Let's Talk Tech Podcast #001 transcript – The Next Gig Thing is here: C Spire Fiber to the Home

Preview: **Jared Baumann***:* "We have approximately 6,000 miles of fiber in the ground today. When we started this project a little over 4,000 miles of fiber in the ground around the state of Mississippi. So when C Spire was looking at other ways to capitalize on all this infrastructure we put in the ground, the natural fit was to take it to the consumer – to take it to homes. That's been one of the great things we've been able to do."

Introduction: **Stacey Kirkland**: Hello and welcome to the inaugural episode of Let's Talk Tech, a monthly podcast that explores the latest emerging technologies, the people behind them and how these trends will affect the way we work, live and play. I'm Stacey Kirkland of C Spire and in today's episode, show host Dave Miller interviews Jared Baumann of C Spire Fiber on how a tech company in the Deep South is threatening to become the nation's leading ultra-fast Gigabit speed Internet service provider. Hear the amazing story of how C Spire used fiber optics to quickly launch a new line of business and put the Magnolia state on the U.S. technology map.

Dave Miller: Welcome to the inaugural C Spire Let's Talk Tech Podcast. I'm Dave Miller, show host, and today we are going to talk about fiber optics technology and C Spire's Fiber to the Home Internet technology initiative in Mississippi. Joining us today is Jared Baumann, the lead manager in the company's consumer fiber-to-the-home program. Welcome Jared!

Jared Baumann*:* Thanks Dave

Dave Miller*:* We're really excited to have you on the program this week. As we were considering topics to cover, we thought it was only fitting that we focus on Fiber to the Home and more importantly on how central the Internet has become to everyone's life. So let's talk a little bit about how C Spire got involved in the Fiber to the Home movement and how literally in just a couple of years you've become a national leader in terms of what you've been able to accomplish for consumers and cities in Mississippi.

Jared Baumann*:* C Spire has been a leader in fiber development around the state of Mississippi for several years now. What's been a little different is that most consumers have not known that C Spire has done this because our services have primarily focused on businesses, hospitals, schools, those very large enterprises, those kind of environments is where C Spire really focused all of our efforts. That fiber network was built out not for those institutions, but was really built out for our wireless network around the state. We have approximately 6,000 route miles of fiber in the ground today and when we started this project less than two year ago we had a little over 4,000 miles of fiber in the ground around the state of Mississippi. So when C Spire was looking at other ways to capitalize on all of this infrastructure we've put in the ground, the natural fit was to take it to the consumers, to take it to the homes. That's been one of the great things that we've been able to do.

Dave Miller*:* I think it's really fascinating and somewhat ironic that fiber optics technology has been around for decades with this tremendous capacity and ability to send and receive these huge volumes of data, but it took a company like Google to shake up the telecom industry by suggesting that we could deliver those same blazingly fast speeds that businesses require and use today to homes. Tell me Jared, how much did Google's experiment in Kansas City really help convince you that C Spire could do something similar in Mississippi?

Jared Baumann: When Google first announced their program, I think most techies in the world sort of had that jaw dropping moment. It was this amazing, truly different initiative that was being done. Everyone else was clamoring to get 50 megabits a second download speeds and Google didn't say, "hey we can do 100 megabits," they said "We can do and we're going to do 1,000 megabits a second." It transformed the way everyone started to think about what could be done. I remember when I first heard the announcement, I didn't know if I should even believe it. It was such an amazing, dramatic development, that kind of connection, a gigabit connection, is what feeds, or at the time, fed the entire campus of the University of Mississippi. A one gigabit connection, I think they've upgraded it now, but at the time the entire campus, every student, all the student housing, every office, anywhere you were on that campus was fed on that one single connection, one gigabit connection and Google was promising to bring that connectivity to the home.

What's amazing is that some of us at C Spire realized that we had the same ability to deliver Gigabit speeds to consumer in their homes. As we started to look at it, we had this great infrastructure in place already around the state. We sort of collectively said, hey, we can do this too. We didn't want to be just another provider in the home, we wanted to be that same kind of different provider that Google showed was possible. You had these other incumbent providers that had very slowly moved up their speeds over time and continued to say that the consumer didn't need or didn't want faster speeds. Well, Google demonstrated that wasn't the case. People truly wanted those speeds and Google showed that they could be provided. So, we've taken that same route. We really wanted to show that we don't want to just have a 50 megabit package or 100 megabit package. So we went straight to the 1,000 megabit per second or Gigabit service package. That's symmetrical service – 1,000 megabit per second speeds for both download and upload.

Dave Miller: *L*ooking back, we're about two decades into the commercial availability of the Internet for consumers. Fast forward 20 years since 1995, and we've experienced these multiple technology disruptions: the smart phone revolution, tablets, miniaturization of computers and the explosion of apps! Now, we've got billions, not millions, billions of people around the globe, and hundreds of millions in the United States, that are using these devices to primarily do what? Access the internet. Using the Internet is no longer just a fun thing, but it's evolved into a necessity of daily life. Was part of C Spire's motivation in launching this Gigabit Internet initiative just acknowledging that reality?

Jared Baumann: Most technology today without the Internet, doesn't even matter. Who cares if you have an amazing smart phone if you don't have a great connection to the Internet? Who cares if you have a great smart TV if you don't have the ability to use any of those smart apps or stream content? So, at the end of the day all of those things depend on connectivity. When people talk about the Internet of Things, all those connected devices in your homes, all the things that can talk and communicate with each other, and do all these kinds of amazing tasks, it's about access and connectivity to the Internet. Whether it's a Play Station or an X Box, or a smart TV, or whether it's your refrigerator that's talking to the Internet or whether you're adjusting your lights from your smart phone from another state, it all relies on the Internet. I had an experience recently were I was at an out of state conference and I had a delivery man that came to my home. I wasn't there at the time when they were coming by to drop off my new dishwasher. I couldn't contact a friend or neighbor to let them in. Then I stopped and realized, "I have the ability to do this." Sometimes you forget about the amazing things you can do with

technology. I was able to pull up a video camera on my smartphone, right from the conference. I could see the delivery truck in my driveway. I opened the garage door for him. Talked to the delivery man. He dropped off the dishwasher. He left. I closed the garage door and I talked to him and said, "Thank you very much. I saw that you put it in there." He was amazed by the technology. It was very convenient for me. He was able to do his job. I was able to be there for him and I was 1,000 miles away.

Those are the kinds of things you can do with the Internet. You mentioned all of the changes that have occurred in the last 20 years. I was a sort of a late bloomer when it came to technology. I didn't have my first email address until 1998, somewhere in there. My first laptop I purchased, I was real proud of, that first laptop had, I think, a 500 megabyte hard drive. About a year later I saved up my money, I was a poor college student, I saved up my money and I bought a 1 gigabyte hard drive and thought was the greatest thing that I doubled the size. Now, the smartphone that I have in my pocket is a 32 gigabyte device and you can do just about anything you want with it. It's really an amazing change.

You have all these great technology advancements that have happened over the past two decades, but the Internet hasn't changed as fast as the other technology has. That's what C Spire's Fiber to the Home allows you to have. With this initiative, we're saying that the devices will need to catch up again. For he first time, Internet speeds for consumers will be amazingly fast. We think that will spark another flurry of technology disruption with new devices and applications that will take advantage of how it can be used now.

Dave Miller*:* Let's talk about the progress you've made on Fiber to the Home. It's pretty remarkable when you consider that less than 1% of U.S. cities have access to 100 times faster Internet. I saw a statistic the other day that there are only about 40 cities in the entire nation that either have or will soon introduce Gigabit speed broadband service and seven of them are right here in Mississippi. That's amazing when you consider that Mississippi is not generally known as a technology leader.

Jared Baumann*:* That's right. It's really amazing to be able to show what a private company that has a strong interest and strong ties can do for a region. That's why we have focused primarily in Mississippi. We could do this in other places, but we've decided to focus on our state to we can improve the quality of life and make it a better place to live, work and play. We've worked with those towns and communities that have been most geared up and ready to benefit from these kinds of services. When I say towns and cities, that means not just the community leaders or municipal leaders, but also really the citizens of those towns who are saying "we want our town to be the best. We want to have the best resources for our students." Many of those towns have one to one computer in the school initiatives, meaning every student has a laptop or a tablet computer that's given to them by their school districts. For them to have the most use of that, that means they need to have great technology at home as well as in their schools. Not just for students, but for the workforce in those towns, improvement in lifestyle, and the general overall community.

Fiber to the Home Gigabit services increase the value of homes. You have realtors who are excited about it for those towns and what it can mean to those neighborhoods that qualify for the infrastructure and sign up for the services. We've really focused on those areas that are most excited about getting those services.

Dave Miller: I understand one of the ideas that C Spire adopted from the Google model was something called crowdsourcing. Let's take a couple of minutes to talk about what that means and how that's helped C Spire build and deploy this technology faster than literally anywhere else in the country.

Jared Baumann: For years now, C Spire has been in the fiber optics business. I talked earlier about how we've deployed this technology to hospitals, schools, businesses and large industries that require lots of Internet bandwidth. We've done that for a long time. We also had a sister company – Telapak Networks - doing Fiber to the Home for a number of years, but in a smaller way. Their focus was really on bringing the Internet and related services to smaller, underserved communities around the state. We never were able to make a model work for the masses until we considered the crowdsourcing model.

When we looked at the crowdsourcing model it allowed us to really say, "who really wants this infrastructure?" instead of using the traditional model, which most of the telecom industry has used for forever, which was "build it and let's see who comes." It was a model of "tell us who wants it most and that's where we'll build it, and that's where we'll build it first." It allows us to be able to figure out which places make the most sense to build. Last mile fiber optic infrastructure is very expensive to put in the ground. Even with our very extensive network around the state, we still had to put it up and down the streets of all these neighborhoods. That's a very, very expensive process to do. So we had to know that we had enough people who were truly excited about our services to bring them there. So it's really opened up a whole new world of opportunity for us to provide these services. Without that crowdsourcing model, we wouldn't have been able to do it.

Dave Miller: Great insights. I really appreciate the time you spent with me today, Jared. It's been fascinating getting more details about C Spire's exciting broadband technology initiative in Mississippi. If people want to find out more information about C Spire Fiber to the Home, they can go to *www.cspire.com/fiberhome* for all the details.

Jared Baumann: That's right. Or they can go to any of the C Spire stores and they should be able to help them with information as well.

Dave Miller: Great. Thanks for coming on today!

Jared Baumann: Thank you.

Episode #002 Preview: **Stacey Kirkland**: Thanks for listening to today's podcast. You can follow Jared Baumann and C Spire Fiber on Twitter @jaredbaumann and @cspire. If you like the show, subscribe through SoundCloud, iTunes, Stitcher or Tune In. Join us next time as we interview the key player for a Mississippi tech startup that may have just cracked the code on one of the most vexing problems for content providers and big media companies worldwide – how to glean searchable, indexable data from images, text and audio in videos.