

FLY ON THE WALL

The future of fibre



InstarAGF's Jack Bittan chats to Byron Cantrall, CEO of LS Networks, and Marc Hudson, co-founder and former CEO of Rocket Fiber, about the rapidly growing opportunity in the fibre sector

A new global disruptor

Jack Bittan: The rapid pace of technological advancement over the last decade has significantly changed the way we live, work and travel, popularising the phrase 'digital disruption'. Since then, the public and private sector have adjusted to a 'new normal', adapting the way we approach design, operations and community engagement to better incorporate emerging technological developments.

While internet connection and access to smart phones or computers are now an accepted fixture in day-to-day life, it's the global pandemic that has truly highlighted the essential role digital infrastructure now plays in socioeconomic equality. With work, education and social opportunities now dependent on access to technology, it's more

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important than ever to ensure all communities are reliably connected.

Given the significant increase in data usage and North America's chronically underfunded infrastructure, a gap clearly exacerbated by the global pandemic, what are the biggest issues facing the fibre sector?

Byron Cantrall: The pandemic has highlighted a need for greater symmetrical bandwidth as people increasingly work from home or virtually connect with friends and family, putting strain on legacy networks and creating additional demand for fibre.

But building into those communities

– creating that dense infrastructure – is a costly exercise, which is why access to capital is the number one challenge. Legacy fibre providers have historically focused on transport, connecting cities over long distances rather than providing dense fibre infrastructure into neighbourhoods. This is because legacy services, with decent bandwidth, have typically already been in place in those communities.

Building infrastructure into communities also means forging relationships and partnerships with municipalities to support permitting, utilities and installation. A relationship with the consumer means building a reputation of customer service and transparent deployment timelines. While all of these things can be a challenge for development, it's ultimately the access

to capital and ability to rapidly expand your footprint that pose the most significant challenge.

Marc Hudson: Fibre is the 21st century version of the highways and railways connecting our economy. And, as Byron mentioned, the real push over the past five to 10 years has been around densification. There are still upgrades required around the long-haul fibre connecting major cities, but that has long been built. The focus for telecommunications now is providing last-mile access, and that's a very capital-intensive part of the business.

The advent of 5G, where wireless nodes are close to the ground, at street level, rather than at a cellular tower level, potentially miles apart, will also require dense fibre backhaul connectivity. That can create challenges for governments, trying to keep pace with changing technology with limited capital resources. A mid-sized city that was previously processing around 50 permits a year for wireless deployment could easily see a five- or 10-fold increase as the 5G roll-out gathers pace. Successfully pushing fibre over the line for these cities will require careful planning, logistics and strong local partnerships.

Finding value in connectivity

JB: It is clear that there is still a great deal of investment required in the fibre space. Where, in particular, do you see value and opportunity for private investors?

MH: Over the past 10 years, we've seen pretty aggressive consolidation, with larger providers buying smaller providers and folding them into their portfolios. What that means at the consumer level is that there are simply fewer providers available. Meanwhile, the pandemic has accelerated the need for increased infrastructure capacity, particularly symmetrical bandwidth. That trend is only going to continue, placing additional strain on the network.

“Fibre is the 21st century version of the highways and railways connecting our economy”

MARC HUDSON

From that perspective, a company with an established track record, existing infrastructure in place and the growth strategy to meet increased demand represents tremendous long-term value for investors. After all, every tech development on the horizon, from 5G to Elon Musk's celestial satellites, will require fibre. No alternative technology has been identified. It's not something that will be easily replaced.

JB: With fibre playing such a key role, what characteristics will define the companies capable of rising to this challenge? Will a more holistic approach be required when addressing the need for symmetrical bandwidth capacity?

BC: Functionally, fibre is all about making connections and delivering information. As a result of pre-fibre telecommunication technology, client

relationships across all sectors of the economy have changed dramatically over the years, evolving from personal to very public. Within the airline industry, for example, airlines will typically find out about a customer service issue through social media. And things really aren't that different in telecommunications. Being responsive to customer needs and having transparent relationships with clients are therefore very important.

Consumers are more engaged and have more options. Our industry in particular is seeing communities that have grown frustrated with the speed of roll-out starting to form their own fibre strategies. Being nimble enough to partner with those communities to help them build that infrastructure and providing the bandwidth they need is therefore an important differentiator and underlines our distinctive service philosophy.

A lot of the large corporates are structured in such a way that they don't have that flexibility. They're more end-user focused, whereas companies like LS Networks see ourselves as boutique custom fibre optics solution providers, making us valuable in the long term, both from an investment perspective and for meeting the demands of our communities.

JB: Has the relationship between end user and infrastructure provider changed in any other ways? What are end users taking into consideration when choosing providers?

MH: A trend we've noticed is the move towards more outsourcing of digital infrastructure. Company needs are becoming increasingly complex with everything from migration to cybersecurity.

It used to be that every business had an in-house IT department and a physical server on site. Problems could typically be solved in one place by submitting an IT ticket. But times have changed. All of these new applications

and additional layers of infrastructure have created a new level of complexity, resulting in smaller and mid-sized businesses looking for extra help and value-added services from their telecommunication partners.

It's no longer enough to be a dumb pipe that moves data in and out. You need to provide additional value, whether that's through network services, unified communications, customised network alerting and monitoring. You need to provide companies with all the bells and whistles required to keep a business up and running, allowing the management team to focus on whatever it is they actually do.

BC: There are so many more considerations we now need to track and address – expanding consumer expectations of technical services to now include evaluations of internal corporate culture and approach. We recently had an interesting conversation with a substantial company, with over 100 locations, as part of a qualification process to determine if we would be engaged to act as their service provider. That company questioned us in detail about our environmental friendliness. In fact, one reason they were considering LS Networks was because of our primary focus on fibre optics. As such, we require fewer electronics on our network and therefore produce less emissions.

Ultimately, environmental responsibility and community responsibility will play an increasingly important role in service provider selection.

Driving success

JB: Which characteristics will emerge as critical to success in the fibre space over the next couple of years? Will companies need to re-examine how they handle client relationships?

MH: Positive customer experience is key. The telecoms industry has traditionally been viewed very poorly in this area. We've ranked up alongside the big banks and government in many

a customer satisfaction index. But we now operate in a world where those expectations are unfailingly high, and instant customer responsiveness is critical.

Of course, durability of network is also essential. No one sings your praises when the internet is on, but they'll certainly let you know if it stops working. After all, that can literally cripple a business or an individual working or learning from home. Having a durable network will remain an important differentiator and play a key role in community enrichment.

Companies able to go out and build that end-to-end experience have been successful in building market share and in customer retention. But it's not an

“The pandemic has highlighted the need for greater symmetrical bandwidth”

BYRON CANTRALL

easy thing to do. It requires a whole company effort, from culture to the way you design systems. It is, however, increasingly what customers are looking for in the telecoms space.

BC: If you look at the big box providers – the major cable operators and the incumbent local exchange carriers – they've all moved to a highly centralised model. If you call customer service, you may get through to Houston or it could be the Philippines. However, what we've seen over the past few years is more of a community bias.

Consumers, businesses and communities are focusing on buying from people who live and work among them. Having a decentralised structure can

be cost prohibitive for those big box operators. But for regional operators, like us, it is critical to how we do business. It's not an inexpensive model but it is what customers are demanding and we can be flexible enough to respond accordingly.

JB: Looking to the future, what opportunity sets are you seeing? Will any of the changes we've seen during the pandemic have long-term impacts on digital infrastructure trends?

MH: If it wasn't clear before covid-19, I think it absolutely is now, that bandwidth and digital infrastructure is not a zero-sum game. This is an ever-expanding market that's going to provide plentiful opportunities for investment well into the future.

The pandemic has clearly accelerated some important trends, such as working from home. We've seen an explosion in the bandwidth required outside of the office. E-rate, the US federal-funded programme reimbursing school districts for their connectivity services, also increased its funding last year as schools were forced to move to a remote or hybrid learning environment.

And I think that hybrid model is here to stay. Things simply aren't going to go back to the way they were, whether that's a five-day work week in the office or the classroom. Covid has ripped the band-aid off and change is now inevitable. Add to that the advent of autonomous vehicles. Just imagine when we have the 100 million people that used to be behind the wheel every day now working and streaming and doing things that require wireless connectivity. All of that will be fibre driven.

We're still in the early stages of what is an amazing opportunity for investment in the fibre space. The future for fibre is incredibly bright. ■

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