Shape your future infrastructure: a proposal document

The shape of the challenge for manufacturing

The manufacturing sector has been in the throes of digital transformation for some time. Big data, robotics, machine learning, artificial intelligence, augmented and virtual reality… these are just some of the technologies already available to help you navigate the post-pandemic landscape.

But it's connecting these technologies that will enable you to get the most from Industry 4.0

Shaping the perfect network infrastructure is challenging. Head office might be city-based, but factories are widely dispersed, often in rural areas or developing countries. Many sites will have legacy systems and ageing networks.

The effects of lockdown on the supply chain and the contraction of markets means that you've had to think fast, accelerating some plans and pausing others. You need to keep capital investment as low as possible and try to anticipate future change.

This proposal document will help you to examine in more detail some of the choices available to you at this pivotal moment. Allow you to select and deliver a successful solution and invest in technologies that will remain sufficiently flexible to allow for different future scenarios.

Let us help you shape your future infrastructure.

Jose Gastey

Director, manufacturing, BT

Exec summary

Coronavirus has created huge uncertainty for organisations; uncertainty around business models, locations and even which products and services to provide.

With the pace of change having increased like never before, you want to shape your infrastructure to reflect the way your business is changing. And to do it faster than you were originally planning.

You can get the flexibility and agility you need with new software defined services, cloud capability and network options.

But, the key to success is combining the right technology with the right security, service, management, expertise and commercials so you can mould your infrastructure into the shape you want.

This document helps you explore what you need to consider when implementing new infrastructure services for your end users, network, data centre and cloud.

Infrastructure index

Challenges facing MNCs

Infrastructure challenges haven't changed, they've just got more complex.

Organisations need infrastructure that can simply support agile working, enable their cloud strategy, deliver the experience needed on evermore demanding applications – all whilst being secure.

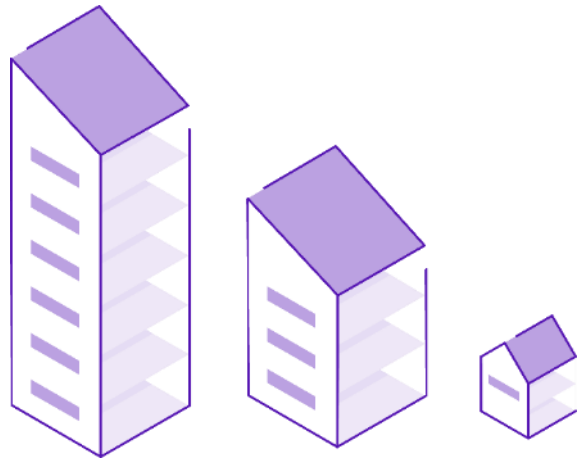
These aren't new challenges. The problems and urgency surrounding them have just accelerated.

For many of our customers, this is driving big change. Budgets are being freed up and the factors that slowed transformation before are no longer inhibitors.

There's huge focus on delivering a better user experience, improving security, driving down network costs and increasing agility. That's where SD-WAN comes into its own. As well as enabling hybrid networking, it also helps achieve each of these benefits.

Then there's the acceleration of cloud adoption. As the reliance on cloud-based applications, such as O365, has increased, so has the need for secure, high-performance connectivity and to have it in more locations across the globe.

And last, but by no means least, is security. SD-WAN needs to be secure, as well as your network, data and cloud. You also need to protect against increasingly sophisticated cyber attacks. The key to success is having a holistic strategy which covers every area, backed up by the skills and data to make sure you always stay one step ahead of the threats.



The wrong approach

Don't believe the hype!

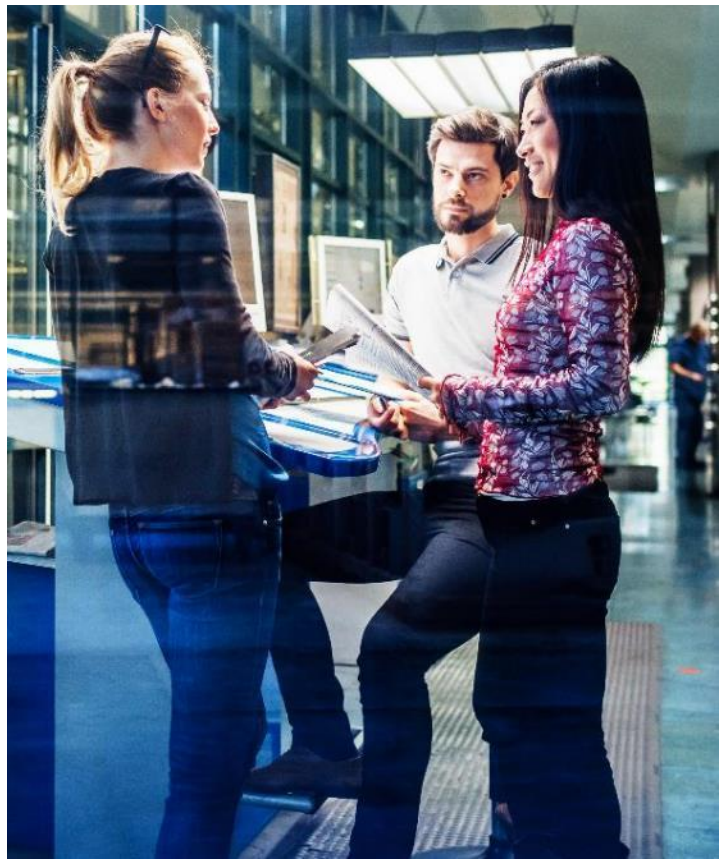
No organisation implements infrastructure transformation without making mistakes. It's complex.

Often companies are blinded by the promise of new technology. After a couple of decades of slow evolution, we're now in a time of revolution. New and developing technologies, like software-defined services, cloud and virtualisation, can deliver more agility, control and insight, as well as cost savings.

But that's only possible if they're implemented successfully. New technology claims to enable a simpler do-it-yourself approach. This may be true if you have three sites in one country, but not when you have the complexities of a multinational organisation. That's why we're seeing continued growth in co-managed and fully managed services.

To make the most of the potential benefits, you need the right design, support, management and security. This is especially true when the software-defined world is only going to get more complicated, with the need to constantly invest in and deliver software drops to maintain a great solution.

One of the biggest challenges with DIY is having the right infrastructure skills and experience to deliver, maintain and secure at scale. Cloud is one of the biggest areas for skills gaps. We often see organisations driving a multi-cloud approach and assuming that the skills for one cloud provider are relevant for all their cloud providers. This is only going to get worse as we see organisations moving typically from three to five cloud solutions to five to seven in the next few years. The wrong cloud strategy, compounded by the lack of skills to optimise their solution means 80% of organisations are expected to overshoot their cloud budgets this year.



The right approach

You need a plan which can evolve

Continually reshaping, evolving and adapting your network infrastructure is vital - especially when faced with the rapidly changing face of business today. You need a strategy and plan that can adapt and evolve in line with your needs.

Choice is fundamental to defining the right strategy. It needs to spread across technology solutions, security services, management / service models and crucially, include a range of flexible commercials. But with choice comes complexity.

If you want to avoid that headache, fast-track your experience and look to benefit from expertise that's come from managing multiple, successful, large scale global infrastructure projects.

Many large organisations don't have a clear infrastructure strategy, but taking the time to create one doesn't need to slow you down.

We can take you on a Smart Transformation journey that within a short timeframe gives you a solid plan:

- **Business context** – understanding your business strategy and problems
- **Discovery** – your site types, financials, tech and service states, as well as application landscape
- **Strategic options** – for SD-WAN, underlay, cloud, security, service models and any other relevant in-scope tower
- **Roadmap / business case** – the creation of a transformation roadmap and supporting business case.

Choice and expertise

We offer choice with a holistic approach.

To deliver a great end user experience, you need to take a holistic approach from the end user, across the network and into the data centre and cloud.

We can give you choice across each of these different areas, and match the right solution to your business needs.

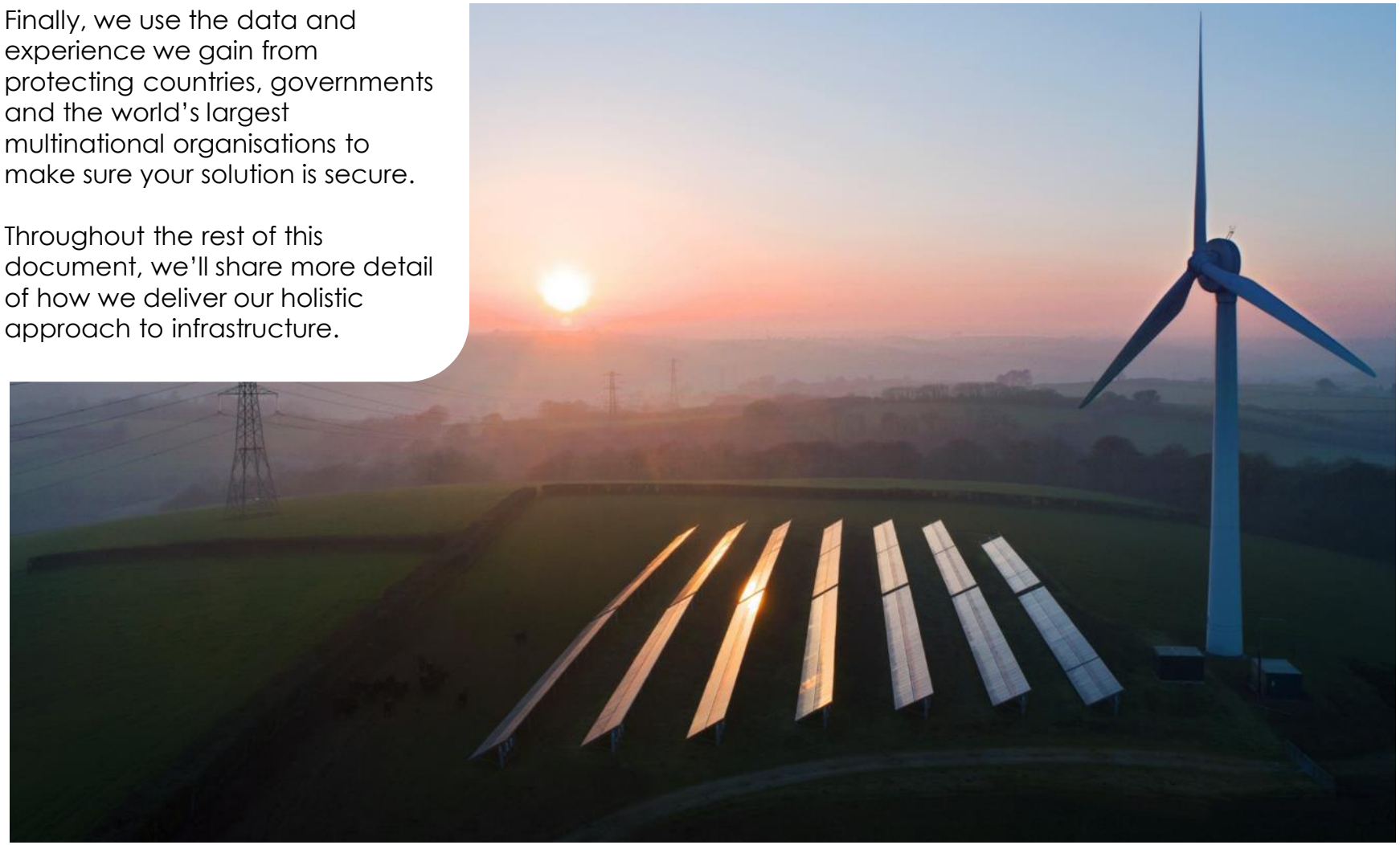
We have the expertise and experience to deliver these services to you, globally and at scale.

We use digital tools which give you end-to-end control and insight and improve the performance of your key applications.

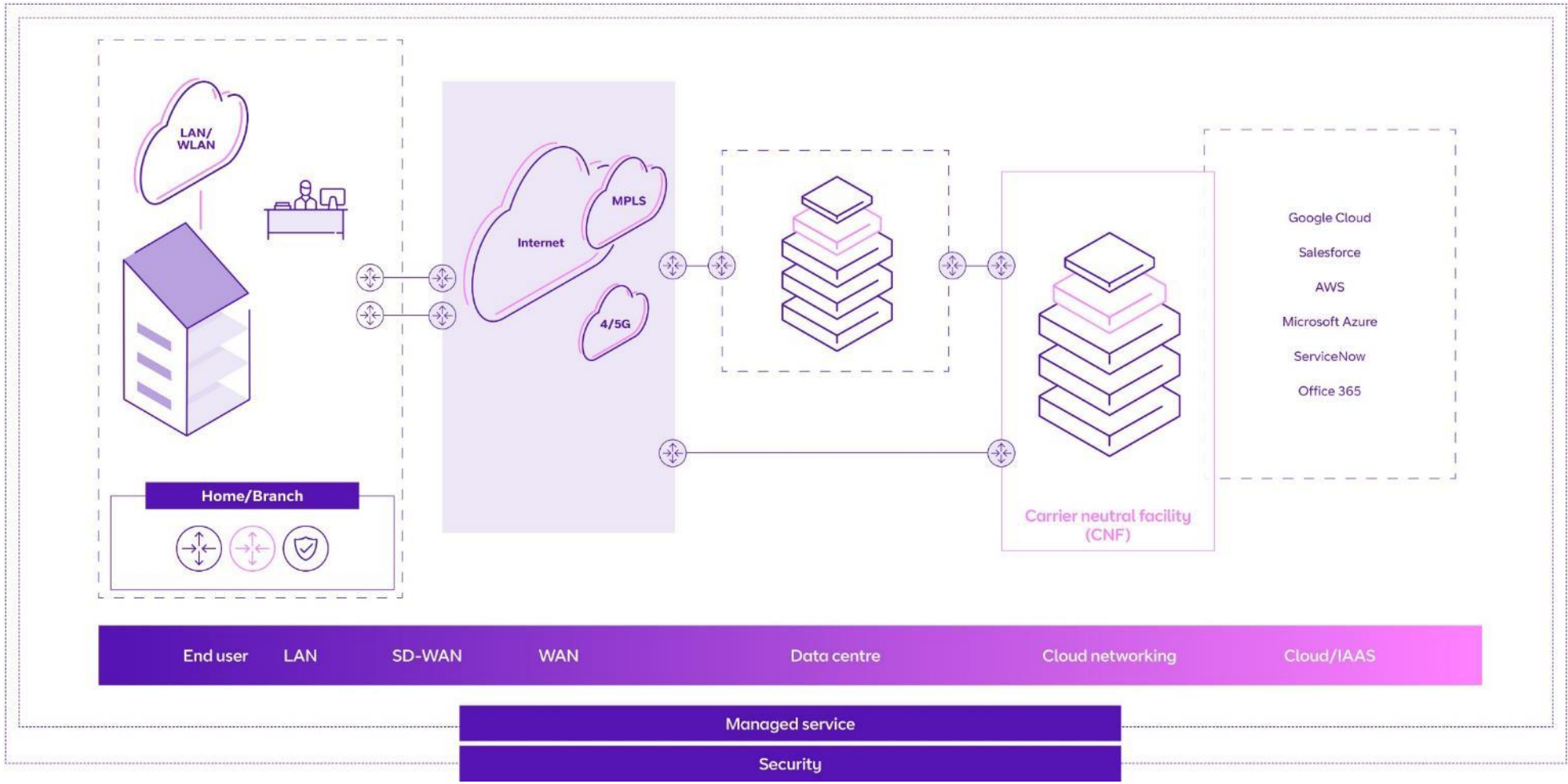
We provide choice of management and service models so you can chose what you control and what we control for you.

Finally, we use the data and experience we gain from protecting countries, governments and the world's largest multinational organisations to make sure your solution is secure.

Throughout the rest of this document, we'll share more detail of how we deliver our holistic approach to infrastructure.



We are unique in the choice of secure services we offer across Cloud, Network, Edge and SD-WAN and our ability to make that choice work to deliver great business outcomes



Great end user experience

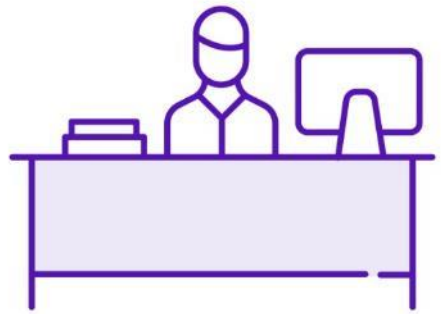
User experience drives productivity and is often how the infrastructure is judged. Understanding it has become even more complicated with so many different applications, often cloud-based, as well as so many different working locations.

The boom in agile and homeworking has created a whole new challenge as organisations try to get experience data across personal consumer broadband services. And as infrastructures evolve and transform, it also impacts user experience, especially with a major change like SD-WAN or a move to new cloud service, like O365.

We can monitor the availability and response time of every application and user on every device (laptop, desktop or mobile). This means you can understand the experience you're giving, compare your company to the best in the industry, avoid many unnecessary costs, make sure that homeworking is effective for all and improve the success of any change project.

We can give you visibility of how your business critical applications perform end-to-end, from any device into the cloud. We can provide your IT department with information on how to triage applications issues, such as inferior voice quality or poor user experience from slow applications We can benchmark service expectations in each country and show how this changes with network transformation to SaaS, SD-WAN or to a new internet underlay, with "hop by hop" performance visibility right into the hyperscalers cloud environment.

IDC report that 77% of employees have issues with enterprise SaaS slowdowns between 1-5 times per week. We can optimise performance for remote and homeworkers accessing SaaS or O365, increasing performance by up to ten times.
We can offer you a choice of commercial and service options, from a fully managed solution to a simple licence model. If you don't want an upfront CapEx outlay, then we can offer subscription licence models and minimal commitment. Our managed service lets you choose the level of service you need, including access to an experienced global consultancy team to recommend application performance improvements and advise on the impact of change programs.



Connecting everything with LAN and WLAN

On-site everything and everyone needs to be connected. Its how you deliver a better experience, both to your employees and your customers. And everything probably doesn't literally mean everything, but its not far off. We are way beyond the days of laptops and printers and into the world of wearables and IoT. The biggest challenge is the complexities of time. You have different approaches for different types of sites, different approaches for different parts of your organisations, technology initiatives which have been implemented in different ways in different locations. It's a challenge delivering the connectivity to everything when you have a new operation, but its much harder when you have history.

That's why our approach is first to take over your mess, take away the headache of managing what you have. Then setting out a plan in line with your business needs to migrate you to a consistent approach across your organisation, matching connectivity, service and security to the needs of the location. When we implement the solution we implement the latest technology ensuring you can maximise the control, visibility and experience you need. We will enable you to deliver the experience that matches your organisational objectives. In the software-defined world our holistic approach brings together the user, network, data centre and cloud services with your LAN, so you can benefit from the added experience you get from controlling application and data end to end. As you implement your IoT and 5G plans, we have the experience and skills to support you in making the most of the latest technologies.

Successful SD-WAN delivery

The SD-WAN market is in a state of flux. There are more than 70 different technology vendors, with no certainty on who'll be the long-term winners. Some vendors have developed leading propositions as the most secure or most flexible solution, but all SD-WANs do the same core tasks and roadmaps are converging.

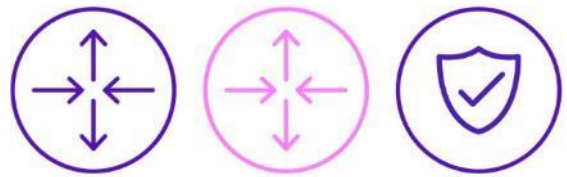
Try to avoid making the mistake of having a preconceived view of the best technology provider. Technology is just one factor in the SD-WAN jigsaw. You need the rest of the puzzle to be successful - making sure you can deliver it, that it's fully tested and secure, and that you have the digital tools to provide the monitoring, visibility and control you need.

We offer a choice of the leading SD-WAN solutions - from Cisco (inc Meraki), Nokia Nuage Networks, VeloCloud and Fortinet - so you get the best technology to match your needs.

Making the right choice of SD-WAN isn't always straightforward and the risk of downtime when you're making a major change like moving to a SD-WAN is huge. That's why we developed our Explorer Labs. Within the labs, we can emulate your own network and test different solutions before you deploy, significantly reducing the risk of change. We can also use the labs to optimise your solution to make sure it delivers on its promise.

We recognise the importance of skills when moving to a new technology like SD-WAN. That's why we've developed our SD-WAN centre of excellence. We make sure we provide you with technical experts in your chosen SD-WAN technology - in the design, delivery and in-life stages. This gives you an optimised design and in-life that, together, make the most of your chosen technology.

We've developed our learning and expertise through the deployment of thousands of SD-WAN sites across the globe. And we've used this insight to develop a 100-point success checklist for all deployments.



Matching networks and business needs

You have an array of different network options and within those options, you have choices on access, service and management. Matching these to the needs of your business can be challenging - balancing cost, performance, reach, service and security. There's no perfect option. One option may be low-cost and highly available, but may then be limited on performance, service and security.

Matching networks and business needs

The improving speed, availability and cost of internet means that most organisations are moving a high proportion of their internet services in the network infrastructure. But there are 3 key issues which need to be managed:

- **types of internet** – internet options can be very different - in price, performance, service and security. Consumer grade internet is completely different to business grade internet. Different providers add to that confusion with their contractual and service approach
- **management of providers** – to get the best possible internet at the best possible price, you need to bring together providers services from across the world. Managing large number of providers is complex, especially when something goes wrong
- **security** – different types of internet come with different security levels. Basic broadband services are cheap, but may need extra security services – the cost of which may outweigh the initial cost benefits.

We've been delivering network services to over 180 countries for many years, using a mix of network and access options. All our experience means we're experts at delivering network infrastructure.

We've built a data warehouse on the best network service options delivering connectivity wherever needed. To meet our customers increasing focus on internet, we've invested in a range of new features and capability:

- **free internet capability** – using our multi-service access capability, you can transform some of your existing MPLS bandwidth to internet for free
- **ISP partnerships** – we believe we lead the market in our ISP partnerships, with over 150 across the globe. This means we can deliver the best coverage at the best price. We also implement APIs to link to those partners in order to provide the latest pricing instantly
- **internet bands** – we've created six simple grades of internet, with clear guidelines on what bandwidth, security and service you'll get at each band. This makes contracting for internet much simpler and quicker.

We provide a choice of network services, simply with fast competitive pricing. We don't just recommend our network, we use partners to identify the best network solution for you.

Our investment in future networking

MPLS is not dead, but we expect growth in internet and other connectivity options, like 5G and satellite, to continue to erode its use.

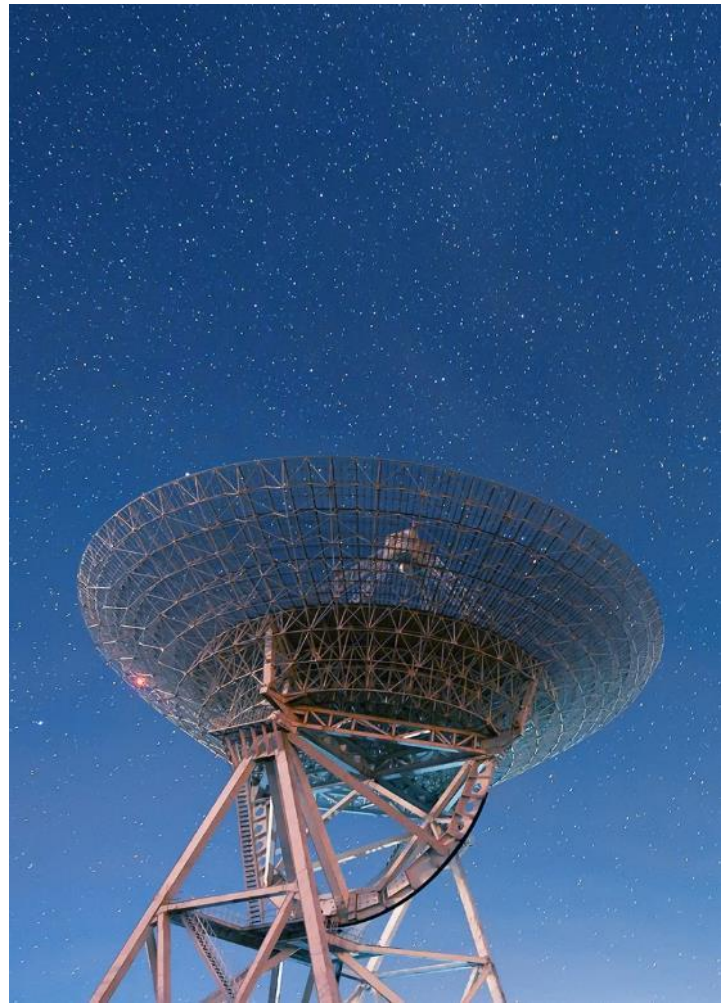
We're just at the start of the 5G story. In 2020, we've connected our first customers sites with 5G. These are global retail stores for a nutrition and health organisation.

We have the best mobile network in the UK and we're using the insight we're gaining from that investment to create the corporate global solutions of tomorrow.

5G offers much higher bandwidth than traditional mobile services and its that performance which will make it a crucial connectivity choice for all organisations as availability grows. We've already enabled 5G options in many of our solutions, including our SD-WAN choices. We're also supporting 5G hotspots which are increasingly being seen as a site connectivity option for IoT.

Advances in satellite technology are opening up new use cases for our customers as we're able to offer much lower latency service. Traditional Geostationary Earth Orbit (GEO) satellites are being improved with higher throughput up to 50Mb and more cost-efficient smaller antennas. The real advances come closer to Earth - Middle Earth Orbit (MEO) satellites cuts GEO latency from over 500Ms down to 120Ms and offers speeds of up to 1 Gig. Across 2021 and 2022, we'll launch Low Earth Orbit (LEO) in conjunction with our partners such as Starlink and Telesat, which offers the game-changing prospect of 50Ms fibre-like latency for speeds of up to 100+Mb.

We have over 50 years experience integrating fixed and mobile networks with satellite. We operate the biggest earth station on the world at Madley, in the UK, which can serve two-thirds of the Earth's surface. Using our own infrastructure and working with our partners, we provide satellite connectivity almost everywhere on the planet, from offshore rigs to remote mining sites, including fast turn up and disaster recovery following natural disasters, and IoT solutions to guiding drones and unmanned ships under remote control from the cloud.



Breathing new life into data centres

A cloud-first strategy can drive a lower cost infrastructure, but do you have a private data centre that offers security levels that you need to rely upon for some applications or do you have legacy applications which are just too difficult to move to the cloud? You've made a huge investment in that data centre after all and you don't want to just give up on that.

Ensuring this data centre can provide the agility, innovation, service and security is key to shaping your infrastructure transformation. The software-defined revolution started in the data centre and by refreshing yours with the latest equipment, you can deliver that cloud-like agility, better visibility and more control. We believe this needs to happen across two areas:

1) SD Fabric: Cisco Application Centric Infrastructure (ACI) is a market-leading solution, but you need the management and support to make a success of the transformation and that's where we can help. We've already made this transformation for several large MNCs that rely heavily on their data centre with our SD Fabric solution. We've helped them to deploy applications faster and scale and grow their data centre fabric easily, without needing a complete redesign.

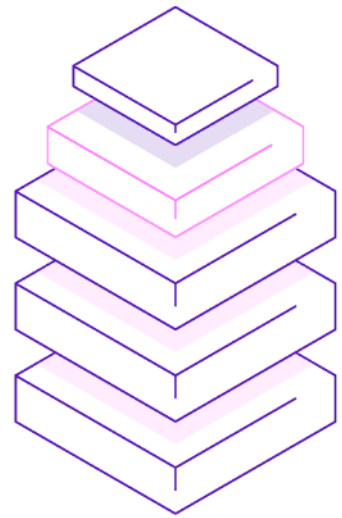
SD Fabric is also an opportunity to reduce your carbon footprint. Our team recently rationalised a customer's private data centre from 120 cabinets down to 40, cutting the power and cooling needed dramatically. Consolidation to a smaller fabric gave them greater processing power, really boosted their green credentials and slashed their costs at the same time.

2) Private Cloud: Refreshing your Private Compute environments with new Private Cloud technology and management capabilities will enable you to leverage the benefits of public cloud functionality and commercials but with the benefits of having dedicated environments in a location of your choosing.

We recognise the importance of a hybrid strategy, combining public and private cloud services. At a time when many providers are cutting back on their choices and investment, we're proud to be continuing our investment.

We're unique because of the level of choice we can offer. We have 5 different types of cloud, private and public, integrated with our network. We offer choice in connectivity, security and management services and
we can scale at speed, globally.

We don't lock you in. Our agnostic approach means we build the right solution for you.



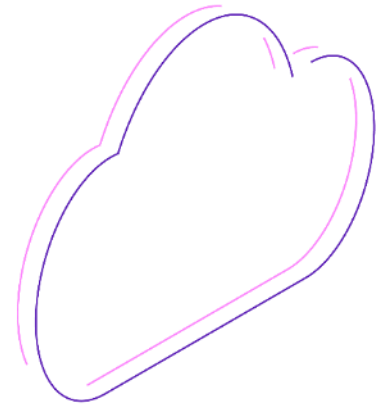
Clever cloud strategy creation

Many organisations are looking to drive agility, innovation, and reduced costs - at scale - by leveraging cloud adoption. But realising these benefits can be difficult, particularly if you don't have the capabilities, skills, insight, and experience you need.

We've seen the aftermath of companies taking flawed routes to the cloud, causing corporate frustration at not realising the benefits or even increased costs. Some have taken a 'cloud first' path, where in their pursuit of digital transformation, they've moved their IT and data centres to the cloud and then failed to operate all their cloud and network environments in the same way. Others have let their business units drive individual project-based cloud deployments, and while this can increase speed, it can also decentralise services, adding cost, complexity and introduce new risk. So, it's important to develop a balanced cloud strategy that enables you to match the shape of your infrastructure to your business requirements, be it all in cloud or hybrid, mixing the need for Private with Public Cloud.

The key to success is having the right choices to enable the right business outcome and having the skills across cloud, network and security to implement those choices properly. Operating in a traditional tower mentality will reduce benefits and increase complexity, that's why 80% are expected to overshoot their cloud budget this year.

We're unique in the way we can bring together expertise with a choice of cloud, private and public, integrated with our network and secured with our market-leading security practice. We will give you control without being locked in technically or commercially. To maximise experience, effective management is crucial. This relies on skills, tools and infrastructure that only we can provide. The best commercials are only possible if you look at the solution end-to-end. Only we can offer consistent pricing which is optimised across the entire solution, including management costs at a percentage of the overall solution. This means we can flex commercials as your solution grows to the shape your business needs.



Connectivity and the cloud

Your experience of cloud-based applications relies upon the connectivity you use. And as you become more reliant on such applications, this becomes ever more important.

Like any other form of connectivity you have a choice of options and it's a balance of performance, security, service, availability and cost. As you increase the number of cloud locations you use, you need to make sure you can deliver the infrastructure to maintain experience levels in those new clouds. It's also important to think about how you extend the services which optimise your application experience into the cloud.

We recognise the importance of this, so it's been an area we've focused investment and development on over recent years. A such, we're leading the way in the choice and innovation.

We offer direct connection to cloud providers through our MPLS network, and we have pre-connected the leading cloud providers in every region, except Antarctica of course. So we can quickly turn up a high performance, secure connection.

We offer cloud networking services from an expanding list of cloud providers. We were named as one of the first global managed service providers for the new Microsoft Azure Networking virtual WAN services and we're able to prove our capability with a live customer deployment for Ixom within days of the announcement. We could so this because we invested in cloud-native networking skills and tooling. We can provide end-to-end visibility and management of hybrid infrastructures spanning branches, WAN and multi-cloud hybrid environments. We can also help increase automation, lower risks and accelerate adoption of cloud services with the security you need.

Carrier Neutral facilities (CNF)are a key development in enhanced cloud connectivity and services. These meeting points provide hubs for infrastructure providers to come together and share connection points. Previously, customers needed to nominate one of their own sites as a gateway when they wanted to take private network from two vendors. Now, the CNF plays this role and forms independent gateways and connectivity points for suppliers and customers. This way, the customer gets more choice of the right infrastructure and network supplier for them in the region they need and lets them hook together suppliers into a single fabric.

The benefit of CNFs for our customers are obvious and so we're already connecting our network to these sites with resilient fibre connections which will support a range of different customers with up to 100Gig services. We have already connected our first sites and by 2022 will have connected 28 CNFs across the globe. We'll be able to extend the control and visibility our customers have through their SD-WAN into the CNF and into the cloud. We'll be able to deploy on-demand a range of VNFs with as-a-service commercials, including security and SD-WAN services.

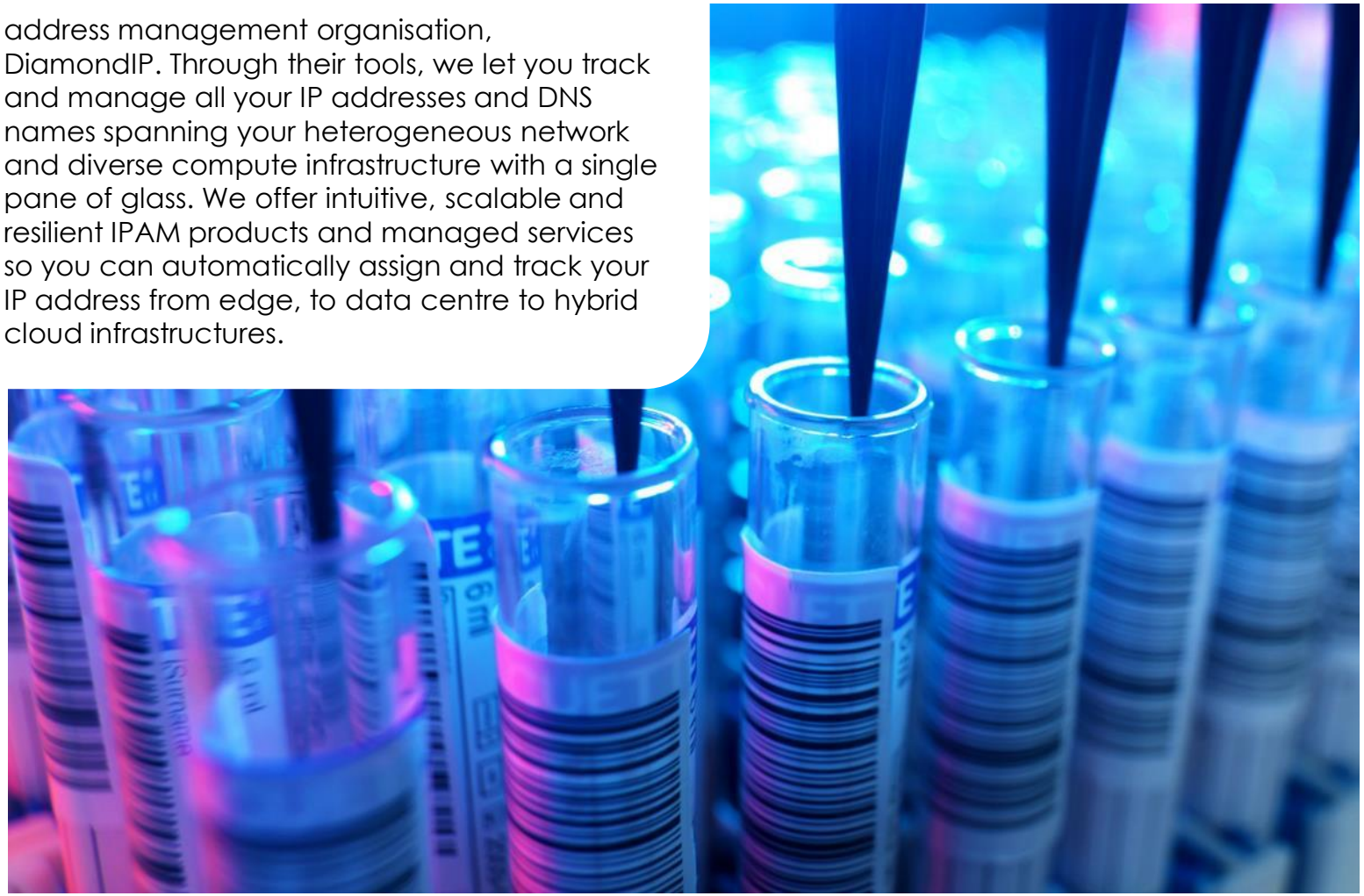
We combine an ever-expanding choice of solutions with the expertise to make sure you get the right connectivity for your business needs, so you can deliver the experience you need from cloud-based applications.

Managing IP address complexity

You're probably experiencing unprecedented demands to seamlessly support a range of requests. Things like rapidly expanding network perimeters, increasingly diversified user devices and a plethora of applications and software. Your network has likely swelled beyond the traditional data centre and remote office architecture to encompass multi-cloud and edge computing. The common foundation underpinning all of this disruption and your ability to manage it is IP address management (IPAM).

The very connectivity between user devices across your variegated hybrid network and applications running on distributed compute resources is impossible without unique, routable IP address assignments. Equally important, is the linking of those IP address assignments to human-consumable names for applications and websites provided by the domain name system, DNS, the "IP directory."

Several years ago, we recognised the growing importance of address management in infrastructure, so we bought the market-leading address management organisation, DiamondIP. Through their tools, we let you track and manage all your IP addresses and DNS names spanning your heterogeneous network and diverse compute infrastructure with a single pane of glass. We offer intuitive, scalable and resilient IPAM products and managed services so you can automatically assign and track your IP address from edge, to data centre to hybrid cloud infrastructures.



Security

Billions of devices connect to the internet every day with little or no security, and cybercriminals are using sophisticated and innovative malware to infiltrate and move laterally through organisations. Global security threats are everywhere - stolen identities, systems held to ransom, and phishing scams.

The transformation of your infrastructure means you're needing to think about security in a new way, and whilst there are many security challenges to consider, there are three key ones:

- **securing your business from the network to the cloud** - as you ramp up cloud adoption, IT security gets more difficult and complex. You need to make sure your journey to third-party cloud services is secure, considering network security services, such as next generation firewalls and intrusion prevention solutions.

- **knowing if you're doing enough to secure your business** - with breaches hitting the headlines every week, do you worry you could be next? You need to make sure every process, application, and area of your infrastructure revolves around the protection of your core assets. And you need a complete understanding of your security posture in order to do it. To outline the steps you need to take you need a defined roadmap that's aligned with your business objectives and digital transformation process.

- **keeping up with the changing threat landscape** - cyber threats are always evolving, so your security should do the same. You need an agile, proactive approach to security that keeps pace with the rapidly evolving threat landscape. And you need the ability to predict where digital threats will come from and defend against them before they impact your organisation. That means combining intelligence from multiple sources – including government, partners and your own global network – to get a birds-eye view of what's going on, and accurately address your risk and measure its impact.

We have the technology and intelligence to spot and tackle global cybersecurity threats before they become the stuff of headlines.

We have 70 years experience protecting government agencies, national critical infrastructure and large global corporations, which gives us the real world experience we need. We protect against 4,000 cyberattacks per day and we block over 100m malicious communications per month, which gives us the data we need to understand the threat against you. We can also bring to you the benefits of our intelligence sharing agreements with Interpol and Europol to enhance our threat detection and management services.

Our 16 global Security Operations Centres, operate 24x7x365. We have 3,000 skilled security experts and 500 qualified security consultants globally. We offer world-leading security consultancy expertise with global Ethical Hacking Centres of Excellence. IDC rates us as the number one provider of Managed Security Services in Western Europe and number two globally.

Control and management

New infrastructure technology offers much greater control and visibility, but you need to have the right platforms, skills and support to make the most of that opportunity. The key question is how much do you want to own and deliver and where do you want to rely on third parties?

Many organisations underestimate the complexities involved, having often been sold the promise of simplicity by the technology provider. For your solution, you need to think about 3 key areas:

- **setting out what you need and where** – do you have the right design and architecture, do you have the capability to distribute and install the solution globally and do you have an ecosystem of partners to deliver the choice you need?
- **full testing to control risk** – is your solution fully tested before deployment, including security testing? Do you have the capability and processes in place to deliver future releases?
- **operate and change** – do you have the monitoring and reporting tools in place? Do you have support in place if something goes wrong? And do you have the processes in place for change and regulation compliance?

We believe in providing you with choice, so you can choose what you want to manage and what you want to rely on us for. We have the expertise and experience to deliver fully managed solutions and we already do this for many of worlds largest global MNCs.

If you want to mange some elements yourself or look to manage some elements in the future, then we can create the building blocks of your managed service so that you can pick and choose what's right for you. If you want to take a DIY solution, then we can provide the services you need, but you get extra value in the way we support your managed solution.

Our digital portal approach provides you with the control and visibility you need in your solution. You can exercise that control yourself or you can use our managed services to do that for you. We're continually developing our portal.

Real benefits from IoT

IoT promised connected everything - from nappies to blades of grass. Whilst we're not seeing demand for all these things, we are seeing demand for Industry 4.0 driving the convergence of IT and OT.

The benefits from digital manufacturing and retail seem to be significantly greater than in other areas. The benefits are focused on collecting data from different sources into a data lake, and then running advanced machine learning and artificial intelligence (AI) to predict equipment failures and streamline production and delivery processes.

Currently, this data is kept in silos: enterprise resource planning systems, industrial control systems, and spreadsheets and documents used by engineers to keep track of supplies and people. But companies that are making efforts to make sense of all this data are gaining some really valuable insights and benefits, such as energy savings of 12% and process improvements of 15%.

The real challenge comes in securely connecting these devices.

90% of OT kit hasn't traditionally been connected to anything outside the factory. And because it's impractical to process the OT data in the cloud, organisations are having to figure out how to manage data at the edge, with little IT support in factories, unlike data centres. There's also little agreement on what the edge looks like and how it may evolve.

Businesses need to consider modernising the LAN, edge compute, cyber security, SD-WAN, IP addressing and even UCC for blue collar workers. We offer market-leading propositions in every one of these areas and we have the skills and experience to bring them together with an eco-system of IoT partners. We're already working with a number of large MNCs to deliver their IoT solution and are able to show how we can realise the benefits IoT promises.

Our track record of success

Around 5,500 customers trust us to deliver critical network and IT services.

We serve the world's largest banks, exchanges, insurance companies, wealth management advisors and financial services organisations. If you have a bank account, have taken out a loan for a car or home, have insurance for your phone, car, house, or like to trade the odd share, the chances are it was with one of our customers.

We serve the world's largest natural resources, utilities, retail, consumer goods, transport, logistics, automotive and manufacturing companies. If you shop online or in the high street, if you visit a gas station or charge you phone, if you book your travel or call an airline, if you take the elevator in a shopping mall… chances are one of our customers took care of it.

We serve some of the largest, business services, technology, healthcare, systems integrators (SIs) and telecommunication companies in the world. In fact, many of our top customers are partners and suppliers. We help our customers make their end customers and employees happy by providing services which help them in variety of ways.

We provide secure, connected communication and collaboration services that help our customers drive their transformation and deliver great internal and external digital experiences.

A great example of the way we work with our customers to deliver innovative solutions is Ixom.

Ixom wanted a more flexible solution than its legacy, traditional network solution - one that could give its users what they needed, while lowering costs.

We built a custom SD-WAN solution designed around their business. It securely supports all their essential cloud applications, gives their users up-to-date information, and puts Ixom on the front foot for innovation.
The extra network visibility that SD-WAN provides has also helped their IT team optimise their network traffic to prioritise what matters most. Our single network management centre is available all day, every day, so if their team need help or want to make a change, we're on hand to help. And with proactive monitoring and reporting built into the solution, we've been able to make sure their network stays protected and runs smoothly. It's given Ixom the confidence to be more agile, as well as a powerful platform for innovation. It's also boosted collaboration across their company, and cut costs by up to 25 percent.

"The results have been fantastic. It's been revolutionary for our employees – they can now run what they need, when they need it," says Ixom's chief information officer, Rowan Start.

Don’t just take our word for it

Our proof points are backed up by our customer stories and analyst recognition.

We’re unique in that we can combine network services in 180 countries, with a complete range of private and public cloud services and all these are secured by 7,700 security experts.

- We stop over 125,000 cyber attacks every month
- We’ve invested over £2.5m in R&D in the last 5 years
- We teach 2m pupils the tech skills for the future - as part of our ambition to reach 5m kids by 2025.

“BT has been able to pull off its multi-cloud approach because of its complementary strengths in networking, computing, and professional services.”

“BT has a strong answer for questions around legacy hosting, cloud connectivity, hybrid cloud management, and local data sovereignty. Its investments in cross-portfolio capabilities (e.g., BT Security portfolio, BT Consulting for professional services) in conjunction with BT Compute have paid dividends in demonstrating to customers the implications of their cloud deployment choices, setting it up for an increasingly interdependent future with multi-cloud deals which integrate products from BT Connect, BT One, and/or BT Security.”

GlobalData Global Data Centre & Cloud Services Product Assessment, April 2020

“BT has been rated ‘Very Strong’ overall in the February 2019 GlobalData BT Global WAN Services Product Assessment.”

“Service and Network Automation Platform supports orchestrated connectivity to major cloud vendors within a flexible bandwidth range from 50Mb/s up to 80Gb/s. Combining the same orchestration with the network portfolio gives enterprise a powerful set of tools to run apps in clouds with high performance plus new levels of management, control and visibility.”

“BT has launched specific consultative and security services to support the deployment of future network services as part of its Dynamic Network Services.”

“From existing IP routers (Cisco-Viptela), wireless branch (Cisco-Meraki), to greenfield (Nokia-Nuage Networks) and kicking the tyres with as-a-service options (InfoVista, and Riverbed), BT has all the bases covered.”

GlobalData, Global WAN Services Product Assessment, February 2019

If you want to find out more about our services, then please contact your account manager or click here.