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## **Cablevision to Offer Wi-Fi Phone Service 'Freewheel' Will Use the Firm's 1.1 Million Hot Spots**

By Shalini Ramachandran

Cablevision Systems Corp. said it will offer a Wi-Fi mobile-phone service starting next month, making it the first U.S. cable operator to take such a product to market.

The new service, dubbed "Freewheel," will take advantage of the 1.1 million Wi-Fi hot spots that Cablevision has deployed in its greater New York service area since 2007. The cable company will offer its broadband customers an unlimited Wi-Fi voice, data and text plan for \$9.95 a month. Non-Cablevision customers will pay \$29.95 a month. The company will market Freewheel first in the New York area, though it will be offered nationwide.

Initially, the service will work only with one phone -- the Motorola Moto G, at a price of \$99.95. Later, it could be made available on other devices through an app.

The Long Island, N.Y., company hopes Freewheel will help it retain subscribers and eventually steal away some customers from cellphone companies. Cablevision is aiming to capitalize on the growth of Wi-Fi access points and consumers' increasing use of Wi-Fi on their smartphones to trim their cellular bills.

"We're riding the wave, and Wi-Fi is the clear winner as the technology," Cablevision Chief Operating Officer Kristin Dolan said in an interview.

Other companies offering Wi-Fi mobile-phone service have sought to fall back on cellular networks when Wi-Fi is out of range, because cellular coverage is more or less ubiquitous and Wi-Fi can be patchy.

Cablevision isn't doing that. Ms. Dolan said the Wi-Fi-only service won't work well for a person who's on a conference call while driving to work, but it would appeal to other types of consumers, such as a student on a college campus or a family on a fixed income.

"When you're connected to Wi-Fi, it works better than cellular," Ms. Dolan said.

Cablevision has long put a strategic emphasis on building up its Wi-Fi presence. Like most of the cable industry, the company is struggling with a sharp slowdown in its TV business, which now serves about three million customers. Wall Street has been watching to see if the Wi-Fi investments can pay off and yield some growth.

Cable operators have made a variety of attempts to enter the wireless business in recent years, without much to show for it. Cablevision said the time is ripe now, because Wi-Fi technology has improved, making it easier to hand off phone calls and data from one hot spot to another.

Freewheel has some drawbacks. Customers might face hiccups or spotty Wi-Fi service outside of Cablevision's footprint, for example, and they may have to pay to access some non-Cablevision Wi-Fi networks. Cablevision's unlimited plan is also more expensive than similar plans offered by smaller carriers such as Republic Wireless.

Kevin Packerham, Cablevision's executive vice president of product, said the plan's higher price reflects Cablevision's investments in deploying and managing its own network of hot spots. "We definitely know our hot spots offer a better, faster data experience than cellular," Mr. Packerham said.

Cablevision said it will also make available "attractive" international Wi-Fi calling plans that will appeal to travelers who now pay expensive roaming fees to make calls or send texts overseas.

Cablevision likened the company's entry into the Wi-Fi phone business to its launch of a landline digital phone product more than a decade ago.

At the time, Ms. Dolan said, the company didn't position the service as a competitor to traditional phone companies, but over time Cablevision has become the dominant landline phone provider in its service area.

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### **Google, Cablevision Challenge Wireless Industry's Business Model Companies Ready Phone Plans That Dial Up Pressure on an Industry Already at War Over Prices**

By Ryan Knutson, Alistair Barr and Shalini Ramachandran

Google Inc. and Cablevision Systems Corp. are preparing new cellphone services that would turn the wireless industry's business model on its head, increasing pressure on companies already dealing with an intensifying price war.

Google's service would hunt through cellular connections provided by Sprint Corp. and T-Mobile US Inc. and Wi-Fi "hot spots," picking whichever offers the best signal to route calls, texts and data, according to people familiar with the situation.

The service could be rolled out in the first half of this year and would likely be offered nationwide.

But previously scheduled launches—including one in October 2014—have been delayed, so the timing could slip again, some of these people said.

Cablevision, meanwhile, will start offering a Wi-Fi-only mobile-phone service next month, making it the first U.S. cable operator to introduce a service that others have discussed. The service, dubbed Freewheel, will include unlimited data, talk and text for \$9.95 a month for the company's broadband Internet subscribers and \$29.95 for noncustomers. (Please see related article on page B4.)

In different ways, the two companies' plans would challenge the wireless industry's prevailing system of supplying service through exclusive agreements with individual phone carriers like Verizon Communications Inc., AT&T Inc., Sprint and T-Mobile.

While that approach has helped carriers collect the steady income needed to support massive investments in what are now some of the world's most advanced wireless networks, critics say it leads to higher prices and sometimes worse service.

Both efforts face substantial challenges—from stitching individual Wi-Fi hot spots into a reliable network to handling new customer-relations issues. And there is no guarantee the services would catch on with subscribers.

Still, Google and Cablevision are throwing their weight behind an idea that up to this point has been pursued only by a handful of startups with names like FreedomPop, Republic Wireless and Scratch Wireless.

Google executives previously have indicated that they are interested in using Wi-Fi and cellular networks together.

The company is lobbying the Federal Communications Commission to free up vast quantities of spectrum to facilitate more Wi-Fi-like hot spots.

"There is a combination of Wi-Fi and wireless—they actually have a symbiotic relationship," Patrick Pichette, Google's chief financial officer, said at an industry conference about a year ago. "We continue to be an active participant to look at how this evolves."

Cablevision Chief Operating Officer Kristin Dolan said its new service could be appropriate for users like college students, who are often connected to Wi-Fi, or others such as children or people on a fixed income.

More than 90% of all mobile data traffic in the U.S. was carried over Wi-Fi networks in 2013, according to Cisco Systems Inc. Yet wireless bills don't reflect that reality.

Carriers such as Verizon and AT&T have tailored their plans in recent years to charge customers more for increased data use.

Now that their cellular networks have been upgraded to faster LTE technology and are more robust, they are trying to increase traffic, rather than limit it, and thus spur customers to buy larger buckets of data.

Google has struck deals with Sprint and T-Mobile and is preparing to offer wireless service, people familiar with the matter have said.

The move would build on the sizable role Google already has in wireless, thanks to its Android mobile operating system, which powers about half the smartphones in the U.S.

At the same time, it has to tread carefully, because relationships with carriers are important to extending Android's reach.

The company's aim is to get the best and fastest wireless connection without phone users having to worry about a long-term relationship with a carrier, two people familiar with the effort said. Lowering prices isn't the goal, one of the people said.

Eventually, though, the technology the company is developing to switch between services based on quality also could be used to consider price as well, creating a bidding war for momentary connections that could drive down prices.

"It's a very aggressive move," said Dave Fraser, CEO of Devicescape, a company that is stitching together a network of millions of Wi-Fi hot spots world-wide. "You can imagine Google driving down the price to be disruptive and paying for it with revenue from other services that the company already provides, like search and advertising."

AT&T said subscribers need its network if they want to be connected wherever they go.

Verizon Chief Financial Officer Fran Shammo said on a call with analysts Thursday that Google will have to overcome many challenges for its service to succeed, including dealing directly with consumers. "Resellers, or people leasing the network from carriers, have been around for 15 years," Mr. Shammo said. "It's a complex issue."

Sprint, mindful of the risks, put volume triggers into its contract that would allow it to renegotiate if Google's service takes off, one person familiar with the matter said.

Apple Inc. got a lot of attention in October when its new iPads included a so-called SIM card that could work with three of the four big U.S. carriers. SIM cards let subscribers use a network, and carriers in the U.S. have typically supplied their own, tying subscribers to their service until the cards are replaced. The iPads' "soft SIM" sparked speculation that customers could one day buy short-term data connections a la carte. Verizon declined to participate.

The carriers argue that reliable and secure mobile service is only possible with their networks of cell towers and fiber optic links that move YouTube videos and Instagram photos among cellphone users. The big four national carriers have built those networks at enormous expense--bids in a continuing spectrum auction at the FCC have approached \$45 billion—and they command a high price. Middle income American households spent about 50% more on cellphone service in 2013 than in 2007, according to an analysis of Bureau of Labor Statistics data.

Smaller companies have experimented with ways to use Wi-Fi to bring down wireless bills, chipping away at problems like the need to log in to dozens of Wi-Fi networks or how to hand off phone calls between them so they don't drop.

FreedomPop, a Los Angeles based company that began offering free mobile service in 2013, launched a new service last week that will give cellphone customers access to nearly 9 million hot spots with a single login for \$5 a month.

Republic Wireless developed technology to hand off Wi-Fi calls and has a few hundred thousand customers for services that work only on Wi-Fi or include cell-network fallback. Its plans range from \$5 a month to \$40, depending on whether the customer wants to use Wi-Fi exclusively or fall back on Sprint's network when necessary.

Motorola, owned by Google until last year, has three models—the Moto X, G and E—that work with Republic's Wi-Fi-first plans.

Cablevision's new service will be available only on one device at launch: Motorola's Moto G. The phone will come with the cable company's video and voice apps already installed and will cost \$99.95.

Cable companies began building millions of Wi-Fi hot spots across the country in recent years, triggering speculation that they might try to stitch them together into a wireless offering. Comcast Corp., which is awaiting government approval to buy Time Warner Cable Inc., told regulators last year that a merger could help spur the development of a Wi-Fi first cell service.

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### **Cablevision to Introduce Wi-Fi-Based Phone Plan** By EMILY STEEL

Cablevision Systems plans to announce on Monday the start of a low-cost mobile phone service that will use Wi-Fi for connectivity rather than standard cellular networks, the first such service to be introduced by a cable operator.

Called Freewheel, the service will offer unlimited data, talking and texting worldwide for \$29.95 a month, or \$9.95 a month for Cablevision's Optimum Online customers — a steep discount compared with

standard offerings from traditional cellular carriers. Freewheel customers initially must use a specific Motorola Moto G smartphone, which is being sold for \$99.95. The service goes on sale next month, and no annual contract is required.

The service will not offer a seamless connection for people on the go. Freewheel only works when the device is connected to Wi-Fi. (One exception is for emergency calls, which will be placed regardless of whether Wi-Fi is available.)

Cablevision has spent the last eight years building out its Wi-Fi network, which now offers more than 1.1 million hot spots for both indoor and outdoor access in the New York metro region.

That period coincided with the introduction of smartphones and an explosion in the use of Wi-Fi rather than cellular connections for mobile activities like browsing the Internet and watching videos.

More than half of smartphone browsing now comes via Wi-Fi, with more than 93 percent of tablet browsing occurring that way, according to a recent Adobe Mobile Benchmark report.

"The big picture for us is the fundamental transformation in how people use their devices," said Kristin Dolan, Cablevision's chief operating officer. "It has been a migration in the past decade from voice to data."

Cablevision said that it was planning a regional marketing campaign to promote the new offering and that it expected its target customers to include people who spent their days in homes and offices with Wi-Fi, were wary of overspending on data, lived in areas with bad cellular service or wanted a low-cost option for their children.

While industry analysts have long expected cable operators to roll out Wi-Fi mobile phone service, the Cablevision product is being offered sooner than many of them had predicted. Cablevision chose not to partner with a wireless carrier, like Verizon or AT&T, or build its own wireless network to fill gaps in service when Wi-Fi connections were not available.

Craig Moffett, a telecommunications analyst with MoffettNathanson, said in a recent report that he did not expect the start of a Wi-Fi-first wireless offering until 2017 because of the coverage gaps, and that the ripple effects of when such service became widespread would be substantial.

"The time is coming when Wi-Fi will shift from being a 'secondary' network to being a primary one; instead of thinking of Wi-Fi as an alternative to cellular where Wi-Fi is available, we will instead begin to think of cellular as a backup network only when Wi-Fi is not," he said. "That shift may sound subtle, but it will usher in a period of profound disruption."

That disruption could spark a new wave of convergence between the wireless and cable industries, leading to more competitive offerings, partnerships and, potentially, mergers.

For years, phone carriers like AT&T, Verizon Wireless and T-Mobile USA have explored ways to reduce congestion on their cellular networks. One method involves offloading voice and data traffic onto the high-speed web connections offered by broadband providers like Comcast and Time Warner Cable.

T-Mobile, for example, offers a Wi-Fi router that is designed to allow iPhone owners to place phone calls over a Wi-Fi connection. That helps offload some of the traffic that would have gone on T-Mobile's voice network, but it also compensates for areas where T-Mobile has poor coverage.

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## **Cablevision seeks niche Wi-Fi market**

By James Covert

Cablevision is launching a new smartphone service that provides unlimited data, talk and texting for \$29.95 a month — but there's a big catch.

The service, called Freewheel, works only when the device is connected to a Wi-Fi network, and is unable to access cellular networks such as 3G and 4G LTE that allow users to roam freely.

As such, Cablevision is courting customers who "spend their day in Wi-Fi-rich environments" such as colleges, offices and homes, or who "overspend on data or constantly worry" about exceeding monthly contract limits.

In particular, the Bethpage, LI-based company will be marketing the service to the New York and New Jersey area, where it has been building out its Optimum Wi-Fi network, with 1.1 million hot spots that have been optimized for mobile devices.

Cablevision officials note that the network has been built out to serve key public areas in New York, including transportation hubs and city parks.

"There has been a dramatic shift in how consumers use their mobile devices; today, it's all about data, and Wi-Fi is now preferred and clearly superior to cellular," said Kristin Dolan, Cablevision's chief operating officer.

Cisco Systems' latest yearly index report found that 93 percent of all data traffic generated by mobile or portable devices in the US was carried via Wi-Fi.

GIGAOM.com

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## **This is big: Cablevision launches Wi-Fi-only mobile phone service**

Janko Roettgers

Cablevision is getting ready to pick a fight with your mobile phone company. Next month, the cable operator is going to introduce a low-cost mobile phone service dubbed Freewheel that's based entirely on Wi-Fi connectivity. Freewheel will offer existing Cablevision internet service subscribers unlimited talk, text and data for a mere \$9.95 per month. Consumers who don't use Cablevision's internet service can sign on for \$29.95 per month.

At launch, Freewheel is only working with one handset: Cablevision will sell Motorola's Moto G for \$99.95, and the phone will come preloaded with apps that automatically authenticate with any of the company's hotspots.

Cablevision started building out its own Optimum Wi-Fi network in 2007, and now has more than 1.1 million hotspots in the New York tri-state area. The company adopted Fon-like Wi-Fi sharing last year, essentially turning its customers' Wi-Fi routers into public hotspots by adding a second, separate network that can be accessed by any Optimum customer, and now by any Freewheel subscriber as well.

In addition to that, Freewheel customers have access to some 300,000 hotspots across the country, courtesy of the CableWiFi initiative that brings together Wi-Fi access points from big cable companies like Comcast, Cox and Time Warner Cable. And of course, the device will also work with any other Wi-Fi network a user has access to, whether it's at home or at their office.

However, Freewheel users may have a harder time staying connected on their commute: The service doesn't include any fall-back option to connect to mobile networks when Wi-Fi is unavailable, which means that users won't be able to make calls or access data services when they're not connected to a Wi-Fi network. That's why the company is primarily targeting users who are in what it calls "Wi-Fi-rich environments" like college campuses and urban areas with a high density of mobile hotspots.

Cablevision has also in the past made a point of highlighting how big of a hit Wi-Fi already is with its customers. Each Cablevision internet household already has 2.88 devices accessing Wi-Fi on average, and customers have used Optimum Wi-Fi nearly one billion times during Q4 of 2014, consuming 19 petabytes of data, according to statistics shared by the company.

Cablevision isn't the first company to use Wi-Fi as an alternative to traditional mobile networks. Low-cost mobile virtual network operator (MVNO) FreedomPop introduced a Wi-Fi-only service tier last year that promises access to 10 million hotspots for \$5 a month. However, Cablevision does have a distinct advantage by operating its own network of hotspots, and it also has a lot bigger megaphone. Its new Freewheel service will be available to consumers nationwide, but Cablevision plans to heavily market it on its home turf.

That could quickly get interesting: Cablevision's biggest competitor in its home market is [Verizon](#), which has been using its FIOS broadband service to steal internet customers away from the cable company. With Freewheel, Cablevision is now attempting to turn the tables, and offer a combination of broadband internet, TV and mobile phone service of its own.

Ultimately, Freewheel could become a blueprint for other cable-led mobile initiatives. Comcast has been aggressively building out its own Wi-Fi network by also relying on a crowdsourced approach that turns customer's Wi-Fi routers into Xfinity hotspots. And with mobile phone usage increasingly moving towards data services, we could possibly see a whole bunch of new players offering Wi-Fi-only or Wi-Fi-first mobile services soon.