

Tech deficit

June 2014

Executive Summary

Breaking into new markets, meeting customer requirements and increasing profitability are key objectives for all companies. Efficient and adaptable technology is required to make these happen.

Appropriate infrastructure foundations such as network, IT, data centre and voice are crucial to businesses success. This infrastructure must now do more to enable businesses to understand and meet customer expectations. It needs to meet daily operational demands but also have the capacity to adapt to future requirements. If not, a gap will develop between what businesses would like to achieve and what their infrastructure can support.

This gap, a technology deficit, is real and growing for European businesses. Technology has become a critical factor in delivering business objectives but budget allocation is not keeping pace with those demands. There is additional urgency now, as companies large and small try to find the right balance, particularly in light of increasing adoption of the Cloud model and the impact that has on the supporting infrastructure. This report outlines the threats and opportunities posed by the Tech Deficit and offers insight into how businesses can respond. Business focus, whether it is on customer insight, innovation or improving employee productivity, requires the right infrastructure foundations and service deployment model.

Colt Technology Services, an established leader in delivering integrated network, data centre, voice and IT services, commissioned research based on the responses of 852 technology decision-makers throughout Europe to assess how European organisations are supporting their business. The research looks at how ready their technology infrastructure is to support future ambitions as well as some of the conflicts that emerge, such as maintaining data security while improving business flexibility.

The Tech Deficit

The research shows that the Tech Deficit touches businesses of all sizes across Europe and highlights that most do not think that their infrastructure is ready to meet the challenges that future business demands will place on it. Businesses require technology and infrastructure to adapt and respond to the faster pace of change, arising from the digital economy. The digital economy is opening the doors to new technologies and associated revenue streams across different sectors. This means requirements have increased while budget allocation remains the same. The research suggests that there is a need to prioritise decisions around buying, using and managing infrastructure. These decisions will involve introducing simplicity and flexibility into business models in order to successfully evolve from technology ownership towards more efficient methods of delivering services to customers who require a more flexible approach to their changing demands.

Executive Summary

Time is ticking

The research shows organisations do not feel their current technology infrastructure is good enough to deliver the kind of flexible services needed to drive their business forward.

- Only 26% of businesses think their current infrastructure is future ready and scalable to support the peaks, troughs and complexity of demand over the next two years
- One in five (20%) businesses state they have no strategy in place to address the deficit
- Without improvements to the current infrastructure, the majority of businesses (53%) believe they will be unable to effectively serve customers

Growing gap

Customers, partners, employees and other stakeholders are all affected by the tech deficit. This gap is largely driven by an underlying infrastructure, which is not currently capable of delivering on specific business objectives. Yet the budget allocated to infrastructure improvements and deploying new technology will remain basically static over the next two years.

- 72% of businesses have a tech deficit, where infrastructure is not ready to deliver flexible services to meet future business needs
- The majority of organisations believe their infrastructure needs to evolve over the next two years to meet future business needs – this includes voice and communications (88%), data centre infrastructure (90%) and network infrastructure (85%)

Closing the gap

Both small businesses and large enterprise across Europe need their infrastructure to evolve into a service-centric model in order to achieve their core objectives around customer satisfaction and service based delivery. Simplification of the infrastructure and the management of it will help all types of business to operate more efficiently and deliver to business outcomes. This approach may involve partnerships to move to a more standardized service based model rather than continuing the traditional 'buy-and-build' approach.

- Simplification (60%) of the technology infrastructure is the preferred route to ensure the adequate provision of the services that organisations need and ultimately, to positively influence business performance over the next two years

It's time to act

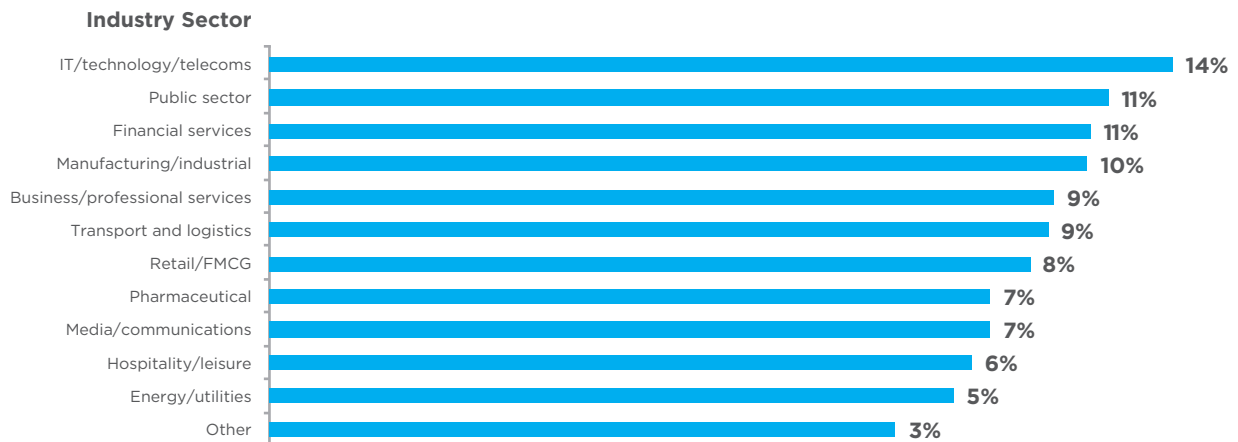
Customers and how they are served and supported is viewed as a key business driver.

Service based delivery is seen to play a key role in meeting business objectives of improving the customer experience (91%), better customer insight (85%), and greater flexibility (81%). The tech deficit threatens to affect how businesses interact with and support their customers. Service delivery will suffer, performance will suffer, expectations will not be met. The allocation of IT budgets remain rigid so what is the answer? Budgets need to be allocated in a different way. People managing IT need to work in a different way, and the management of the IT itself needs to change. Different decisions will be needed about the infrastructure foundations, what and how to buy as well as ensuring support for business needs both now and in the future. This is a shift in mindset away from managing technology towards developing a service based infrastructure. Businesses that make the best decisions in these areas will be in the strongest position to deliver the most effective response to the tech deficit and ensure technology supports the overall business objectives.

Research overview

Figure A: Research Overview

More than 850 European technology decision makers completed an interview during April 2014



Country	No. of respondents
UK	107
France	105
Germany	110
Netherlands	104
Belgium	105
Italy	107
Spain	108
Switzerland	106
Total	852

Research Methodology

852 European technology decision makers completed an interview during April 2014. UK, French, German and Dutch respondents are equally split between SMEs (50-500 employees) and enterprises (more than 500 employees); Belgian, Italian, Spanish and Swiss respondents are taken from companies with more than 100 employees. Research conducted by Loudhouse, an independent research agency based in London.

Time is ticking

Businesses across Europe are finding that their current technology and applications are not ready to support the business challenges which lie ahead.

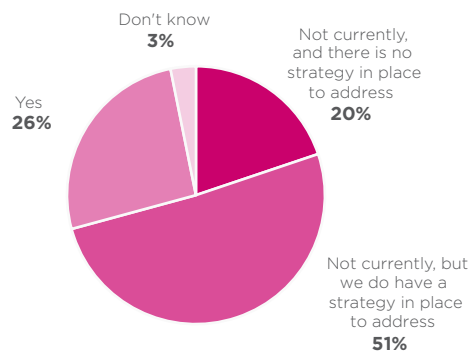
Only one in four (26%) businesses think their current infrastructure is future ready and scalable to support the peaks, troughs and complexity of demand over the next two years (see figure 1). Just over half (51%) state they are not currently ready, but have a strategy in place to address this. However, one in five (20%) organisations say they have no strategy in place at all. This is true across the complete range of technology: from voice and data networks through to data centres and IT.

Infrastructure needs to evolve and simplify. Standardising tools and processes can help with this evolution and there are definite opportunities to exploit service providers to help with this transition. But doing nothing comes with consequences. If organisations were to maintain their current infrastructure without further improvements, over half (53%) believe they will find themselves unable to deliver their business-critical services within a year (see figure 2).

And this is just the start of the problem. Half of organisations (50%) believe they have only a year before they will be unable to manage and mitigate risk for the business, with a further 46% struggling to effectively facilitate new technology deployment within a year. Ultimately, 44% of companies will find themselves unable to deliver critical services to the business within the next 12 months.

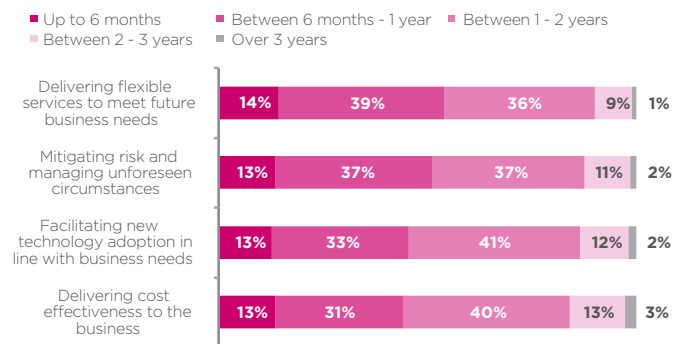
Given that some businesses say they are not at all ready to address the complexities which lie ahead, the need for effective action is even greater. Organisations can no longer afford to ignore the issue. Instead they must recognise that what they do with their infrastructure over the next year is critical. Persisting with the current approach is not going to work.

Figure 1: Infrastructure readiness to support future complexity



Q: Overall, do you think your current infrastructure (including network and data centre) is future-ready and is scalable to support the peaks and troughs and complexity of demand over the next two years?

Figure 2: Time before reaching shortfall



Q: If you were to maintain your current IT infrastructure without further improvement or innovation, assuming licences, capacity etc, scaled with the business, how long would it be before the system fell short of achieving the following

Growing gap

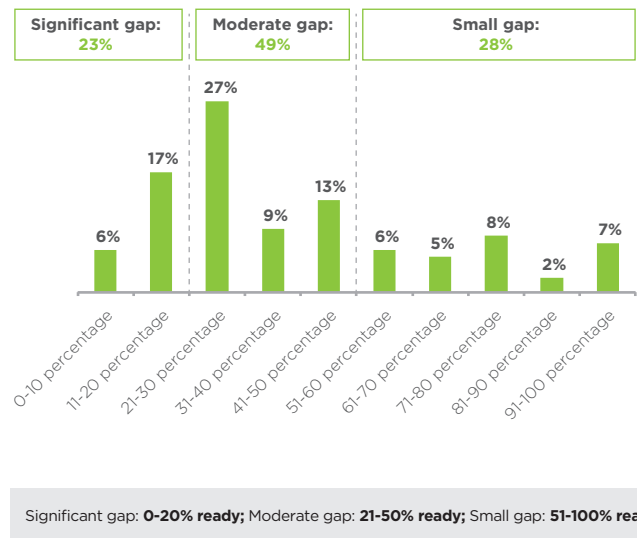
Organisations must tackle the tech deficit, both because of the urgency, and the extent of the gap. Almost three in four businesses (72%) have either a significant or moderate tech deficit, where their infrastructure is not ready to deliver the critical services needed to meet future business needs (see figure 3).

The majority of organisations believe their infrastructure needs to evolve over the next two years to meet future business needs - this includes voice and communications (88%), data centre infrastructure (90%) and network infrastructure (85%).

The key drivers forcing change are cost pressures (40%), storage requirements (39%) and data centre security (34%). Even though businesses face significant gaps, the allocation of technology budgets over the next two years is set to remain the same (see figure 4).

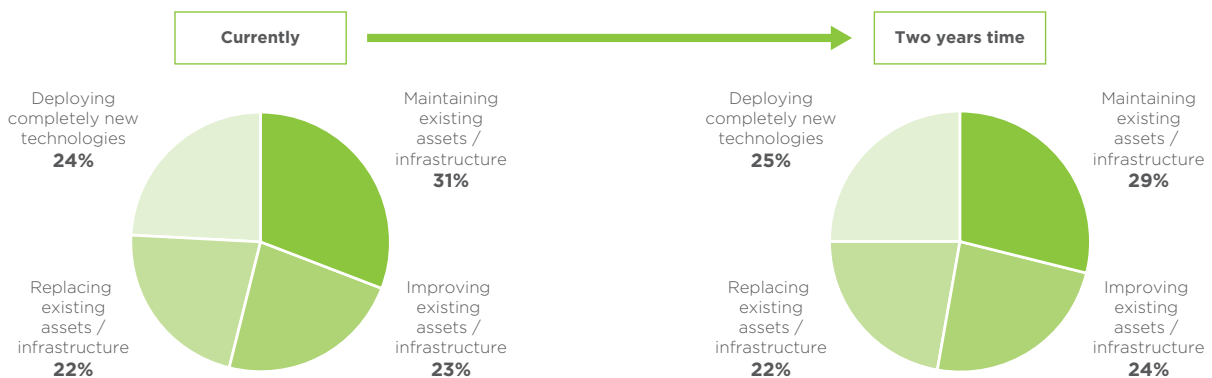
People working in technology are very used to trying to do more with less, but the continued budget constraints means that to achieve competitive advantage, a fundamental change is required in terms of what infrastructure to buy, how to buy it and how to manage it.

Figure 3: Readiness of infrastructure to deliver flexible services to meet future business needs



Q: In your opinion, to what extent do you believe your existing IT infrastructure will support the future needs (i.e. in two years' time) of your business to achieve the following?

Figure 4: Current and future allocation of technology budget



Q: In the last 12 months, approximately what percentage of your IT budget was invested in the following? And approximately how do you envisage your organisation's IT budget being split in two years' time?

Closing the gap

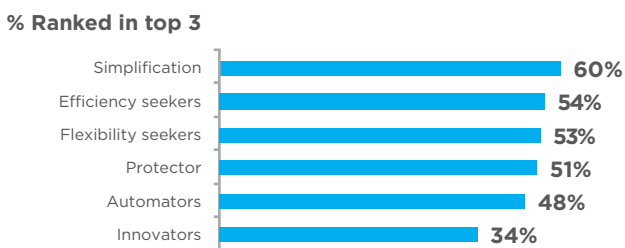
To close the gap, IT budgets must be spent in ways that streamline and standardize infrastructure, make use of expert help, simplify processes and focus their strategy on delivering business outcomes.

These potential responses can benefit from external service providers who understand the technology as well as the business challenges and crucially, have the scale, experience, systems and processes in place to overcome this tech deficit.

Closing the gap involves delivering the complete range of network, IT, voice and data centre services in a more efficient way. More than 8 in 10 businesses acknowledge they need to evolve their current infrastructure in these areas to meet business needs over the next two years.

In order to better manage their infrastructure transition, organisations are looking to simplify the number of services, applications, storage and network resources they have in place. Simplification (60%) is felt to be the most important route to ensuring that the infrastructure supports the services needed to drive future business performance (see figure 5).

Figure 5: Preferred route to infrastructure evolution



Preferred route to infrastructure evolution	
Simplification:	Simplify, standardise and reduce the number of servers, applications, storage and network resources across the company
Efficiency seekers:	Increase the speed of network and application performance
Flexibility seekers:	Improve ability to respond to changes in business needs
Protectors:	Protect the business with resilient operations, disaster recovery
Automators:	Automate routine, operational and end-to-end processes
Innovators:	Supporting new ways of doing business

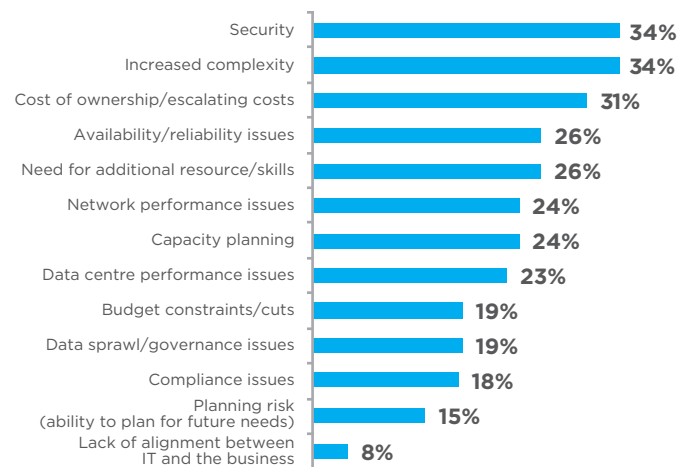
Q: How important are each of the following in ensuring that your infrastructure supports the applications / services your business needs and ultimately positively influences business performance over the next two years?

Businesses must adopt an infrastructure which is responsive to business change. Over the course of the next two years, businesses are looking to adopt more flexible models which can be tailored towards their business requirements. Use of Infrastructure-as-a-service and Software-as-a-service are both set to grow in the future (increasing by 52% and 55% respectively). Such platforms provide organisations with continuous IT and an opportunity to close the gap between their services and business requirements. Businesses are also keen to explore opportunities with reliable external partners, particularly in the critical area of data management, with colocation expected to increase (by 33%).

Change comes with its own challenges. The biggest risks of infrastructure transition are perceived to be security (34%), increased complexity (34%) and cost (31%) (see figure 6). Any transition needs to be effectively managed and carefully developed to ensure these problems are minimised.

The evolution of infrastructure to a more efficient and simplified model will require help. Engaging the right partner will prove key. A partner with the expertise, technology and local knowledge can provide the necessary support for a carefully staged transition. Businesses can consume these services either directly or indirectly through the channel, acquiring partners who understand the intricate relationship between infrastructure, services and business success.

Figure 6: Biggest risks of infrastructure transition



Q: Where do the biggest risks reside in infrastructure transition in your organisation?

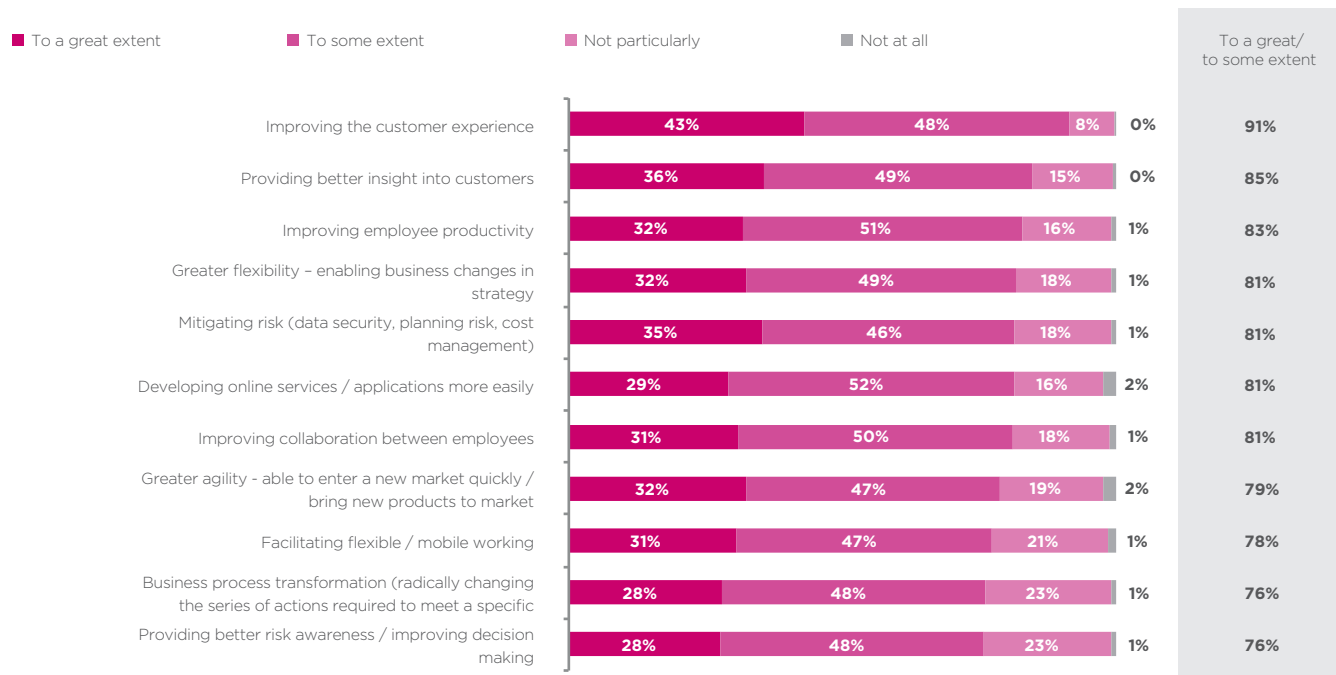
The cost of failure

Technology helps provide services which are crucial to business success. Organisations acknowledge that service based delivery plays a key role in meeting key business objectives of improving the customer experience (91%), providing better customer insight (85%) and greater flexibility (81%) (see figure 7).

Customers will always notice when service standards drop. An IT department under too much pressure will struggle to support the business and standards will inevitably drop. With the increase in digitalisation, more and more businesses are dependent on IT as a key part of reaching and servicing their customers. Failing to address the tech deficit will have visible consequences such as increased customer dissatisfaction, falling behind competitors, poor market performance, employee frustration and stalled revenue growth or decline.

IT infrastructure under increasing pressure and demand can result in many high profile failures. Several retail banks across Europe have suffered technology failures during times of peak online customer activity, resulting in critical service disruption and customer dissatisfaction. Furthermore, a government led health insurance programme in the US backfired after users were unable to log-on to the organisation's website. The programme was plagued with delays and backlogs. These critical malfunctions proved both costly and publicly damaging. Services can only be maintained if businesses have a robust infrastructure in place. Investment in the right infrastructure and tools is critical to avoid losing customers, falling behind the competition and suffering damaging revenue losses.

Figure 7: Extent of service-based delivery driving business performance



Q: To what extent do you think the investment in service-based delivery of applications and IT, including data centre colocation, over the next two years will help to deliver the following outcomes?

Conclusion and recommendations

Ignoring the tech deficit will result in painful and visible consequences to profitability, service delivery, competitive edge and customer satisfaction levels. The tech deficit has created an urgent need for a more evolved and flexible infrastructure, one designed to deliver business outcomes. It is also shining a spotlight on the need for a new, service-centric approach.

The good news is that significant IT pressures like this can drive innovation and effective changes in strategy. The response can result in value for the business and customers if the right decisions are made in a timely manner.

We have identified three key areas, which, if improved, will help businesses respond effectively to the Tech Deficit.

1 Thinking about infrastructure

This is about changing mindsets to get better results, in particular moving away from buying technology and owning things. This new mindset will enable a move towards the kind of service based delivery that will help the business achieve its core objectives around delivering the services customers want.

The service based delivery model is being driven by the pace of change as well as the challenge of balancing changing customer needs and future business requirements with daily operational demands. In the digital economy, customers expect quick responses to demands, which means an increasing pressure on businesses to respond in an agile way. The technology infrastructure should be able to support these changes in demand and scale accordingly, while maintaining all the necessary governance and security. Owning infrastructure that cannot quickly be used to support the new requirements could prevent businesses from exploiting the benefits of the digital economy.

2 Managing infrastructure

Flexibility needs to be introduced into business models and commercials. A partner of choice can introduce this flexibility into an organisation. Businesses can no longer be certain about their needs and will seek out providers who they know have the technology, expertise and flexibility of service delivery that can adapt to their needs.

Increasing flexibility should not however lead to an increase in complexity. Looking for an underlying infrastructure that achieves more while being easier to manage is a key consideration.

The right partner can integrate their resources with existing technology and processes to refine and simplify what is already there while also creating a foundation for adding better technology and services in a straightforward way. This will support and improve interactions with customers.

3 Buying infrastructure

This is about evolving away from buying and managing technology towards embracing the considerable advantages that come with managing cloud based services. It's a shift away from owning technology towards the effective and flexible management of multiple cloud based services that can respond to customer needs and deliver business outcomes in a more simplified and efficient way. Cloud services will play an important role in enabling IT departments to evolve. But the cloud model is only as good as the underlying network and supporting services. Good underlying infrastructure does more than meet day-to-day needs, it creates a strong platform for continuous IT.

Businesses are demanding simplicity. Cloud services are based on repeatable, standardised processes. They are not just about provisioning of resources – they are about managing changes and incidents in a consistent and cost-effective manner.

A deep relationship with a partner can lead to the right environment for a business to run IT effectively and change when required. For example, by influencing a technology partner's technology roadmap, it can help to deliver business outcomes more effectively.

The Tech Deficit can lead to a market changing transition, driving the deployment of an infrastructure that is adaptable, scalable and flexible. An infrastructure that supports service delivery while being simpler to manage by both provider and user. In the digital economy, successful businesses will be supported by service-centric infrastructure. Strategic technology partners will play a key role in this transition, enabling the IT department to become more flexible while simplifying tools and processes.

Colt is the information delivery platform, enabling its customers to deliver, share, process and store their vital business information. An established leader in delivering integrated network, data centre, voice and IT services to major organisations, mid-sized businesses and wholesale customers worldwide. Colt operates in 22 European countries with a 46,000km European network and transatlantic network capacity. Colt has metropolitan area networks in 42 major European cities with direct fibre connections into 19,800 buildings and 20 carrier neutral Colt data centres.

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