



A Brave New World?

**Why business must
ensure an inclusive
Digital Revolution**

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Foreword

The digital transformation of the UK economy is a significant opportunity to drive growth and prosperity for the betterment of both business and citizens. It also offers the chance to reduce poverty and inequalities, improve livelihoods and enable us to better manage growth on a finite planet. However, this digital transformation also presents challenges to society. Some forecasts suggest that as many as ten million jobs (35 per cent of today's UK workforce) could be lost due to automation by 2035 alone. And the negative impacts of reduced face-to-face interactions and hyper-connectivity are only just starting to be understood.

In order to understand and define the role of responsible business in this digital era, Business in the Community is launching a new programme that will, over the coming months, combine thought with action and set a new agenda for UK businesses. This paper serves as a call to action for all UK businesses, NGOs and policymakers, as it is only through collaborative and innovative approaches that we will benefit fully from the opportunities provided by digital transformation. Business in the Community is committed to leading action on this agenda and we look forward to working with you to drive businesses towards ensuring an inclusive digital revolution.

Antony Jenkins
Chairman, Business in the Community
Founder and Executive Chair of 10x Future Technologies Ltd

The UK is a world-leading digital economy. We have a growing body of digital technology industries that positions us competitively on the global stage, driven by an excellent pool of talent. Digital transformation is set to drive substantial economic growth for the UK too – jobs in digital technology pay on average 36 per cent more than the UK's national average, increasing levels of disposable income and driving future consumption.

Yet the value that digital transformation offers will not be sustained unless we address its potential downsides. It is crucial for UK businesses to work together, with government and the non-profit sector, to tackle head-on the technology skills gaps that 72 per cent of large companies and 49 per cent of UK SMEs are currently suffering from. We must also work to build trust and ensure the benefits of the transition to digital technology are universally accessible. Key to this will be innovating together and drawing on existing expertise from across the country. Business in the Community has a fundamental role to play here, catalysing stakeholders and driving towards new solutions. In doing so, we can help ensure an inclusive digital revolution as well as unlock new sources of business value.

Olly Benzecry
Managing Director, Accenture UKI

Contents

What will our digital future look like?

4

1. Digital promises huge value for UK industry and society

6

2. However, digital presents a number of challenges that must be addressed

10

3. Business has the opportunity to help secure an inclusive digital revolution

14

Ten questions for business leaders to ask themselves

20

4. Business in the Community will lead this agenda

22

Endnotes

26

What will our digital future look like?

The opportunity

An estimated

720,000 lives

could be saved from road traffic accidents thanks to connected cars, and

1.6 billion people

could be connected to e-health services globally in 2030.

Digital technologies could help provide better access to education for

450 million people worldwide.

Forecasts suggest there will be at least

30 billion

connected devices globally by 2025 – other estimates are as high as

500 billion.

Artificial intelligence could increase labour productivity in the UK by

25% by 2035.

Smart agriculture could reduce food waste by

20%

globally in 2030.

Digital solutions could help reduce global oil consumption by

70%

and carbon emissions by

20%

in 2030.

The Industrial Internet of Things is predicted to add

£244 billion

to the UK's GDP by 2030.

The challenge

Electronic waste is one of the fastest growing waste streams in the world, and is expected to reach

50 million tonnes

in 2018 – up 21 per cent from 2014.

By 2022, women will still only represent

30%

of the UK's digital workforce.

4 billion

people globally remain without access to the internet.

The ICT industry is forecast to contribute nearly

2%

of global emissions in 2030.

Forecast job losses due to automation range significantly – one prediction suggests as many as

10 million

job losses in the UK by 2035.

As many as

900,000

jobs could be lost in the UK retail sector alone by 2025.

It is forecast that

6.2 million

people in the UK will not have the basic skills required to regularly use the internet for themselves in 2020.

**Digital
promises huge
value for UK
industry and
society**





The UK is well positioned to realise the potential benefits of digital transformation – driving economic growth, tackling disadvantage and improving lives.

The UK has strong foundations on which it can build a leading digital economy

- **Dynamic digital industries:** Turnover of digital technology industries grew 32 per cent faster than the rest of the UK's economy from 2010–2014, reaching £161 billion in 2014. Notably, 75 per cent of digital technology businesses operate outside of London.¹
- **A vibrant start-up culture:** The UK is the most successful European country at producing 'unicorns' (high-value technology-focused start-ups) – it has 14 to date, in total valued at more than £32 billion.² The European Digital City Index shows London as the top city in Europe for supporting digital entrepreneurs.
- **Leader in e-commerce:** The UK had the highest online retail market share globally in 2015 (at 15.2 per cent), while it is also home to the largest e-commerce market and the highest online shopping penetration rate in Europe.³
- **World-class education:** Three UK universities are in the top ten globally for Mathematics or Engineering, Technology and Computer Sciences.⁴ Students in the UK score above the OECD average on Science⁵ and more adults have computer experience than the OECD average.⁶
- **Forward-looking government support:** The UK government is providing policy and regulatory support to the digital economy. For example, the Digital Economy Bill includes a new Broadband Universal Service Obligation as well as new protections for intellectual property.⁷

Digital transformation can drive future economic growth for the UK

- **Boosting GDP:** The Industrial Internet of Things (IIoT) could add £244 billion to the UK's GDP by 2030; with additional measures (for example, hiring more people with skills related to the IIoT) this figure could grow to £428 billion.⁸
- **Enhancing productivity:** Artificial intelligence could increase the annual UK gross value added growth rates by 1.4 percentage points – from 2.5 per cent to 3.9 per cent – and also increase labour productivity by 25 per cent, by 2035.⁹
- **Paying better:** Jobs in digital technology pay on average 36 per cent more than the UK's national average, increasing levels of disposable income and driving future consumption.¹⁰

“Digital should have great promise in terms of improving productivity and driving economic growth, not just within the digital technology industries but also throughout the rest of the economy. Everyone is using some form of digital technology.”

– Charlotte Hogg, COO, Bank of England

Digital transformation can also help to reduce inequalities and improve livelihoods

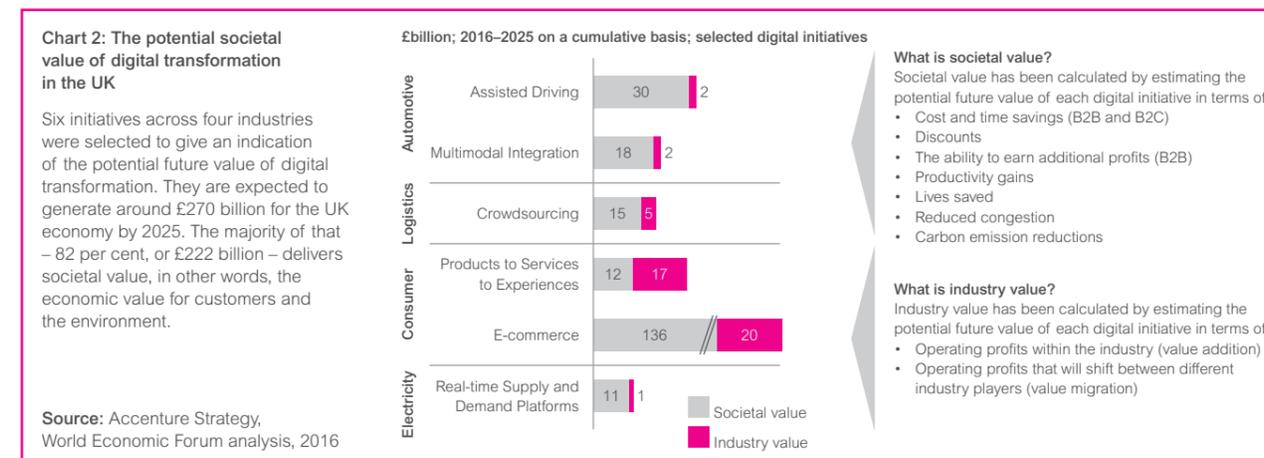
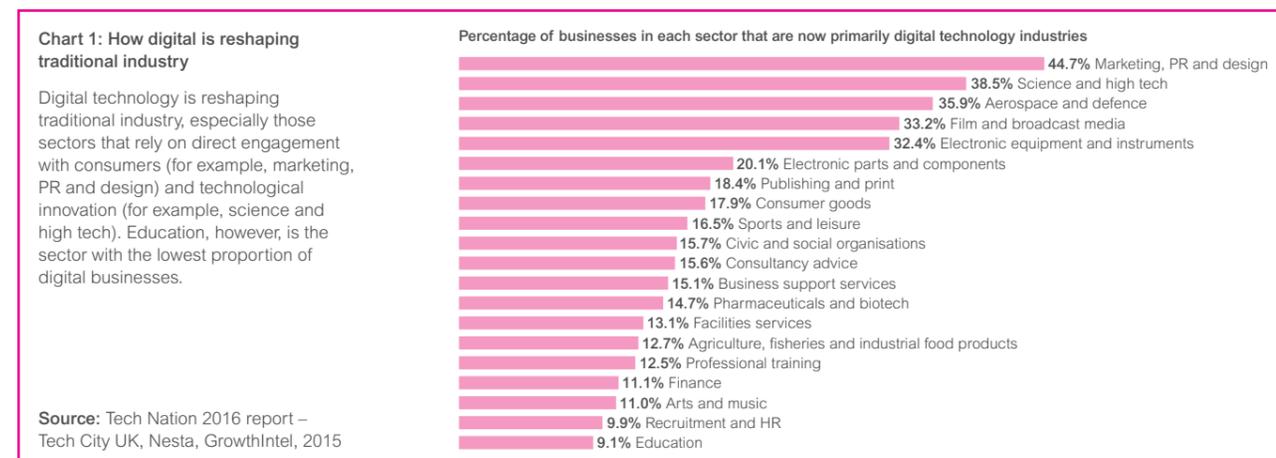
- **Creating new jobs:** There were 1.56 million jobs in the UK's digital technology industries in 2014, with new jobs growing nearly three times faster than the rest of the economy.¹¹
- **Enhancing societal outcomes:** Digital technology has the potential to deliver societal benefits, such as saving lives (through assisted driving) and saving consumers time and money (through e-commerce). According to Accenture Strategy analysis for the World Economic Forum, the total societal value of these benefits for the UK economy, based on digital initiatives in just a small sample of industries, could be as much as £222 billion by 2025 (see chart 2).¹² In reality, the total figure across all industries could reach trillions.
- **Enhancing environmental outcomes:** Digital technologies can help create efficiencies in a wide range of industries. For example, smart water management technologies can reduce water consumption, including network losses, by up to 12 per cent¹³ while smart agriculture could reduce food waste by 20 per cent in 2030.¹⁴ The ICT industry will also enable the reduction of emissions of greenhouse gases from other industries – resulting in emission reductions 12 times greater than the direct footprint of the ICT industry itself. In the UK, ICT will create a 24 per cent reduction in national carbon emissions annually by 2030.¹⁵
- **Opening up education:** In a 2016 study of higher education in Europe, the UK was the only country where institutions are more likely to offer open education

(for example, Massive Open Online Courses or MOOCs) than not to offer them. Thirty-five per cent of Higher Education Institutions in the UK reported offering MOOCs, equal highest in Europe with France and Spain.¹⁶

- **Enabling smarter working:** The ability to work flexibly and in collaboration with new technologies opens up new employment opportunities while also driving productivity. For example, MindMeld (see case study 1).¹⁷
- **Promoting competition:** As the cost of digital technology falls – the price of cloud storage has declined by around 32 per cent between 2013 and 2014¹⁸ – many companies can now enter previously inaccessible markets. A 2014 Accenture survey found that nearly two-thirds of businesses globally were looking to entirely new industries for future sources of growth.¹⁹
- **Increasing supply chain transparency:** Digital technologies such as the IIoT and robotics can allow products and components to be tagged, tracked and traced throughout their entire lifecycle.

Case study 1: Increasing productivity through artificial intelligence

MindMeld helps customer service agents work smarter by listening to conversations and suggesting effective responses in real time. Not only does this human-machine collaboration enhance the customer experience, but it can also reduce call time, make the agent more effective, therefore reducing costs and improving overall efficiency for the call centre.



However, digital presents a number of challenges that must be addressed



The value delivered by digital transformation will not be sustained unless a number of key challenges are addressed. This call to action focuses on five areas in particular, reflecting the views of business leaders consulted as part of this research.



Building skills to enable all in the workforce to participate in the new economy

- Digital transformation will create a huge shift in terms of the jobs that are available and the skills required to do them, resulting in significant job losses in certain sectors. This could put particular pressure on local communities where current jobs are concentrated in one sector (for example, retail). Furthermore, many of those new jobs that are created may not provide the favourable terms and conditions that we have come to expect from quality jobs.
- Many roles will change fundamentally, requiring businesses to help current and future employees develop new skills and capabilities. Today, 72 per cent of large companies and 49 per cent of SMEs are currently suffering technology skills gaps.²⁰
- The rise of more flexible working patterns, known as the 'gig economy', does not necessarily benefit all equally – businesses will need to balance the desire for a more liquid workforce with the provision of appropriate employee protection.

“Technology is all well and good but it has to serve human beings rather than the other way round. Robotisation does not happen overnight – we have to take account of humans in all of this.”

– Estelle Brachlianoff, Senior Executive Vice President, Veolia UK & Ireland (Responsible Business of the Year 2016)

“We don't do a very good job of helping those left behind by business paradigm shifts and helping them succeed in the new world – for example, who is helping traditional cab drivers to succeed in an Uber world?”

– Alex Lubar, CEO, McCann London

Stakeholder concerns about the ethical use of digital

- The rise of data-driven business models and the increasing sophistication of technology – an integral part of digital transformation – has eroded trust in business. Ninety-two per cent of British internet users report that they worry about their privacy when using the internet²¹ while 48 per cent of UK consumers would be more likely to purchase from brands that are transparent in their data practices.²²
- Digital transformation is creating a challenge for retailers in the area of product provenance – it has raised consumer awareness of boycotts and corporate reputations through organisations such as The Ethical Consumer and groups such as Good Guide and BuyCott.
- As businesses' use of digital technology becomes more sophisticated, maintaining trust will be more difficult. Sixty-two per cent of UK business leaders believe that the use of emerging digital technologies (for example, artificial intelligence, robotics and virtual reality) will make it harder for their businesses to be trusted.²³

Digital's environmental footprint

- While digital transformation can help reduce carbon emissions and mitigate other environmental issues, digital technology has its own environmental footprint that presents a substantial challenge. For example, electronic waste (devices and equipment) is one of the fastest growing waste streams in the world; this is driven by decreasing product lifespans and increasing consumption, amongst other factors, and reached 41.8 million tonnes in 2014.²⁴ Furthermore, around 70 per cent of collected electrical waste and equipment ends up in unreported and largely unknown destinations.²⁵
- Similarly, as volumes of data grow exponentially, it has its own environmental impact. Data centres consumed between 1.5 per cent and two per cent of electricity globally in 2011²⁶ and estimates put the total consumption of the ICT sector at close to ten per cent of the global total,²⁷ making the ICT sector a significant contributor to climate change. It is forecast to have a footprint of 1.97 per cent of global emissions in 2030.²⁸

Uneven access to digital technology and its benefits

A significant proportion of people and organisations in the UK remain offline or fail to use digital technology in ways that could benefit them fully, presenting a challenge for many sectors as they increasingly offer digital-only services. The benefits of digital transformation are also unevenly distributed, with wealthier, more educated people more likely to be able to harness it to their advantage.

- Despite the UK being the market with the highest online shopping penetration rate globally at the end of 2015, 13 per cent of the UK's population had not purchased a product online in the month before the survey was conducted.²⁹
- Twenty-four per cent of UK SMEs neither have their own website, nor are they listed in online directories.³⁰
- Eleven per cent of households in Great Britain do not have internet access³¹ while 16 per cent of adults do not have the required level of basic digital skills to buy items or services from a website.³² Access is unevenly distributed across age groups – two-thirds of all digital exclusion in the UK is among those aged 65 and over, and just 11 per cent of online adults are in this age group.³³
- The rise of digital technology risks concentrating wealth amongst the most skilled – those with the abilities to manage complex cognitive or interpersonal tasks such as designing and running a digital business – while eroding demand for mid-skilled employees.³⁴

Pressure on communities and well-being

- The shift to online services, in particular, has changed the physical environment in which we live, work and socialise, reducing levels of face-to-face interaction and challenging existing perceptions of community for UK residents.
- Prevalence of digital interactions, such as on social media, has been linked to symptoms of mental ill-health in children³⁵ and rising levels of anxiety and depression among teenagers.³⁶ This in turn places pressure on health services. The number of children and young people who have presented to A&E with a psychiatric condition has more than doubled since 2009.³⁷
- Digital platforms offering holiday or short-let accommodation have been criticised for contributing to the disruption of traditionally residential neighbourhoods and accelerated gentrification of areas in cities such as Amsterdam, driving up property prices as people will pay more for a property if they can make extra money renting it out.³⁸

“More flexible working patterns will be critical. Twenty per cent of the over 50s in the UK are carers – many of them end up leaving the workforce because they cannot combine an inflexible job with caring responsibilities.”

– Andy Briggs, CEO, Aviva UK and Ireland Life, Chairman of Global Life and Chair of Business in the Community's Age at Work Leadership Team

**Business has
the opportunity
to help secure
an inclusive
digital revolution**





The corporate sector cannot solve these problems by itself. But businesses can make a significant contribution to them – both individually and in collaboration with partners from government and the non-profit sector.

Over the coming months, Business in the Community will help identify the implications and opportunities of digital transformation in order to define a new agenda for responsible business in a digital era. But in order to stimulate discussion and debate, there are three key opportunities where businesses could focus.

Opportunity 1: Enabling the rapid transition of employees from traditional jobs to the high-quality jobs of the future

- **Building people's digital skills:** Digital transformation will help create many new opportunities for innovative products and services but their development will require new skills in the workforce. Workers losing jobs in existing industries could find themselves locked out of new opportunities as their skills may not be directly transferable. Concurrently, all people – whether they are young or old, male or female, in a minority or not – will need the right skills to be able to enter the workforce.
- **Managing job loss:** Adoption of digital technologies will result in significant changes to the employment landscape. The British Retail Consortium estimates that as many as 900,000 jobs may be lost in the retail sector alone by 2025, although the remaining jobs will likely be more rewarding and productive.³⁹ Business in the Community's Healthy High Streets programme illustrates how collaboration and support can help businesses manage the trend of declining footfall. Since the programme launched in 2014, towns have reported nearly 6,000 new jobs.⁴⁰

- **Creating a more diverse workplace:** Digital transformation is fundamentally changing the nature of work. Business has an opportunity and responsibility to ensure that the future digital economy is diverse and open to all. This is a particular challenge, given the under-representation of women in the digital workforce. Ensuring that older workers are also able to access employment opportunities is a pressing priority, given the demands that demographic shifts will place on the UK economy over the coming years.

“I believe that businesses have a responsibility to support the next generation of tech talent. We need to invest in training and recruitment not only to support the need for digital skills today, but to encourage more young people to pursue their interests in STEM and join this exciting industry.”

– Andy Lawson, SVP, UKI Enterprise Business Unit and UK MD, Salesforce UK

Leading practices

- **Enhancing the accreditation of non-traditional forms of education.** For example, last year, to avoid bias against key talent from disadvantaged backgrounds, PwC removed the UCAS tariff system as an assessment tool for the majority of their undergraduate and graduate opportunities. Instead, they use online behavioural and aptitude assessments. Already, one year on from making these changes, there is increased diversity among student applicants and recruits.⁴¹
- **Providing agile, on-the-job training to ensure skills remain relevant.** For example, Google's Digital Garage initiative provides free training on digital skills such as website design and online marketing. This has yielded business benefits for SMEs, including 50 per cent sales growth rates.⁴²
- **Creating opportunities to widen access to the digital economy and create new pathways into employment.** For example, Digital Mums (see case study 2).⁴³

Opportunity 2: Ensuring that digital technology is used to enhance transparency of business practices and operations, building trust with consumers and wider stakeholders

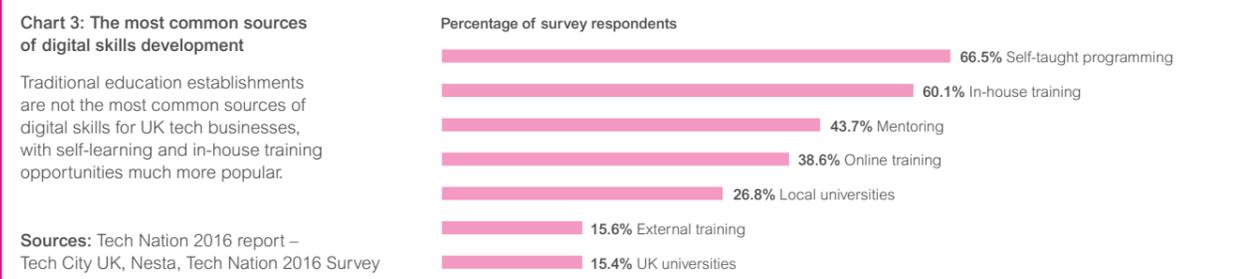
- **Utilising data for good.** More data is being produced and used than ever before. Ninety per cent of the world's data has been created over the last two years.⁴⁴ Responsible businesses should use data innovatively to build trust by using it to tackle social and environmental issues along with their bottom line.
- **Addressing consumer concerns about personal data.** Consumers are also increasingly aware of the value of their personal data and of the risks to them if data is not handled appropriately. New business models and practices are emerging that place fair handling of data and sharing of value arising from that data at the heart of their value proposition. Businesses that do not adopt these practices risk the erosion of their consumers' trust and ultimately the migration of these consumers to competitors who have approaches more to their liking.
- **Promoting responsible practices across the value chain.** Businesses draw on increasingly complex webs of suppliers to support their products and services. These complex relationships can make it difficult to know who suppliers are, and whether they are complying with expected good practices, for example, on working conditions or avoidance of child labour.

Leading practices

- **Using data to tackle social issues.** IBM's World Community Grid harnesses the computing power of a network of thousands of volunteers' ICT devices to support scientific research. The computer network is used to run complex simulations of the impact of proposed responses to societal challenges, enabling research to be more targeted and efficient. Current research covers issues such as the Zika virus, TB, cancer, energy and AIDS.⁴⁵
- **Increasing levels of transparency around how they use customers' data, who they share that data with and how value is generated from it.** For example, Apple has a dedicated section of its website explaining clearly how they use customer data and their commitment not to monetise it.⁴⁶ The Direct Marketing Association is striving to build trust across its members' organisations by introducing an additional compliance audit by an independent third party for all member companies that buy and sell data, driving responsible approaches to data-driven marketing.⁴⁷
- **Using digital to drive transparency across supply chains.** Businesses should use digital technology to enable greater transparency across their value chain, encouraging all players to adopt best practices. For example, clothing manufacturers such as G-STAR, Anvil, Rapanui and Howies disclose all their suppliers and provide supply chain maps showing the organisations involved in manufacturing their products.⁴⁸

Case study 2: Using digital to help mothers to re-enter the workforce

Digital Mums is an online service that provides women with digital marketing skills training, enabling them to return to work in a flexible way that they can fit around their childcare requirements. Digital Mums connects upskilled women with a network of SMEs that need to access these skills on a flexible basis.



Opportunity 3: Finding new ways to deliver social and environmental benefits while creating business value

- The opportunities that digital transformation creates for radically different ways of doing business can drive societal benefits including reducing environmental footprints, enabling internet access for all and enhancing community cohesion, all while creating new value for the private sector.
- Focusing efforts on addressing critical social and environmental issues can be a unifying purpose for responsible businesses, by driving the highest performance from employees and finding creative solutions which ultimately drive more success. Digital can play a critical enabling role here – digital solutions play a critical role in more than 50 per cent of the 169 targets that sit beneath the United Nations' Sustainable Development Goals, while offering around £7 trillion in additional revenues and reduced costs.⁴⁹
- Digital transformation presents a once-in-a-lifetime opportunity for many businesses to transition to sustainable (including circular) business models, enabling them to reduce their input costs, manage their supply chain risks and become more competitive in their sectors.⁵⁰

Leading practices

- **Quantifying the environmental and societal 'value at stake' whenever considering potential investments and prioritising those that maximise the value delivered to society as well as to business.** BT has recently quantified the role of ICT in reducing carbon emissions in the UK – Smart Manufacturing has the potential to deliver 41 mega-tonnes of CO₂-equivalent abatement in 2030.⁵¹
- **Seeking opportunities for digital technologies to enable communities to benefit from spare capacity in businesses' assets or capabilities.** Businesses are exploring the potential to put shared capacity in their digital assets with the communities in which they operate, reducing costs for those communities and enabling greater access. For example, Karma Go (see case study 3).⁵²

Case study 3: Sharing data to increase access

Karma Go encourages users to share their mobile WiFi hub's hardware and data connection with other users by giving the hub owner financial account credit or additional data allowance each time a new user connects to their device (in other words, each user has their own account but only some users have their own hardware). This has the potential to enable widespread and affordable internet access in more than 460 US cities, reducing environmental impact through minimising demand for hardware and lowering costs for the network provider through reducing pressure on logistical systems and processes.

- **Increasing the market size for digital products and services and stimulating the revitalisation of the high street.** For example, EE's 'Techy Tea Parties' (see case study 4).⁵³ While not explicitly designed to draw-in new customers, the Parties help create trust amongst participants that may result in them returning to EE as paying customers in the future.

Case study 4: Increasing digital skills among older people

EE's Techy Tea Parties are run in partnership with Age UK, using EE's high street stores to help older people learn, for free, how to use mobile/tablet devices for basic tasks such as communicating and shopping, along with how to keep safe and secure online.

Case study 5: Utilising space data capacity

Virgin Mobile Australia Data Gifting enables any Virgin Mobile customer to share their data allowance with any other customer on a postpaid mobile plan. Customers can share their unused data with friends or strangers that can't afford their own data plan, increasing access to online digital services.⁵⁴

Ten questions for business leaders to ask themselves

1. How does

digital transformation

impact the responsible business agenda, both in terms of new risks and opportunities?

2. What element of the inclusive

digital revolution

do we want our brand to be known for championing, and how will we drive progress and communication on that?

3. What value

is at risk

if we do not achieve an inclusive digital revolution for the UK?

4. How will we change our governance and accountability structures to drive improved stakeholder trust in

digital technologies

across the business?

5. How can we deliver the right

digital skills

training across our workforce?

6. What spare capacity is there in our

digital assets

that we can helpfully share with local communities/SMEs?

7. How can our recruitment and

training processes

recognise and support non-traditional learning?

8. How can we

use the data

that we are already collecting (for example, customer data) to help address specific societal challenges?

9. How can we ensure our products and services have a

positive net impact

on the environment?

10. How can we

work more effectively

with policymakers, industry peers and others in order to address these challenges collaboratively?

Priorities for responsible business in a digital age



This report marked the beginning of the conversation. Businesses consulted agreed on the necessary actions to ensure an inclusive digital revolution, and defined how they would deliver on this goal.

The priorities below were published in response to this report in April 2017

<p>Business Priority 1 Protect, support and empower customers</p> 	<p>Simplify data practices Make data sharing and privacy clear and visible from the start.</p>
<p>Business Priority 2 Embrace the changing nature of work</p> 	<p>Be inclusive Build digital access, capability and confidence to allow all to benefit from the digital economy.</p>
<p>Business Priority 3 Deliver innovative products and services that serve society</p> 	<p>Enable better choices Develop solutions that help people to make more informed decisions on their health, education and finances.</p>
<p>Business Priority 4 Drive a transparent, inclusive and productive value chain</p> 	<p>Prepare employees Provide digital skills and lifelong learning to create an adaptable workforce.</p>
	<p>Anticipate automation Create new roles, where technology complements humans, and support communities to manage the transition.</p>
	<p>Extend employer responsibility Provide security, job protection and benefits for the growing 'gig' economy workforce.</p>
	<p>Design with purpose Ensure technology reflects human values and corrects for unconscious bias.</p>
	<p>Promote sustainable consumption Transition to new business models that cut waste and increase asset productivity.</p>
	<p>Partner to solve Work cross-industry to design and scale solutions that will benefit society.</p>
	<p>Empower suppliers Provide digital solutions and training to achieve minimum social and environmental standards across the value chain.</p>
	<p>Click green Minimise the environmental impact of operations, committing to 100% renewable energy and zero e-waste.</p>
	<p>Track, trace and resolve Use digital technology to address corruption, exploitation and environmental harm.</p>

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Endnotes

1. Tech Nation, 2016.
2. Tech City UK, For Investors, <http://www.techcityuk.com/investors/>
3. Online retail in Europe, the US and Canada 2015–2016 RetailMeNot, 2015.
4. Academic Ranking of World Universities, <http://www.shanghairanking.com/>
5. Programme for International Student Assessment (PISA), OECD, 2012.
6. Programme for the International Assessment of Adult Competencies (PIAAC), OECD, 2015.
7. Digital Economy Bill, Department for Culture Media and Sport, 2016.
8. The Growth Game-Changer: How the Industrial Internet of Things can drive progress and prosperity, Accenture, 2015.
9. Why Artificial Intelligence is the Future of Growth, Accenture, 2016.
10. Tech Nation, 2016.
11. Tech Nation, 2016.
12. Digital Transformation of Industries, WEF/Accenture Strategy, 2016.
13. The benefits of smart meters, Thames Water, 2015.
14. #SMARTer2030, GeSI and Accenture Strategy, 2015.
15. The role of ICT in Reducing Carbon Emissions in the UK, BT, 2016.
16. How are higher education institutions dealing with openness?, European Commission, 2016.
17. IQ plus EQ: How technology will unlock the emotional intelligence of the workforce of the future, Accenture, 2015.
18. This one chart shows the vicious price war going on in cloud computing, Business Insider UK, 2015.
19. Remaking Customer Markets, Accenture, 2014.
20. Digital Skills for the UK Economy, Department for Culture, Media and Sport and Department for Business, Innovation and Skills, 2016.
21. Press Release: 45% of British Consumers Think Online Privacy is More Important than National Security, TRUSTe, 2015.
22. Consumer Attitudes toward Transparency in Data Collection, Evidon, 2012.
23. Leadership and Digital Ethics business leader survey, Accenture Strategy, 2016.
24. Global E-Waste Volume Hits New Peak in 2014: UNU Report, United Nations University, 2015.
25. Global Partnership on Waste Management, United Nations Environment Programme, accessed October 2016.
26. How dirty is your data?, Greenpeace, 2011.
27. The cloud begins with coal, Digital Power Group, 2013.
28. #SMARTer2030, GeSI and Accenture Strategy, 2015.
29. Worldwide online retail rate 2015, by country, Statista, 2016.
30. Digital Capabilities in SMEs: Evidence Review and Re-survey of 2014 Small Business Survey respondents, Department for Business, Innovation and Skills, 2015.
31. Statistical bulletin: Internet access – households and individuals: 2016, UK Office for National Statistics, 2016.
32. Basic Digital Skills UK Report, Go ON UK, 2015.
33. Digital inclusion evidence review, Age UK, 2013.
34. To those that have shall be given, The Economist, 2014.
35. Insights into children's mental health and well-being, UK Office for National Statistics, 2015.
36. Pressure to be available on social media may harm teenagers, British Psychological Society, 2015.
37. Mental health statistics, Young Minds, 2016.
38. Amsterdam strengthens grip on tourist rentals, Municipality of Amsterdam, 2016.
39. Retail 2020, British Retail Consortium, 2016.
40. Healthy High Streets, BITC, 2016.
41. PwC scraps UCAS points as entry criteria for graduate jobs, PwC, 2015.
42. The Digital Garage, Google, 2016.
43. Digital Mums website, 2016.
44. IBM, What is Big Data?
45. World Community Grid, IBM, 2016.
46. Apple's commitment to your privacy, Apple, 2016.
47. DMA extends compliance process for businesses that buy or sell data, Direct Marketing Association, 2016.
48. Corporate websites, G-STAR RAW, Anvil, Rapanui, Howies, 2016.
49. Rapanui, Howies, 2016.
50. #SystemTransformation, GeSI and Accenture Strategy, 2016.
51. Circular Advantage – Innovative Business Models and Technologies to Create Value in a World without Limits to Growth, Accenture, 2014.
52. The Role of ICT in Reducing Carbon Emissions in the UK, BT, 2016.
53. Karma Go, Karma Mobility Inc, 2016.
54. EE Techy Tea Parties, Business in the Community, 2015.
55. Data Gifting, Virgin Mobile Australia, 2016.

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