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When Monopoly Hinders Innovation:

A look at the lack of internet access in rural America

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When I was in Colorado, I absolutely deplored CenturyLink, my internet service provider. They offshored all their customer service support, closed the branch office in Pagosa Springs, and when I would call to report an internet outage, an automated message would tell me that if I wanted faster service, I should search for the solution online. How was I supposed to search for the solution online when I had no internet connection? CenturyLink gets 1.66 stars on Broadband Now (2019), and I am amazed they got any stars. Internet access in Southwestern Colorado is a problem, opposed to the northern, tech-rich part of the state, and for much of my time in that part of the world I was telecommuting and attending online school. I had to have fast, reliable internet.

Ultimately, the difference was made by one technician. After dozens of hours waiting online and trying to get my message across to people all over the globe, I was sent someone who could check the connection outside my home. He looked inside my box, looked at me, and said, “Okay, I’m just going to do this, since you need it, and it can be done. I’ll give you my cell phone number in case you need anyone again, just call me. Don’t bother calling the CenturyLink number” (CenturyLink Employee, 2014). As a result, I had the fastest internet service outside town and when something went wrong, I just called the technician directly.

It has been said that attitude makes the difference (Haynes, 2013), but it’s people who have the attitudes. CenturyLink provides communications and data services to residences, businesses, and governments in 37 states and in 2018 had revenues in excess of 23 billion dollars (CenturyLink, 2019) and yet they can’t manage to get more than 1.66 stars on a popular internet service review site. Why? Does the company feel as though they are “too big to fail” (Young, 2019), which means that they are so engrained in the economic fiber of the country that the government would intervene should they roll under. Maybe partly. Losing internet service in 37 states would create a seismic fissure coming close to the 2008 economic meltdown. But shouldn’t there be competition and choice to consumers in a market like internet service? And shouldn’t broadband service operate as a public utility, regulated by a public process and with ombudsmen to protect the public interest?

In the first case, yes, there is competition, and no, there isn’t. But before we look at that question, we must take a deep dive into the larger philosophical policies created during the time of the New Deal, and which cable and broadband companies have fought hard to avoid- until now.

Utilities like our drinking water or electricity are considered essential services. The first stage of electrification of our nation, in the late 1800s, was a relatively hokey affair involving low-voltage wires and spotty service. However, as the technology improved by and through the involvement of investors like Samuel Insull of Chicago Edison (Blackout, 2014) holding companies were developed, and running outside the aegis of much governmental regulation, multiplied into pyramid-style monopolies, vertically integrating into every aspect of every business that could be involved with power transmission, from the manufacture of the wires to the delivery of service. This kind of activity is sometimes referred to as a natural monopoly, because it is inherently too expensive to duplicate services due to the expense of the capital investment. Everyone today understands the example of a cell phone tower owned by one company, such as Verizon, and that company rents out space to smaller cell phone companies. But

Verizon is not going to share its towers with US Cellular. Nor will US Cellular share its towers with Verizon. Think about that fact for a moment. Is there really any technical reason why they can't? No. But we don't question it. We'll return to that point in a bit.

In the meantime, recall the Great Depression and the stock market crash of 1929. In 1928, the FTC began a six-year investigation into holding company market manipulation (yes, the same organization made famous by Ajit Pai and the misnomer, Net Neutrality). It had followed that natural monopoly allowed unnatural, and perhaps even unearthly, inflation of utility prices. Following the inevitable crash of the air balloon created by such monopolies in 1929 (think ahead to the 2000s, when sub-prime mortgages created the same kind of false inflation of home prices) the country was ripe for a reformer, and in 1935 President Franklin D. Roosevelt pushed through the Public Utility Holding Act, outlawing the types of pyramid schemes that allowed the holding companies to falsely inflate prices (Cornell Law, 2019). But please let us not forget Frances Perkins, the woman who really made the New Deal (Frances Perkins Center, 2019). Her home still stands in Newcastle, Maine, and Maine Historic Preservation would love to find someone with deep pockets to renovate it. I've always wanted to make my home there, because there's room for my horses and somehow, it would seem right that I end up there. But I don't have the deep pockets.

The long and short of public regulation of essential utilities is that once broadband came along, broadband companies fought against it, with the reasoning that the inherent cost of deploying the service should exempt regulation, and besides which, broadband and then to follow, cell phone service really aren't essential services quite the same as electricity.

But paradoxically, internet service providers have of late been making the argument that yes, they are providing an essential service similar to water, gas, sewer, and electricity (Brodkin, 2018) and they can't provide this service unless (surprise) the government gives them more money.

This is a strange swing of the pendulum. The encapsulated timeline brings us from the stock market crash of 1929, the New Deal of 1935, and then the deregulation of the 1980s and 1990s that allowed privatization of many services and diminished regulatory oversight (including decreased regulation in the credit card industry) massive government bailouts of institutions that were "too big to fail" in 2009, the FTC voting to allow network throttling at certain prime times unless customers paid for the next level of service (mis-named Net Neutrality) and then, amazingly, companies making in excess of 20 billion a year and controlling market share asking for government assistance to expand broadband service to rural areas, because it is too cost prohibitive to do so otherwise.

I no longer make my home in Southwest Colorado, but the song remains the same in a little Maine town on the Canadian border. The big ISP here is Spectrum/Time Warner (the other big guy in the game) and I am the town manager of a little municipality about the size of Whosville, though we would like to have internet service so that we can communicate our existence to the rest of the world before we get put in the proverbial pot of stew. Right now, I'm scratching my head as I'm staring at a franchise contract with the Evil Empire itself, and wondering what would happen if I didn't sign it. Some of my residents are urging me to just not sign. I'm not sure what my selectboard would do to me if I didn't, but I did email my counterparts in the three towns around me, and ask them what they plan to do. The trouble is that Spectrum has increasingly eroded our service and increased our costs. Once upon a time, they provided cable coverage (which is how broadband gets into people's homes) at a density of ten homes per linear mile. Now, we are down to 20. The cost of the franchise is going up, and when I do the math and ask my representative if this really means that costs have gone up as much as I think they have to the consumer, I don't get a straight answer. We get a public access TV station as part of the deal, but once upon a time, they provided us with equipment for the station, and there was no cost. They have also relegated our channels to a place on the band that no one, not even a drunken and jilted unrealistic dreamer coming in at 2 am and deciding to watch Godzilla while eating cornflakes would find: it's channed 1302, which has been dubbed here in Maine "Digital Siberia" (Murphy, 2019).

According to my colleague in Caribou, they are going to send back comments asking for improvements, and they are hiring a consultant to try to negotiate a better contract (Bouchard, 2019). Bolstered by this news, I emailed a few other managers around me, trying to gain some traction to get all of us together on the same page.

Getting back to the idea that the big ISPs want government money to expand service, we have to look at what has happened in rural areas of the United States as state and local governments have tried to grapple with the lack of internet service for their residents: which is a situation solely created by economic factors determined by the big internet service providers. They are the ones who decide whether it is cost effective for them to extend service to rural areas where home density is fewer than 20 units per linear mile.

And this is where the irony kicks in: because government has tried to make up the difference for Rural America, now the big ISPs come in and want a slice of the pie, too.

Here in Maine, a major infrastructure project to create a Fiber Optic “Superhighway” was finished in 2012 (Hall, 2012). With a $31.7 million budget, the “Three Ring Binder” provides a 10 gigabit fiber optic network in three loops of the state. The thinking behind the project was that the highway would be constructed, and then the middle mile and the last mile service would be administrated through grants. Somehow, I do not know how, this granting process has fallen to the USDA, through Rural Development, to adminster. Most likely this came about as a result of the Federal Communications Commission (FCC) putting out to bid $2 billion dollars to companies to provide internet access to rural areas, and the bids are being administered by USDA? The process is so convoluted it’s impossible to tell (Crawford, 2018). I have attended grant seminars led by consultants who travel all over the country teaching people just like me how to apply for a service on a competitive basis that we now argue is as essential as gas, water, and sewer. It is clear to me that, despite my ability to work for twenty hours at a trot without sleep, larger municipalities are going to be more successful in winning grants than I am, because I do not have the additional professional staff to write grants while I manage the town. I will find the way, but the playing field is not level. And this is why we have two Americas: a rural America just barely hanging on, and an urban America filling up fast with people seeking services and employment. But the tragedy is that here in rural America, people can afford to live: if only someone hadn’t decided to make some of the processes we need in place available competitively, not intrinsically.

Returning to my initial thought that it takes one person to make a difference, and remembering my solitary internet technician who appreciated my predicament and made a change, what can be done to create internet access equity? The Maine Legislature currently has a bill in committee addressing cable issues, particularly as they pertain to local access stations (LD 1371, 2019) which should pass, and would help with some issues, including reducing the housing density per linear mile to 15 from 20.

But in order to be more innovative, to make a difference at the per-person level, and to reduce wasted energy of thousands of municipal managers all racing around trying to chase after the same money that now businesses like Verizon are also attempting to garner, I feel that money to expand middle mile and last mile service in Maine, and in other states as well, should just have been distributed proportionally per GIS survey of who didn't have service, and built out according to standardized, engineered specifications. The trouble comes when one has to decide on who to hire to install the new infrastructure, but here is where I think the real entrepreneurialism would develop. Because the towns would have the money and the engineering specs required, and a certain speed of internet required, I believe that a local base of businesses would develop. When there is a need, the need is filled. We would no longer be at the mercy of the CenturyLinks and the Spectrums of the world. Small internet service providers like Pioneer Broadband (2019) here in Northern Maine, or GWI further to the south. We'd see an increase of entrepreneurial economic activity simply because the money was in the towns.

A similar situation has occurred with municipal streetlights. A few years ago, the Maine Legislature voted to allow towns to own their own streetlights. Previously, a town could not put their own light on a pole owned by the utility company. As a result, towns have transitioned to owning their own lights so that they can purchase and use LEDs and save energy. The utility companies have also gotten in on the game, renting their own version of an LED to the towns at a higher cost over time than if the towns were to buy the lights up front. At first, small towns were reluctant to purchase their own lights, simply out of fear of the cost of maintenance and lack of staffing or equipment to service their own lights, but in the past year, businesses have reinvented themselves to provide that service to the towns, such as a local electric contractor in Northern Maine who now focuses on the streetlight program. Towns have also banded together to order the same infrastructure so that if anyone needs a lightbulb or a part, help is available.

The streetlight program was begun by one person: I don’t know if it was his idea, but he was the representative in the legislature at the time who kept sponsoring the bill that finally got swept up into an Energy Omnibus bill and eventually passed: Lance Harvell of Farmington (Parkurst, 2011). I was in the legislature during this time, and participated in the process of documenting my own city’s streetlights so we could get a comparison cost of what it would look like if we owned our own.

What companies like Spectrum and CenturyLink fail to understand is that they may have the market share, and may feel that they don’t need to provide the level of service that they would if they didn’t have a captive audience, but ultimately, their inability to innovate could be the cause of their downfall. They want government grants without the responsibility of providing service. Their customer service is non-existent. Just walk up to a stranger in the grocery store and ask how they like their internet service. It doesn’t have to be that way. Big business could be a partner in small innovation. I believe that companies like Spectrum could increase their bottom line through entrepreneurial activities like providing cable service to more homes, even if it didn’t initially make financial sense, improving their legendarily horrific customer service record, and helping towns in rural America. Small internet companies will eventually push out a part of their market share, so why wouldn't they simply see the future and partner with the people instead of continuing to act like holding companies?

If they don't, then the entrepreneurs of small internet will continue to push for share- but the unknown factor in this equation is how governmental grant money will be awarded. If the FCC and FTC continue down the path of making things easier for big business, it could follow that rural internet grant money will go to the Spectrums and Verizons and CenturyLinks out there. This could hinder entrepreneurial activity, because there would be even less incentive for these companies to change their ways. If grant money predominantly goes to smaller companies, or if it had been administered by population to the towns themselves, I believe we would see a much richer entrepreneurial result. How things shake out remain to be seen, but public policy and the flow of money will absolutely determine the level of innovation and by default access.

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