



Destination Digital

Driving growth through Digital Adoption in the UK's
Innovation Corridor

In partnership with



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INTRODUCTION

The adoption and use of technology is a vital contributor to economic growth, and the demand for digital connectivity is accelerating exponentially.

As we enter a new decade, we are seeking to answer two questions

1. Is the existing technology infrastructure fit for purpose?
2. Are our businesses and public sector bodies adopting technology fast enough?

The first question of 'what is enough' with regard to digital infrastructure (mobile, broadband etc.) should clearly be a national priority to ensure that digital connectivity is ubiquitous and delivers where and when we need it.

The second is a broader question – both for the individual business and its technology adoption, but also how technology can accelerate skills and productivity.

The UK Innovation Corridor together with North London Chamber of Commerce & Enterprise and the Essex + Herts Digital Innovation Zone has produced this report, bringing together thoughts and opinions from across the region on how to tackle these issues and examine what action needs to be taken.



Cllr Alan Lion

Chair, Herts & Essex Digital Innovation Zone, deputy chair UK Innovation Corridor

Epping Forest District Councillor

SETTING THE SCENE – THE GOVERNMENT PERSPECTIVE

TECHNOLOGY CAN HELP deliver prosperity, sustainability and inclusion – things which the Innovation Corridor aims to achieve. Everyone should benefit from world class digital connectivity while new technologies improve the way we do business - digital adoption can help all businesses grow, and all people have more rewarding lives.

Jobs in the digital sector are rising five times faster than the rest of the economy, and the sector is currently worth £184bn to the UK economy – the Corridor must ensure it gets a dividend from this.

All areas need high quality digital connection – urban and rural. There are cost implications here, so we need to focus on how digital change can be brought about and new services rolled out.

Government is aiming to build on existing infrastructure to drive digital adoption, grow businesses, and grow the economy. Their vision is of a thriving economy driven by technology and underpinned by five key principles.

- an unashamedly pro-technology government
- that the benefit of technology should be spread more fairly and widely
- to drive growth through pro-innovation regulation
- safety and security online
- a drive to keep internet free and open.

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PUBLIC HEALTH PROVISION - DOING THINGS DIFFERENTLY



Recent market research conducted by IpsosMori into public thinking about healthcare in Britain showed that the most important issue facing Britain today is healthcare and a concern that the NHS will deteriorate further. A trend that emerged was an interest in connected health, including better relationships between doctors and patients, personalized medicine, and, in particular, personalized care. Interestingly, only 11% of Britons have experienced a health device such as a Fitbit, but more are likely to use one if recommended by a doctor or nurse. There are concerns about data being shared, but trust that the healthcare system would take better care of personal data than other organisations.

There is real potential to improve public health through digital adoption

TECHNOLOGY & INFRASTRUCTURE

A fundamental driver of adoption is good digital infrastructure, plus ambition, collaboration, and creativity. Many areas are working on this. One, Cambridgeshire Council, has a goal to achieve superfast broadband for everyone by the end of 2020 and 30% full fibre coverage by 2022. There are also ambitions to improve 2G-5G mobile connectivity and provide free wifi in public areas. This will only come about through creative solutions, for example, by ensuring that ducts for fibre networks are installed during highway work.

PEOPLE - INTERPERSONAL SKILLS MATTER EVEN MORE



People are often the missing factor from technology conversations. Investment in technology provides opportunities to explore new markets and be competitive, but a barrier to implementing new technology is people's skill levels. Soft skills are needed to adopt and adapt to technology: cognitive flexibility; emotional intelligence; ability to build relationships; creativity; critical thinking and so on. However, organisations don't have people with these skills because they look for specific experience rather than the ability to learn new skills. In order

to compete, SMEs need the right kind of people as well as processes, data, and devices. Technology can only be an enabler if there are people that can identify the problem that needs solving and communicate this within the business.

DATA INFRASTRUCTURE

Building capacity

Kao Data is the UK's largest data centre and a key enabler for technology companies and organisations that generate or use large data sets. Data – the platinum of the fourth industrial revolution – is changing the world. 90% of today's data has been created since 2016, in large part due to the Internet of Things. Google's self-driving car, for example, generates 1 GB of data every second.

The decision to build the new Kao data centre was taken when the UK's demand for data storage approached 75 MW per annum and existing data centres in Docklands and Slough were becoming saturated. Backed by 100% sustainable energy sources, this new data centre can deliver high levels of availability, scalability, reliability, and energy efficiency with less complexity.



The location in Harlow, within the UK's Innovation Corridor, provides a huge opportunity to attract new customers. Indeed, the European Bioinformatics Institute committed over 270 PB to Kao last year. Funding for the site was originally provided by Homes England, who saw the value of a data centre to the local economy. Subsequent funding from the Goldacre Noé Group was followed by an investment from Legal & General Capital in 2019, once the first building had been completed.

CONSUMER IMPACT

Rethinking how we do business



What needs to be done to encourage end user adoption? How will customers benefit from this adoption? Customer insight is paramount for understanding consumers' needs in order to ensure that new technologies will add value to their lives. Security and confidence around individuals' data, is important, particularly when the customer journey involves multiple organisations. Silo working is ineffective in these circumstances, but GDPR rules are a challenge for sharing consumer data between organisations. In some areas, such as social media, it is important to clearly communicate the social benefits

of digital solutions so that consumers are given the information they need to make a choice about engaging with the digital future.

TECHNOLOGY

Do we have the infrastructure?

Is the existing technology infrastructure fit for purpose? What can businesses do to accelerate adoption? The government has pledged to provide gigabit broadband to every home. The infrastructure for this pledge will require ducts for fibre networks to be laid under roads, so it will be important to coordinate this effort with water, gas and electricity works to minimise disruption and cost. Government intervention may



be needed to ensure that new highway developments include provision for fibre optic ducts. Demand for superfast broadband would likely come from high-growth businesses, therefore inspiring these businesses to exploit opportunities to improve broadband infrastructure could be a way forward.

RETHINKING CONSUMER BEHAVIOUR

Can technology save the High Street?

The high street of the future needs to be a place to meet and connect with people, not just a place to shop. It should offer services that can't be provided online, for example colour consultations and make up advice, and products like carpets that people need to physically touch. The group discussed how the real-world shop could be better integrated with an online presence, which might involve offering greater discounts in store than online or providing samples of unusual items in store.

But how can these and other organisations be persuaded to adopt technology to survive the modern world? The benefits of change need to be communicated and disseminated throughout entire organisations because digital adoption is as much about people as it is about processes. Early adopters should be consulted, encouraged to spread the word, and lessons learned from their mistakes.

SKILLS

New jobs require new skills, but people skills still matter

What capabilities are required to exploit digital opportunities? Many jobs didn't exist five years ago, so businesses need to invest in people who can re-learn. There are currently four generations in the workplace today (Baby Boomers, Generation X, Millennials and Generation Y), all of whom have different needs and expectations, but all of which need to be engaged in digital adoption, because diversity and inclusion matters. It is important for businesses to recognise new talent and bring it in at the appropriate moment.

INWARD INVESTMENT

Creating the right environment

The UK's Innovation Corridor's digital story can attract further inward investment. Using Kao Data as a case study, people, location and infrastructure could all be used to attract investment, but the best story is the sum of these various parts.

A barrier to investment in the corridor is the number of potentially discordant voices. Having a more joined-up approach and communicating a set of shared reasons to invest in the region could help to attract investment, as has been the case in Singapore.



UK 5G

Building future capacity

The UK5G Innovation Network was set up by the Department for Digital, Culture, Media and Sport to help businesses deploy 5G, particularly in rural and semi-rural areas. It is a form of localised innovation that involves new tools and systems, and which has the potential to change how businesses interact with customers and the services they offer.

For successful deployment, organisations need to consider where they want to be in ten years' time. Ten years ago Kindles were new and 4G networks were still in the planning. These advances ended up revolutionising the publishing and information industry, in a way which was not necessarily foreseen, illustrating just how hard it is to predict what the landscape will be like in 2030.

There are five “digital forces of transformative technologies”:

- mobility (freeing people from desks)
- big data (the Internet of Things)
- social media (including the reviewing industry)
- cloud computing (reducing the need to spend money)
- AI and robotics (reducing the need for humans and processes).

Other issues will influence technological adoption: the need to look after the environment, caring for an ageing population, training people in the right skills, and increasing connectivity whilst ensuring security and identity.

For adoption to be successful, businesses need individuals with a digital mindset, including the following capabilities: agility and resilience (the ability to anticipate and accept change); comfort with ambiguity (as the line between work and personal life blurs); curiosity coupled with an abundance mindset (fearless to experiment); collaborative (so information and data are shared); and embracing of diversity and disagreement (to create safe spaces for people to challenge each other).

Organisations also need to bear in mind that adults find it harder to adopt new technology than teenagers, and that people have a limited attention budget for change due to amount of training that needs to be done. Creating a habit of change – little and often – is the best strategy to adopt.



CONCLUSION - CALLS FOR ACTION

Technology must make things better for people, rather than people having to learn to live with technology


The high street is one striking example of how disruptive digital technology can be and businesses have had to adapt or disappear.

Overall the key messages and calls for action are for leadership at several levels:

- from government, setting the right policy framework to incentivise investment in infrastructure;
- from business to increase the take-up and adoption of technology to improve productivity;
- from local government, to bring people together, set a vision for the locality and to create an investor-friendly environment.

And most importantly to remember this is still about people. Giving people the right skills and the opportunity to raise their skills – recognising the digital world will make interpersonal skills more important, not less.





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