

# From Canopy WISP to Multi-State MSP

Shane Moulton, ED.D.



Shane Moulton, ED.D., Partner and co-founder of Optix Media, holds a doctorate degree in Educational Leadership and Instructional Technology. Dr. Moulton worked as a Teacher Trainer/Technology Specialist for a U.S. Department of Education Challenge Grant, taught at Idaho State University and continues teaching at Empire State University. In 2012, Shane co-founded Optix Media, a MSP-Wi-Fi provider and fiber optic internet service. He provides technical services to universities and student housing developments throughout the United States.

We started our ISP business in the late '90s. My business partners and I thought that was a really cool business because we bought a T1 line and wanted to segment that out to various businesses. We used the Cisco Aironet cards, and we shot a link up to the top of the mountain.

Back then, we shot links down to connect various businesses. That worked out really well, but it didn't scale. Then we found the Motorola Canopy wireless broadband system, and we started deploying their equipment. As the network grew to meet demand, we invested everything we possibly could - my kids' savings, everything. We totally retooled with Motorola Canopy, which soon thereafter became Cambium Networks.

We were so grateful for Cambium technology and what it did for us because by the end of 2011, we had just over 9,000 subscriber modules throughout Eastern Idaho; we had 118 towers that had multiple APs on them covering the entire region with broadband.

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**OPTIX MEDIA** - Managed Service Provider based in Rockland, ID. Optix Media engineers install and support high-performance wireless networks in demanding wireless areas such as apartment complexes, hospitality, hospitals, and convention centers. We partner with owners using a MSP (Managed Service Providers) model to provide, manage and maintain their wireless Wi-Fi networks, allowing them to focus on their business.

- **WE DESIGN** - Design is a critical aspect of implementing a fast and reliable system. We work to complete site surveys to create a plan that best fits your facility.
- **WE BUILD** - Our experience and continuous technology training are key components of a successful rollout.
- **WE MANAGE** - We don't leave you after the install. Proactive management, monitoring, tech-support, upgrades and being generally awesome is what we do.
- **WE LET YOU ENJOY THE AWESOME** - Relax, we got it from here. Focus on your core business and leave it to us to focus on your internet experience.

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## LEVERAGING EXPERIENCE TO PROVIDE CONNECTIVITY

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We were a successful, established WISP when Rise Broadband purchased our business. At the time, we saw that fiber would be a big opportunity and started installing fiber in neighborhoods. As part of the program, we made a connection with BYU-Idaho who wanted to have a fiber ring around their campus. They were a big Xirrus implementer early on, and they wanted a great Wi-Fi fiber network for all their students. BYU-Idaho was transitioning the curriculum, delivering more content out to the bedrooms and having more Q&A in the classroom.

I was a full time instructional design professor at Idaho State University, and I was teaching four-year doctoral students at BYU-Idaho how to transition curriculum to an online model. One night after class, the associate dean came up to me and he said, "We need to do a better job at providing Wi-Fi up to these student apartments." And I said, "Great, go do it." He said, "No, I want you to do it." I took the job.

I leveraged my experience from being an apartment owner and a manager, I applied my experience from being a college professor and what I needed my students to have, and then I added my wireless internet service provider experience. Based on this knowledge, I asked, "What connectivity does an apartment owner really want?" They want to do what they do best, which is share services, have great amenities and keep track of their tenants in those apartments. But they do not want to deal with internet technology. They just want to have connectivity work all the time.

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As a result, we planned to create wireless branches off the fiber optic ring within BYU-Idaho and did bakeoffs with the well-known Wi-Fi equipment providers. They all wanted to be our partner. Xirrus came in at the very end and totally knocked us off our feet. We thought, "Man, this is what we want." We put Wi-Fi in all these student apartments, and it has been fabulous ever since.

Every night, we'd max out around 16 gigabits of bandwidth. That's our peak time. We have about 40,000 wireless devices connected every night in Rexburg in that network, and it would be closer to 25 gigabits out to the net every night. Netflix came to our rescue, and we now have a Netflix server inside our network. That is hitting between eight and 10 gigabits every night.

But we've found that a lot of landlords who own large apartment complexes in Rexburg also own other property throughout the United States. When they discovered that what we were doing in Rexburg was so unique, they asked about doing the same in College Station, Texas and other locations. Today we serve: Raleigh, North Carolina; The University of North Carolina; North Carolina State University; Duke; Notre Dame; Springfield, Missouri; Riverside, California; and locations throughout Oregon, Washington and Nevada. All of them are running Xirrus XR-620 APs in almost every unit.

I have been asked how we manage tech support people in the field. It's easy: all I do is put out a couple of feelers in these apartments and ask if there are any students who want to learn about Wi-Fi. I get plenty of interest in people becoming my apprentices. I personally train each one in the field over two or three days, and they become my 24/7 tech support boots on the ground covering the buildings. I pay them fairly, and they love the experience. I also put my doctor card on any letter of recommendation for them.

We have great support from the Xirrus team. They have really picked up the slack over the last year. As a managed services provider, when we go into a property and sell it, we want to be the owner of all that gear because we can replace it a lot quicker should something go wrong. Our team has hot, swappable gear already programmed and ready in these units so that we can replace a switch.

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## INTERNET SERVICE PARTNER

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As an MSP, we don't have to wait for the owner to give us permission to replace any of that gear. We own everything. We manage everything. We take care of the whole network, and the building owner pays us a flat fee per user to provide them with awesome internet. That is what the building owner wants. If we run out of bandwidth, it's our problem – and we are experts at solving connectivity problems.

When I go to these properties, I tell them I'm not an internet service provider. I'm an internet service partner. A partner is the one that shares the risks and challenges along the way. Because I'm a partner, they know that I'm in it with them, and I want to be successful when they're successful and not a day earlier.

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