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Alexicon *insider*

INFORMATION AND ADVOCACY FOR THE
RURAL TELECOMMUNICATIONS INDUSTRY

Regulatory Headlines

Rural Areas Can't Catch a Break

When Galen Manners was offered a promotion at his job, he didn't want to relocate to the big city from his family in rural Kansas, where he helped his two brothers run their 2,000-acre farm in his spare time.

Broadband in Farm Country

A year ago, Cathy Hansen got the kind of breakup letter everyone dreads. Her internet provider was shutting down service in her area in the next couple of months. We do apologize for the inconvenience this interruption of service may cause and wish you the best in finding a new internet service provider," the Cumberland Telephone Company said as it suggested satellite and cellular companies as possible alternatives.

5G Pits Carriers, Gov't Against Towns

Given the hype and interest around 5G, you'd think any community would welcome the next-generation cellular technology with open arms. Not Doylestown, Pennsylvania.

FCC Relaxes RoR BDS Regulation

The FCC voted to relax business data price regulation for certain rural carriers. Rate of return carriers that opted to receive Universal Service Fund support based on the FCC Alternative Connect America Cost Model (A-CAM) will have the option of transitioning to what the FCC called "light-touch incentive regulation" for their business data services. Those services include lower-speed TDM data services that operate at speeds of 45 Mbps or less.

AT&T's Fix For Broadband Mapping

Federal telecom regulators have a well-documented problem: They don't know where telecommunications services are, exactly. But AT&T is proposing a potential solution to this problem. And it's a solution that involves one big element: Get everyone's address.



Market Watch

[5G Could Benefit Fiber Industry](#)

[Broadband Investment Increased to \\$76.3 Billion](#)

[Blackfoot Carrier Services Launches](#)

[Streaming Services Will Be 25% of Market](#)



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Technology Trends

New and notable technology and services

Feds Favor Light Touch IoT Regulation

The Internet of Things may be in its infancy, but the U.S. government has been gearing up to determine what the proper federal role should be, both for encouraging and for regulating the use of IoT technology. Two recent developments have underscored the government's interest in IoT. On the regulatory front, the Consumer Product Safety Commission has launched an initiative to determine a framework for regulation related to IoT.

Former NSA Chief on Cyberattacks

There are few limits to the destruction that could be caused by a devastating cyberattack, retired Adm. Michael Rogers told CNBC in one of his first interviews after departing the National Security Agency five months ago. "There is no scenario that is beyond the pale of possibility in the world we are living in now," said Rogers, who oversaw the NSA for nearly four years.

Why AT&T Would Build a Media Box

AT&T said that it has begun beta testing a streaming media device with plans for expanded trials in the first half of 2019. That begs the question: why? The box, unearthed at the FCC by Variety last year, is a wireless 4K OTT client based on Google's Android TV. It has a voice remote along with Ethernet, digital audio, HDMI and USB ports. It's pretty small; roughly the size of an Apple TV, Fire TV or a Roku.

Using the Cloud for Digital Transformation

Digital transformation is the buzz phrase of the moment, with budgets and resources to match. Worldwide spending on digital transformation technologies - hardware, software, and services - hit \$1.3 trillion in 2017, according to IDC. The tech research company expects spending to almost double between now and 2021, when the total amount spent on digitalisation globally will surpass \$2.1 trillion.

IoT Embraced Cautiously

The theft of millions of email addresses in recent data breaches has contributed to a reluctance by consumers to embrace the Internet of Things (IoT), according to a study by F-Secure. Among the early adopters who were interviewed, 74% expect to acquire home devices, but 66% have delayed such purchases because of privacy concerns.



IN FOCUS: Homework Gap Affects Nearly One-in-Five Teens

According to a recent [Pew Research Center analysis](#), approximately 15% of households in the United States with school-age children do not have a high-speed internet connection at home.

Many school-age children live in households without high-speed internet

% of U.S. households with children ages 6 to 17 who do not have a high-speed internet connection

	All	White	Black	Hispanic	Asian
All households with school-age children	15%	10	25	23	5
BY ANNUAL HOUSEHOLD INCOME					
Less than \$30K	35%	28	41	38	14
\$30K-\$74,999	17%	13	21	22	7
\$75K or more	6%	4	9	9	2

Note: Race and ethnicity are based upon the race and ethnicity of the head of household. Whites, blacks and Asians include only those who reported a single race and are only non-Hispanics. Hispanics are of any race. Household income data reported for the calendar year prior to the survey year.

Source: Pew Research Center analysis of 2015 American Community Survey (IPUMS).

PEW RESEARCH CENTER

The analysis was based on 2015 U.S. Census Bureau Data, and shows that some teens are more likely to face digital hurdles than others. Not surprisingly, the race and income level of the household seemed to affect whether or not a teen faced the so-

called homework gap, or the challenge faced when homework given requires internet access for those without it.

At the policy level, the federal Lifeline program is the tool used to address the affordability and adoption of broadband services. The FCC has taken some steps to address the affordability of broadband services, but has yet to increase the Lifeline credit to reflect the

addition of broadband as a supported service. In addition, the federal high cost programs, currently under consideration for revision as to the overall budget for RoR carrier areas, is a tool used by the FCC to address some of the homework gap issues. However, the problem remains and is a focus of Commissioner Jessica Rosenworcel as shown in her statement related to the Pew analysis:

"The new Pew Research Center data about the Homework Gap should be a wake-up call. Nearly one-in-five teens cannot complete their homework because of the Homework Gap, and impoverished and minority students are hit especially hard. The Homework Gap is the cruellest part of the digital divide. We need to bridge this gap and fix this problem. Our kids deserve nothing less and our shared economic future depends on it."



Alexicon at Work

NECA Expo, November 4-7 in New Orleans

Alexicon's Zach Cochran will give a presentation on broadband mapping and federal broadband deployment policy. This presentation is intended to be a satirical (but not insulting) look at broadband mapping. It will outline the use, importance, complications and problems surrounding broadband mapping and Form 477. It will also discuss some solutions to the problems. This is timely due to the recent RUS NOI, GAO report, and FCC Form 477 proceeding.



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