

Broadband Providers and a Smart FCC: Keep Us Connected While We Stay Distant Bartlett Cleland

Particularly over the last decade, much has been said about "innovation." Many have commented on how to create an environment to inspire it, to manage it or benefit from it. In fact, so much has been said that unfortunately many people tune it out. This has happened in part because many merely pay lip service to the notion to further specific political ends and ignore, or not recognize, the need for the right government policies to create

an environment to best foster innovation.

But even worse, some politicians use innovation as a launching point to begin to advance policy reforms that do damage to the innovation ecosystem. Ignoring the value of an innovation environment, or even opposing it, seems to be the populists' status quo.

However, few will call out innovation for criticism directly, instead aiming their misdirected ire at companies that serve as icons of innovation. Such attacks are often in favor of older economy and declining industries that are not the pathway for the future. In that approach, only raw political power wins, the country's future is made to suffer, and the interwoven fabric of the innovation economy is harmed in the end. Amid the new and imposing challenges posed by a pandemic, having a political class that appreciates innovation as much as the economy and consumers do is valuable.

The lack of understanding that innovation is an ecosystem demonstrates a profound ignorance that easily leads to real economic harm if policies detrimental to innovation are enacted or allowed to continue in place. How so? Because a change to any part of the ecosystem has an impact on all parts of it. Specifically, the well-being of broadband, and of the internet, at least as those are understood and exist in the U.S., is dependent on all parts of the ecosystem being healthy and free from interference.

Platforms such as social networks, search engines, operating systems, webbased email, browsers, mobile apps, games and e-commerce continue to proliferate. The relationship between these various layers in the stack of the ecosystem, including the broadband service providers, is tightly woven in part because of vertical integration but also because of a web of contracts and interdependencies that make the whole function. Harming through overregulation or legislation that isolates one part of the technology stack does not necessarily lead to linear and predictable results. In fact, the opposite is usually observably true. That is, innovation related to the internet and communications space

moves rapidly but unevenly. Even the most visionary of futurists have only a slim chance of understanding where innovation is headed.

Regulatory or legislative hubris by federal, state or local governments that presume to know the direction of invention and innovation often leads to any number of unintended consequences. This is damaging pollution to the ecosystem. Fortunately, during the recent pandemic, industry was able to step up in a big way because of regulatory humility.

Near the beginning of the U.S. COVID-19 outbreak, FCC Chairman Pai asked broadband and telephone providers to take the Keep Americans Connected Pledge. This was not done via a command or under a threat but rather through real leadership at work. Nearly 800 broadband and telephone providers stepped up to help millions of Americans during a time of need. They pledged to not terminate service to any residential or small business customer because of an inability to pay a bill due to the disruptions caused by the coronavirus pandemic. Pledge signers also committed to waive late fees for any residential or small business customers caused by their economic circumstances related to the coronavirus pandemic, and to open Wi-Fi hotspots to any American who needed them.

Chairman Pai also encouraged all providers to expand and improve the low-income broadband programs they already possessed or to adopt programs if they didn't already have any in place. In addition, he asked providers to relax data cap policies, waive long-distance and overage fees, work with schools and libraries on remote learning opportunities and prioritize the connectivity needs of hospitals and healthcare professionals.

Many followed the extra suggestions and even expanded on them. Comcast promised to keep Wi-Fi hotspots open through the end of 2020. Verizon automatically enrolled Pledge customers into payment plans. Charter waived a portion of past due balances, and even raised the minimum wage for its workers to \$20 an hour, investing in a workforce that can help keep people connected. Others did more.

Those efforts were clearly needed. According to OpenVault, broadband consumption increased by 47 percent in the 1st quarter of 2020, as more and more people stayed home to work and watch movies.

Through it all, critics predicted that the system would buckle, that peaks in use would crash the system. Instead, an infrastructure built with private investment increased broadband provision and the industry took on more responsibility. This was made possible because of decades of private industry investment in people and infrastructure that continues today. For example, CTIA, the trade association that represents the wireless communications industry, has reported that telecom companies built out a whopping 46,000 new cell sites last year (more than 13 percent growth in coverage) as the industry makes the transition to 5G networks.

These investments were made more likely because of the light regulatory touch approach the FCC has taken over the last few years including during the pandemic. Turning away the heavy-handed tactics of just a few years prior, the FCC established a predictable, settled regulatory strategy that has made possible the rapid broadband expansion and higher customer satisfaction we are experiencing now.

Other helpful public policy approaches have laid the foundation for success today, as well. Not least of these efforts was the FCC's determination to fill the spectrum pipeline (the roads on which wireless communications travel) that has kept the raw material of broadband flowing.

As just one example, the need for more mid-band spectrum has become increasingly obvious. The ever-increasing demand by consumers required a full pipeline. Mid-band spectrum (1GHz to 6GHz bands) is the sweet spot segment of spectrum that combines range and power in the best balance, making it attractive for a range of uses. However, no new mid-band unlicensed spectrum had been released in a decade, so the currently-available bands have reached the point of exhaustion, having become increasingly congested.

The FCC took action to continue to maximize use and availability throughout part of the mid-band range to permit future generations of wi-fi to be deployed, providing the 5G experience in our homes and businesses as well as in urban and rural communities alike. The advent of 5G represents all that we have come to expect from wireless communicationsinnovations greater than streaming services-ideas such as the intelligence of things, virtual reality and the increasing connectivity needs for telehealth care and distance learning.

While the FCC is doing what can be

done now to maximize spectrum given current restraints, going forward, a plan to include more licensed spectrum must be developed with a continued focus on mid-band capacity. The combination of its actions now and this continued focus on next steps for a mid-band and licensed plan is just what the country needs as the rollout of 5G continues, enhancing the U.S. global leadership role in broadband.

The FCC has provided the right policy environment and industry rolled up its collective sleeves and has been working hard alongside. For the past several years, broadband companies have topped the list of those investing in capital improvements as reported by the Progressive Policy Institute in its annual report of companies ranked by capital investment. Once again last year, the communications and broadband sector was the top investing sector of the U.S. economy, with four out of the top ten companies being "pure" broadband companies with another three having significant investments in broadband infrastructure.

Moreover, because networks are actively managed due to usage changes over the course of a day, routine investment is a must. Such management is a "paint by number" approach that requires years of experience and constant retooling; neither of which is an inexpensive proposition. These efforts and investment have paid off.

Broadband enabled vast swaths of the economy to continue to operate, at least at some level. Millions of Americans were able to keep their jobs, telemedicine helped many, education was able to continue virtually (and could have been much better if more schools around the country had followed Florida's lead and taken advantage of advances in technology), and staying in touch was easier with social media and new video conferencing platforms. While much may have been lost, so much more would have if not for the broadband infrastructure across the country.

While the advances are impressive, more work remains. More than 18 million are still without broadband accessabout 20 percent of rural Americans. Unsurprisingly, the importance of having access to broadband has become even more apparent during the last six months. The FCC is currently being urged to take action to clarify a rule governing the potential price gouging of providers seeking to attach 5G cells to poles that are due to be replaced. The goal should always be to make delivering rural broadband an easier hill to climb. Given its history of sensible regulations and clearing the way for industry to do what it does best, likely this broadband challenge will be overcome as well. Such an accomplishment would prepare even more of America for whatever challenge next lies ahead.

A smart public policy environment is necessary for a robust innovation ecosystem to thrive. This is a vital approach exactly for times like now when all manners of innovation are needed to hold together society. Policymakers need to recognize that their actions will directly impact innovation and technology and must think humbly and act carefully. The FCC has been a shining example of leadership while understanding the need to allow invention and creativity to flourish. The reward is a robust ecosystem ready for the big challenges as have had to be overcome this year.

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