

Embracing Digital in Every Sector

CBI Survey

“Instead of one sector called digital – all sectors should be digital”

*Carolyn Fairbairn, CBI
Director-General*

The digital revolution is in full swing, presenting a real opportunity for businesses

Digital technology has revolutionised the way each of us lives our lives, from our online shopping habits, to the way we manage our money and the way we watch the latest box office releases, and the UK has been at the frontier of adapting by topping the league tables on ecommerce, transforming our delivery of financial services and home entertainment.

In parallel, digital technology has also changed a range of business processes from basic invoicing, through to big data analytics and product tailoring. The transformative effect this has had on the relationship between businesses, customers, products and services, means that all businesses are having to think about how they adopt and utilize technology to interact with consumers and with each other.

As a result, all businesses now need to be ‘digital’ businesses. Be they dairy farmers and construction companies, or new and different online business models, companies are more reliant than ever before upon digital technology to streamline their operations for productivity, reach their customer base to grow their sales, and create jobs as business thrives.

A ‘digital divide’ in the UK could hamper our current global standing

However, despite the UK’s status as a world leading digital economy in ecommerce and creative terms, there is still more that we could achieve by increasing digital adoption across more sectors and more geographical hubs in different parts of the UK.

For instance, according to the World Economic Forum’s Global Competitiveness Report (WEF GCR) 2015-16, the UK ranks 5th/140 on availability of technology, yet we are only 14th based for company level adoption.

To get to the bottom of this disconnect – of great technology, but limited adoption – the CBI has surveyed its membership to understand business perceptions of technology across all sectors, their levels of investment and the barriers that they face in doing more to digitise, and the divide that is emerging between the early adopters and those that aren’t yet out of the starting gate.

So what drives the success of already digital businesses, and what can others do to take advantage of the digital revolution?

There are three magic ingredients businesses need to become truly digital – but a lack of these presents an obstacle to those businesses struggling to keep up

Whilst early adopters and trend setters – so-called ‘pioneering’ businesses - in technology adoption are ploughing ahead at a phenomenal rate, some businesses and sectors run the risk of being left behind. When it comes to the digitisation of our economy - and boosting productivity, growth and job creation - a broad mix of ingredients is needed, and they are really about businesses getting the basics right:

People & Know-how

Businesses that are furthest along their digital journey tend to have the right people in leadership with a range of digital know-how in the workforce. This know-how could be coding, data science or digital marketing, but there needs to be an appreciation and understanding in the boardroom, and not just at the front line, that these are the skills that are needed. This will require businesses to diversify their talent pipeline and government to ensure that their approach to in-work skills and digital education in schools supports building this pipeline.

Investment

There is no shortage of good ideas, technology inventions or ways to utilize technology, but what is often missing is the business case to spend the money. Whether it’s the right finance mix to turn start-ups into scale-ups, the right level of investment in innovation or simply the know-how to make sure a business can ensure return on investment, it is clear that money matters. Adopting digital technology is an investment for a business, not a cost, and making the right business case to invest in a new technology is an absolute must.

Tools & Infrastructure

From fast and reliable internet connections, to online platforms to take their product to market, and the right cyber security products, tools and processes, what businesses need to become digital are the basic building blocks needed to get started. For businesses, understanding and taking advantage of these tools is critical.

Businesses must act now to remain competitive as the digital revolution comes full circle

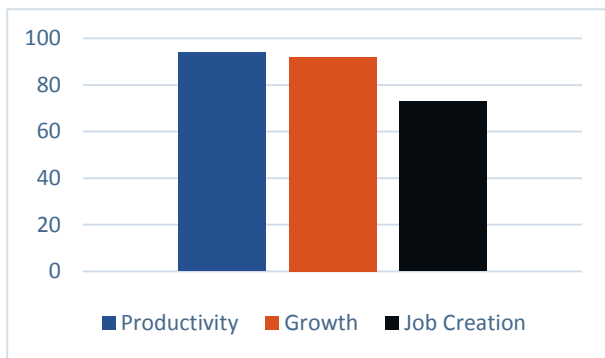
- Businesses getting started on their digital journey should consider giving technology a strategic face, in the form of Chief Digital or Technology Officers, sitting on the board and responsible for driving digital strategy from the top down.
- Businesses should diversify the advice they are getting at board level, and look to new avenues to inject digital skills at the strategic level. Non-Executive Directors are a good route, and whilst it won’t be right in every circumstance, businesses should consider their diversity in terms of age, industry and experience to tap into the next generation of business leaders and unlock know-how across sectors.
- Collaboration between businesses is critical, and pioneering businesses could provide mentoring and coaching to those that need help. The know-how needed exists in the business community, but we need to pull together to make sure that it multiplies.

Chapter 1: The Opportunity

Making the most of technology creates jobs, boosts productivity and promotes growth

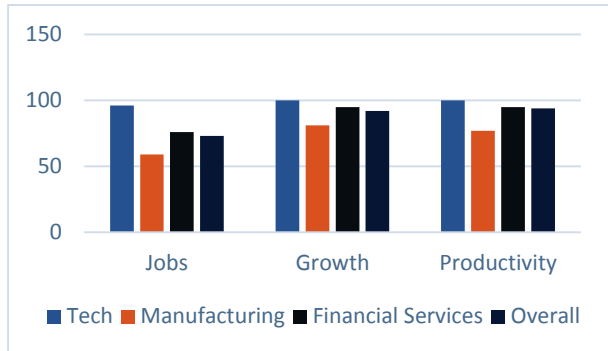
There is much debate about a productivity problem in the UK economy, but for businesses the more digital we become, the more productive we are likely to become. In fact, agreement in the business community about this is near-universal, with 94% agreeing that digital technologies are a critical driver of increased productivity. They also agree about the economic benefits that technology can deliver in terms of economic growth (92%) and job creation (73%).

Exhibit 1: Top benefits of technology for the UK economy



This is true regardless of sector, but some recognise the opportunity more than others. Unsurprisingly, the technology sector are more inclined to think that digital adoption will create jobs (96%) compared to manufacturers (59%), where there is more concern about technology being used to replace jobs. Whilst many businesses are now seeing the need to create highly skilled jobs in data analysis and software development, the manufacturing sector is not so far along this journey. Manufacturers do however recognise the productivity gains that will result from digitising and automating their systems, processes and supply chains.

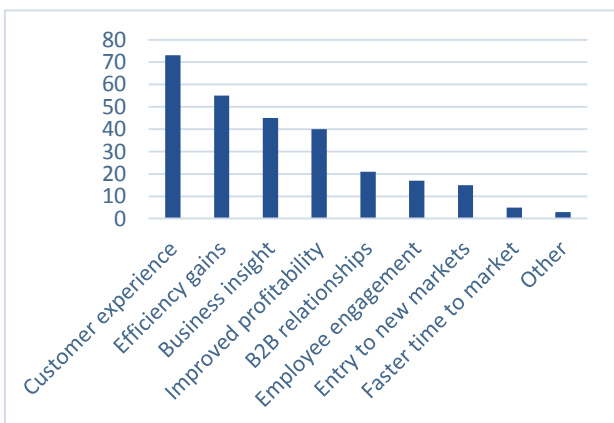
Exhibit 2: Economic benefits of technology by sector



Customer efficiency and greater efficiency are significant prizes for digital adopters

The perceived benefits of greater digital adoption are not just at the UK economic level – digital transformation is real for businesses and the growth of their bottom line. And it’s not all about automation and efficiency – 55% do indeed cite efficiency gains as one of the more important business benefits, but nearly three quarters place the most importance on the improved customer experience that technology can help to deliver (73%).

Exhibit 3: Top benefits of technology for businesses



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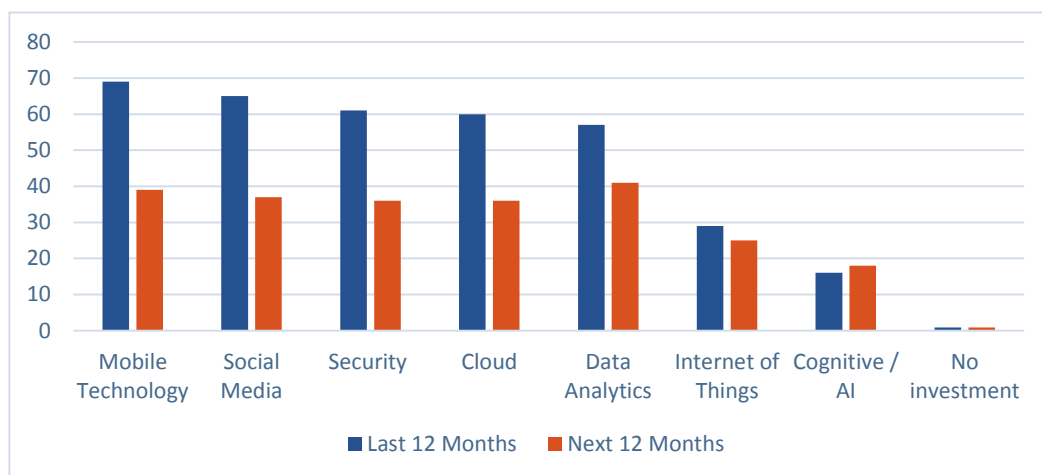
This is unsurprising given the consumer-led digital revolution we are experiencing in the UK, and businesses are genuinely client centric, responding to this revolution by designing a better online experience for their customers - whether they're members of the public accessing an online marketplace, or a business customer in a complex supply chain.

The 'customer is queen' philosophy means gaining greater business insight through data is recognised as a key benefit of technology by nearly half of businesses (45%). However, data is fast becoming the most important commodity in the digital age and so the challenge is set for the remaining 55% to push the importance of big data up their agenda.

Many businesses are investing in technology in order to reap the rewards

Businesses are certainly investing in the technology that will better help them reach, and understand, their customers. Last year, 65% of businesses invested in social media based technologies, and among the most invested in technologies by business last year were the cloud (60%) and data analytics (57%).

Exhibit 4: Business investment in technology



Data isn't just a handy way to understand customers and improve services, it is also critical to efficiency and system improvement in the modern digital business environment. Just shy of a third of businesses invested in the internet of things last year (29%) and just under a fifth invested in cognitive or artificial intelligence technologies (16%) – both of which thrive on data to drive productivity and efficiency and are likely to experience an upturn in those looking to invest in the year ahead.

Chapter 2: The New ‘Digital Divide’

Some businesses are embracing the digital revolution, but too many risk being left behind

Despite the high levels of agreement in the business community that greater technology adoption will boost the economy and individual business performance, it is a minority of businesses that are taking *full* advantage of this opportunity.

There is a new ‘digital divide’ – different to that which we have seen previously on connectivity - between those businesses that are at the frontier digital transformation and keeping the UK ahead on the global ecommerce and technology leader boards, and those businesses who have further to go before they can call themselves a digital business.

When asked to categorise their behaviours and attitude toward technology adoption and investment, businesses categorise themselves into roughly equal, but rather far apart, thirds. Only 30% saw themselves as ‘Pioneers’; those businesses that are the early adopters of the latest technologies, and forging ahead in the digital revolution.

A similar number again (31%) place themselves at the opposite end of the scale, describing themselves as ‘Followers’; those businesses that wait for a technology to become mainstream before thinking about adoption. In the middle are those that literally see themselves in between; the ‘Experimenters’ (36%). These are businesses that are curious about the potential of technology and experiment with it, but only after the relative merits of doing so have been established by the pioneers.

There are a number of behaviours that pioneering businesses display, that set them ahead of the rest of the pack, one of which being to build a digital strategy

for their company. Indeed, more than half of all businesses do have a digital strategy that looks 3 to 5 years out (55%).

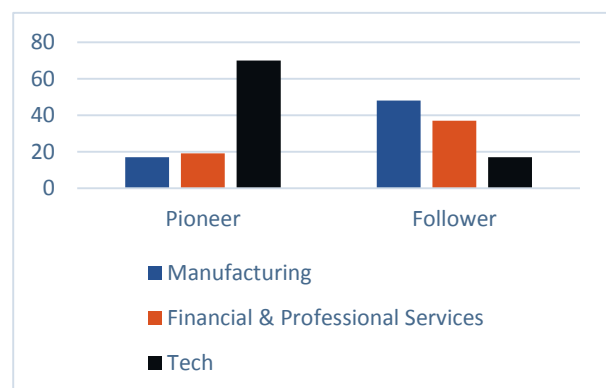
But if more than half of businesses do have a longer term strategy, the figure for those without is uncomfortably high at 45%. Instead, these businesses are only looking ahead to the next year or two (30%), whilst 7% of businesses have no sense of their digital plans at all – and this rises to 25% among small businesses.

The more that these businesses muddle through the digital revolution, the less likely they will be able to close the gap with those that are forging ahead, putting themselves at a competitive disadvantage when it comes to growth opportunities. They may even perish as the digital transformation of the economy continues to gather pace.

Some sectors are adopting digital technology more than others

The digital divide can also be demonstrated by looking more closely at sectors – with some clearly embracing digital technology more than others. 70% of the technology sector classify themselves as pioneers, compared to only 17% of manufacturers and only 19% of those in financial and professional service sectors.

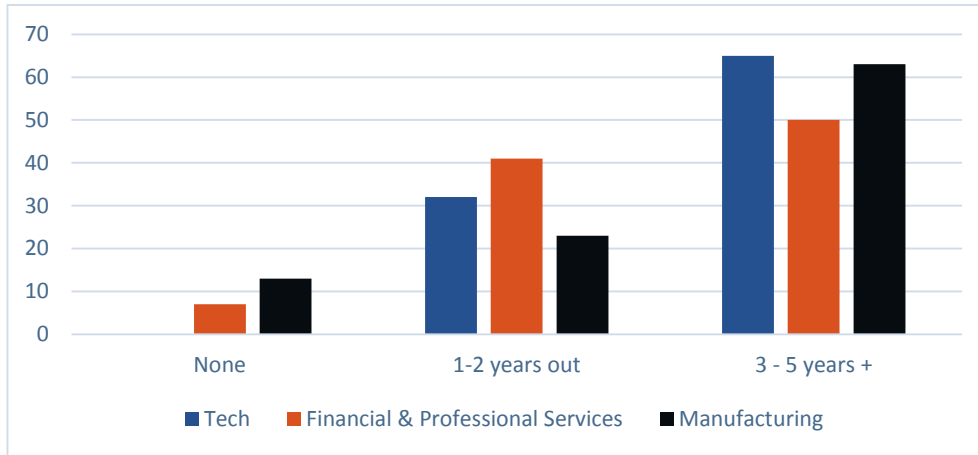
Exhibit 5: Pioneers & followers by sector



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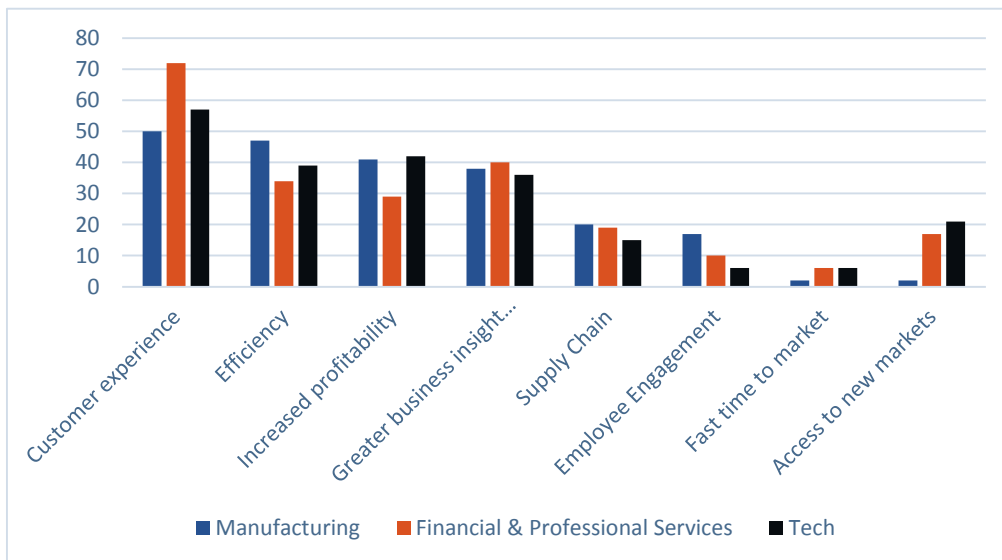
Meanwhile, the almost half (48%) of manufacturers are self-confessed followers, compared to 37% in financial services and just 17% in the tech sector. When it comes to strategy though, manufacturers do better on the long-term, but are less likely than other sectors to have a mid-term view on digital adoption. They are also twice as likely as businesses over all to have no strategy at all (12% compared to 7%).

Exhibit 6: Businesses with a digital strategy by sector



The benefits that different sectors prioritise are also different. For instance, it is clear that where some sectors – like financial services & professional services – have responded to the digital revolution by virtue of their need to adapt to consumers (Exhibit 7), for others, especially those in the B2B space, there is scope to do more with digital technology, but the benefits that they focus on are more likely to be efficiency and profitability.

Exhibit 7: Benefits of technology by sector



Chapter 3: The Barriers

There are some roadblocks for businesses on the journey to digitisation

The road toward being a ‘digital business’ in the modern age is not straightforward. Those that are forging ahead do so despite a raft of barriers along the way, whilst those that ‘follow’ need a little more help in overcoming them.

Exhibit 8: Barriers to business investment in technology



Barriers in the external environment are important to businesses. For instance, concerns about security are one of three top barriers for 21% of businesses, whilst concerns regarding adequate connectivity register in the top three for 15%. For a reasonably large minority, economic and political uncertainty is a top three barrier to investment at 19%.

However, by far and away of most concern to businesses are cash availability and skills. For 45% of businesses, not having the money to invest registers as the main barrier to investment, 42% of businesses lack skills within the business to become digital, 33% cannot make an adequate case for return on investment (ROI), and 27% lack knowledge of the technologies available to them.

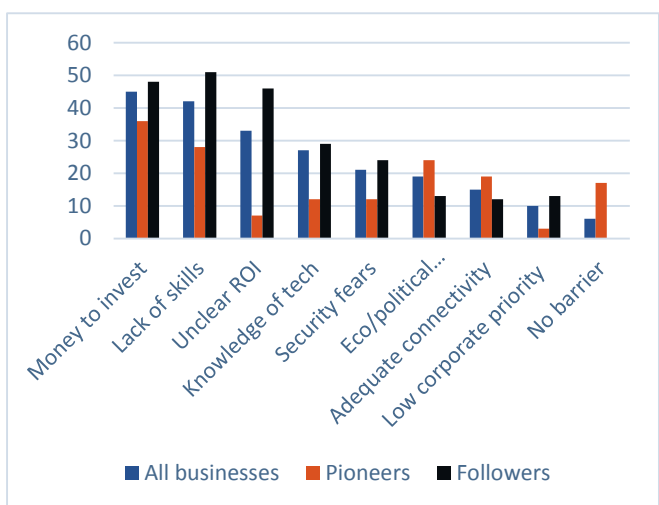
Skills & knowledge shortages are affecting businesses’ ability to be strategic about digital

Skills and understanding are critical to businesses understanding the benefit of technology and making money available to invest. Without this understanding, businesses are less easily persuaded of the return of investment and will be less likely to establish a business case to make money available.

‘Followers’ are more likely than pioneers and businesses overall to cite investment, ROI and skills problems as inhibitors to investment in technology for their business. Pioneers on the other hand are significantly less likely than businesses overall to find knowledge (12%) and ROI (7%) an obstacle and are able to lead the way on investment.

Furthermore, of those businesses that cite knowledge and skills as barriers, 43% are only looking at technology in the short term. They are also less likely to identify as pioneers – only 16% of those businesses that lack technology knowledge see themselves that way, compared to 30% of businesses overall. They are much more likely to be followers instead (38%) compared to businesses overall (31%).

Exhibit 9: Barriers by business category



Chapter 4: Overcoming the barriers to adopting digital technology

Businesses can learn from the pioneers among us

Despite experiencing some of the same skills shortages and other barriers to investment, the front-runners in business are ploughing ahead regardless, and have adopted certain attitudes and behaviours that all businesses can look to in order to improve their own journey toward digitisation. Regardless of the sector or a size of a company, those that are currently 'following' can look to their competitors or industry leaders to help them adapt – and the pioneers need to help.

There are some steps that the business community can take now

Businesses should consider giving technology a strategic face, in the form of **Chief Digital or Technology Officers**, functioning on the board and responsible for driving digital strategy from the top down.

Businesses should **diversify the advice** they are getting at board level, and look to new avenues to **inject digital skills at the strategic level** from Non-Executive Directors, future leaders, and different industries.

Collaboration between businesses is critical, and **pioneering businesses could provide mentoring and coaching** to those that need help. The know-how needed exists in the business community already, but we need to pull together to make sure that it multiplies.

Profile of a Pioneer

They're not all in tech: Whilst 36% of pioneers can be found in the technology sector, 63% of them can be found across all sectors of the economy, from financial services to retail, and media to construction.

They're not all tech start-ups: Contrary to the image we might conjure up of the hip tech start up leading the digital revolution, pioneers aren't all one size either – 45% of them are bigger businesses, with only 21% of pioneers being those businesses with less than 50 employees.

They have a strategy & a vision: Pioneers have longer term strategies for investment in technology for their business. 70% of them have a strategy ranging between 3 and 5+ years, demonstrating forward planning with an element of flexibility for review.

They invest more in tech than others: These strategizing pioneers are more likely to have invested in technology across the board, and the longer term the strategy the more likely they are to invest.

They're already looking toward the next tech trends: 28% of pioneers, compared to just 18% of businesses overall have already invested in cognitive technologies.

They don't let barriers stop them: Pioneers see fewer barriers to future technology investments than their counterparts – in fact 18% of them see no barriers at all. They are also noticeably better informed – only 14% lack knowledge of available technologies. More likely to get in their way is their connectivity needs not being met (22%), demonstrating a greater need for ever more robust and fast connectivity the more digital we become.

They're looking to expand globally: They're much more likely than other businesses to see the benefit of technology to help them enter new markets, removing barriers to trade by being online. 26% of pioneers cite this as a top benefit compared to only 5% of followers.

Footnotes

1. Exhibit 1 & 2: To what extent do you agree that adoption of digital technologies (such as cloud, data analytics, cognitive computing and the internet of things) can boost the UK economy in terms of job creation, productivity and overall economic growth?
2. Exhibit 3 & 7: What are the most important benefits to your business that you expect as a result of your investment in technology? Please indicate up to three.
3. Exhibit 4: Please indicate if you have invested in any of the following technologies in the past 12 months or intend to invest in the next twelve months. Select all that apply.
4. Exhibit 5: How would you characterise your business' attitude to investing in technology?
5. Exhibit 6: Does your business have a digital / technology strategy, and if so how forward looking is it?
6. Exhibit 8 & 9: Looking ahead over the next 12 months what, if anything, might prevent your business investing in digital technologies? Please indicate up to three.

Acknowledgements

With thanks to the Market Developments & Insights team at IBM Europe for assistance on question design, data analysis and insight.

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