

The Investor's Advantage

Investment Insights from Zacks Advantage



How 5G Could Deliver the Next Wave of Tech Innovation

There's a buzzword in the technology sector these days that we believe is absolutely critical to the future of innovation in business, but it's a buzzword that's not very well understood. For starters, it's not even really a word!

We're talking about 5G, and if you're an investor interested in the tech sector and opportunities that derive from new technology, we think you should be talking about it too.

Most readers who look down at their phones today will see either 3G or LTE (4G), which are the current cellular networks we use for data. It is because of 3G – and eventually 4G – that the internet moved from your computer to your phone. 4G is the reason you can use your phone to check Facebook, hail a car (Uber), map your trip (Google, Apple, or Waze), or even Facetime/Skype with your children or grandchildren. Younger phone users enjoy a variety of social media apps they use to communicate, and market-watchers know these social media apps are also multi-billion-dollar ideas and companies. Think Instagram, Snapchat, Twitter. Without 3G and 4G, none of them would exist.

Research conducted by U.S. wireless trade association CTIA found that “America’s 4G leadership led to roughly \$125 billion in revenue for U.S. companies” while increasing wireless-related jobs here by 86%, from 2.5 million in 2011 to 4.6 million in 2014.²

5G is what comes next. It is the next generation of cellular networks that “promise to deliver ultrafast speeds and open up a range of new applications.” Most consumers tend to focus on speed – downloading a movie in seconds, playing virtual reality video games on a phone. But corporations and governments see much bigger opportunities.

Factories and manufacturers can use 5G to monitor assembly lines for efficiency and to put chips in machines so engineers and managers can know when a part needs replacing. Doctors can use 5G to perform remote surgeries with robot arms. Farmers can track livestock and soil conditions to know when either are in need of attention or care. Cities can use 5G to monitor traffic patterns and save energy by controlling light use, better managing waste disposal, protecting neighborhoods, and cutting emissions. In our homes, we can use 5G to connect appliances or even heart monitors to appliances so we can readily access data. The opportunities are quite literally endless, and many of them we simply cannot fathom knowing what we know today.

Who are the Players in the 5G Revolution?

There are two main groups of companies/sectors to consider in the race to 5G. The first are the biggest telecom companies, which today include AT&T, Verizon, Sprint, and T-Mobile (which could ultimately merge with Sprint). Each company claims that it will be the first to broadly offer 5G, and each has plans for smaller city rollouts in the not-too-distant future. Whichever company does in fact win the race to 5G, the implications for downstream business could be sizable.

But investors should also not rule out non-telecom companies that have the ability to make waves in the space. Google and Microsoft are examples of companies that could find innovative ways to offer their own 5G services, and cable companies are also seeking access so that they can offer their own wireless services.

The second group are the companies, entrepreneurs, and industries that can leverage 5G to build new products, offer new services, and enhance productivity to levels never seen before. We mentioned before the use of 5G in manufacturing and agriculture and how cities can leverage new swaths of data. Some pilot projects are already in testing – in San Diego, city officials are testing a power-saving system that turns off lights when there is no traffic; in Portland, multi-sensor light poles can enable the city to monitor traffic, and provide updates in real time to help prevent accidents and more traffic.

The list goes on. But perhaps the most important takeaway to keep in mind is that before the arrival of 3G and 4G, very few people knew that multi-billion dollar companies like Instagram, Snapchat, Uber, and others would ever come into existence. Few people understood that our phones would become supercomputers that drive consumption and business in everyday life. And that was just with 4G.³

5G is what comes next.

Bottom Line

The 5G opportunity spans corporations, industries, and even municipalities. To be sure, however, the rollout will likely not be perfect and could take several years. The key factors for investors to watch are which countries develop the 5G technology the most quickly and most broadly, and for now it's a three-way race between China, the U.S., and South Korea. But we should also be watching which telecom companies roll out the technology the most quickly and the most broadly, and what companies get created as a result.

At Zacks Advantage, we believe in innovation. That's why we have innovated with new financial technologies and now offer an actively managed robo advisor that:

1. Automates the advising process
2. Invests exclusively with ETFs
3. Uses technology to recommend the appropriate mix of equities and bond ETFs to help achieve your investing goal and specific risk tolerance.
4. Lowers fees and expenses

For further information, we recommend you read our report: [The Savvy Investor's Guide](#)