgets and growing demand.

A key example is Datactics' work with Surrey County Council to create an on-demand register of vulnerable citizens for emergency services during disasters. Data from over 30 agencies, stored in disparate systems, was matched, de-duplicated, and processed within 10 minutes, allowing services to access accurate name, address, and medical information. This data was further verified with the Post Office Address database and mapped using GPS for real-time use by emergency teams. The company's scalable, interoperable solution exemplifies the push to remove obstacles to public service digitisation, leading to more efficient and responsive Government services.

Inhealthcare Virtual Wards at North West Anglia Foundation Trust save 2,300 bed days and £810,000.

North West Anglia Foundation Trust adopted virtual wards to reduce avoidable admissions, support earlier discharges, and ease pressure on inpatient beds while improving patient experience. Partnering with InHealthcare, the Trust launched an acute virtual ward for patients with heart failure, infections, respiratory diseases, and stroke. Up to 20 patients a day opt to join this service, where they are cared for by a consultant-led clinical team.

Patients use simple devices to monitor vital signs such as blood pressure, temperature, oxygen levels, and weight from home, submitting readings via a mobile app, text, or phone. If readings fall outside normal ranges, clinicians are automatically alerted to provide timely medical interventions. From December to June, 596 patients were admitted, saving 2,300 bed days and £810,000. The service boasts a 98% satisfaction rate, and the Trust plans to expand it for frailer patients, using wearable devices for continuous monitoring.

Microsoft demonstrate the transformative potential of Generative AI to boost productivity of UK public services

Microsoft's recent report, **"Harnessing the Power of AI for the Public Sector"** highlights the transformative potential of Generative AI in enhancing efficiency, boosting productivity, and driving significant economic benefits for UK public services. The report reveals that AI could save an astounding 23 million hours each week by reducing administrative burdens. This reclaimed time would allow public sector employees to focus on critical tasks, thereby improving service delivery for citizens. Additionally, the research projects savings of over £17 billion by 2035, which could be reinvested to enhance public health outcomes.

Red Hat driving open innovation across all UK critical infrastructures

Red Hat is a leading provider of enterprise open-source solutions, supporting organisations and the public sector to modernise their IT infrastructure, improve operational efficiency, and accelerate innovation.

DWP Digital, DWP's technology department, created an ecosystem that allowed data to be shared with other Government departments and third-party partners, while maintaining security and compliance. DWP Digital deployed Red Hat® Ansible® Automation Platform within its DevOps tooling. This created pipelines for deployment, production, and other environments. It also supported self-service functionality around the various new services created.

- Reduced edge deployment time from weeks to hours
- Reduced the deployment of infrastructure services from 3-6 hours
- Improved productivity with support for offline work and data access

EMPOWER THE COMPETITIVENESS OF UK'S EVERYDAY ECONOMY

Use digital technology to improve the resilience, efficiency and quality of our public services, delivering better outcomes for UK taxpayers.

Objective	Policy action	Growth benefit
Improve access to day-to-day digital services. 	**Immediate term: Establish the new Technology Procurement Delivery Body (TPDB).** The sole purpose of the Body should be to improve procurement processes and tackle existing barriers to procurement. This will act as a check on Government aiming to ensure departments fulfil the aims of the Procurement Act[76] and drive best practice across how Government both buys and develops new digital services. Supporting the initial commencement of the Procurement Act, set to go live in October 2024, this should be in place for the full Parliamentary term. Involvement from the Body should include Ministers, high-ranking civil servants, operating at the Director General tier, from departments with extensive procurement involvements. Once in place, work with the tech sector to establish the initial key areas of focus. techUK members have indicated initial areas of focus could be (1) new playbook for social value in procurement, (2) better supporting start-up and scale-ups to better access procurement contracts, (3) review cybersecurity requirements and (4) assess the leadership and resources of both Government Digital Service (GDS) and Central Digital and Data Office (CDDO) for open source contribution and (re-)use across national and local government. **The cost to the Exchequer would likely be £Nil. Draw from the operating budgets of the PAC and NAO.** For more information, see Seven Tech Priorities p.28.	This Body would also cut costs for both Central and Local Government. One example, companies taking part in the Small Business Research Initiative (SBRI) have seen annual revenue growth rates over 30%.[77]
Ensure a level playing field for startup and scaling firms in the procurement process. 	**Immediate term: Reform public procurement to further drive social value and support the UK's scale-ups and create a scale-up category in public sector procurement.** Support the UK's innovative scale-up companies by streamlining public procurement to remove entry barriers and take advantage of competition to drive meaningful social value and economic growth. Priorities should include: (1) better transparency of tenders, pipeline and spend data, (2) clearer framework to support SMEs to define social value commitments (3) consultation	Increased investment in public good projects (for example: companies that train local people in digital skills) under the social value metrics. An economic benefit directly to the UK by facilitating scale-ups to better access public procurement frameworks

   	to introduce financial viability requirements and (4) webinars and pre-market engagement more accessible for SMEs and scaling firms. Scale-ups are often missed out on public procurement frameworks. Anecdotally, techUK members have outlined that the procurement system often acts as a sign-off procedure rather than a formative part of the decision-making or selection process. techUK members outline impacts on their ability to scale and stay in the UK, with a system that often hinders newer and smaller companies. **Cost the Exchequer would be small as the resource planned for the implementation of the Procurement Act 2023 should be used to ensure it accomplishes aims of the Procurement Act 2023. Note, there are already changes legislated for via the Procurement Act 2023 which are yet to be implemented.**	and the impacts that increased innovation and competition will bring.
Prioritise digital record keeping across tax, e-invoicing and other forms of record keeping. 	**Immediate term: Complete Making Tax Digital (MTD) for Income Tax by 2026 to reduce the tax gap and support SMEs to embark on their digitisation journey.** Already in place, and with delays threatening innovation, completion of HMRC's flagship Making Tax Digital Programme will ensure SMEs embark on digitisation and will create additional tax revenue for the Government. The delayed roll out of Making Tax Digital for self-assessed taxpayers cost HM Treasury £1.75 billion in lost revenue according to the House of Commons Public Accounts Committee.[78] This is also a question of international competitiveness and the UK's reputation amongst technology entrepreneurs. The likes of Australia, Sweden and Germany are moving quicker than the UK to deliver on their tax digitisation programmes. Analysis from HMRC on MTD for VAT confirmed that the programme can result in additional tax revenue. It will enable a real-time view of the economy, reduce errors when filing tax returns and ultimately make it easier for smaller firms, with often limited headroom for administrative tasks, to get their taxes right. Along with reducing fraud, a key pillar of HMRC's IT Strategy from 2022 to 2025.[79]	Evidence suggests that MTD creates additional tax revenue. MTD for VAT for the population below the turnover threshold (£85,000 VAT turnover), estimated additional tax revenue was an average of £19 per business for the quarter. Including the population above turnover threshold, the estimated total additional tax revenue in 2019 to 2020 was estimated at between £185-195 million.[84]

According to the Committee of Public Accounts, HMRC has spent £640 million on the MTD programme to date, compared to its 2016 forecast of £222 million. Updated estimates suggest that the Making Tax Digital will cost HMRC £1.3 billion by 2027-28.[80]

Medium term: Implement a phased introduction of Making Tax Digital e-invoicing for B2B transactions, supporting small business productivity and creating more efficient invoicing and payment processes.

The Government can work with HMRC to phase in e-invoicing alongside Making Tax Digital. E-invoicing would not have to be connected to any tax reporting to start with and could be phased in for B2B transactions. A phased introduction would allow HMRC to continue the rollout of MTD unimpacted.

This would follow models used in Japan, who have been working to develop a Japanese standard for e-invoicing since September 2021, and currently planned in Belgium.

E-invoicing also has huge advantages for the Government. It supports international trade and boosts revenue for Governments and enables real time visibility of the state of the economy. Of note, the US and EU announced a joint declaration on improving e-invoicing interoperability due to the advantages this will bring in facilitating cross-market transactions, improving transatlantic trade, and reducing costs for businesses who are trading.

Giving an indication of costings for the Exchequer, the Australian Government has phased in e-invoicing for B2G transactions. From July 2022, the majority of Federal Government agencies have been mandated to be e-invoicing-enabled, with many state and local agencies following suit. The Australian Government put AUS $3.6 million towards this in 2020-21 and a further AUS $15.3 million in 2021-22.[82]

HMRC's Making Tax Digital programme is already costed at £1.3 billion by 2027-28.[83] **Further costings should take into account the introduction of e-invoicing, recognising that once e-invoicing is fully functioning across the UK economy for B2B transactions, the Government could look to transitioning from MTD in its current form to basing tax reporting on transactional real time e-invoice data.**

International examples of e-invoicing adoption have highlighted how it can result in savings and productivity gains.

- In Australia, it is estimated that e-invoicing brings down individual invoice cost from AUS $27-30 to AUS $10.[85]
- France is set to gain €4.5 billion[86] through e-invoicing as a result of productivity gains and reducing administrative burdens.
- In Italy, e-invoicing has led to a significant reduction in unreported or unpaid VAT from the year of introduction in 2019, amounting €4.5 billion euros in 2020.[87]

Deliver the digital transformation that the NHS and social care system need to improve services.  	**Medium term: Prioritise a unified, rules-based pathway for medtech within the NHS.** Digital health suppliers should not have to compete for one off funding pots. A sustainable approach to reimbursement will be essential to support the continued growth of the digital health and social care industry, as well as securing the benefits it can provide to patients. The recently launched NHS England and NICE consultation includes aligning payment models and funding mechanisms to different elements of the medtech pathway, providing industry with clear procurement mechanisms for products that have been recommended by NICE, and a more systematic approach to reimbursement. Responses to this consultation from the digital health and wider medtech sector should be carefully considered. If implemented correctly, this pathway could provide much needed clarity and security for the digital health sector. **Cost to the Exchequer would need to be costed following the recommendations.**	The bioscience and health tech sector statistics 2021 to 2022 show continued positive year on year growth in employment (304,200 people) and turnover (£108.1 billion).[88] AI software that predicts missed appointments and then offers new bookings is already proving majorly successful potentially allowing 100,000 more patients to be seen a year in each of the UKs over 200 NHS Trusts.[89]
Enable the criminal justice system services to better leverage digital tools and make policing more resilient to cyber threats and data hacks.  	**Immediate term: Rethink the Criminal Justice approach for attracting talent, implementing a national programme to encourage graduates from the sciences to join as "data apprentices."** Data plays a pivotal role in the public sector, including the Criminal Justice System (CJS). It serves as a valuable resource that informs and enhances decision-making processes for organisations within the system. While action has been taken to attract new entrants to work in the Justice system through a variety of programmes including Unlocked Graduates; Advance into Justice or Justice Leaders, and the Probation Workforce Strategy 2023 -2025, there is more that the Government can do. techUK suggest a national programme of 'data apprentices' to be onboarded onto the CJS. This could be modelled similar to the civil service apprenticeships at the National Crime Agency, where the fast track offers two-year Level 4 apprenticeships in areas such as digital technology.[90] **Cost to the Exchequer associated with setting up a National Programme and maintenance of the Programme.**	The Government can achieve real transformation by reshaping the business of Government and understanding challenges presented by legacy systems and data. According to research, outdated legacy IT systems represent a £13-22 billion risk for the UK Government over the next five years.[92]

	Medium term: Address the UK Government legacy IT challenge and improve the interoperability and integration of systems. Legacy systems persist at the heart of UK justice, police services and organisations. An example includes the Police National Computer, used by all UK police forces as the primary record database since 1974. This inhibits organisational agility, increases operational risk and cost, and reduces service experience. To achieve efficiency savings, the National Audit Office included 'solving the problems of legacy IT' in the Government's critical path.[91] A recent parliamentary update outlined that MoJ, HM Courts and Tribunals Service (HMCTS), and the Home Office have a combined total of 33 red-rated legacy systems. This figure represents over 50% of the total number of red-rated legacy systems reported by the 27 departments onboarded to the CDDO risk assessment framework. It is crucial to understand, plan, and address legacy at an enterprise architecture and "system of systems" level. The challenge is then how best to segment the legacy landscape and coordinate and govern all initiatives, resources, and changes within legacy programmes, alongside wider transformation efforts and ongoing operations. techUK propose the focus should be on (1) maintaining an understanding of the IT estate through comprehensive data, (2) coordinating the transformation and remediation of legacy IT across Government departments and (3) better utilise automation to support the legacy IT challenge, enable cross departmental interoperability, data sharing and analysis. techUK propose the Department for Science, Innovation and Technology would be best suited to lead the transformation, including across departments such as the Ministry for Justice and Home Office. This also follows the integration of the Central Digital and Data Office (CDDO) into DSIT. **Cost to the Exchequer associated would be low. Cost savings from solving the problems of legacy IT and technical debt.**	
Modernise public transport by investing in new infrastructure and placing innovation at the heart of delivery. 	**Immediate term: Unlock adoption barriers for scalable solutions available today (e.g. PAYG rail ticketing) and that have demonstrated better outcomes within short timeframes.** The Government should continue to fund City Region Sustainable Transport Settlements that have provided funding for large English cities to support investment in infrastructure over the last decade. However, this alone will not improve public transport. Today, quick wins can be achieved through spearheading the adoption of data and digital-based solutions throughout the transport sector.	If the UK's 10 largest cities (each with a population of over 600,000) were to match their European counterparts in terms of the share of commutes by public transport, an additional 963,000 workers would travel by public rather than private transport.

This includes piloting the delivery of mobile Pay As You Go Rail (mPAYG) ticketing to deliver a transformation for passenger experience, boost ridership and fuel economic growth. Benefits include delivering insight on new technologies at zero cost, and increasing the propensity to travel, stimulating economic growth.

Currently, no trials have been permissioned despite multiple providers being in a position to commence them. To act on mPAYG right away, the Government can instruct GBRTT and RDG to progress on small-scale 'closed loop' trials within the next 3 months.

This can be done with private sector resource and appropriate investment. But the Government must first give permission for trials to commence.

Medium term: Mandate infrastructure authorities, including National Highways and Network Rail (Great British Railways), to publish annual innovation strategies.

This should be supported by a visible pipeline of projects that spurs investment from the supply chain. Arm's Lengths Bodies should also be in receipt of targeted support to address skills shortages and can problem-shoot adoption barriers effectively.

More broadly, the Department for Transport should help the sector move away from a culture of risk aversion towards becoming an ambitious sector that uses outcome-led innovation better serve customers and reach net zero.

Cost associated with delivery of innovation strategies, likely taken from DfT spend.

This would double the number of workers using public transport to travel to and from work, leading to wider agglomeration, productivity, and environmental benefits.[93]

Ultimately, the UK economy depends on a modern, reliable, and sustainable public transport network. Poor public transport provision in major towns and cities outside of London has caused the UK's regional cities to have some of the worst productivity levels in Europe.

EMPOWER THE COMPETITIVENESS OF UK'S EVERYDAY ECONOMY

Take a place-based approach to deliver globally competitive tech clusters across all regions of the UK.

Objective	Policy action	Growth benefit
Drive regional growth and build on the success of Metro Mayors to expand place-based offer to investors. 	**Medium term: Develop a framework for how national and sub-national investment promotion bodies will work together to boost investment in the tech sector.** The Government should collaborate more closely with local, regional, and national stakeholders to enhance the UK's investment proposition. Recognising that local decision makers are more likely to know what investment opportunities will be most appropriate for their area.[94] As part of establishing a framework to guide collaboration between national and sub-national investment promotion bodies, develop 'investment-ready' proposals to actively attract major investors and facilitate investment in strategic sectors, including the tech sector, and regions that align with market demand. To support this, techUK points to the Harrington Review recommendation to build the capacity of the Office for Investment. The Office must have cross-Government support and a mandate to secure strategically valuable investments in the UK. **The Cost the Exchequer would be low. Costs associated with increased resource within the Office for Investment.**	Place-based investment in the UK offers a significant opportunity for economic growth by targeting specific regions and communities for development. By focusing on the unique strengths and needs of different areas, such investments can unlock local potential, drive innovation, and create jobs.
Bring benefits of the tech sector to all regions of the UK through Connected Hubs. 	**Immediate term: In an era where remote and hybrid working is the reality, promote tech clusters through a digital hub network of 'ConnectedHubs'.** Such hubs should have direct links to Combined Authorities and Local Authorities, who will be able to signpost people, new spaces and encourage their own facilities to become 'ConnectedHubs'. Along with assessing whether public spaces could be used as hubs, not just office spaces. Right away, the Government should run a feasibility study on mirroring the Irish Connected Hubs scheme within the Department for Levelling Up Housing and Communities. This could be led, or have lines, into the recently formed Council of Regions and Nations. Leveraging the use of digital technology, the hubs would be accessible to remote workers via an online map. This would also help the Government to identify the scale of our nation's	Demonstrating success, Ireland currently has 363 co-working hubs, 5292 desks available and 561 workings rooms.[96] The hubs in Ireland have seen over 10,000 people across rural communities register for hot desks in remote working hubs. A primary economic benefit is their role in job creation and creating professional networking opportunities outside of major cities.

	remote working infrastructure, guiding and informing future investment decisions. Supporting economic growth, hub working can support employment opportunities and career paths in rural and remote areas of the UK. **The cost to the Exchequer would likely require £50 million in initial investment. Costings based on the Connected Hubs programme beginning with €5 million[95] for the Department of Rural and Community Development in Ireland and taking into account population size.** For more information, see **Seven Tech Priorities** p.44-45.	
Better support the university spinout ecosystem to create economic impact from world-leading research. 	**Medium term: Increase Higher Education Innovation Fund (HEIF) allocations, and ensure similar funding is made available in the Devolved Nations.** This type of funding has a proven track record of success. For example, HEIF generates a return on investment of £12.46 in impact for society and the wider economy for every £1 invested. HEIF supports universities' core innovation activities, enabling them to attract private investment and build capacity for technology transfer. Examples of HIEF case studies[97] include the University of Surrey's Vidiia portable COVID-19 test-kit spin-out and Keele University's Smart Energy Network Demonstrator. Scaling up the HIEF scheme would enable research intensive universities to support and nurture emerging innovation clusters in every region and nation of the UK. **At present, HEIF allocations are capped at £4.67m per institution. A £20m supplement – only 8% of the total funding pot – is distributed to those institutions who can demonstrate that the cap is a constraint to their support for economic growth. Increasing the supplement by £80m per annum would enable those institutions affected by the cap to increase the economic impact of their innovation efforts and provide an additional return of £1bn over the next three years for the economy and wider society across all the nations and regions of the UK.**	UK universities are world-class in tech transfer. Their spinout companies raised £1.66bn in equity funding in 2023, 9.54% of all equity funding raised by UK companies, 3 second only to the US in total investment in spinouts. In 2021/22 businesses spun out of the 24 Russell Group universities alone supported over 80,000 jobs and generated £17.8bn in economic output.[98]
Prioritise funds and British Business Bank reform to supporting scaling firms across the UK.	**Immediate term: Progress on launching the Long-Term Investment for Technology and Science (LIFTS)[99]** This initiative will support the Government in unlocking UK institutional investment, particularly Defined Contribution (DC)	Supporting investment in scaling firms will deliver growth for the UK. Scale-ups generate new tax receipts, lead to

pension funds, and catalysing investment into UK science and technology scale-ups at the later stages.

Placing growth at the heart of the programme, proposals and development for the initiative have centred around delivering genuine Value for Money (VfM).

Stimulate the UK VC ecosystem through this initiative will be vital for the UK's competitiveness. Recognised in the Start-Up, Scale-Up review, the UK is lagging behind competitors such as the US who see 70% of VC funding from pension funds (in comparison to the UK where the figure is under 20%).[100] Acting on this will enable high potential UK businesses to scale and stay here.

The Government funded commitment of up to £250m to be available through the first phase.[102]

Longer term: Reform the British Business Bank with a stronger mandate to support scaling firms, and growth across regions and nations.

Do this by (1) Making it truly independent, (2) Leveraging its role in unlocking patient capital (3) Develop a longer-term strategy with KPIs to deliver return on investment to all regions of the UK and centered around the delivery of the Government's five missions.

The Bank plays a key role in supporting UK smaller business equity deals, for instance, supporting 15% of equity deals in 2023.[103]

Alongside this, a longer-term strategy would match the longer-term horizons that support economic growth, i.e., in VC markets. techUK members anecdotally note that the Government's review of annual plans can often hinder the pursuit of longer-term objectives on a longer-term basis.

Making the British Business Bank truly independent would not impose a significant cost on the Exchequer.

business investment and innovation and drive productivity.

techUK analysis on Data City estimates an average headcount growth rate of 36.6% for the group and the potential to reach over £2 billion in turnover in the near future.

Empowering the British Business Bank to invest more in growth capital and support investment in scaling firms will see economic growth benefits for the UK.

From 2023 activities and funded commitments, an expected 39,400 new jobs and £8.4bn of gross-value ad (GVA) over the life of the finance.[105]

Enable digital infrastructure to be built more quickly, with wide reaching benefits for everyone across the UK.

Immediate term: Ensure there is a future spectrum release roadmap to meet projected capacity demand and enable future applications and services in both licensed and license-exempt spectrum.

For spectrum management, implement sharing where it is beneficial and continue with market mechanisms such as trading to achieve efficient use.

The cost to the Exchequer would be £Nil. This is based on Ofcom's review of its market-based approach to mobile spectrum management.[106]

Medium term: Refresh the model for the regulator to work with industry in the future.

techUK members have outlined how the Wholesale Fixed Telecoms Market Review (WFTMR) and Statement of Strategic Priorities (SSP) model work well in giving the regulator steer from the Government and providing longer term certainty for operators. However, techUK members note that more could be done to hold Ofcom to account on delivery of their work programme.

The cost to the Exchequer would be £Nil.

The UK telecoms sector, and the digital connectivity it delivers, is vital to the prosperity of the country.

A key foundation of the economy, the sector contributes £32.7 billion to the UK economy and made up 1.5% of total GVA in 2022.[107]

3. Shoot for the stars

The UK remains the number one tech ecosystem in Europe and the third most valuable in the world. The combined market valuation of the UK tech sector in the first quarter of 2024 was $1.1 trillion.[108]

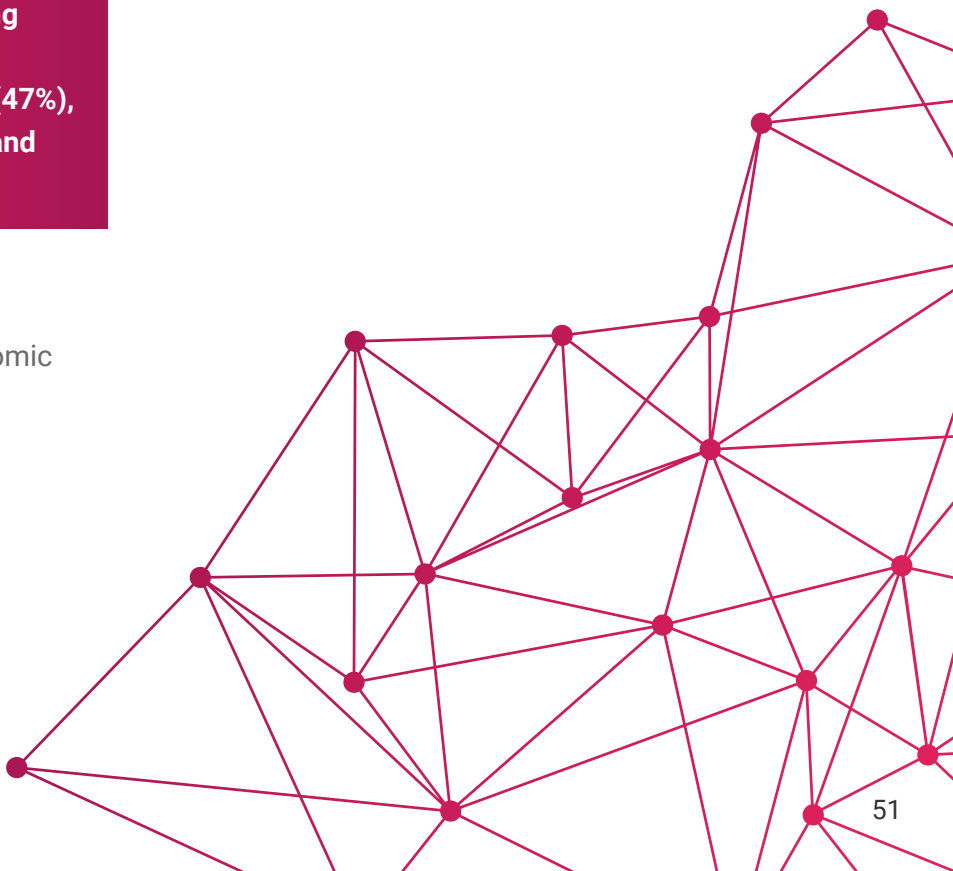
But there is now intense global competition for the key technologies that will shape the future. From AI and quantum computing to green technologies and semiconductors, Governments are vying to attract talent, develop clusters of innovative tech companies, and be the first to implement groundbreaking digital public services. The UK holds a leading position in this race, but we must not allow our success to lead to complacency.

In early 2024, techUK and Public First research with over 250 senior tech sector leaders, found that new technologies were seen to provide a wealth of opportunity. Wide ranging benefits from adopting new technologies included improving productivity (54%), reaching new customers (50%), growing revenue (47%), becoming more competitive (46%) and developing new products (42%).

techUK, and our members, call for the Government to capitalise on the UK's unique advantages and leverage economic growth opportunities.

Take the net zero transition and its economic potential for the UK. Welcome moves from this Government include setting up a Clean Energy Superpower Mission Board and lifting the onshore wind ban in England.[109] [110] But the role of digitisation in supporting the delivery of this, whilst recognising and managing potential tensions, will be vital.

The UK also holds a first-mover advantage in Open Banking, outpacing Italy, France, Spain, and Germany in adoption. This has laid strong foundations for future consumer, business, and economic benefits. But the UK has an opportunity to lead in Open Finance, with a potential GDP boost of £30.5 billion annually.[111]



Recommendations in this section include

- Deliver a future AI strategy that is fit for the mid 2020s.
- Address access to finance challenges for UK tech and science scale-ups.
- Send pro-innovation signals to industry through an established permanent commercialisation of Tech Taskforce.
- Support the UK semiconductor and quantum capability, recognising their strategic and vital importance for the UK's global competitiveness.
- Bring together the delivery of a green and digital economy.
- Seize the UK's leading role in Open Banking and become a world leader in Open Finance.
- Leverage the role of digital in UK trade policy and sign more Digital Economy Agreements.
- Unleash the growth benefits of Automated Vehicles (AVs) and establish the UK as a market leader.
- Maximise opportunities for AR technologies to spur growth of enterprises and digital marketplaces.

Spotlight on techUK members' supporting the UK's economic growth opportunities

Circulor proves end-to-end traceability of SQM's lithium volvo cars

Circulor provides organisations with full visibility into their supply chains, offering a proven software solution to track materials with significant environmental and human rights impacts throughout complex manufacturing and recycling processes. This London-based headquartered company enables businesses to trace critical materials from extraction to production and ultimately recycling, while also monitoring ESG characteristics and embedded carbon across Scope 1, 2, and 3 emissions.

In 2023, Circulor shared their progress partnered with SQM, the world's largest lithium producer, and Volvo Cars and The Initiative for Responsible Mining Assurance (IRMA). SQM's Salar de Atacama mine became the first lithium operation to achieve IRMA 75, a comprehensive mining standard evaluating areas like water management and human rights.

Using its PROVE platform, Circulor authenticates lithium as IRMA 75, linking SQM's audit report to material flows to ensure its incorporation used in Volvo's EV batteries cells. This connection highlights SQM's commitment to sustainable production and supports Volvo's ongoing efforts to source responsibly audited lithium, enhancing transparency in their supply chain.

Deep Green enhancing heat capture efficiency to drive sustainability and cost savings

Deep Green design, build and operate sustainable datacentres that enable the heat created from these facilities to be re-used. They exchange the rental for contributed heat energy. Deep Green don't consider this "waste" but venting energy as "wasteful."

A small data centre in Devon made national news when it was able to heat a public swimming pool, saving the leisure centre thousands of pounds in heating costs. To enhance heat capture efficiency, Deep Green implemented a Direct Liquid Cooling System in the data centre. The technology used involves immersing high-power consuming hardware in cooling pods, resulting in reduced power consumption for the infrastructure.

The cooling process utilises biodegradable mineral oil, which aids in heat capture. When connected to the variable flow heat exchanger, this facilitates the redistribution of the excess heat and ensures the pool is maintained at a comfortable 30°C for 60% of the time while recovering over 70% of the energy used. The success of this model has paved the way for its broader implementation across various pools and district heating systems, scheduled for 2024.

Snap Inc enabling the growth of augmented reality to support sector growth and public service delivery

Augmented reality (AR), powered by AI, enhances real-world experiences through immersive virtual platforms. In the UK, AR's contribution to the economy is projected to grow from £18.4 billion to £70 billion by 2030. Snap Inc. is leading this growth, driving revenue through advertising and helping businesses like Pure Gym and Pet Lab Co expand. Snap's AR technology promotes sustainability and awareness across sectors, including healthcare. For example, a collaboration with NHS Blood and Transport used AR on Snapchat to educate 3.1 million young people about organ donation, boosting engagement by 22%. Additionally, Snap partnered with the Department for Education to host the UK's first Virtual Careers Fair, promoting apprenticeships and technical education routes.

Riverlane accelerating the commercialisation of quantum technology in the UK

Cambridge-based technology company, Riverlane is focused on making quantum computing useful sooner with their quantum error correction technologies. Founded in 2016, they bridge the gap between quantum hardware and practical applications, accelerating the commercialisation of quantum computers in the UK.

Riverlane's primary product, Deltaflow, is a quantum error correction stack made up of fast and accurate decoders, designed to keep up with the vast amount of data errors that arise from today's noisy (error prone) quantum computers. Deltaflow enables quantum computers to achieve useful scale to a million reliable quantum operations by 2026 – enough to begin to develop applications in fields such as materials science and drug discovery.

Having recently raised $75 million of Series C funding, Riverlane are expanding their operations to deliver on their technical roadmap, and further accelerate innovations through key partnerships.

SHOOT FOR THE STARS

Capitalise on the UK's unique advantages and leverage economic growth opportunities, including AI, net zero and Open Finance.

Objective	Policy action	Growth benefit
Deliver a future AI strategy that is fit for the mid 2020s. 	**Immediate term: Update the UK's AI Strategy for the mid 2020s.** The last UK AI Strategy was published in September 2021. Since then, our understanding of the technology, products available now and its use by businesses and public services has utterly transformed. With the AI White Paper now setting the main regulatory framework for AI regulation in the UK, and a Bill in development for a small, specialised proportion of the AI market, we must move rapidly into a period of delivery, implementing our chosen regulatory framework while also refreshing the AI Strategy so it is ready for the mid 2020s. This strategy should not seek to revisit the broad theory of regulation, but instead focus on delivering the approach set out in the AI Whitepaper, as well as seeking to enable AI across the economy. The Government's AI Action Plan will provide some good initial steps; however, a full multiyear strategy should be developed for AI as part of the UK's planned industrial strategy. For this updated AI Strategy, techUK calls for the Government to take a multifaceted approach focused on AI adoption as well as supporting the developers of AI technologies themselves. We suggest four potential pillars of (i) AI for the Day to Day Economy, (ii) AI for Innovation Intensive Business, (iii) AI for the Public Sector and (iv) Frontier/Cutting Edge AI Development. By focusing on each of these areas, a future AI strategy can help secure the broad benefits that AI can bring to the wider economy and public services as well as continuing to support the UK's leading AI sector. Additionally, the AI strategy should support a permissive environment for the use of open-source AI. This would work to advance open innovation across the economy and ensure that businesses have a range of offerings as they seek to begin their AI journey. A strategy should be developed at pace, aiming for it to be released by the end of 2025.	Digital technology is already one of the biggest drivers of UK growth and the country has attracted more than £20 billion in private investment in AI since 2016. Overall, AI is projected to boost UK GDP by up to 10.3% by 2030[112] and bring huge benefits for UK businesses with better productivity, efficiency and technology. Recent research highlights that delaying the roll-out of AI over the next half decade could cost the UK £150 billion by 2035.[113]

	No expected costs to the Exchequer. Consultation, engagement, development and design of the strategy sit within the Department for Science, Innovation and Technology. Costs may be associated with policy interventions to support the strategy. For more information, see **Seven Tech Priorities** p.15-18.	
Address access to finance challenges for UK tech and science scale-up firms. 	**Immediate term: Develop a scale-up support service to help address the UK's scale-up funding gap.** This should prioritise navigating the support and funding out there, and a relationship management system to more effectively deal with scale-ups enquiries. techUK members anecdotally cite an account management style system with direct relationship into Government would support in addressing regulatory or policy challenges and how changes may impact their business. For the Government, such a support service would also help to develop stronger evidence bases when designing systems-wide policy interventions. This would also support in understanding barriers to growth scale-ups are facing and facilitate cross-Departmental connections. Once piloted, embedding a wider support service into the Department for Science, Innovation and Technology should a priority, ensuring that the service can have the greatest impact possible to support science and tech firms to scale and stay in the UK. We believe this approach should be expanded to the broader scaleup ecosystem, including government and educational institutions, to support the UK's growing scaleup business community. Alongside this, a 'one-stop shop' homepage to share the relevant grant and support out there to help scaling firms navigate the support already out there. An example of this includes Start-Up Estonia programme run by the Estonian Business and Innovation Agency since 2022. **No significant cost to the Exchequer, costs could be absorbed by DSIT's operational budget.** **Immediate term: Leverage world leading Seed Enterprise Investment Scheme (SEIS), Enterprise Investment Scheme (EIS) and Venture Capital Trust (VCT) schemes, bolstering support provided for smaller scale-ups and R&D intense businesses.**	On a global scale, the UK ranks third for VC investment, is home to over 150 unicorns and over 25,000 funded startups.[115] EIS and VCT have significantly supported high-risk, early-stage business in the UK. Since the EIS launched in 1994, over £41 billion has been raised. According to HM Treasury, the schemes continue to generate investment, with £2.9 billion of funds raised across the schemes in 2022-23 and 1,280 companies using the EIS for the first time over this period.[116]

	The UK has a thriving ecosystem to grow a business. Interventions such as the Seed Enterprise Investment Scheme (SEIS), Enterprise Investment Scheme (EIS) and Venture Capital Trusts (VCT) scheme are world leading and have supported firms to start and then scale in the UK. With the EIS and VCT schemes now extended until 2035, there is an opportunity for the scheme to better support smaller scale-ups and R&D intensive scale-ups. This includes the size of enterprises in which investments can be made to get relief. For instance, for VCT and EIS, there is a cap before investment on gross assets of £15m and 250 full-time employees. For SEIS, the period under which businesses can claim is currently two years. techUK believes that the Government should consult on ways to bolster the scheme. . This comes considering recent inflationary pressures for scaling firms for smaller scale-ups (with a value between £20m and £40m). Once reviewed, the Patient Capital Review [114] provides suggestions, such as extending the EIS and VCT to focus on Knowledge Intensive Companies (KICs), that could be explored. **Costs to the Exchequer to consult and review the schemes. Associated costs with addressing limitations.**	
Send pro-innovation signals to industry through an established permanent commercialisation of Tech Taskforce. 	**Immediate term: Establish a commercialisation Tech Taskforce within the Regulatory Innovation Office to provide clear regulatory guidance, get products authorised and send pro-innovation signals to industry.** The taskforce should bring together regulators, businesses and Government in a series of Task and Finish Groups aiming to identify and resolve fundamental barriers to commercialisation within the regulatory system. The taskforce should be based within the planned Regulatory Innovation Office. Once in place, the taskforce should run 12-month sprints focused on a select number of technologies that can then be extended if necessary. Some immediate opportunities for such taskforces include web 3.0, mobile pay as you go, lab grown and cultivated meats, open-source AI technology and the deployment of self-driving vehicles. By targeting specific markets every 12 months this could see the taskforce make significant returns on investment. **Costs to the Exchequer: costs can be absorbed within the budget for the Regulatory Innovation Office.** For more information, see **Seven Tech Priorities** p.55-56.	The UK was able to secure Europe's largest AI deal by moving quickly to provide regulatory clarity for the self-driving car market. Similar results could be achieved for other technology areas. An example of a sector that this could support, the UK Quantum industry contributes £1.7 billion to the UK economy and has grown by 81% since 2013.[117] Quantum technologies are on the verge of a range of commercial applications and could deliver even more significant benefits to the UK economy if they can be rolled out.

Support the UK semiconductor and quantum capability, recognising their strategic and vital importance for the UK's global competitiveness.

Medium term: Renew efforts to support the UK semiconductor industry to increase UK supply chain resilience, shape future technologies, and boost economic growth.

The National Semiconductor Strategy[118] marked a step in the right direction in recognising the role of semiconductors as a key technology to support future technology development, and the UK's economic and national security.

UK industries have highlighted their strong capabilities in Chip design e.g., Photonics in the North of England and Northern Ireland. Other examples include compound semiconductors in Wales.

Ensure delivery on supporting the sector. This could be achieved through (1) facilitating regional clusters with a triple helix between academia, business, and local government on innovative semiconductor design and manufacturing, (2) better leveraging international partnerships, (3) re-engaging with industry through the Semiconductor Advisory Group (made up of UK semiconductor experts/leaders) to review and advise the Government and (4) continuing progress with the National Semiconductor Institute to underpin this work.

No additional cost to the exchequer beyond the existing budget for the National Semiconductor Strategy.

Immediate term: Remain committed to the National Quantum Strategy and funding the associated five missions to ensure the commercialisation of all quantum technologies.

The National Quantum Strategy assures a strong decade of UK leadership in quantum technologies. Turning this leadership to commercial success when the time is right will require consistency. This patience could reward the UK with a thriving quantum economy with UK businesses at the center.

The UK tech sector often struggles to commercialise. The National Quantum Strategy recognises this challenge. To mitigate the commercialisation gap, it identified several levers to support this burgeoning industry. This includes effective Government procurement, and most critically, support for the five quantum missions.

These missions include enabling activities to support commercialisation, supply chain development, and user adoption across key industries such as healthcare.

Cost the Exchequer would be low. Costs associated with acting on recommendations within the National Quantum Strategy.

The UK semiconductor industry generates substantial revenue and supports a wide range of downstream industries.

The sector is also an integral part of the global supply chain and is crucial for the functioning of modern technologies and critical infrastructure.

The global semiconductor market was worth $430 billion in 2021 and is estimated to be worth up to $800 billion by 2030.[120]

The UK's current success for the quantum sector should be applauded. The UK has 11% of the world's quantum start-ups - the largest amount of quantum start-ups in Europe - and 12% of global private equity investment into the technology.

This quantum economy employs over 100,000 people and growing at 7.8% every year.[121]

	Medium term: Develop a Quantum technology roadmap to better reflect the different development needs across quantum technologies. Government intervention is needed to avoid the high risk of losing ground to countries making major investments in quantum. A recent review from the Royal Academy of Engineering notes large-scale commercialisation will require extensive prototyping, testing, and demonstrating.[119] The resource and infrastructure required for evaluating the performance, reliability, and scalability of quantum solutions in real-world scenarios is extensive and beyond what is economically feasible for DeepTech SME's. A clear roadmap would help to develop the right infrastructure and supply chain to secure the UK's leadership position and strategic advantage in fields of high national interest. **Consultation, engagement, development and design of the strategy sits within the Department for Science, Innovation and Technology. Costs may be associated with policy interventions to support the strategy.**	
Bring together the delivery of a green and digital economy through an Office for Net Zero Delivery at the heart of Government.  	**Immediate term: Alongside the recently announced Clean Energy Mission Board, create an Office for Net Zero Delivery to bring together delivery of the future green and digital economy.** We are the crux of a twin transition where careful oversight and framework(s) are needed to get this right and manage potential tensions. For instance, the energy demand and use from digital infrastructure needed to meet the growing demand for digital technologies. techUK propose an Office for Net Zero at the heart of Government, sitting within Cabinet Office, with lines into HM Treasury, the Department for Science, Innovation and Technology and the Department for Energy Security and Net Zero. A further priority of the Office should be close collaboration with the Office for Investment, recognising that AI and cleantech represent two of the fastest growing markets within the UK. In 2023, $5bn was raised in the UK was raised by energy tech start-ups, and 16% of total UK VC investment went to AI startups in Q1 2024.[122] No significant cost to the Exchequer. Reallocate staffing and resourcing costs from Government departments, including the Department for Energy Security and Net Zero, and the Department for Science, Innovation and Technology.	The net zero economy supports nearly 4% of UK economic activity – that's £74 billion in GVA.[124] Analysis that an accelerated net zero transition could boost the UK's economy by £240 billion more in 2050 than the current trajectory.[125]

Place digitisation at the heart of plans for NESO and the planned Strategic Spatial Energy Plan.  	**Medium term: Place digitisation the heart of plans for National Energy System Operator (NESO), to be launched in 2024, with the immediate priority of this within the production of the first ever Strategic Spatial Energy Plan.**[123] Improving the visibility of the entire National Grid, through use of digital technologies such as digital twins, will enable and support the creation of Strategic National and Regional Spatial Energy Plans. Strategic Spatial Energy Plans will be important to set out what needs to be built, where and when, to achieve net zero. In turn, providing more certainty and clarity for investors and wider industry. **Costs associated to the Exchequer associated with the delivery of the Strategic Spatial Energy Plan.**	Improve the visibility of assets on the Grid has the potential to enable consumer benefits of up to £150m per annum according to National Grid ESO .[126]
Ensure a level playing field for UK tech firms through the Carbon Border Adjustment Mechanism (CBAM) 	**Immediate term: Deliver a response on the design and delivery of UK CBAM, ensuring a level playing field for UK tech firms.** With its experience from the EU CBAM, the tech sector is eager to assist in shaping the long-term plans for a UK CBAM. CBAM will help tackle carbon leakage, reducing the risk of production and associated emissions being displaced to other countries because they have a lower, or no,carbon price. This levels the playing field for UK producers and encourages sustainable practices. techUK members outlined the following points to ensure a UK CBAM supports the UK tech sector. The Government should (1) implement a single methodology across jurisdictions and international collaboration and (2) enable businesses to prepare and adjust for the new system by implementing a transitional period with clear timelines and legislative plans. This is especially important for obtaining and exchanging data. **A CBAM mechanism will create distortions in the market, HM Treasury will need to assess the impact as well as the need for a suitable transition period.**	Economic benefits of getting CBAM right include international competitiveness, avoiding potential fines and preventing market share loss. Vital for a global trade and supply chain efficiency.
Enhance regulatory clarity and stimulate investment through the delivery of UK Sustainability Reporting Standards (UK SRS). 	**Immediate term: Avoid any further delays in adopting the International Sustainability Standards Board (ISSB) framework and ensure that the UK Sustainability Reporting Standards (SRS) are finalised by the first quarter of 2025.** Originally scheduled for July 2024, the endorsement of the ISSB framework has been postponed to Q1 2025 by the previous Government. The tech industry is eager for this to be completed, especially given the increase in regulations in other jurisdictions, such as the EU. Further delays pose a risk to the UK's competitiveness.	As sustainability reporting becomes more comprehensive and widespread in the UK, it will provide investors with better access to reliable financial information. This transparency will allow for more informed decision-making and attract investment into the UK market.

	The Government must ensure that the introduction of UK SRS is accompanied by a support package for smaller businesses, which will inevitably face indirect impacts. These businesses will need to respond to procurement questions from companies directly affected by the new regulations. The introduction of UK SRS, along with appropriate measures for smaller businesses, will drive UK companies to become more cognisant of their emissions and environmental impact. In turn, this shift will enhance the global competitiveness of UK businesses, opening new markets and opportunities, and ultimately support the UK's journey towards achieving net zero emissions. **Cost to the Exchequer would be £Nil.**	
Seize the UK's leading role in Open Banking and become a world leader in Open Finance. 	**Immediate term: Take forward recommendations made by the Open Finance Taskforce, putting the foundations in place for the UK to become a leader in Open Finance.**[127] The UK already has first mover advantage as a market leader in Open Banking adoption, outpacing Italy, France, Spain and Germany. Open Banking has laid strong foundations for future schemes to benefit consumers, businesses and the UK economy. Open Banking has significantly impacted the UK's financial landscape, fostering innovation, competition and consumer choice. Over 10 million users have now embraced open banking and are regularly benefiting from using open banking technology.[128] Similar to Open Banking, there remains the need to ensure the standardisation of open API protocols as well as underpinning standards and infrastructure thereby optimising interoperability whilst lowering barriers to entry and driving better functionality through open innovation. **While specific costs figures for the Exchequer are not readily available, costs would be associated with APIs, security measures to protect data and operational expenses for delivery. Open Finance's potential impact on the economy includes reduced transaction costs, increased efficiency and innovation opportunities.** **Medium term: Launch a consultation led by the Joint Regulatory Oversight Committee (JROC) into an Open**	HMRC collected £3.5 billion in tax payments through Open Banking, showing tangible impact with a 16% increase from the previous year and nearly a 40% surge in transaction value.[130] Open Finance has the potential to boost UK GDP by £30.5 billion annually.[131] It is also anticipated to aid SMEs in overcoming an estimated £22 billion funding deficit[132] through access to alternative lending models.

	Finance regulatory framework. This will ensure that any associated or potential risks are also addressed, and lessons are learnt from Open Banking. A regulatory framework would also enable SMEs to take advantage of Open Finance, unlocking solutions to some of the acute challenges facing small businesses, including the management of cashflow, access to finance and late payments. This is critical given more than 72% of small business owners face difficulties in accurately predicting their annual earnings, [129] while half of them encounter challenges in accessing finance, resulting in two- thirds of invoices being paid late. **No expected additional cost to the Exchequer. However, costs are likely to be borne by the private sector and Government agencies.**	
Leverage the role of digital in UK trade policy and sign more Digital Economy Agreements. 	**Medium term: Negotiate more Digital Economy Agreements with priority markets, building on the model of the UK-Singapore DEA.** This type of agreement is adaptable to new technologies and new innovations and provides for regular stakeholder input in improving and modernizing the trading relationship. An example of this working in practice, the UK-Singapore Digital Economy Agreement (DEA)[133] aims to capitalise on the UK's strengths as a major services and digital exporter, fostering a new era of modern goods and services trade between the UK, Singapore, and the broader region. **The Department for Business and Trade can subsume the operational cost of a review and subsequent promotional activities under its wider annual budget**.	Establishing digital economy agreements that enable seamless cross-border data flows while maintaining strong data protection standards, can create a favorable environment for innovation, sustainable growth, and international cooperation.

Unleash the growth benefits of Automated Vehicles (AVs) and establish the UK as a market leader. 	**Immediate term: Build on the UK's world-leading Automated Vehicles Act through passing the secondary legislation needed to implement the UK's regulatory framework for AV deployment on public roads by 2026, alongside ringfenced funding to support the sector.** In the interim, the Centre for Connected and Autonomous Vehicles (CCAV) should work in partnership with the AV sector to develop a mechanism to provide legal certainty and guidance for advanced trials (i.e. without a safety operator) by 2025. AVs can help drive economic growth through improving personal and commercial productivity and spur a new highly skilled manufacturing sector. UK AV companies are already attracting significant investment from around the world. UK AV developer Wayve recently raised $1bn in funding, the largest ever investment into a European AI start-up.[134] [135] Alongside this, public records show that of the companies who have received Government grant funding to date, 35 have secured private investment totalling £790 million, although the true value, including private capital, will be far higher. **There is a cost to the Exchequer associated with CAM Pathfinder fund. However, this would de-risk additional investment by automated vehicle developers or Tier 1 suppliers that can ultimately create multiplier growth effects throughout the sector.**	AV vehicles, technologies, capabilities and services are predicted to be worth £750 billion globally by 2035. The UK share of this value is estimated at £42 billion. The SMMT sizes the UK market as being worth £66bn by 2040 on the basis that an effective regulatory regime is put into place as soon as possible.
Maximise opportunities for AR technologies to spur growth of enterprises and digital marketplaces.  	**Immediate term: Develop a plan for the deployment of AR technologies alongside the UK Industrial Strategy.** The UK has a strong reputation for innovation and being a leader in developing new technologies, including augmented reality (AR) tech. AR uses the foundations of AI to enhance real-world objects on a virtual platform to create an immersive environment. From retail to entertainment, arts and the automotive industry, AR is overhauling the way we interact with brands, products and services. AR can also be used in healthcare to enhance precision during surgical procedures, and training surgeons through virtual simulations. It's estimated that by 2025, 45% of the people in the UK will be using AR and almost all people who use social/ communication apps will be frequent AR users.[136] AR technologies have the potential to boost the UK economy, but to date, there is no Government strategy aimed at harnessing this technology alongside other emerging technologies, including AI. No expected costs to the Exchequer. Consultation, engagement, development and design of the strategy, which should be expanded to consider AR, sits within the Department for Science, Innovation and Technology. Costs may be associated with policy interventions to support the strategy.	Research from the Centre for Economics and Business Research (CEBR) estimates that the estimated economic contribution of AR (real GVA) in the UK will be £72 billion by 2030. Demonstrating the growth potential, this is quadruple the estimated contribution for 2024 which stands at £12 billion.

Annex 1: Spotlight on techUK reports supporting delivery of the Governments' missions

Government mission	techUK report
 **Secure the highest sustained growth in the G7**	A UK tech Plan, 2024 Seven Tech Priorities for the next Government, 2023 Small Enterprises, Big Impact, 2024 Quantum Commericialisation: Positioning the UK for success, 2024 Emerging Space Technology Industry Perspective report, 2024 AI adoption in the UK: Putting AI into action, 2023 Open and secure: Charting a path for UK tech in a world of resurgent strategic competition, 2023
 **Make Britain a clean energy superpower**	Crops to code: the role of data in fostering sustainable agricultural trade and responsible supply chains, 2024 Warming Up to Efficiency: Understanding the potential benefits and pitfalls of data centre heat export in the UK, 2024 Cloud computing and a path to a more sustainable future, 2023 AI for energy, 2021
 **Build the NHS fit for the future**	Evidence Pack: the case for continued investment in digital transformation of the NHS and social care, 2024 The Five Point Plan for CareTech, 2023 Right from the Start: What should Integrated Care Systems prioritise to make digital, data and technology work for them and their populations?, 2023
 **Make Britain's streets safe**	Improving Social Value in Technology Procurement, 2023 Local Public Services Innovation: Creating a catalyst for change, 2022

Government mission	techUK report
Break down the barriers to opportunity at every stage	Telecoms Action Plan: a techUK policy stocktake for the new government, 2023 Four policy actions to support the UK's Autonomous Vehicles sector, 2024 Local Digital Index, 2023 Driving the future of transport – addressing the skills gap, 2023 Making AI work for Britain, 2023 Digital skills: establishing a digital learning pathway, 2020

Annex 2.
Full list of policy actions

BUILD THE RIGHT FOUNDATIONS	
Objective	**Policy action**
Enable digital infrastructure to be built more quickly and reduce operating costs by reforming the planning system.	• **Immediate term:** Deliver on the Planning and Infrastructure Bill to reform the planning system and make it fit-for-purpose to deliver our future digital and net zero economy. • **Immediate term:** As part of the reformed National Planning Policy Framework, classify data centres as Nationally Significant Infrastructure Projects (NSIP). • **Immediate term:** Place digital at the heart of the local plan development process. Advances in technology offer a chance to make local plans more innovative and responsive to social and economic objectives.
Boost innovation and maximise growth through stability and effective delivery of R&D tax reliefs.	• **Immediate term:** Use the 'R&D tax reliefs: Expert Advisory Panel' announced in Spring 2024 to inform recommendations around HMRC's administration, operation and delivery the R&D tax credit. • **Immediate term:** Re-introduce geography specific expert teams within HMRC, creating sector specialists due to the clustered nature of R&D investments. • **Immediate term:** Introduce a de minimis qualifying R&D expenditure threshold for the R&D tax credits scheme, with the purpose of reducing HMRC caseload and removing wholly non-compliant claims. • **Medium term:** Extend the qualifying categories for the R&D tax credits scheme to include capital expenditure, such as plant and machinery, used solely for R&D purposes. • **Medium term:** Ensure continued support for SME innovation by expanding ERIS (Enhanced Research and Development intensive support) to include profitable SMEs and revisit the scheme to improve clarity around subcontracted R&D. • **Longer term:** Get started in a longer-term five-year plan for the delivery of R&D tax reliefs to restore confidence and stability following a series of changes.
Ensure the full expensing regime works for the UK tech sector with clear guidance.	• **Immediate term:** Encourage business investment, and that the tech sector reaps the full benefits of the full expensing regime by clearly including technology products in upcoming guidance.

Deliver a pro-growth regulatory system that is smart and keeps pace with fast technological change.	• **Immediate term:** Leverage the Growth Duty of UK regulators to deliver on innovation as a driver of economic growth.[137] Hold regulators to account in reporting against the statutory guidance for the Growth Duty. • **Immediate term:** Utilise the Regulatory Innovation Office (RIO) to improve accountability and promote innovation in regulation across all sectors of the UK. • **Medium term:** Work to establish a Regulatory Initiatives Grid for the tech sector.
Support UK research and innovation through data reform, further encouraging more effective public services.	• **Immediate term:** Modernise the UK data protection framework to support research and innovation, and encourage more effective public services, whilst ensuring the UK retains its data adequacy agreement with the EU.
Support the economic growth opportunity of cyber security through better awareness and built-in resilience.	• **Immediate term:** Develop a new Cyber Charter with the aim of building resilience and recovery into supply chains, in particular for SMEs. • **Immediate term:** Embed cyber security awareness into the beginning of setting up a company in the UK.
Show that the UK is an attractive and open destination for internationally mobile investment.	• **Immediate term:** Establish a new Investment Committee to work across Government, proposing improvements to the UK business environment based on investor feedback.
Make digital pathways more accessible through a reformed Apprenticeship Levy and a Digital Skills Toolkit 2.0.	• **Immediate term:** Deliver a reformed 'Growth and Skills Levy' that prioritises flexibility, enabling employees to fund training through routes alongside apprenticeships. • **Medium term:** Build on previous success of the Skills Toolkit launched in Spring 2020,[138] to build a 'Digital Skills Toolkit 2.0'. • **Medium term:** Offer world-leading computing education by continuing to fund the National Centre for Computing Education (NCCE).
Deliver education, skills and training by better embedding cyber security and resilience across the UK's supply chain.	• **Immediate term:** Engage in a review into the current cyber security skills gap with a specific focus on the challenges and opportunities to encourage diversity.

Address productivity challenges and enable SMEs to unleash the benefits that AI can bring with better SME digitisation support.	• **Immediate term:** Appoint a single Minister with responsibility for driving digitisation across the public sector and the economy. • **Medium term:** Deliver a comprehensive digital adoption plan with clearly defined targets by 2030. • **Medium term:** For SMEs to overcome obstacles to digitalisation, the UK Government should introduce a tax incentive to encourage new investment in digital technology. • **Medium term:** As previously advocated by techUK, the CBI and FSB, expand the Made Smarter Adoption Programme to all sectors of the economy.
Support and drive forward the Digital ID industry by ensuring that Digital Identity Technologies can be adopted and used across all sectors and industries.	• **Immediate term:** Enact the proposed Digital Identity and Attributes Trust Framework (DIATF) and ensure that legislation allows for digital IDs to be used across all sectors of the economy. Enable full interoperability between public and private sector digital IDs. • **Immediate term:** DIATF must be established through the Digital Information and Smart Data Bill. The Bill should also change UK legislation to enable the widespread use of digital IDs, interoperability between the public and private sectors and support independent regulation.

EMPOWER THE COMPETITIVENESS OF UK'S EVERYDAY ECONOMY

Objective	Policy action
Improve access to day-to-day digital services.	• **Immediate term:** Establish the new Technology Procurement Delivery Body (TPDB).
Ensure a level playing field for startup and scaling firms in the procurement process.	• **Immediate term:** Reform public procurement to further drive social value and support the UK's scale-ups and create a scale-up category in public sector procurement.
Prioritise digital record keeping across tax, e-invoicing and other forms of record keeping.	• **Immediate term:** Complete Making Tax Digital (MTD) for Income Tax by 2026 to reduce the tax gap and support SMEs to embark on their digitisation journey. • **Medium term:** Implement a phased introduction of Making Tax Digital e-invoicing for B2B transactions, supporting small business productivity and creating more efficient invoicing and payment processes.
Deliver the digital transformation that the NHS and social care system need to improve services.	• **Medium term:** Prioritise a unified, rules-based pathway for medtech within the NHS.

Enable the criminal justice system services to better leverage digital tools and make policing more resilient to cyber threats and data hacks.	• **Immediate term:** Rethink the Criminal Justice approach for attracting talent, implementing a national programme to encourage graduates from the sciences to join as "data apprentices." • **Medium term:** Address the UK Government legacy IT challenge and improve the interoperability and integration of systems.
Modernise public transport by investing in new infrastructure and placing innovation at the heart of delivery.	• **Immediate term:** Unlock adoption barriers for scalable solutions available today (e.g. PAYG rail ticketing) and that have demonstrated better outcomes within short timeframes. • **Medium term:** Mandate infrastructure authorities, including National Highways and Network Rail (Great British Railways), to publish annual innovation strategies.
Drive regional growth and build on the success of Metro Mayors to expand place-based offer to investors.	• **Medium term:** Develop a framework for how national and sub-national investment promotion bodies will work together to boost investment in the tech sector.
Bring benefits of the tech sector to all regions of the UK through Connected Hubs.	• **Immediate term:** In an era where remote and hybrid working is the reality, promote tech clusters through a digital hub network of 'ConnectedHubs'.
Better support the university spinout ecosystem to create economic impact from world-leading research.	• **Medium term:** Increase Higher Education Innovation Fund (HEIF) allocations, and ensure similar funding is made available in the Devolved Nations.
Prioritise the delivery of funds and institutional reform to better support scaling firms across the UK.	• **Immediate term:** Progress on launching the Long-Term Investment for Technology and Science (LIFTS). • **Longer term:** Reform the British Business Bank with a stronger mandate to support scaling firms, and growth across regions and nations.
Enable digital infrastructure to be built more quickly, with wide reaching benefits for everyone across the UK.	• **Immediate term:** Ensure there is a future spectrum release roadmap to meet projected capacity demand and enable future applications and services in both licensed and license-exempt spectrum. • **Medium term:** Refresh the model for the regulator to work with industry in the future.

SHOOT FOR THE STARS	
Objective	**Policy action**
Deliver a future AI strategy that is fit for the mid 2020s.	• **Immediate term:** Update the UK's AI Strategy for the mid 2020s.
Address access to finance challenges for UK tech and science scale-ups.	• **Immediate term:** Develop a scale-up support service to help address the UK's scale-up funding gap. • **Immediate term:** Leverage world leading Seed Enterprise Investment Scheme (SEIS), Enterprise Investment Scheme (EIS) and Venture Capital Trust (VTC) schemes, bolstering support provided for smaller scale-ups and R&D intense businesses.
Send pro-innovation signals to industry through an established permanent commercialisation of Tech Taskforce.	• **Immediate term:** Establish a permanent commercialisation Tech Taskforce to provide clear regulatory guidance, get products authorised and send pro-innovation signals to industry.
Support the UK semiconductor and quantum capability, recognising their strategic and vital importance for the UK's global competitiveness.	• **Medium term:** Renew efforts to support the UK semiconductor industry to increase UK supply chain resilience, shape future technologies, and boost economic growth. • **Immediate term:** Remain committed to the National Quantum Strategy and funding the associated five missions to ensure the commercialisation of all quantum technologies. • **Medium term:** Develop a Quantum technology roadmap to better reflect the different development needs across quantum technologies.
Bring together the delivery of a green and digital economy.	• **Immediate term:** Alongside the recently announced Clean Energy Mission Board, create an Office for Net Zero Delivery to bring together delivery of the future green and digital economy. • **Medium term:** Place digitisation the heart of plans for National Energy System Operator (NESO), to be launched in 2024, with the immediate priority of this within the production of the first ever Strategic Spatial Energy Plan. • **Immediate term:** Deliver a response on the design and delivery of UK CBAM, ensuring a level playing field for UK tech firms. • **Immediate term:** Avoid any further delays in adopting the International Sustainability Standards Board (ISSB) framework and ensure that the UK Sustainability Reporting Standards (SRS) are finalised by the first quarter of 2025.

Enable the criminal justice system services to better leverage digital tools and make policing more resilient to cyber threats and data hacks.	• **Immediate term:** Rethink the Criminal Justice approach for attracting talent, implementing a national programme to encourage graduates from the sciences to join as "data apprentices." • **Medium term:** Address the UK Government legacy IT challenge and improve the interoperability and integration of systems.
Seize the UK's leading role in Open Banking and become a world leader in Open Finance.	• **Immediate term:** Take forward recommendations made by the Open Finance Taskforce, putting the foundations in place for the UK to become a leader in Open Finance. • **Medium term:** Launch a consultation led by the Joint Regulatory Oversight Committee (JROC) into an Open Finance regulatory framework. This will ensure that any associated or potential risks are also addressed, and lessons are learnt from Open Banking.
Leverage the role of digital in UK trade policy and sign more Digital Economy Agreements.	• **Medium term:** Negotiate more Digital Economy Agreements with priority markets, building on the model of the UK-Singapore DEA.
Unleash the growth benefits of Automated Vehicles (AVs) and establish the UK as a market leader.	• **Immediate term:** Build on the UK's world-leading Automated Vehicles Act through passing the secondary legislation needed to implement the UK's regulatory framework for AV deployment on public roads by 2026, alongside ringfenced funding to support the sector.
Maximise opportunities for AR technologies to spur growth of enterprises and digital marketplaces.	• **Immediate term:** Develop a plan for the deployment of AR technologies alongside the UK Industrial Strategy.

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About techUK

techUK is the trade association which brings together people, companies and organisations to realise the positive outcomes of what digital technology can achieve.

With around 1,000 members (the majority of which are SMEs) across the UK, techUK creates a network for innovation and collaboration across businesses, government and stakeholders to provide a better future for people, society, the economy and the planet. By providing expertise and insight, we support our members, partners and stakeholders as they prepare the UK for what comes next in a constantly changing world.

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