

Broadband's Velocity Imperative

Service providers can gain a competitive advantage by working to continually resolve such common issues as workforce and technology transitions.

By Jay Cadman / IQGeo

Not long ago, home internet speeds were measured in kilobytes per second and required a hard connection to a phone line. Some people even remember the infamous modem connection tone. Thankfully, bandwidth has increased dramatically. So too have expectations of high-speed internet access everywhere, with 5G adoption allowing people to take data-intensive activities – such as video streaming, gaming and near real-time industrial applications – wherever they go. In a digital-first world, the telecom industry has had to be visionary and innovative in its approach to meeting demand and building the operational infrastructure needed to deliver super-fast connectivity at home, in the office and on the go. Revenue and market-share opportunities exist where these new market demands meet innovation.

A critical factor in the availability and adoption of better internet technology for end users is fiber rollout. But in the U.S., only 43 percent of households have access to fiber broadband, and only 53 percent of the U.S. has 5G coverage depending on the provider. Improving technology is critical to business productivity, but a velocity business proposition is also at play. It's a race to embrace fiber.

In the post-COVID-19 remote working model, the line between consumer and business needs is increasingly blurred. There is an urgency for better performance, which will require more-resilient networks to serve the entire ecosystem. As the consequences of the climate crisis bite and the frequency of extreme weather events increases, operators also need to make the most of new technology resistant to disasters, allowing for the rapid rollout of contingency plans in worst-case scenarios and mitigation of downtime. Greater network reliability reduces customer churn, contributing to telecom providers' revenue targets. Here too the velocity of fiber rollout is critical.

There's no ignoring that the world changed during the COVID-19 pandemic. An exodus from large cities into more rural areas, where the same work can be completed with a better overall quality of life, created a demand for service in new markets for telecom operators. Demands to scale telecom services aren't based just on geography. For the work-from-anywhere generation, unique solutions that support on-the-go internet aren't a luxury. They're a necessity.

This is playing out at a policy level for governments. The \$45 billion "Internet for All" initiative from the U.S.

government aims to provide digital equity with a guarantee that every household in the country has access to reliable high-speed internet, and competition is heating up. One recent example is the city of Mesa, Arizona, where multiple broadband operators are targeting the city for fiber rollout, including Gigapower, which announced it would target Mesa as its first primary market. Similarly, Europeans are working to reduce the costs of providing internet services to rural areas in the EU. These initiatives recognize the need to move quickly – so how can operators accelerate their rollout initiatives?

SOLVING SMALL PROBLEMS DELIVERS BIG SUCCESS

The innovation in the telecom sector has been truly revolutionary. But it's only one side of the coin. Operators that can continually resolve common issues and improve processes will achieve a significant competitive advantage.

The appetite from policymakers is there, the technology is available, and the consumer demand exists. The move from an era of vision to a period of implementation driven by three key metrics is rapid:

- **Happy workforce, happy business:** Like every industry, the backbone of the telecom sector is its workers. Companies that want to be successful players need their crews to buy into their vision, to feel like active participants in the rollout of meaningful technology, and to be empowered as experts across the business. The people who make up a company's workforce are the company's advocates, and companies must sell their visions to the workers first. Consult with them in the development stages, learn from their experiences in the field and involve them in the evaluation process to ensure they feel adequately onboarded.

This goes beyond training, though training is essential. Making a business a place that attracts and retains top technical talent helps support business objectives. It's a competitive field out there: a McKinsey study revealed that 87 percent of organizations are in the throes of a skills gap or expect to face one in the next five years, especially within the telecom sector. Companies prioritizing talent attraction and retention are future-proofing the workforce that will build their networks.

Limit the risk of wasted resources or worse, lost market share, by implementing new technology rapidly and incrementally. This will reduce long-term risk and pave the way to continual benefits.

As much as the digital-first culture has created a demand for telecom infrastructure, it has also contributed to the evolution of a digital-native workforce looking for employment. Leveraging the capability of a young, digital-savvy workforce that can help integrate knowledge into an accessible platform for the whole company can help break down silos, democratize vital tools and ensure that all workers can more easily meet objectives.

- **Evolution, not revolution:** A drastic overhaul is not always necessary. Often, in the pursuit of speed, the desire to radically change the whole system can lead to hesitation, delay and frustration. Newly implemented technology will rarely have a 100-percent success rate, and that's OK. But if operators take years to deliver massive change, only to find it plagued with issues and marginal improvements, they will miss a chance to provide meaningful progress.

Start small. Limit the risk of wasted resources, or worse, lost market share, by implementing new technology rapidly and incrementally. By shifting the focus onto solving many more minor problems and building a solid foundation, an operator can deliver results with great agility, reducing long-term risk and paving the way to a continual stream of benefits that increase revenue and value while paving the way for investments in future innovation.

This method starts by identifying a specific area of business weakness and solves it with a targeted technology solution that combines workflows from different platforms. For example, a business experiencing inefficiencies with field crews and contractors can develop a total mobile solution for construction. If it works, it can be rolled out across operations and maintenance, bringing incremental improvement to each new team.

- **Watch and learn:** Learning from those in the sector that are doing

it right is helpful. Brightspeed is an example of an ISP that has successfully moved from idea to implementation by speeding up the rollout of its fiber optic network with a human-driven technology strategy.

This is aided by deploying a suite of fiber-based optical distribution network technologies and integrated software that can leverage an innovative distributed-tap product solution, thereby increasing efficiency, accelerating the deployment process and increasing market availability. This approach allows Brightspeed to expand its fiber optic network far more quickly than it could with a more typical centralized split design.

Using its new strategy, Brightspeed expects to reach more than 3 million homes and businesses over the next five years. This includes areas where fiber still needs to be deployed, creating new market opportunities. Brightspeed's approach relies on all three of these metrics. The company identified a pain point in its business operations, motivated a capable workforce to embrace a new solution and allowed itself to capitalize on new markets.

Other telecom organizations that follow in Brightspeed's footsteps will be able to embrace the window of opportunity offered by the future of work offers and enjoy the benefit of higher-velocity deployments. 🙌



Jay Cadman is the senior vice president of enterprise at IQGeo.