



The Ultimate Balance of Control + Agility

PNs provide network leaders the best of both worlds

— Aaron Werley, VP - Technology, Lit Networks

Abstract



The pandemic put into sharp relief the difference between enterprises that had invested in IT and network solutions and those that hadn't: the difference was whether they were able to shift, scale, innovate under increasing pressure for the network infrastructure to perform and adapt...or they weren't.

The winning formula: an enterprise network environment with true agility, while also allowing IT leaders to maintain complete control. While those two benefits may seem at odds with each other, they can be simultaneously achieved, giving IT leaders the best of both worlds.

In this ebook, we'll talk about the benefits of proactive IT investment, specifically in private networks. Private networks give IT leaders the benefits of complete ownership of their network, without the burden of operational cost. When they're delivered as a tailored, managed solution, they ease the burden on IT, but still allow for agility.



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Pandemic accelerates need for flexibility and risk management

Whether it was the need to shift workloads, rapidly provision networks or advance projects around remote work, the pandemic period has greatly accelerated innovation and digital transformation in the enterprise. Yet, it also drove an equal measure of protectionism in the form of risk management and wait-and-see approaches to technology investment, especially in infrastructure.

While many CIOs tightened their spending in 2020 to focus on only what was deemed mission critical, in 2021 Gartner anticipates an 8.4% increase in IT spending, driven by the mirrored trends of the “anywhere employee” and “everywhere/anytime customer access.” And they expect that spending to be led by line-of-business buyers, not at the enterprise-wide level, underscoring the increasing importance of IT in solving business problems.



McKinsey predicts that the recovery from the pandemic will be entirely digital, elevating the role of IT from support to strategic function, with the difference between winners and losers being defined by smart, proactive investments in technology: “Playing it safe now, understandable as it might feel to do so, is often the worst option.”

Not only do enterprises need to invest in innovation while mitigating risk, they must do so in the context of a very real tech talent shortage. A survey of technical HR professionals finds that 61% reported that finding qualified developers would present their biggest recruitment challenge of 2021. Network engineers are in particularly high demand, with almost 150,000 job postings last year and a projected growth rate of 6.5 percent over the next 10 years, according to the tech careers marketplace Dice.

“Tightening in 2020 saw most CIOs putting their dollars into only what was deemed mission-critical at the time. This year CIOs will need to balance the need for the “anywhere employee” with “everywhere/anytime customer access.”

— **John-David Lovelock**
Gartner distinguished research vice president

A new focus on the network

At Zayo, we've seen those predictions bearing out: our customers with robust cultures of innovation, who had cloud-forward ideas already in flight plus flexibility, collaboration and scalability as a focus, have thrived. They've managed to innovate — while managing risk. How? By focusing on their networks, and the fiber at their foundation, enabling automation, and embracing software and cloud.

Perhaps once an afterthought, networks are getting more attention than ever at the highest levels within enterprise organizations. According to McKinsey, "CEOs can help the senior team recognize that infrastructure investments in cloud platforms represent a source of competitive advantage rather than a cost to be managed."

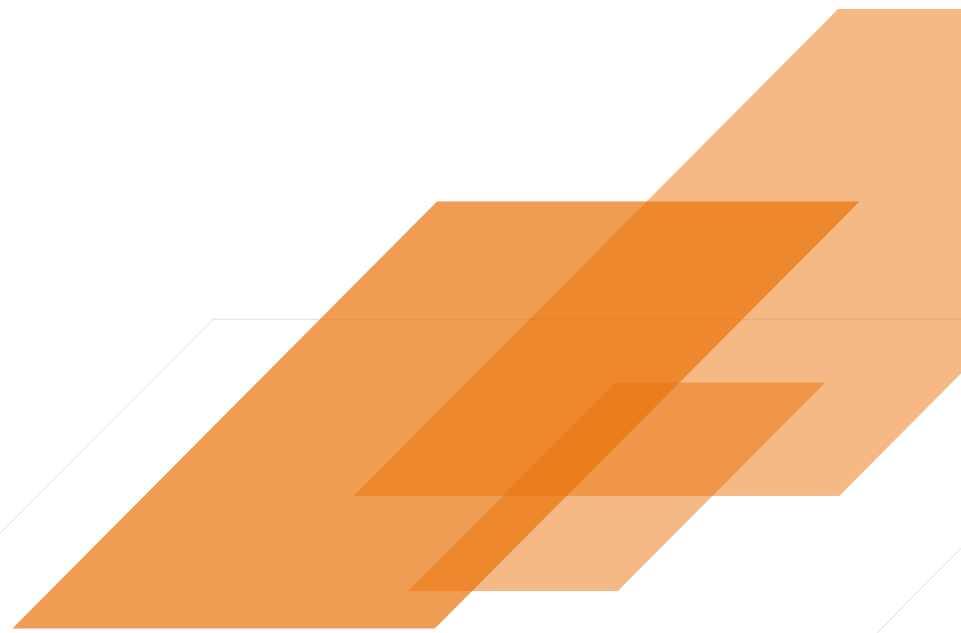
With digital demand at an all-time high — both from customers and employees — enterprise IT teams are more attuned to their networks than ever. The most progressive IT teams are continually challenging their current network architecture and contemplating how it needs to evolve and scale to meet today's demand to share, transport and compute data.



At Zayo, we are involved in strategic discussions about the potential of a company's bandwidth and network infrastructure to affect its business performance, particularly as it relates to industries where milliseconds translate into measurable profit and loss. The common thread of these conversations? Control.

Network control is no longer a "nice to have" but an imperative for companies looking to either maintain an edge over their competition or at the very least keep pace with their competitors.

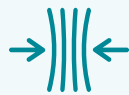
While control is top of mind for technology leaders, it opens up a bevy of questions for them as to how to accomplish that level of network control while also managing costs, ensuring qualified staff and other key considerations.



The need for network autonomy and increased self-determination is manifesting in a few key topics that are top of mind for IT leadership:



Quickly provisioning bandwidth to support organizational needs



Adapting to shifting product needs in response to application requirements



Determining maintenance steps and timing



Maintaining the tech talent to manage the network



Network decisions shouldn't be binary

Historically, a high-bandwidth, low latency network has come in two main varieties: dark fiber or lit services. Each of these has advantages and drawbacks. Dark fiber offers scalability, customization and allows IT to wield a high degree of control over their network but takes substantial CapEx to implement and requires specialized skill sets to design, operate, optimize and troubleshoot. Conversely, lit services provide a more turnkey solution for IT teams, shorter term commitments and have an OpEx payment structure – yet IT teams lose the agility to turn up services quickly and are beholden to carrier maintenance windows. Bottom line, this binary decision relegates IT teams to either carry some degree of management burden with dark fiber – or sacrifice control with lit services.

Keep up with demand — without the trade-offs

The prospect of making those trade-offs simply won't suffice for IT teams committed to network performance, especially as applications push the limits of existing architectures. With network performance more critical than ever to the core of how the enterprise runs and business requirements getting increasingly aggressive, Zayo was inspired to think outside the two traditional service options and devise a mid-step solution: a private network (PN).

PNs are particularly relevant to some key use/cases or conditions:

- Highly competitive, fast-moving industry verticals
- Dynamic product environments or aggressive product development leadership
- Capacity requirements demanding immediate attention and agility
- Stringent security or compliance requirements
- Conservative financial philosophy or need to conserve cash (OpEx vs CapEx)

Ultimately, our conversations center on finding the right solution for each use case, and a growing number of organizations are searching for the happy medium between the capacity and control of dark fiber with the ease-of-use and cost model of lit solutions.

Companies are often surprised to learn that a PN can be designed to their exact specifications, deployed with zero upfront capital and offered with the terms and assurances of a fully managed solution.



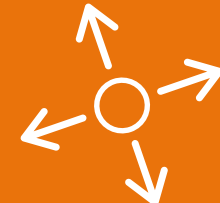
Understanding PNs

Private Networks offer the security, scalability and dependability of an owned network — fiber and equipment: 100% dedicated to your business.

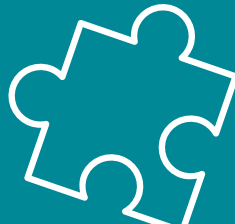
No burden of operating your own infrastructure



No need for tech talent to manage the network infrastructure



Fully managed solution, engineered for your enterprise



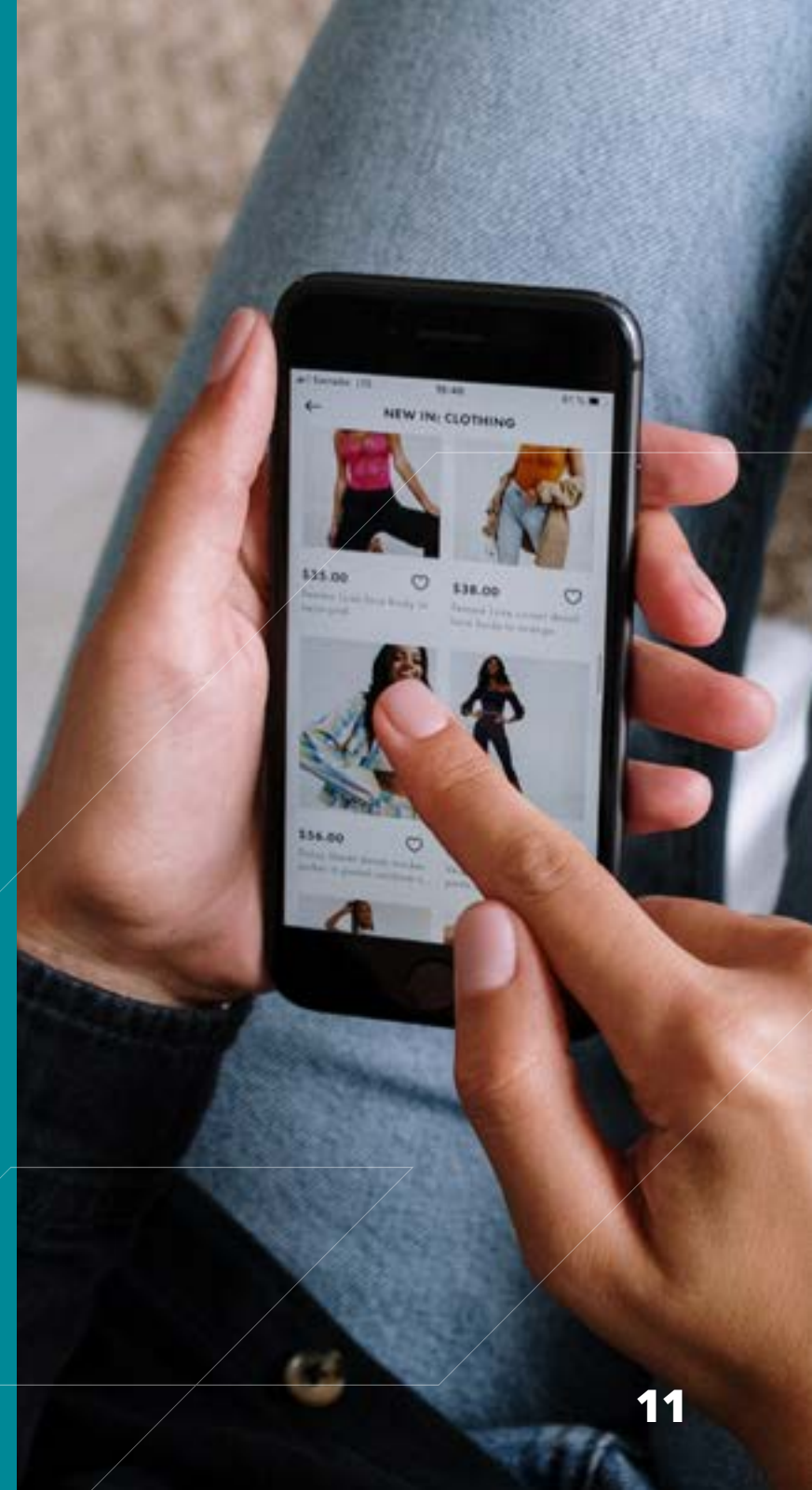
Leverage the buying power and support of a trusted partner

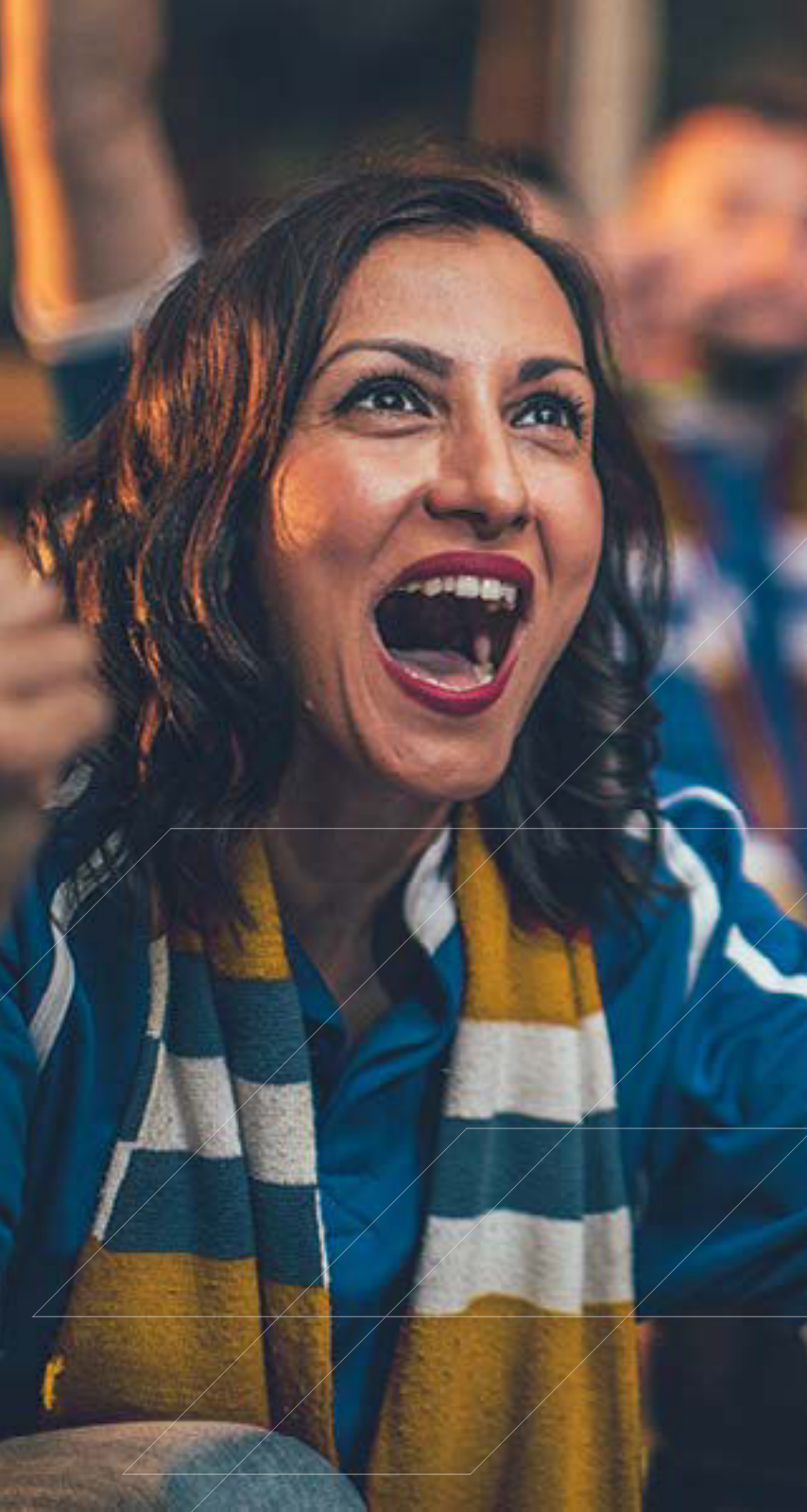


— Use Case

A major US retailer gets connectivity and scale

A major US retailer approached Zayo with the need to connect six datacenters with 100% uptime to support both its business and ecommerce operations. Lacking the in-house technical talent to build and manage an optical system, they relied on Zayo to engineer, plan, and deploy a private network. The retailer purchased the equipment themselves, because it suited their accounting approach to write down a capital expenditure, while Zayo fully manages the network, working with the retailer to scale bandwidth up and down as needed.





— Use Case

Broadcasting powerhouse reaches viewers with no lags

A major league sports organization needed a high bandwidth, ultra-low latency network to ensure that their broadcasts could reach viewers across the US with no lags. They turned to Zayo to help design and execute a private network with the performance they needed to deliver exceptional end user experiences with every game watched.

Stay ahead of business demands

IT leaders have a golden opportunity to leverage the cachet they've earned helping their organizations through unprecedented times to enable a more proactive approach to network strategy. Rather than simply maintaining the status quo, IT is in a position to take a leading role in driving business objectives by ensuring greater levels of control and performance while also mitigating risk, cost and the need for tech talent.

Find out how you can stay ahead of business demands.

Connect with us: zayo.com/products/pdn-private-dedicated-networks

About Zayo

Zayo Group Holdings, Inc. provides mission-critical bandwidth to the world's most impactful companies, fueling the innovations that are transforming our society. Zayo's 126,000-mile network in North America and Europe includes extensive metro connectivity to thousands of buildings and datacenters. Zayo's communications infrastructure solutions include dark fiber, private data networks, wavelengths, Ethernet, dedicated internet access and datacenter connectivity solutions. Zayo owns and operates a Tier 1 IP backbone and through its CloudLink service, Zayo provides low-latency private connectivity that attaches enterprises to their public cloud environments. Zayo serves wireless and wireline carriers, media, tech, content, finance, healthcare and other large enterprises. For more information, visit zayo.com.