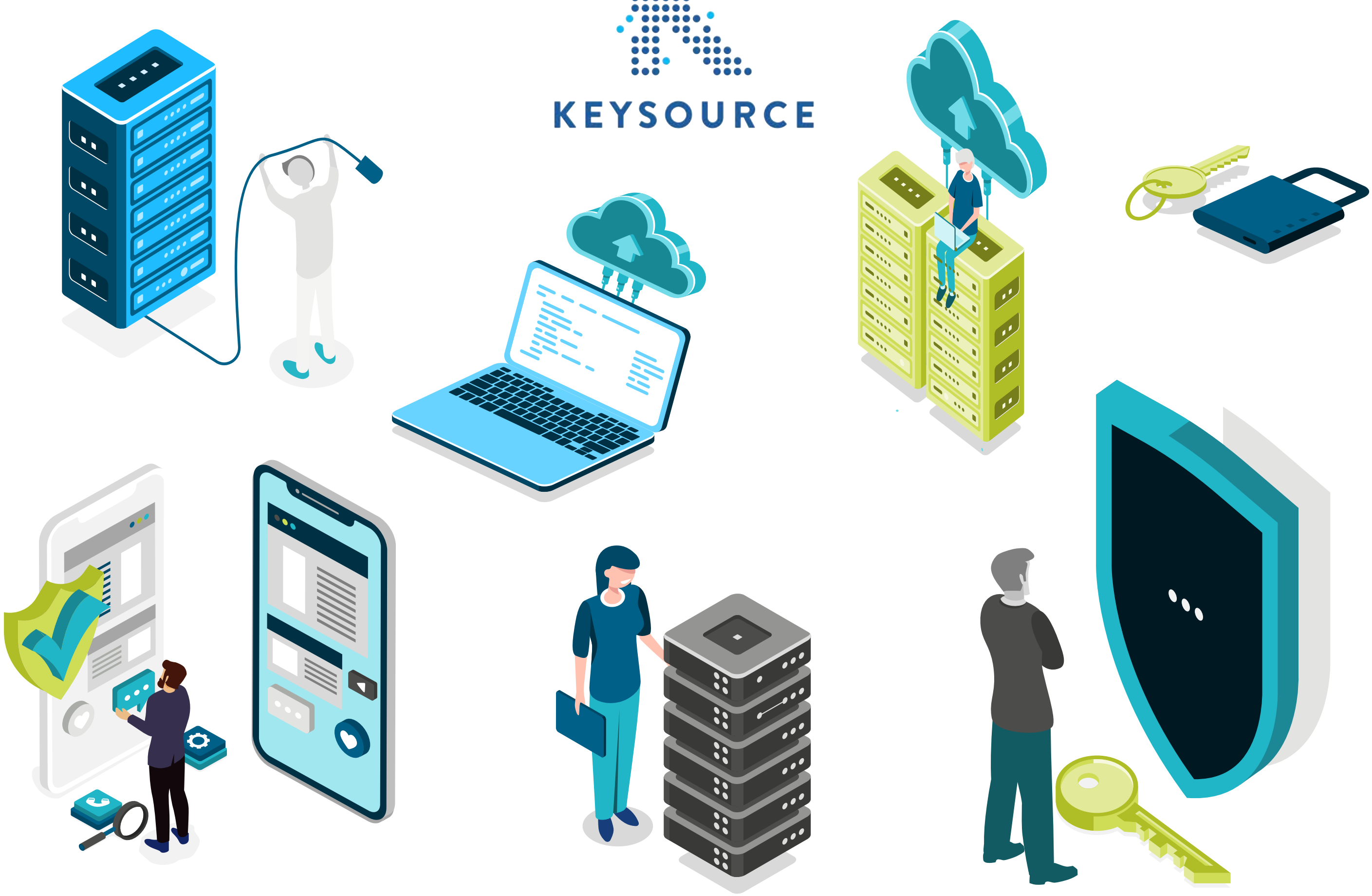


THE STATE OF THE INDUSTRY

2020

CONTENTS

FOREWORD
… A YEAR LIKE NO OTHER

The Keysource 2020 State of the Industry Report, unsurprisingly, is dominated by the impact of the COVID-19 pandemic and the technology changes and challenges that it has brought to business and its effect on people's ability to work, their priorities and decision-making processes. However, we also wanted to ensure that we captured other issues in our questions in order to ensure some continuity.

Overall it is encouraging that the survey results suggest the data centre industry remains strong with buoyant demand and activity and seems well placed to meet the challenges of the coming year, with 66% of respondents planning increases in capacity in some form.

For many the virus has prompted the need to consider their IT resilience, capacity, and security to deal with the demand and change to the working landscape. Given the economic downturn the fact that less than half of respondents are expecting a budget increase is perhaps unsurprising. However, will delaying investment in technology-based projects hinder organisations' ability to rebuild and evolve to meet the requirements of the 'new normal'? Will we see those who are prepared to keep investing reap the rewards while others are left behind? Should Government identify IT investment as key to improving the economy and look to make funding more attractive?

FOREWORD
… A YEAR LIKE NO OTHER

It is also a concern that only 23% of IT Directors highlight security as a major challenge for this coming year despite the significant increase in breaches during lockdown. With a combination of increasing demand, cost pressure and speed it is vital that the industry doesn't lose sight of the risks and threats to its operations, finances and reputation.

As political and commercial drivers focus more on sustainability the finding that over three quarters of the respondents believe that sustainability has a medium or high influence on IT decisions suggests an interesting road ahead, with government backed commercial incentives likely to help drive this. Given other pressures, will this focus continue unless there is a clear commercial benefit?

At Keysource we have lived in the industry for 40 years where change is constant and whilst 2020 is certainly unique, the sector has proven it is resilient and adaptable. It does however further highlight the need for specialist advice to help support businesses carve the right path, where innovation will undoubtedly be key.

The stakes are now higher than ever.

JON HEALY

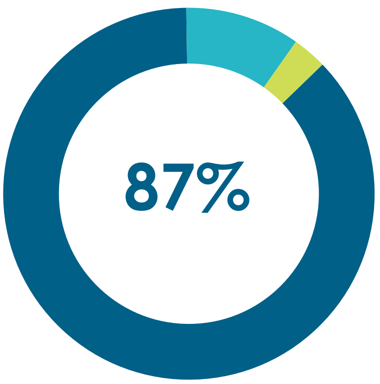
Operations Director - Keysource

RESEARCH HIGHLIGHTS

Keysource surveyed 100 Senior IT decision makers who have an annual budget for IT equipment and services, have a lot of or some responsibility for their businesses servers and or data centres and have continued to trade during the Covid-19 lockdown.

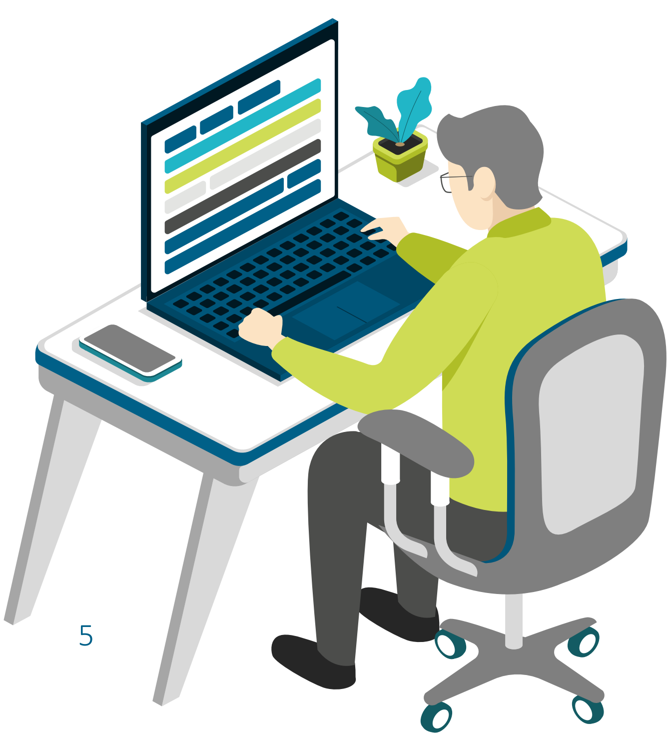
We have pulled out the highlights below. The full survey can be seen on pages 20 to 26.

Home working is a new issue for many businesses



of respondents have needed to enable greater home working and 60% of those needed to limit the remote access of home workers before additional capacity was available.

IT & Telecoms and Education seem to be the least prepared for home working with 77.8% and 75% needing to limit access initially.



#3

Supporting more home working is number 3 on the list of challenges for IT Directors in the next year.

The location of data centres is more of a consideration due to Covid-19 and security remains high on the agenda

66%

of respondents have added or plan to add DC capacity.

One-third have added or will add colocated capacity and 27% have or will add off-site DC capacity.

Almost ¾'s believe that location is more of a consideration as a result of Covid-19

68% of respondents think there will be an increase in demand for UK based data centres.

#1

Security is the number one issue facing IT Directors

54% have seen an increase in malware, phishing attempts and cyber attacks

31% of respondents need to demonstrate that security is taken care of

THE IMPACT OF COVID-19

The survey:

- **87% of respondents needed to enable more home working**
- **Almost a half reported IT projects have been cancelled or postponed due to Covid-19**
- **66% have added or plan to add data centre capacity due to Covid-19 and the lockdown**
- **45% expect to see an increased budget due to Covid-19**

There is no doubt that the Covid-19 pandemic has changed the face of the world for the foreseeable future. It is not a surprise that almost half of respondents reported the cancellation or postponement of IT projects, but expect the 'new normal' to influence the bounce back and shape the future of the industry.

The large proportion of businesses needed to enable more home working and our respondents suggesting that even more home working capacity will be required next year suggests that the office based, desktop IT infrastructure has changed forever.

Perhaps it was inevitable, and Covid-19 has simply accelerated the drive for less commuting and more home working, but the change has now happened and the digital network space is more fragmented as a result.

Although almost half of the surveyed businesses have had projects cancelled or postponed it is encouraging to see that 66% have added, or plan to add data centre capacity due to Covid-19 and the lockdown.

With 45% of our respondents also expecting to see an increase in budgets due to the pandemic it may be that the industry will bounce back relatively quickly.

THE KEYSOURCE VIEW

As the volume of data and use of digital services continues to exponentially increase, it comes as no surprise that Covid-19 has compounded this even further. As a result, the data centre sector remains resilient with the take up of additional capacity.

Alongside the highly publicised sectors that are struggling, such as Travel, Tourism and Hospitality, there are more positive stories for sectors such as Online Retail, Pharmaceuticals and Media Services which are creating demand for data and digital services and driving the need for data centre capacity.

Unsurprisingly, the survey results suggest some uncertainty due to Covid-19 although this is likely to be temporary given the increase in demand for data driven services. Prudently, Keysource suspects businesses will take stock and identify opportunities to leverage their current investments and infrastructure and look for any available efficiencies.

Post Covid-19, businesses will no doubt reflect on how their technology enabled them to operate during this period and they will invest to correct any deficiencies and, most likely, ensure it can be more resilient as they settle in to the 'new normal'.

With the data centre sector already under pressure to meet demand, the additional demand from Covid-19, coupled with the delays to facilities under construction, may see a further squeeze on the industry. This undoubtably puts more emphasis on the ability to improve the speed of creating capacity which will put emphasis on innovation from design to construction.

THE techUK VIEW

COVID-19 has certainly created a whole new level of uncertainty for operators but it was heartening to see how rapidly the sector responded, implementing precautions well before formal requirements were in place. Operators proved to be resilient to challenges - from supply chain bottlenecks to increased demand for smart hands and competitors worked together, shared knowledge and best practice.

In terms of business impact, it has been mixed: cloud services are widely reported to have experienced a huge surge in demand – over 800% for some popular remote conferencing applications, and we have seen rapid take-up of spare capacity in the market. There was concern about the impact of construction project delays, but these seem to have been kept to a minimum. On the other hand, traditional enterprise business has fared less well as other parts of the economy have scaled back activity.

WILL DEMAND FOR UK DATA CENTRES INCREASE?

The survey:

- **Almost 3 out of 4 respondents believe that location of a data centre is more of a consideration as a result of Covid-19**
- **68% of respondents think there will be an increase in demand for UK based DCs**
- **58% of respondents believe latency is more of an issue than in previous years**
- **Almost 40% of businesses that have or will add capacity will add, or have added, on site capacity**

The international travel restrictions that were imposed during the pandemic have caused concern throughout the industry, although data centre engineers were considered key workers and able to travel, the difficulties this presented have probably caused a re-think regarding the ideal location of an off-site data centre.

This combined with 58% of respondents believing latency is more of an issue now than in previous years has led to three quarters of respondents suggesting that the location of data centres will be more of a consideration as a result of Covid-19.

Interestingly, and possibly combined with the border, customs and legal changes expected as a result of Brexit, 68% think that there will be an increased demand for UK based data centres.

Of the 66% that have added or plan to add data centre capacity as a result of Covid-19 40% will provide the additional capacity on-site.

Exactly 1/3 prefer colocated capacity and 27% are looking towards an off-site data centre.

THE KEYSOURCE VIEW

With the increased requirement for Edge computing, along with possible Brexit implications, we were already seeing increased demand for local UK data centre markets, especially outside of the M25. The survey indicated that location would be further influenced by Covid-19.

The UK market has typically had a significant divide in the growth of data centres, inside and outside the M25, with a large London user base traditionally preferring on-premise or relatively short travel time to their data centres.

With travel being restricted under Covid-19, a measure likely to be repeated in the event of a second spike or another pandemic, we could see facilities with better access by car favoured over sites which would usually be accessed via train, tube or taxi. It may therefore be that site access, or lack of it, becomes more of a factor in the selection process for a new data centre moving forward.

Whilst ‘cloud first strategies’ and large cloud provider activity are dominating the headlines, typically because of their scale, we are continuing to see businesses adding capacity on-premise to support their requirements.

The real estate impact of the pandemic can’t be ignored and as businesses rationalise or change their long-term property strategy for the ‘workplace’ this may well direct more IT to the UK.

THE techUK VIEW

We too anticipated further growth in demand for data centre capacity in the UK, with average project size increasing. Whilst the primary driver is relentless growth in digital data, factors like GDPR, Brexit and geopolitical strategies relating to data sovereignty are also contributing to increased demand. COVID-19 has also catalysed demand for cloud services from organisations previously reluctant to outsource to third party providers. Now they have made the move, they are unlikely to retrench.

In terms of regional deployment, the UK sector is highly clustered and this will not change overnight. However, when we analysed sector travel patterns back in March, most operators required staff to use private cars rather than public transport, often hiring vehicles to limit routes for infection. Reliance (or not) on public transport may well be a factor in future location decisions but is unlikely to drive a regional rethink.

A RISKY BUSINESS

The survey:

- **77% of respondents feel that they are taking a high or medium risk storing data offsite or colocated**
- **31% of respondents need to demonstrate that security is taken care of when looking at data centre accreditation**
- **Over half of respondents have seen an increase in malware, phishing attempts and cyber attacks**
- **61% of senior IT professionals are concerned about resilience against cyber attacks**
- **23.1% of IT Decision makers believe security will be a big challenge next year**

In our 2019 survey we were surprised to see 80% of respondents felt that they were taking a high to medium risk storing data offsite or colocated.

This fear hasn't gone away with 77% of this year's respondents still concerned about off site data presenting a high to medium risk.

Clearly the industry hasn't done enough to counter the fears of senior IT professionals, but it may also be the case that with over half of the businesses seeing an increase in malware, phishing and cyber attacks that however secure a data centre the external environment will always cause concern.

61% of the IT decision makers were concerned about the pressure put on IT to prove its resilience against cyber attacks leading to 31% looking at accreditation to show that security is taken care of.

For the second year running security is a big concern and remains number one on the list of challenges facing IT decision makers next year.

THE KEYSOURCE VIEW

With an increase in Cyber Crimes, IT decision makers remain vigilant of their business risk and rightly so. With the continuing trend of moving IT to a professional data centre operator and further consumption of public cloud services, the need for businesses to do this confidently is key.

This can be complex for businesses which use bespoke applications, utilise legacy platforms and require a disparate estate for regional or customer reasons. Hybrid physical environments are typically common leveraging investments and the associated technical/operational benefits.

However, for customers that want to consume different data centre or hosting services, a common language and consistent relevant standards will be important as decision makers look to manage the risk across their estate. It is clear the industry has some work to do to establish this and ensure what's used is fit for purpose for the UK and ideally internationally.

Given the sensitivity of some data sets, and the IP which it may represent, it is important for a business to have a strategy and standards in place, whilst not hindering other parts of the business that may be able to accept lower security standards and a higher risk profile, for example emerging markets.

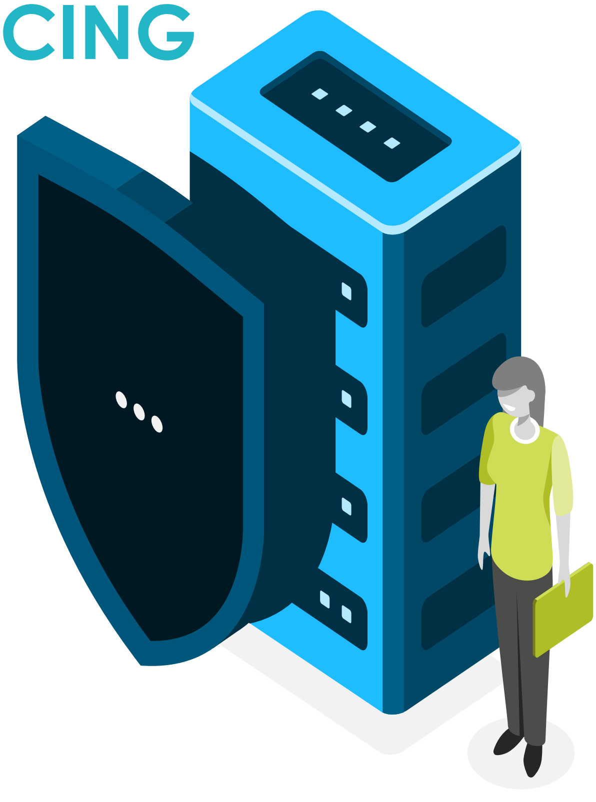
THE techUK VIEW

Just like last year, we are really surprised by this figure because managing risk is bread and butter for colocation providers; operators compete on the basis of availability. Consolidating corporate IT functions in secure, efficient, purpose-built facilities that comply with standards like ISO27001 seems to be the logical step in terms of security, resilience and business continuity.

However, this customer perception tells us that we need to do more to explain how risks are managed and mitigated. In fact, this has been discussed with the Government recently as political recognition of the importance of the sector has grown, so this may provide a useful template for supplier-customer conversations looking ahead.

On the other hand, it would be interesting to know whether security is a primary concern irrespective of where the data is housed or hosted.

THE CHALLENGES FACING IT DIRECTORS



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The survey:

- **23.1% of IT Decision makers believe security will be a big challenge next year**
- **17% are worried about budgets**
- **15.3% think they will need to support more home working**
- **76% of respondents believe that sustainability has a medium or high influence on IT decisions**
- **61% of IT Decision makers are considering the opportunities enabled by 5G**

Whilst security remains the number one issue for IT decision makers there are a range of challenges to be faced over the next few years.

Although 45% of respondents expect to see an increase in budgets due to Covid-19, it is also the case that 17%, almost 1 in 5 are worried about their budgets for the coming year, this may be down to the unknown future and the likely economic downturn.

Possibly, due to the Covid-19 pandemic and maybe a flawed assumption at this early stage, but slightly more than 15% of the respondents believe they will need to support even more homeworking next year.

It is really heartening to know that over three quarters of respondents believe that sustainability has a medium to high influence on IT decisions. Again, this may be a side effect of the Covid-19 pandemic with the cleaner air and climate benefits being seen by many but let's hope sustainability remains high on the agenda into next year too.

Amongst the challenges are some opportunities with 61% of businesses considering the opportunities enabled by 5G.

THE KEYSOURCE VIEW

In last year's survey we highlighted the increasing challenges that IT Directors are facing with their remit evolving from the traditional responsibility for hardware and software to focusing on business-critical activities. There is no doubt that Covid-19 has exacerbated this, putting the IT Director role firmly at the forefront of the organisation. For many organisations the virus has prompted the need to re-consider their IT resilience, capacity, and security to deal with the demand and change to the working landscape.

Whilst this drive to adapt to the new normal is likely to be a priority – other pressures continue to gather pace. The requirement for sustainable solutions continues with the introduction of new legislation and regulation – with failure to report on energy and carbon will result in significant fines and penalties.

As the report shows, businesses will be considering direct and indirect ways of using 5G technologies for their competitive advantage as it offers greater capacity and lower latency. This paves the way for new innovative services such as driverless cars, healthcare systems and robotics and the additional data from this technology, coupled with the ability to sustain the demand of 5G network capacity requirements, should further increase the need of data centre capacity. For IT directors the challenge will be how best to leverage the services available whether this be public or private cloud or via on-premise assets.

THE techUK VIEW

Energy and carbon are high on political agendas and we anticipate more policy measures if we are to achieve our legally binding zero carbon target in the UK. The European Commission, meanwhile, is rolling out a hugely ambitious package of environmental measures and data centres are firmly in the firing line; the sector must be climate neutral by 2030, for instance.

What we need from legislators is more focus on carbon productivity rather than just energy. Policies need to accommodate the carbon reduction capabilities of digital services and technologies. Currently, if logistics software enables a fleet operator to reduce emissions by 20%, the transport sector is credited with those reductions, while the ICT sector must accommodate additional processing load. While policy should continue to drive efficient ICT, measures should also encourage deployment of new technologies that deliver net carbon savings.

KEYSOURCE CONCLUSIONS

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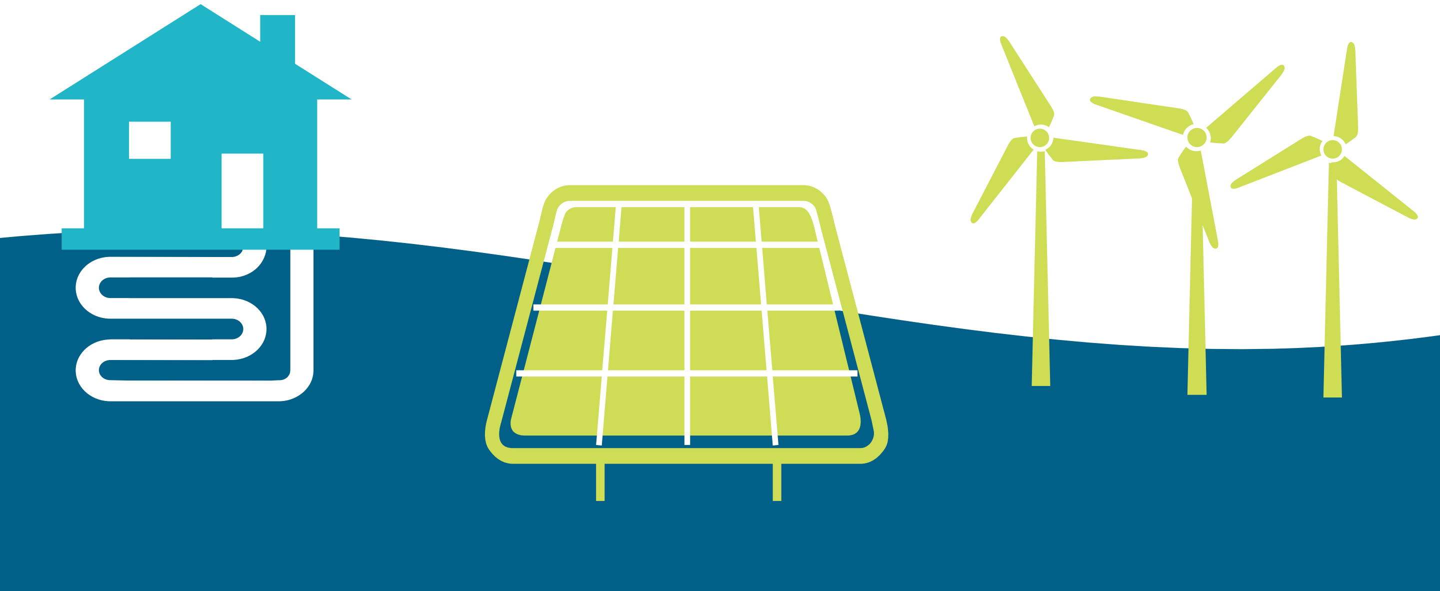
There are several recurring themes in this year's survey. It is clear that the increased demand on the industry, in the short and medium term, will be exacerbated by existing 'pre-Covid' challenges such as skills shortages and issues with the speed of delivery, and that there will be continued pressure to show resilience, secure operations and deliver rapid growth.

However, whilst it is likely that on-premise data centre assets will be leveraged where suitable, it also seems certain that UK data centres will be used to take on the additional capacity needed due to real estate rationalisation.

Clearly, the industry still has work to do to gain customer confidence in off-site or colocated environments and will need to respond to the changing demands and provide sustainable solutions and services in order to help customers deliver on their social responsibilities and meet the legislative targets whilst supporting advances in technology.

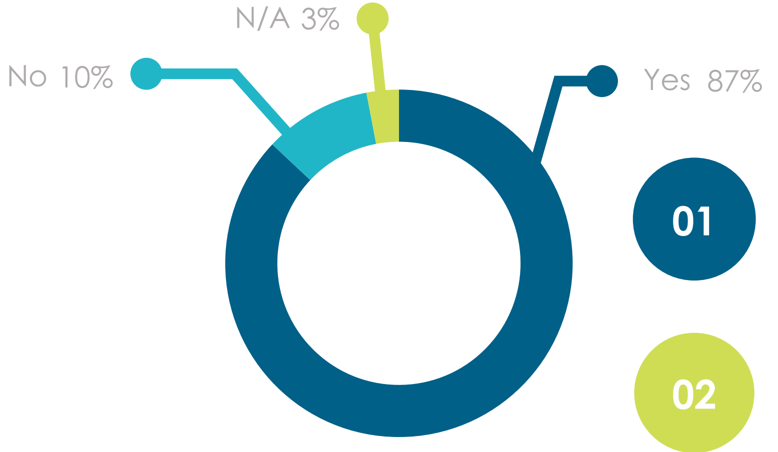
JON HEALY

Operations Director - Keysource



SURVEY RESULTS AND STATS

Q1. Have you had to enable greater remote access for home workers during the Covid-19 lockdown?



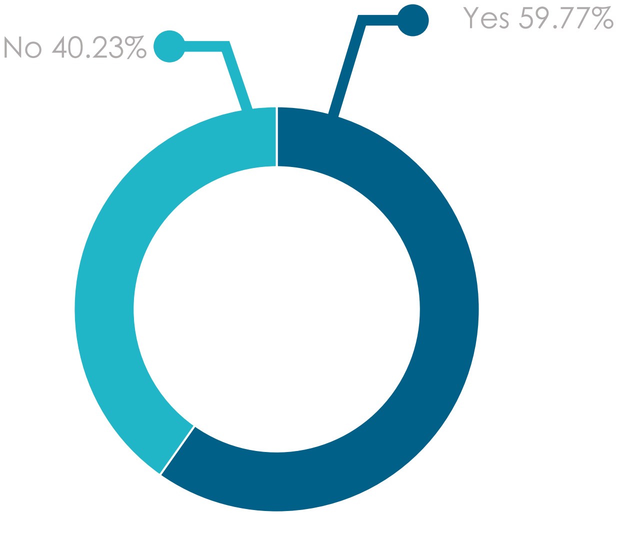
01 87% of respondents have needed to enable greater remote access

02 All regions saw an uptake in remote working

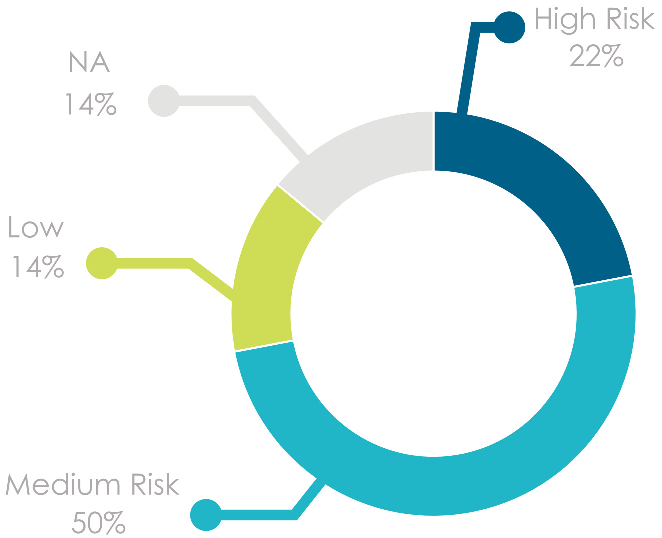
Q2. Of the 87%, did you need to limit the remote access of home workers before additional capacity was available?

03 Almost 60% of those businesses that did need to enable greater remote access were only able to by rationing access initially

04 IT & Telecoms and Education seem to be the least prepared for home working with 77.8% and 75% needing to limit access initially.



Q3. Thinking about security, how much risk do you think you are taking on by having data stored in off-site premises or in colocation facilities?

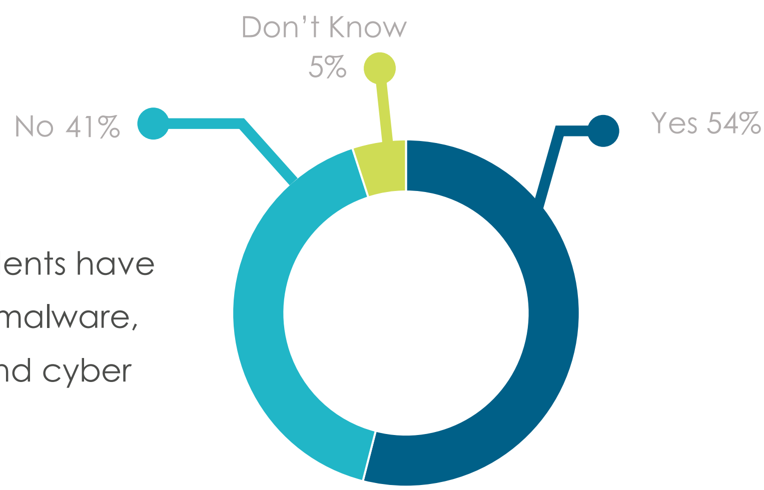


05 77% of respondents feel that they are taking a medium to high risk storing data off-site

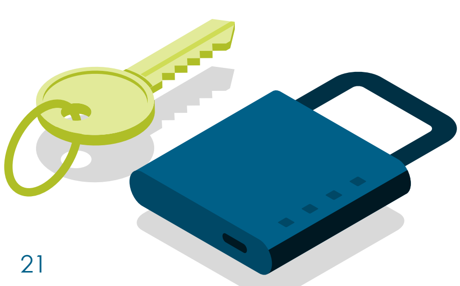
06 This is highest amongst Directors with 76% believing the risk is medium to high

07 This compares to 20% high risk and 60% medium risk in 2019

Q4. Have you seen an increase in malware, phishing attempts and cyber attacks?



08 Over half of respondents have seen an increase in malware, phishing attempts and cyber attacks



09 The increase has been seen more in IT/Telecoms and Architecture/Engineering

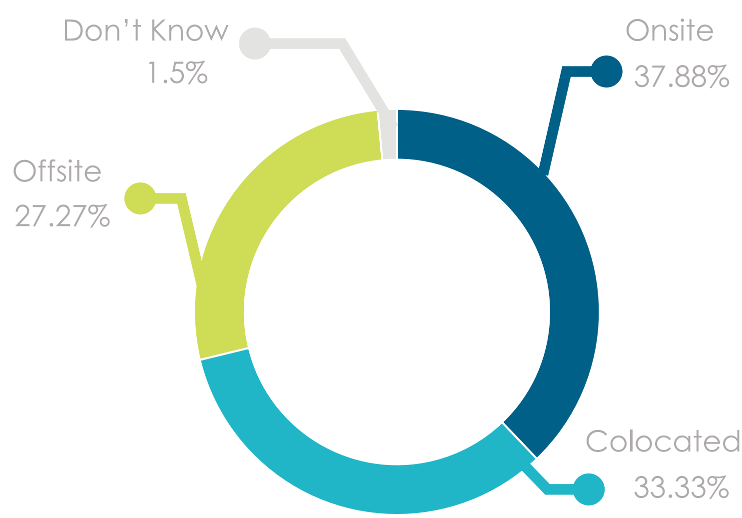
Q5. Have you added or plan to add data centre capacity due to Covid-19 and the lockdown?

10 66% of respondents have added or plan to add DC capacity

11 Almost 1/3rd plan to add more capacity

12 London and the South East are the regions with the highest % of 'have added' or 'plan to add' DC capacity

Q5a. Of the 66%, is/will the added data centre capacity likely to be on-site, off-site or colocated?

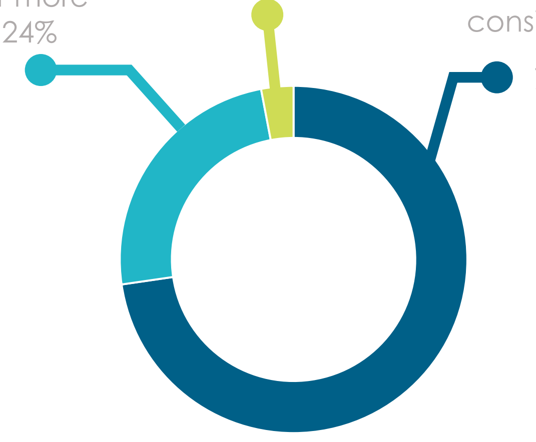


13 Almost 40% of businesses will add, or have added, on site capacity

14 1/3 have, or will add colocated capacity and 27% have or will add off-site DC capacity

15 Finance & Healthcare appear to favour colocation

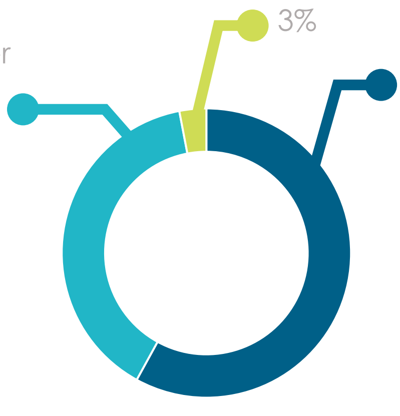
Q5b. Of the 66%, is location of the added data centre capacity more or less of a consideration as a result of Covid-19?



16 Almost three quarters believe that location is more of a consideration as a result of Covid-19

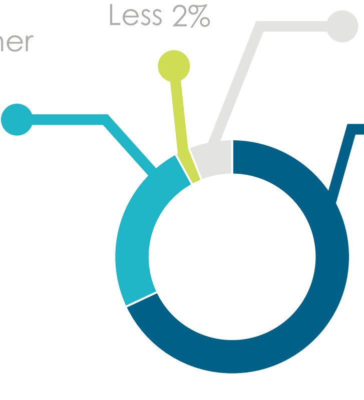
17 A broad range of industries are more concerned about data centre location post Covid-19

Q6. Has latency become more or less of an issue than in previous years?



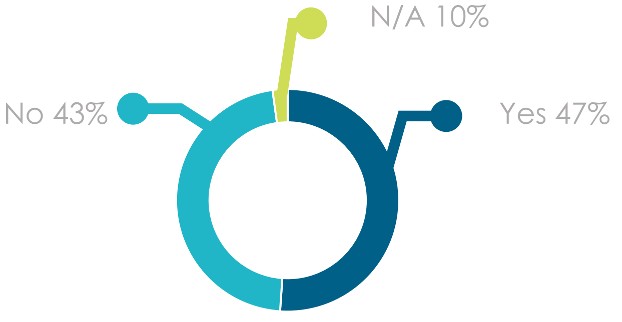
18 58% of respondents believe latency is more of an issue than in previous years

Q7. Do you think there will be an increase or decrease in demand for UK based data centres?



19 68% of respondents think there will be an increase in demand for UK based DCs

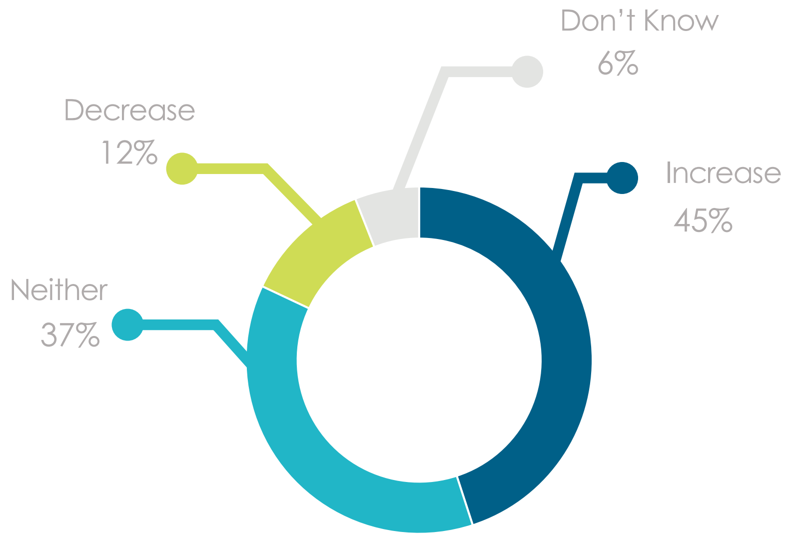
Q8. Has COVID 19 deferred or cancelled your/any planned IT projects?



20 Almost half (47%) reported IT projects had been cancelled or deferred due to Covid-19

Q9. Will your IT budget likely increase or decrease as a result of Covid-19?

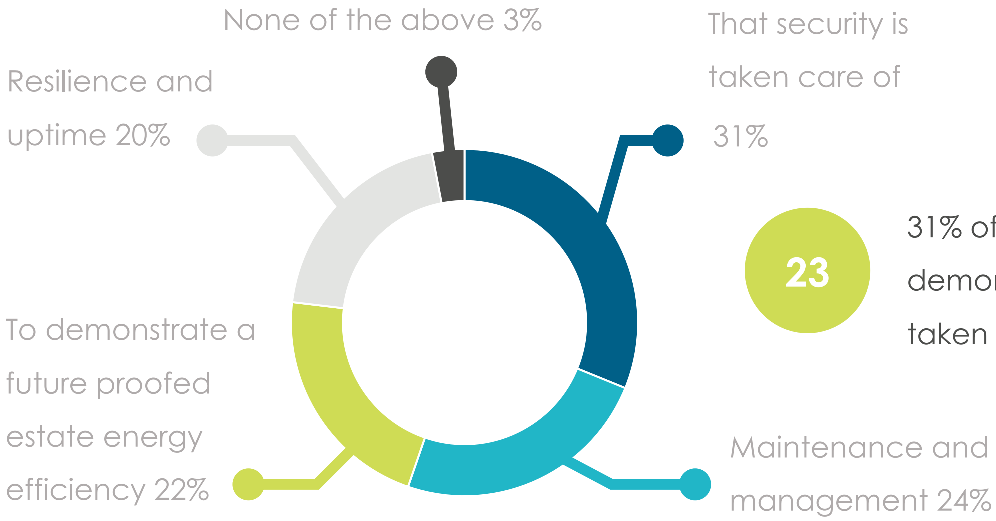
21 45% of respondents believe that their budget will increase as a result of Covid-19



Q10. By June 2020, 5G coverage was available in 80 towns and cities in the UK. Is your business considering the opportunities this enables?

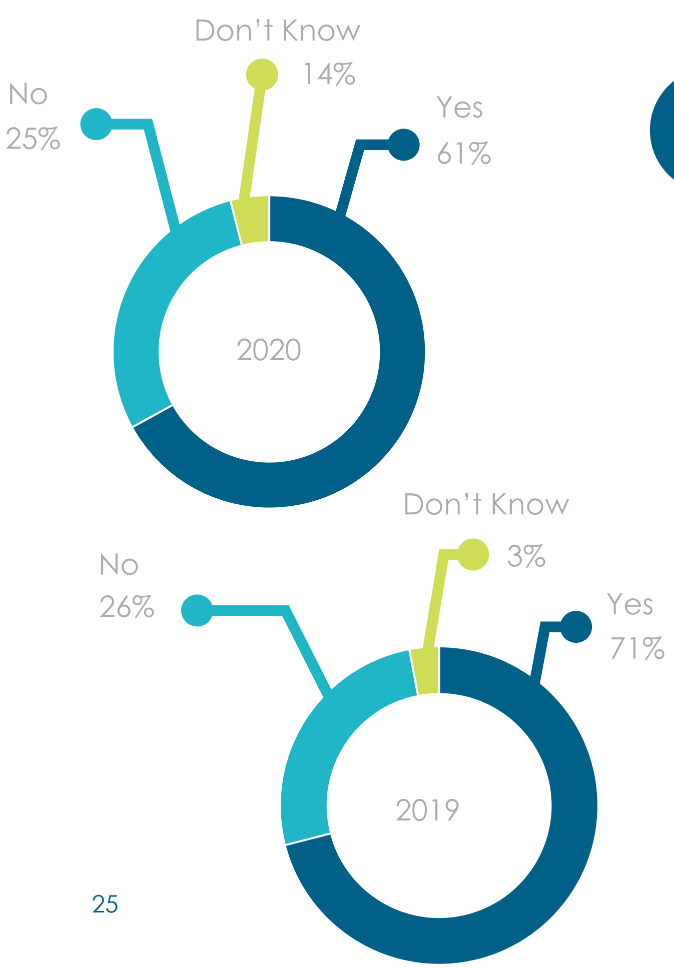
22 61% of IT Decision makers are considering the opportunities enabled by 5G

Q11. When considering accreditation for your data centres, which of the following, if any, would you want to demonstrate to external and internal audiences?



23 31% of respondents need to demonstrate that security is taken care of

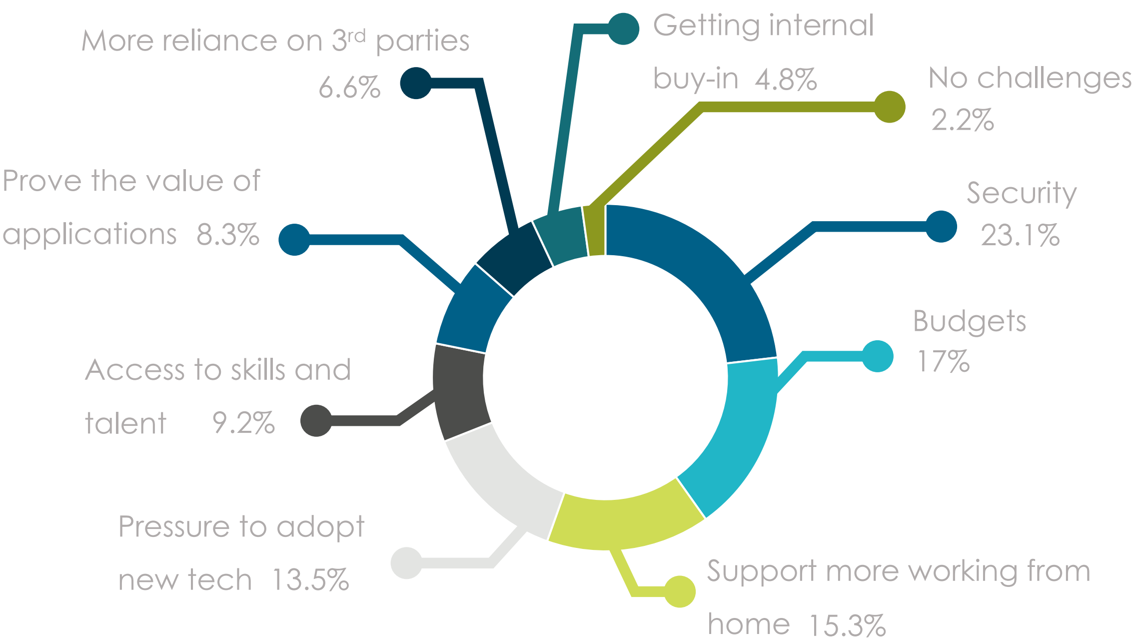
Q12. Are you concerned about the pressure put on IT to prove its resilience against security breaches and cyber-attacks?



24 61% of senior IT professionals are concerned about resilience against cyber attacks

25 This is an improvement on the 71% who were concerned in 2019

Q13. What do you think will be the main challenges facing IT directors in the next year, if anything?



26 23.1% of IT Decision makers believe security will be a big challenge next year

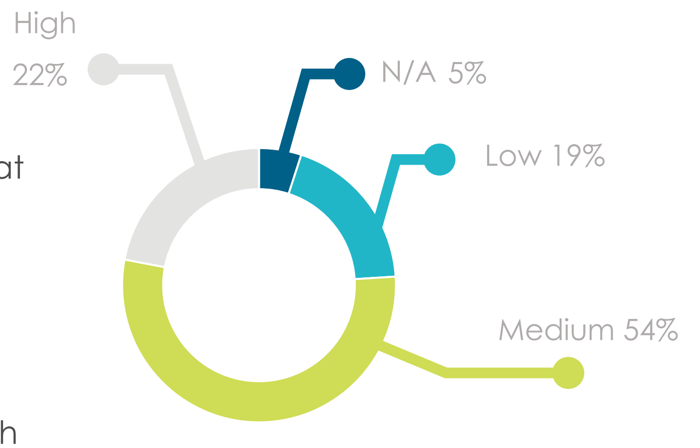
27 17% are worried about budgets

28 15.3% think they will need to support more home working

Q14. When considering new IT solutions and services how much does sustainability influence the decision?

29 76% of respondents believe that sustainability has a medium or high influence on IT decisions

30 1/5 believe the influence is high



KEY CONTACTS

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ABOUT KEYSOURCE

Keysource provide a range of services to support the full data centre and critical environment lifecycle from consultancy, project delivery and critical operations.

Operating for over 40 years as trusted advisors, Keysource is one of the world's leading specialists in data centres and critical environments, helping to ensure business continuity for clients across the globe.

Our clients trust us to protect their reputation and keep their critical and technology infrastructure operating. Our consultative-led approach sees us working closely with major international brands from a range of sectors to deliver solutions and services which support our customers' technology.

In a fast-moving digital world where continuous availability, performance and security is expected, we understand businesses need a flexible partner to effect change with innovative thinking.

Our people are amongst the best in the industry, and our world class customer service is why many of our clients are longstanding.

TRUSTED SPECIALISTS

FLEXIBLE & STRATEGIC

INNOVATION & KNOWLEDGE

KEYSOURCE

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