

The role of digital transformation on the UK economy:

**Professional Services Sector** 

A Cebr report for Virgin Media Business

March 2021

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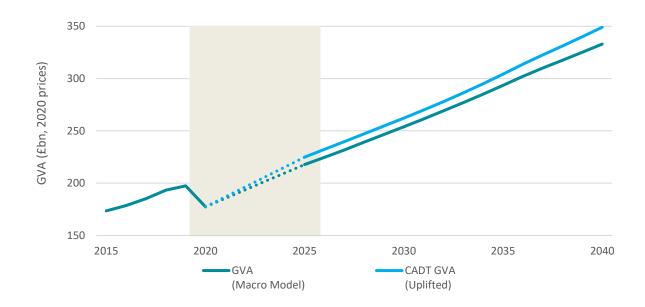
# **Executive Summary**

- This is a Cebr report for Virgin Media Business on the impact of Covid-accelerated digital transformation (CADT) in the **professional services** sub-set of the private sector.
- Following the release of Cebr's extended report for Virgin Media Business on the topic of <u>Covid-accelerated digital transformation</u>, and its impact on the UK economy more broadly, this report focuses on the **professional services sub-sector**.
- This is the fourth a series of sector-specific vertical reports, providing a detailed review
  of the role that digital transformation is expected to play in accelerating the UK's rebound
  from Covid-19.
- Within professional services, we consider solicitors, architectural and legal services.
- As detailed in the main report, increased adoption of key digital technologies due to the pandemic could lead to a period of Covid-accelerated Digital Transformation (CADT).
   Boosted investment and fast adoption of CADT technologies over the coming decades is set to increase UK GDP by £232bn¹ or 6.9% by 2040.
- Across the three private sectors that were analysed in the wider report (professional services, construction and retail), we estimate that a total of £40bn of additional GVA could be realised in 2040.
- This represents a combined GVA uplift of approximately 4.8% above the baseline for the three in scope private sectors.
- In **professional services**, the digital transformation uplift is estimated to be approximately **£16bn in 2040**, a gain over the baseline of around **4.8%**, bringing the size of the sector **to £349bn** in 2040.
- The size of the professional services sector **pre-COVID** is also shown in Figure A, where it can be seen that **GVA fell by approximately 10%** between 2019 and 2020 to £177bn.
- Under the **CADT scenario**, pre-COVID levels of GVA could be achieved by **2025**, when the size of the sector is estimated to be **approximately £225bn** representing around **3.2% of the total professional services sector GVA**.

<sup>1</sup> All figures are presented in 2020 prices.

• Figure A, below, sets out the forecasted size of the professional services sector under the baseline scenario, together with the estimated size of the uplifted sector, as a result of accelerated digital transformation in the professional services sector.

Figure A: Professional services sector GVA, 2015-2040



Source: Cebr analysis

# The impact of COVID-accelerated digital adoption

This section sets out the findings of the research, that is, the estimated sector-specific impact of accelerated adoption of digital and technological initiatives in response to Covid-19, estimated over a 20-year time horizon.

For reference and context, Table 1 sets out a summary of the results for the **whole of the UK** economy, after which the professional services sub-sector results are presented.

Table 1: UK-wide impact of post-Covid digital transformation adoption

Year	Baseline GDP (£bn, 2020 prices)	Uplifted GDP (£bn, 2020 prices)	Additional GDP (£bn, 2020 prices)	Percent Boost
2020	2,178	2,178	0	0.0%
2025	2,651	2,725	74	2.8%
2030	2,891	3,018	127	4.4%
2035	3,143	3,314	171	5.4%
2040	3,361	3,593	232	6.9%

Source: Cebr analysis

#### The 2021 - 2025 short run

It should be noted that this research has been carried out in real-time, against an uncertain economic backdrop with particular respect to the long-awaited Brexit deal announcement, and indeed Covid-19 – the surrounding circumstances of which have been subject to frequent and last minute change. Results are estimated using assumptions that are based on the state of the world at the end of 2020, and the near-term forecast might consequently be subject to change.

As noted in Cebr's <u>extended report</u>, the shape of 'economic recovery', in the period 2021 – 2025, is uncertain.<sup>2</sup> Opinion ranges from a quick 'V-shaped' to a prolonged period of lower output. This uncertainty is largely due to the unpredictable progression of the virus and governmental responses. While a fast and effective rollout of vaccines may allow for a return to normality and a quick economic recovery, prolonged restrictions well into the second half of 2021 would lead to greater scarring in the economy and slower economic growth in the following years.

We have therefore placed greater focus on the medium and longer-term findings by excluding annual estimates for the years between 2020 and 2025. Longer-term findings are more robust and less likely to be impacted by the current – and ongoing – changes to government policy and pandemic trajectory. By the start of the long term steady state period (currently estimated to be 2025), increased Covid-accelerated Digital Transformation is estimated to have added £74bn to GDP.

<sup>2</sup> The immediate term between 2021 and 2025 can be thought of as the of the 'economic recovery' period, before the UK transitions into a long term steady state. 2025 has been chosen as a suitable analytical starting point from which to undertake the analysis because that is the nearest steady state marker that is currently identifiable.

It can be seen in Table 1 that under the baseline scenario, sectors operate under normalised assumptions, following non-accelerated technological usage trajectories. In this case, GDP across the UK economy as a whole is estimated to be approximately £2,891bn by 2030. However, the results of the model in which we consider accelerated technological adoption, indicate that GDP could increase to approximately £3,018bn – an uplift of £127bn, or 4.4%.

By 2040, the counterfactual GDP – with normalised assumptions regarding technology adoption – is estimated to be approximately £3,361bn. However, with increased use of digital technologies, it could be uplifted by around 7% to £3,593bn – an increase of £232bn.

As detailed in the extended report, the private sector is treated differently from the public sector. Increased efficiency in the private sector – attributable to accelerated adoption of technology – raises employee productivity, which manifests itself in the form of increased sectoral output, a portion of which is assumed to be channelled into increased investment. The gains of such investment lead to higher GDP from the year after the investment is made, and in turn, bring about a further increase in sectoral GDP.

Table 2 summaries the results in 2040 for the three "in scope" private sub-sectors. It can be seen that the total digital transformation uplift is approximately £40bn in 2040 – representing a combined GVA uplift of approximately 4.8% above the baseline for the three sectors.

Table 2: Summary of private sector digital transformation GVA uplifts in 2040

(Real, £bn, 2020 prices)									
Private Sector	Baseline 2040	Size of Uplifted Sector in 2040	Digital Transformation Uplift	Percent Gain					
Construction	164	167	3	1.8%					
Professional Services	333	349	16	4.8%					
Retail	340	361	21	6.2%					

Source: Cebr analysis

The importance of the interaction between worker productivity and technological transformation drives the larger impacts in retail and professional services, as digital technologies enable more efficient work – and hence the uplift is greater, relative to that of the construction sector.

The following section sets out the results for the professional services sector.

### Professional services sector

Table 3 sets out the estimated size of the professional services sector, starting in 2020, and then each year from 2025-2040.

It can be seen that by the middle of the 2030's, the digital transformation uplift owing to the accelerated use of technology is estimated to be in the double digits at £10bn, increasing the size of the sector to almost £300m. By 2040, the CADT uplift is estimated to be around £16bn, approximately 4.8% of baseline sectoral GVA.

Table 3: Impact of accelerated digital transformation in the professional services sector

	(Real, £bn, 2020 prices)			
Year	Professional services sector baseline GVA	Size of uplifted professional services sector GVA	Digital Transformation Uplift	
2020	177	177	0	
2025	218	225	7	
2026	225	232	7	
2027	232	240	8	
2028	239	247	8	
2029	247	255	8	
2030	254	262	8	
2031	261	270	9	
2032	269	278	9	
2033	277	286	9	
2034	285	295	10	
2035	293	304	11	
2036	302	314	12	
2037	310	323	13	
2038	318	331	13	
2039	325	340	15	
2040	333	349	16	

Source: Cebr analysis

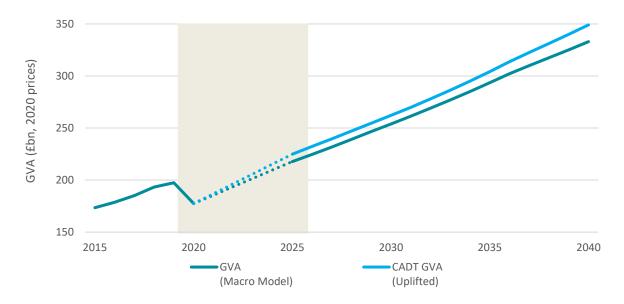
In contrast to other sub-sets of the private sector, such as construction, the professional and scientific services sector was found to have a 'high' current level of digital transformation adoption.

This was verified through the panel workshops, where industry practitioners confirmed that many sub-sets within the sector, such as the legal profession, have been using various automation tools for repetitive tasks for a number of years.

Such tools have brought about significant productivity gains that can further be realised by additional innovations in the sector, such as increased use of video technology, which was referenced as important in ensuring successful working from home practices.

In view of this, there are ongoing opportunities for the sector to grow, and the delta between the baseline and the CADT uplift scenario is shown in Figure 1, below.

Figure 1: The impact of accelerated digital transformation in professional services sector



Source: Cebr analysis

# 2. VMB case studies

The following case studies supplied by Virgin Media Business serve to demonstrate the forms of digital transformation organisations working in throughout the public sector have successfully implemented throughout Covid-19.

# 2.1 Knights

# Viva office life! How hybrid working will improve your business performance

Building a world class digital business is more about the mindset of people working alongside you than the tools you use. And the key to success lies in teams (with a lower case t).

Leading UK legal and professional services experts Knights cite teamwork and tech as the twin pillars that enabled them to survive and thrive through the Covid-19 pandemic.

It has helped the firm hit £100 million turnover, with 900+ professional advisors serving more than 18,000 business clients, both large and small.

Knights COO Richard King says: "Since we listed in 2018 we've had great momentum in scaling up our business, which now consists of over 900 fee earners.

"We've achieved that through both organic growth and complementary acquisitions."

So what's the secret to Knights' success?

Richard explains: "We came to market on the belief that there's a better way to deliver legal services in the 21st century.

"Our business model is focused on a strong culture of collaborative teamwork, supported by robust technological systems.

"The combination of the two enables us to flow work to the right level of expertise, improving the efficiency of the business and ensuring we can offer our clients better value for money.

"It also ensures our lawyers focus on quality work that is suitable for their experience.

"The time of our senior lawyers is better spent providing high value add advice to clients and junior lawyers are keen to learn.

"The culture we have developed ensures our professionals work together to produce the best outcome for the client.

"In more traditional law firms, it isn't uncommon to see partners act as competitors to ensure they meet their own personal targets, which isn't the case at Knights, as we have removed targets.

"We've also embraced technology to make our ways of working dramatically more efficient and faster.

"In the traditional legal world, to get a document printed you take notes, give it to a secretary to type up, then read and edit it before you arrive at a final copy.

"We made the conscious decision to not employ secretaries, but rather to empower our lawyers to do this themselves through the use of our technology systems.

"The industry average number of fee earners per support staff is 1.7-to-1 and currently we're operating at 4.2-to-1.

"In many ways the legal sector is 20 years behind other sectors. We knew where we were trying to get to when we moved from the traditional partnership model to corporate structure in 2011."

Richard debunks the myth that using digital to streamline everyday business processes makes a company cold and uncaring.

"Take video calling for example, which enables us to meet more frequently and face-to-face. We use technology to enhance our relationships with all stakeholders.

"Technology has allowed us to work effectively from home, allowed us to successfully integrate acquisitions, onboard and train our new colleagues and engage effectively with our clients."

This has led to a Client Net Promoter Score of 60-plus. A figure that compares favourably with superstars like Apple or Amazon, and way ahead of rivals in the professional services sector.

Knights also engaged world famous sport and business psychologist Jamil Qureshi to help inspire and embed its winning formula for teamwork.

During the pandemic, he provided invaluable advice on how to thrive in lockdown.

Staff are inspired by Europe's Ryder Cup success and Premier League champions Leicester City, teams where the whole is greater than the sum of their parts.

Richard explains: "Our deep belief is that teams always outperform collections of individuals and there's a million and one examples of that.

"Yes, command and control structures can be very effective, but if you want to be agile, flexible and fit round someone's needs, you need a team approach."

Winning as a team in business requires leadership sacrifice and commitment. It can mean throwing away the trappings and titles traditionally associated career success.

"We are a people business. Our model is relationship led, not brand led. It's person-to-client, heavily powered by digital.

"Some believe that embracing digital means losing some aspects of the personal relationship. But we would argue the opposite.

Richard King

Richard adds: "The legal industry is full of these structures. Our team culture strips that away, we don't have team leaders, heads of specific practices.

"It's a one culture business. We've tried to remove what's seen by many as badges of honour.

"From the CEO through the seven client services departments, we have a 'come on, let's do it' ethos.

"Nobody is too grand to get stuck in. We go out of our way to avoid any implications of hierarchy, that's one of our unique traits.

Knights recognise that new digital skills are required for lawyers and specialists on its team to adapt to new ways of working. And it has put in place an efficient training system to deliver them.

Richard says: "We work hard to ensure all of our lawyers are trained on our systems and familiar with our technology.

"We made four acquisitions during the pandemic and integrating them into our businesses. This included moving 300 lawyers into our core systems and training them on how we work in Knights.

"A lot of those are people who have never created their own engagement letters or generated an invoice.

"We've been able to bring them to a level of competency very quickly and remotely, even though we haven't been able to meet them in person yet."

The impressive onboarding process was enabled by two dozen staff supporting training and compliance.

Richard adds: "It can be very stressful for lawyers, who are experts in their field, being novices when it comes to technology.

"Our training staff are very good at the pastoral side as well as helping people get to grips with our systems.

"Willingness to learn is critical. Some people will never feel compelled to make that journey. If you want to work with a secretary and work in the old way, Knights is not for you."

Richard continues: "There are some basic digital skills you need to have. The equivalent of reading and writing after the printing press was invented.

"You need to be able to create documents, use email, Word, Zoom and Teams. You

have to review documents online, mark them up and work electronically.

"That's the price of entry. If you don't have those life skills it's difficult to shop, pay utility bills and interact with other people at home.

"We want people with a willingness to explore different ways of achieving and who are open to experimentation.

"We find people are excited by finding a better and more modern way of working. Take electronic signatures as an example. In law many documents are still wet signed. This can take days!

"The time wasted is ridiculous, and this method is not necessarily more secure than an electronically encrypted method. The pandemic saw people embrace electronic signatures."

Knights is looking forward to fully welcoming its staff back into the office, as it sees the physical workplace as a hotbed of great new business ideas.

Richard explains: "Our model is to be office based. We believe the office helps people work collaboratively together and builds trust in teams.

"Our investment in technology and paperless ways of working meant we were able to go home and on immediately carry on working as normal at the onset of the pandemic.

"There was no material impact on our productivity.

Virgin Media Business has been working with <u>Knights</u> Professional Services since 2019

### 2.2. Fulcrum

# Care home consultancy Fulcrum shows how embracing the cloud can transform an industry

Fulcrum was already well placed to provide transformative digital security for an industry that had been widely criticised for being lax with data.

One of the recurring bugbears raised by the Care Quality Commission – the body responsible for regulating the care industry – has been weak data security.

But with the arrival of the Covid crisis – with care homes on the front line – the need for digital innovations to keep residents and staff safe only increased.

Founder Tony Thiru has seen demand for his company's tech-based solutions triple in 2020 as the pandemic left the care industry extremely vulnerable.

Since starting-up just three years ago, Fulcrum had built its growing reputation by providing cloud-based digital security strategies – a critical issue for an industry tasked with keeping highly vulnerable people safe.

Tony explains how Fulcrum's digital innovation neutralised the data-security problem. "We'd go into a care home and find they were quite cavalier with resident and internal information: care plans sellotaped to the wall, open offices with staff personal data on boards and so on.

"Our systems have removed the problem. By moving data to the cloud we've made it more accurate and more secure. Clients knew it was a problem area and our input has reassured them that it no longer is."

So when Covid came along and the industry was plunged into crisis it was a logical step for Fulcrum to provide digital support to help.

"Some of our clients will have as many as 4000 residents and as many staff, and as soon as the pandemic hit they'd be on the phone to us desperate to create systems that could keep them all safe," Tony recalls.

"By adopting our innovative digital strategies we provide a way of centralising every aspect of care provision, from meeting nutrition and hydration needs to making sure staff were in the right place at the right time with the right kit.

"With this new digital regime they could make sure that everyone was protected: that PPE rollout was managed efficiently, both their staff and residents kept safe and their core care provision uncompromised.

"Demand for our services went through the roof because we could quickly put robust systems into place that worked. I'm certain our interventions saved many lives."

The care industry has often been resistant to change but the simplicity of use of the digital

systems introduced by Fulcrum has seen a high adoption success rate among staff.

Tony explains: "We use systems and apps that are completely intuitive so that anyone who has used an iPhone or a tablet will be able to use them immediately, and it's so much more dependable to have a holistic system that manages and delivers care plans so that every patients' needs are built-in than relying on staff remembering to administer a medicine or check hydration, say.

"Our systems have removed the problem. By moving data to the Cloud we've made it more accurate and more secure. Clients knew it was a problem area and our input has reassured them that it no longer is."

### 2.3. Actis

# In an unpredictable world, smart digital strategies prevent your investors losing out

Global progressive investor Actis knew about the impending scale of the pandemic before almost any other Western business: they had a team on the ground in Wuhan when it began.

"We were getting feedback from the very earliest point advising us that this was going to be very big," recalls Actis comms chief John Thompson.

Their team were working on a healthcare infrastructure project and thankfully all were able to survive the outbreak safely. But the unanticipated insight they were able to feed back to London gave John and his colleagues a head start in preparing for the seismic shift in working practice that was looming.

This shift saw them put digital strategies front and centre of everything they would do in 2020, and helped them stop their investors losing out because of world events.

"Because we have offices in 17 cities around the world, from Mexico City to Seoul, we have always partially relied on online communication, but there was a lot of physical travel too. Covid saw digital take over completely. And you know what? By using digital strategies to manage that transition, we didn't suffer."

John explains: "We broke it down into response, recovery and resilience, and digital underpinned all three. Tech was the key enabler in allowing us to continue to be impactful remotely, whether it was switching to Zoom or Microsoft Teams or enabling home working remotely, but remaining hooked into our global network of projects.

"For example, we opened a wind farm in Senegal and a shopping mall in Cameroon last year, the first certified green project in its area. Previously we would have flown over a group of pension fund investors and shown them around, done a meet-and-greet with them, local communities, management teams and so on.

"But that was impossible under Covid so we had to remodel how we did that. We could use drones to give them a birdseye, up close view of the turbines of the windfarm, say, which was much more insightful than anything they'd have seen under the old model. It was about using tech imaginatively. And people really responded.

"The key to our success in 2020 was investing in digital and harnessing its possibilities."

#### 2.4. Blenkin

# Clicks and Mortar – how one estate agent's digital transformation paved the way for others to follow

When Ed Hartshone joined long-established York estate agent Blenkin and Co nearly 20 years ago, the only clouds were those rolling in off the North Yorks Moors.

He longed to shake up working practices, to bring the office, in the shadow of historic York Minster, into the modern age. But it was not until he became the full owner that he was finally able to achieve that.

In 2019 he embarked on an ambitious digital transformation project. All data became cloud-based. He created an integrated phone and email system, with decades' worth of paper files consigned to history. And thanks to integration with property website OnTheMarket.Com, he changed the firm's approach to marketing too.

"It turned out to be incredibly timely," Ed recalls. "By the beginning of last year we were transformed from the old, cumbersome working methods. Instead we had become very light on our feet. When we realised we had to close the office and start working from home we were all up and running effectively within 20 minutes of taking that step.

"Everything was functional and integrated and, crucially, instantaneous."

"Before this if I was at home on a Saturday morning and needed to check an invoice urgently it would literally mean an hour's round trip into York to start rummaging in a filing cabinet. And all that sensitive data was only as secure as the locks on the front door."

He adds: "By undertaking that transformation it made us so much more time and cost effective - we made back everything we spent on our digital upgrade within months. And it meant that when lockdown came we could carry on working at our best without compromise.

"Whereas an old friend of mine works for a rival agency and it took her two weeks to get her phone configured to receive calls at home and another two weeks before she was able to access their email system. They lost a month of trading and I don't know if they'll ever catch up."

### 2.5. Irwin Mitchell

# How Cloud technology became a central part of the Courtroom

It's difficult to think of a field more rooted in traditional practice and resistant to change than the UK courts and judiciary, so the idea of trying to lead them on a journey of digital innovation must have seemed daunting.

But legal giant Irwin Mitchell didn't flinch from that challenge and has been among the trail blazers that have started a tech revolution in the way our courts are run.

Technical Director and partner Jonathan Scarsbrook explains: "As an organisation we are routinely handling documents that are of the most sensitive nature possible – private medical records, settlement discussions and so on – and historically much of this information was stored on paper or discs, which brings with it a range of security challenges and risks.

"At Irwin Mitchell we sought to adopt Cloud technology and increased digital security around sensitive information long before the pandemic."

Covid – as with so many other fields – changed all that. The courts were forced to look to technology to keep functioning as those famous giant paper bundles of evidence were useless to parties dialling in from home.

"We proved relatively early on in the pandemic that digital and remote can work. A staging post came with a settlement of over £10m being approved in Manchester after the court engaged with the firm's IMShare solution to filing all the necessary documents as e-bundles."

Jonathan adds: "Consistency of approach around virtual hearings has been lacking, however Cloud Video Platform has gradually emerged as the court service's platform of choice for remote hearings. We expect the roll out of this solution to continue at pace."

Now digital is being seen not just as a temporary inconvenience but a longer term way forward to clear the significant backlog in cases that Covid created.

"Clients have felt far more at ease being at home, being able to make a cup of tea in their own house, or take the dog for a walk, than travelling to a more formal office, where they are cooped up with us for what can be a 12 hour day sometimes," Jonathan explains.

Virgin Media business has been working with Irwin Mitchell since 2019. Virgin Media Business is also working closely with Courts, and Police Forces nationwide to smooth the transition to remote work and remote courtrooms.

#### 2.6. CBI

# The CBI calls on the UK Government to boost the UK Economy through digital innovation

Digital innovation will help deliver on Britain's ambition to be the world leader in producing business unicorns: startup companies valued at more than \$1 billion.

The Confederation of British Industry (CBI) identify additional government support for tech as a crucial catalyst to achieve that goal.

They note that SMEs are the backbone of the UK economy, making up 99% of all businesses nationwide. And many of them were acutely affected by Covid-19.

Increasing competition alongside demands from new regulation, data protection and taxes mean there will be considerable challenges to overcome.

But there's a huge prize for getting it right. The CBI vision for the year 2025 is to improve the UK's ranking for various indicators compared to other G7 countries.

- Number of unicorns created per \$ trillion of GDP: Current ranking 2nd; 2025 target
   1st
- % of premises with full fibre broadband: Current ranking 5th; 2025 target 2nd
- Business implementation of digital technologies: Current ranking 2nd; 2025 target 1st
- R&D spending as % of GDP: Current ranking 5th; 2025 target 4th
- Business view of level of digital skills in workforce: Current ranking 4th; 2025 target 2nd

The pandemic showcased innovation in action, from vaccines and ventilators to data modelling, UK business showed its capacity to solve real world problems and improve lives.

Senior Policy Adviser Susannah Odell, author of the CBI report Building a World-Class Innovation and Digital Economy, says:

# "Coronavirus has shown the very best of British innovation.

"We've seen businesses changing manufacturing to produce hand sanitiser, to rapidly adopting digital technologies, such as remote working.

"But we can't take this progress for granted. Businesses face low cash reserves for innovation and a highly uncertain economic climate.

"There are five things the government can do to put innovation and technology at the heart of the economic recovery and make the UK the best place to innovate."

She explains: "Firstly, ensure that digital regulation is cohesive and pro-innovation, so that businesses can test ideas and scale quickly.

"Secondly, go for the gigabit by accelerating the rollout of future-proof broadband and mobile connectivity.

"Thirdly, accelerate adoption by simplifying, joining up and scaling up support that's already out there.

"Fourthly, increase innovation by making sure that businesses have the confidence and capability to restart their R&D activities.

"And finally, up-skill on digital. Making sure that the UK has a world class digital skills system that prepares people for jobs in technology and innovation.

# 3. Literature Review and Panel Insight

In order to undertake the analysis, it was first necessary to conduct an in-depth literature review of each "in scope" industry. This enabled sector-specific assumptions to be made which were then further verified through panel interviews and workshops with industry practitioners. These assumptions were used as modelling inputs in support of estimating the impact of accelerated digital transformation on each of the UK sectors of interest.

This section sets out the findings from the literature review. Of particular importance was data on current levels of technological adoption for each sector, from which it would be possible to estimate trends in tech adoption. It was also important to gather evidence on the tech-enabled productivity increases that *could* be realised across a variety of industries – which would provide an indication of the potential gains that could be achieved with accelerated use, owing to events such as Covid-19.

The literature review and panel insight also provide important background information against which findings from the research can usefully be contextualised.

#### Professional services sector

The professional service industry is making advancements in digitalisation and technology adoption to improve the quality and efficiency of their work. The Covid-19 crisis, which may ultimately lead to a technological boom, could be particularly beneficially for this industry.

Talamo. C., and Bonanomi. M. (2019) note that productivity growth in the architecture, engineering and construction sectors have been stagnant globally in recent decades.<sup>3</sup> They also note that there is a clear positive correlation between the degree of digitalisation in a sector and its productivity; the ICT sector ranks highest in productivity in their study and also has the highest degree of digitalisation.

Despite this, there is a growing consensus within the architectural field that adopting technology and digitalising is the future. A Microsoft and RIBA survey<sup>4</sup> of 300 professionals working in architectural series found that:

- 87% agree that digital technologies are transforming ways of working;
- 79% agree that adopting digital technologies leads to improved project efficiencies;
   and
- 55% link digital transformation to business survival.

The fact over half consider digitalisation a key factor in longevity of their firms highlights that technology offers a way to cut costs and boost efficiency which has become increasingly important with the increased globalised nature of the world; firms are competing domestically and internationally for business.

<sup>3</sup> Talamo. C., & Bonanomi. M. (2019). 'The Impact of Digitalisation on Processes and Organisational Structures of Architecture and Engineering Firms'.

<sup>4</sup> RIBA. (2019). 'Digital Transformation in Architecture'.

Cloud computing is a way in which legal firms have begun cutting costs and improving efficiencies. Cloud computing refers to the delivery of computing services such as storage, servers, databases, networks, software and intelligence through the internet.<sup>5</sup>

Cloud computing enables mobility as information can sync across multiple devices. This is becoming essential as according to the American Bar Association, 79% of lawyers telecommute and spend around 25% of their time outside their offices. Not only this, but adopting Cloud computing is estimated to cut costs by 30% on average for these firms.

Cloud computing cuts costs as it reduces the need for firms to purchase the expensive capital needed to run servers, software or networks. Rather, dedicated firms who operate the cloud servers utilise their economies of scale, which would never be achievable by non-dedicated firms.

Similarly, another study suggests that firms with a hybrid cloud model could cut costs by 24%. A hybrid cloud model is a computing environment that uses a mix of on-premise, private cloud and public cloud services.<sup>8</sup>

Cloud technology is becoming very common across industries. The IDG 2020 Cloud Computing survey estimates that adoption rates have reached more than two thirds of all firms in all industries. The industries with the greatest rates of adoption are education (88%), Manufacturing (87%), healthcare (86%), financial services (75%) and government (71%).

Another technology making a real difference within professional services is automation and artificial intelligence. Many aspects of professional service roles are labour intensive and repetitive. Within accountancy, it is estimated that 30% of people's working hours could be freed up for higher value-added work through automation.<sup>10</sup>

- 5 Microsoft. 'What is cloud computing?'
- 6 Clio. (2019). 'How Cloud Computing is Making Law Firms More Efficient and Profitable'.
- 7 Ibid.
- 8 Sprout IT. 'Legal Cloud Technology How it Aids Efficiency and Productivity'.
- 9 IDG. (2020). 'IDG Cloud Computing Survey'.
- 10 Accountancy Age. (2019). 'Technology tools that will drive efficiency for accountants'

# 4.Industries in practice

To supplement the literature review, we also consider recent industry data for each of the "in scope" sectors.

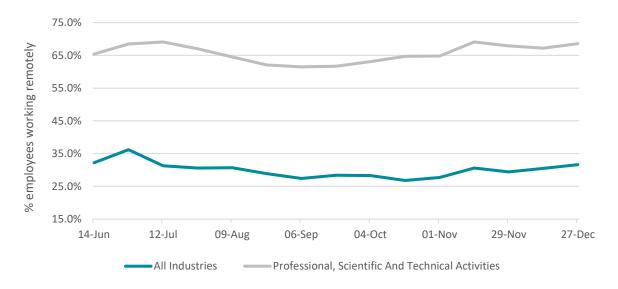
We use ONS data gathered from the voluntary fortnightly business survey (BICS)<sup>11</sup>, which looks at financial performance, workforce, trade and business resilience across UK sectors. In the professional services sector, this includes scientific and technical activities.

## Remote working in the professional services sector

In the context of this research, it is particularly relevant to look at the data pertaining to remote working, and the associated gains and challenges that UK businesses have experienced.

Figure 2 sets out the proportion of professional services sector employees who were working remotely as opposed to at their normal place of work from mid-2020 to the end of the year. It also shows the average across all industries in the UK.

Figure 2: Proportion of professional services sector employees who are working remotely as opposed to their normal place of work



Source: BICS and Cebr analysis

In line with the literature, and the numerous ways in which digital solutions are already being used by employees in the professional services sector, it is perhaps not surprising to see that a significantly higher proportion of employees engaged in professional services activities were found to be working remotely, as compared with the 'all industries' average in the UK.

In the given time period, the average proportion of professional services sector employees working remotely is approximately 66%, more than twice the 'all industries' average of around 30%. The only UK industry to have a higher proportion of remote-working employees was

11 ONS. (2021). 'Business insights and impact on the UK economy: 14 January 2021'.

information and communication, with an average of 75% working remotely during this second half of 2020.

The level of remote working can be explained in part by the particular job roles and task undertaken within the professional services sector, which lend themselves well to remote working – even prior to Covid-19. However, it is fair to say that the comparatively 'high' levels of technology adoption will have further supported the ongoing remote-working environment.

According to BICS survey data from the middle of December 2020, approximately than 11% of professional services sector businesses reported an increase in employee productivity, above the 'all industries' average of 8.4%, and above that of the information and communication sector (10%).

It follows that more than 30% of professional services sector businesses intend to use increased homeworking as a permanent business model going forward – more than double the 'all industries' average of approximately 16%. Of those, 58% cite reduced overheads as a reason to do so, and 56% cite improved staff well-being. This is shown in Figure 3, below.

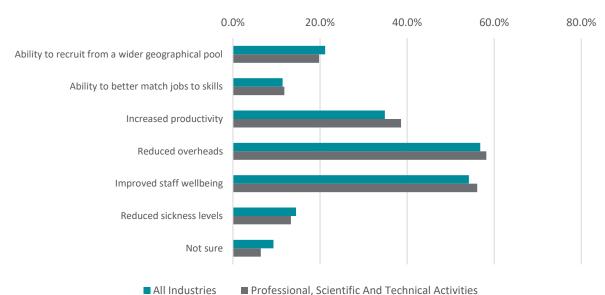


Figure 3: Reasons to use increased homeworking as a permanent business model going forward

Source: BICS and Cebr analysis

