

Guest Column: What to Expect from Wireless Technology in 2022

January 6, 2022



2021 was a year of tremendous challenges, but there were also incredible strides made in the world of wireless technology that have changed the way we live, work and play – all for the better.

I have been in the wireless industry for more than 15 years, and as technology evolves, there's always plenty to be excited about. Today, over 300 million people have access to a 5G wireless network, so it's hard to believe this innovation became available only three years ago. 5G has been described as a transformative technology, but most transformations happen steadily – they become “trends” that happen

over time. To that end, here are three trends I predict for 2022 that can have a lasting impact on families and businesses across the country.

1. Real Change for Rural America

A recent study by BroadbandNow indicates that more than 40 million people in the United States lack reliable access to high-speed Internet, many of them in rural areas. A primary driver for lack of coverage in these areas is simple economics – at times it can be twice as expensive to build the needed broadband infrastructure in rural areas, and there are far less people to help pay for the service – making it costprohibitive for providers and expensive for customers.

But there are encouraging signs that this will be changing. The recent infrastructure bill allocated more than \$65 billion for broadband and provides an unprecedented opportunity for the expansion of highspeed connectivity to underserved areas, as well as increased affordability for consumers. And government leaders I've spoken to are eager to put this money to work for their constituents.

Additionally, revolutionary new wireless technology – 5G fixed wireless – can provide connectivity to homes and businesses at very high speeds, delivering reliable broadband access in rural areas quickly and cost-effectively. At UScellular, we've achieved world-record speeds in trials of our fixed wireless solution, and we look forward to rolling the service out to more customers in 2022. Our investments in fixed wireless serve a dual benefit of also enabling enhanced 5G mobile broadband for consumers, allowing them to connect both at home and on the go.

I predict 2022 will be the year that we begin the path towards significant progress in connecting rural America and bridging everyone to the digital economy.

2. Internet of Things Goes Mainstream

You may have heard this one before. The Internet of Things – or IoT – has been touted for years, and while there have been significant strides towards the ultimate promise of a connected world, the hype has so far outweighed the results. However, business leaders I've met with have shared concrete examples that demonstrate IoT technology is starting to deliver on its potential, mainly due to the ubiquity of 5G networks that provide the consistent, fast connection that IoT devices require.

Hospitals are reducing costs and improving patient care by tracking the location of thousands of assets, such as beds, medical equipment, and specialized instruments, as well as monitoring temperaturesensitive medications. Precision agriculture allows farmers to automate their irrigation systems and monitor soil quality, minimizing money and resources spent by only putting water and fertilizer when and where they are needed. For consumers, the expectation that everything can be trackable and connected is becoming a reality with security cameras, smart watches and low-cost item tracking like AirTags.

According to CTIA, there are more than 190 million IoT devices in the U.S., representing over 40% of all estimated wireless devices. I predict that 2022 will be the year that IoT truly starts to emerge from the hype and deliver on the promise of a world where anything can be connected.

3. Connecting for Togetherness

Perhaps the most impactful change that I see for 2022 is reversing the trend of technology that divides us online, and instead helps us connect in real life. And the indications are there.

Connectivity has always been used to bring people together – phone calls, text messaging, video calls, and even social networks initially brought us together, helping us connect with old friends and share important life moments. But much of the online social discourse these days is divisive, poisonous, and at times even life-threatening. When people can hide behind digital disguises and speak to anonymous and

faceless recipients, every online conversation can quickly escalate into an “us vs. them” division.

Encouragingly, at UScellular, we are seeing a steady uptick in personal communication. One-on-one text messaging is on the rise, and after previously declining year over year, phone calls per user increased on our network in 2021 – signs that people are connecting directly with each other, not around each other via social networks.

I’ve also personally observed a shift toward reining in the dangerous echo chambers of social media, and oftentimes teens – like my daughters – are leading the way. They are getting smarter about the implications of an always-on, connected life. They are savvy about the value of their personal data, and they are putting less emphasis on ‘likes’ and ‘shares’, and more emphasis on sharing experiences with people they like...their friends.

While there is still plenty of work to do to make the online world safe and enjoyable for everyone, I predict that 2022 is the year the pendulum starts to swing away from technology that divides us, and towards connections that bring us together. So, this holiday season let’s use connections for togetherness. First, call your mom. Then, put the phone away and spend time with your family.