# [Speech: The Foothills of the Digital Age](#)

Thank you for inviting me to this Tech Summit.

The word summit of course has two popular meanings. There's a gathering such as this, and then there's the peak — the zenith, the apex, the apogee — the highest point that can be reached.

When it comes to tech, and to digital technology, we are very far from the summit of what can be achieved. Indeed, we are only beginning to even glimpse the potential of where digital technologies might take us, and how much they will transform our world.

These are very much the foothills, and now we must be ready for the climb. Policy making is always as much about anticipating and preparing for the future as it is with addressing current issues.

Our Digital Strategy, published in March of this year, set out how we intend to make the UK the best place to establish and grow a digital business and the safest place for citizens to be online. That means today, but also in the future, so we are ready for the changes ahead.

It established seven pillars that underpin the changes we need to see and I'd like to update you now on the impressive progress that, just eight months in, we have already made.

The first pillar, and central to everything, is infrastructure. In the Digital Strategy we committed to building a world-class digital infrastructure for the UK. That means ubiquitous coverage, so no one is left out, and with sufficient capacity not only for today's needs but in readiness for tomorrow.

We are on track to meet the target, set out in the Strategy, of superfast broadband coverage at 95% by the end of 2017. Then to reach the final 5%, we legislated in the Digital Economy Act, which received Royal Assent this year, for a Universal Service Obligation to deliver decent broadband to all. In the modern economy, broadband is essentially a utility, and I'm pleased it is increasingly delivered by a competitive market of providers.

For mobile reception, each MNO is obliged to provide voice coverage to 90% of the UK by the end of this year. Meanwhile, 4G premises coverage rose from 29% in 2015 to 72% last year and in our Manifesto we set a target of 95% coverage of the UK landmass. People must be able to stay connected wherever they live, work, and travel.

But at the same time as fixing the current technology, we must also look ahead the next generation, and that means 5G and full fibre.

Our 5G strategy, released at Spring Budget 2017, outlined the necessary

steps. As part of a £1.1 billion investment in digital infrastructure, we are funding a coordinated programme of integrated fibre and 5G trials to ensure the UK leads the world in 5G connectivity.

Today, we're launching a pilot scheme in Aberdeenshire, Bristol/Bath and North East Somerset, Coventry, Warwickshire, and West Yorkshire, which will see local companies offered vouchers by broadband suppliers to pay for gold-standard full-fibre gigabit connections. This should help revolutionise our digital infrastructure, and make it fit for the future, so we trust that take-up will be high.

The second pillar of the digital strategy is skills. At every level, from getting people online for the first time, to attracting and training the world's top coding talent, Britain needs stronger digital skills if we are to thrive in the years ahead.

Government can't address this shortfall alone. So when we launched the Digital Strategy in March, we committed to establish a new Digital Skills Partnership, between Government, businesses, charities and voluntary organisations. The aim was to bring greater coherence to the provision of digital skills training at a national level.

And at the launch we promised to create more than four million digital training places. Just eight months in, we and our partners — including Barclays, Lloyds, Google, and many others — have impressively over-delivered, with more than two million places made available, in everything from basic online skills through to cybersecurity and coding. These skills will be crucial to our country's future prosperity, so we intend to keep up the pace.

The third pillar is to make the UK the best place in the world to start and grow a digital business.

Make no mistake, Britain is already a global tech powerhouse, with more than 1.4 million people working in digital tech and new jobs being created at twice the rate of other sectors. In the first half 2017 there was a record £5.6 billion invested in tech in the UK — including from Microsoft, Amazon, Apple, IBM, and Google — and the sector has an annual turnover of £118 billion.

All impressive figures, but we can still push further.

So today we are unveiling a £21 million investment to create a new national network of regional tech hubs, across the country, from Belfast to Edinburgh, Cardiff to Birmingham. The funding will also help entrepreneurs in emerging technologies, such as Artificial Intelligence and FinTech, by connecting them to peers and potential investors in other hubs across the country, as well as by offering tailored development programmes.

And, as the Chancellor has announced, Tech City UK and Tech North are to become a single national organisation, Tech Nation, to speed up the growth and reach of the UK's innovative digital clusters. Companies that have already benefitted from Tech City UK's input include Just Eat, Funding Circle

and Zoopla, and they haven't done too shabbily. So this is very welcome news.

The fourth pillar of the Digital Strategy is that every UK business should be, to some extent, a digital business.

In July we launched the Productivity Council, which was developed through discussions with UK business leaders, the Confederation of British Industry and the Institute of Directors, and designed to encourage and support UK businesses to go digital. Analysis suggests that only a modest improvement across a broad base of firms could unlock billions of Gross Value Added every year.

The fifth pillar is to make the UK the safest place in the world to live and work online.

Our Internet Safety Strategy, published last month, is a substantial step towards that goal. The Strategy sets out how we all must play our role in tackling online harms. We want to bring together groups from across our whole society and hear from people of all backgrounds – including technology firms, schools, the voluntary sector, and citizens young and old as we turn ambition into reality.

We will bring in a statutory code of practice for social media companies, and are consulting on an industry levy to support educational programmes and technical solutions. We also want to see more transparency, to help inform future policy.

Ensuring the internet is safe means cyber security too, and our National Cyber Security Strategy, funded to the tune of £1.9bn, sets out what we are doing to help improve Britain's cyber security.

One of the programme's many aims is to find, finesse and fast-track tomorrow's online security experts. Over 6000 young people – between 14 and 18 years old – are now being invited to test their skills in online cyber and problem solving challenges, via a £20 million training programme. They might then win a place on the Cyber Discovery scheme, where they can learn cutting-edge skills from cyber security experts.

But keeping citizens safe online means more than protecting against cyber crime. It means ensuring that norms of behaviour online match those we have always valued offline.

The Digital Strategy is now complemented by the Digital Charter, as introduced in the Manifesto. The Charter will reinforce the work we started with the Strategy but will further consider how we apply the liberal values we value offline to the online world, so we can seize the opportunities that unprecedented connectivity provides, while also mitigating the harms it creates.

Throughout we will be guided by three core principles. First, what is considered unacceptable offline should not be accepted online. Secondly, all users should be empowered to manage their own online risks. Lastly, technology companies have a responsibility to their users to develop and

protect safe online communities.

And we are committed to bringing about a sustainable business model for high quality journalism. I welcome Google's movement towards this, not least removing the one click free policy, but there is much more to do to ensure we find a genuinely sustainable business model for high quality journalism, as we have, for example, for the music industry that's been through a similar radical disruption but found a way to a model that seems to be working.

The sixth pillar of the Strategy is to digitise Government.

Since the creation of Government Digital Services in 2011, Britain has been a world leader in such work.

From applying for a passport, to applying for lasting power of attorney, dozens of Government services have been digitised. The massive project to make tax digital is proceeding carefully, and the feedback from those who use the new digitised service is encouraging. Our G-cloud procurement system is being copied around the world, as it allows and encourages contracts to go to small innovative companies, not the traditional main players. In February this year, we had 3,947 suppliers on the Digital Marketplace, of which 93% were SMEs. And as a result out GovTech market is booming.

And so we arrive at the final pillar: data.

The Digital Strategy has also committed to unlocking the power of data in the UK economy and improving public confidence in its use. Research shows that, currently, more than 80 per cent of people feel that they do not have complete control over their data online, and that is too high.

So we are strengthening our data protection laws through the new Data Protection Bill, making UK law consistent with the EU's GDPR. Under its proposals individuals will have more control over their data, through the right to be forgotten and to ask for their personal data to be erased. They will also be able to ask social media channels to delete information they posted in their childhood.

We want to end the existing reliance on default opt-out or pre-selected 'tick boxes', to give consent for organisations to collect personal data. We all know these are largely ignored. The Data Protection Bill will make it simpler to withdraw consent for the use of personal data and require explicit consent to be necessary for processing sensitive personal data. It also expands the definition of 'personal data' to include IP addresses, internet cookies and DNA.

New criminal offences will be created to deter organisations from creating situations — be it through pure recklessness or deliberate intent — where someone could be identified from anonymised data. The data protection regulator, the Information Commissioner's Office, will be given more power to defend consumer interests and issue higher fines for the most serious data breaches.

So there you have it. We may be in the foothills of this digital age but we

are well equipped for the climb, and remain alert to any obstacles ahead. Much remains to do but I am confident the measures I've just outlined will continue to ensure our good progress.