



## Inside This Issue:

### This Week's Stories

Chrome Will Start Marking HTTP Sites That Transmit Passwords Or Credit Cards As Non-Secure In January 2017

The 5 Biggest Things Apple Just Announced

### Products & Services

Newest Wearables From Apple And Fitbit Set Up A Fitness Battle

Amazon's Alexa Finds Its Way Into Tablets. Where Next?

### Emerging Technology

Google's DeepMind Achieves Speech-Generation Breakthrough

Snapchat Fuels Augmented Reality Hardware Rumors

### Mergers & Acquisitions

Google To Acquire API Management Provider Apigee For \$625 Million

Dell Gets Bigger And Hewlett Packard Gets Smaller In Separate Deals

### Industry Reports

Apple Music Vs. Spotify: Guess Who's Winning Now

AT&T Continues To Court DirecTV Customers With Wireless Offers

Mobile Scammers Becoming More Effective, First Orion Survey Finds

## This Week's Stories

### Chrome Will Start Marking HTTP Sites That Transmit Passwords Or Credit Cards As Non-Secure In January 2017

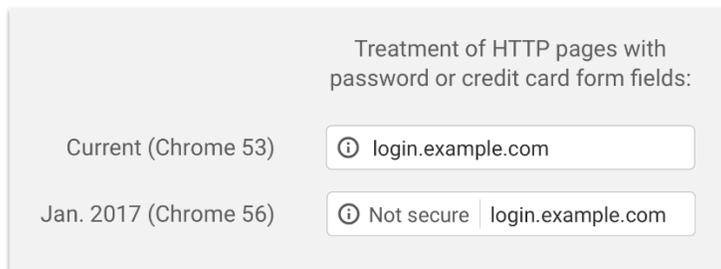
September 8, 2016

Google today revealed the first step in its long-term plan to mark all HTTP sites as non-secure in Chrome. Starting in January 2017, Chrome will mark HTTP sites that transmit passwords or credit cards as non-secure.

HTTPS is a more secure version of the HTTP protocol used on the internet to connect users to websites. Secure connections are widely considered a necessary measure to decrease the risk of users being vulnerable to content injection (which can result in eavesdropping, man-in-the-middle attacks, and other data modification). In August 2014, Google's search algorithm started prioritizing encrypted sites in search results with a slight ranking boost and in December 2015, Google Search started indexing HTTPS pages by default.

Currently, Chrome indicates connection security with an icon in the address bar, but does not explicitly label HTTP connections as non-secure. This will change with the release of Chrome 56, according to the Google's roadmap (we're on Chrome 53 right now, for those keeping track). In a similar vein, Google also plans to drop SHA-1 encryption from Chrome by January 1, 2017.

For HTTP connections that transmit password or credit cards, Chrome's address bar will show "Not secure" next year (instead of a neutral indicator):



Google's reasoning for highlighting HTTP sites as non-secure is simple:

This doesn't reflect the true lack of security for HTTP connections. When you load a website over HTTP, someone else on the network can look at or modify the site before it gets to you.

Studies show that users do not perceive the lack of a "secure" icon as a warning, but also that users become blind to warnings that occur too frequently. Our plan to label HTTP sites more clearly and accurately as non-secure will take place in gradual steps, based on increasingly stringent criteria.

In short, this is Google's way of pushing the web towards HTTPS. Currently, more than half of Chrome desktop page loads are served over HTTPS, but the company wants to push that as close to 100 percent as possible.

The change early next year is just the first step. Google doesn't say exactly when, but in future Chrome versions, the HTTP warnings will be extended further. The company offers an example of a next step: labeling HTTP pages as "not secure" in Incognito mode, where users may have higher expectations of privacy.

At some point, Chrome will label all HTTP pages as non-secure. The HTTP security indicator will also be changed to the red triangle that is currently used for broken HTTPS pages.

[venturebeat.com](http://venturebeat.com)

## The 5 Biggest Things Apple Just Announced

September 7, 2016

*"Both new phones come with a water resistant design, an improved camera, a revamped home button that's pressure sensitive, and more powerful processors. The phones no longer have a headphone jack, but buyers will also receive a new pair of earbuds that connect to the new iPhones via their charging port, along with an adapter."*

Apple made several big announcements during its event on Wednesday, including the introduction of two new iPhones and an updated Apple Watch. Here's a breakdown of the new products and updates from the Cupertino, Calif.-based company:

### The iPhone 7 And iPhone 7 Plus

Apple unveiled the iPhone 7 and iPhone 7 Plus on Wednesday, both of which will launch on Sept. 16. Both new phones come with a water resistant design, an improved camera, a revamped home button that's pressure sensitive, and more powerful processors. The phones no longer have a headphone jack, but buyers will also receive a new pair of earbuds that connect to the new iPhones via their charging port, along with an adapter.

The Cupertino, Calif.-based company is also giving buyers another reason to opt for the larger model this time around. The iPhone 7 Plus will come with two camera lenses: a wide angle lens and a telephoto lens, which should let owners take better photos while zooming. Both devices will see general camera improvements that include a larger aperture and a six element lens.

This year's iPhones are also said to be 40% faster than their predecessors and are supposed to last for roughly two hours longer on a single charge. Apple has also slightly tweaked the design by adding two new finishes: black and jet black, the latter of which has a shiny finish.

### Apple Watch Series 2

Apple is releasing a new version of its smartwatch called the Apple Watch Series 2, which launches on Sept. 16 and is priced at \$369. The new model is water resistant down to 50 meters and will include specific fitness features aimed at swimmers. It also includes a GPS sensor for mapping runs and bike rides when your phone isn't nearby and a new, faster processor.

### Super Mario Comes To The iPhone

Nintendo's Super Mario will make his debut on the iPhone in a new game coming to the App Store called Super Mario Run. This isn't a port of an existing Mario game; rather, it's a new title developed specifically for mobile gameplay. In the game, players are tasked with collecting coins and avoiding obstacles by running and jumping. Nintendo's Shigeru Miyamoto joined Apple CEO Tim Cook on stage to demo the game, marking a historic moment for both companies that comes on the heels of the runaway success of another Nintendo-related mobile game, Pokémon Go.

### AirPods

Apple expanded into a new product category on Wednesday with the introduction of its new wireless earbuds, called AirPods. The AirPods are capable of detecting when they're in your ear so they know

when to play audio. They're also compatible with Siri, Apple's virtual assistant. They'll be launching in late October for \$159.

### iOS 10 And macOS Sierra Launch Dates

The updates for iPhone and Mac that Apple unveiled in June will be launching this month. Apple announced that iOS 10 will be launching on Sept. 13 while macOS Sierra will debut a week later on Sept. 20. The forthcoming iPhone update brings a new version of iMessage that supports third party app integration, the ability to handwrite messages, and more. When iOS 10 debuts, Siri will also be able to communicate with various apps. Meanwhile, macOS Sierra brings Siri to the desktop and will allow Apple device owners to copy and paste content between their iPhones and Mac computers.

[time.com](#)

## Products & Services

### Newest Wearables From Apple And Fitbit Set Up A Fitness Battle

September 8, 2016

*"Apple is adding fitness features and trying to tap into the social networks of avid exercisers. Fitbit, which could claim those moves as areas of strength, is adding more smartwatch-like notifications and more fashionable accessories, aping some of Apple's core features."*

Smaller players like Garmin could also be trampled, analysts warn. Before Apple's first smartwatch went on sale last year, Wall Street analysts had high hopes for the sharp looking wearable device.

On average, they expected Apple would sell over 20 million in 2015 and 33 million this year. Revenue estimates were \$10 billion for 2015 and \$17 billion for 2016.

It hasn't turned out nearly so well. The first Apple Watch suffered from limited battery life, slow apps, and a somewhat confusing user interface, leading to mixed reviews and slow sales after an initial burst. Apple shipped only 11.6 million watches last year and just 3.1 million in the first half of this year, according to estimates by International Data Corp. (Apple doesn't disclose its watch sales)

By contrast, sales of cheaper and more focused fitness trackers have continued to boom. Fitbit is by far the leader in that segment, trailed by the likes of Jawbone and Garmin. Fitbit, which unlike Apple discloses sales every quarter, sold 21 million devices last year and 10.5 million so far in 2016.

At the start, the two companies had quite different strategies. Apple's original watch performed a myriad functions and had its own apps, while selling for \$349 to over \$10,000. Early Fitbits cost under \$100 and mostly tracked steps and other fitness and athletic activities.

But it's becoming increasingly clear that the two companies and their strategies are converging in important ways. Apple is adding fitness features and trying to tap into the social networks of avid exercisers. Fitbit, which could claim those moves as areas of strength, is adding more smartwatch-like notifications and more fashionable accessories, aping some of Apple's core features. That should set up the holiday shopping season of 2016 for a battle royale to win over fitness and exercise geeks.

The new features on Apple's updated series 2 watch unveiled on Wednesday were all about fitness, including GPS tracking and a partnership with Nike to tap into the sneaker maker's network of millions of avid runners. "We think Apple Watch is the ultimate device for a healthy life," Jeff Williams, Apple's chief operating officer, said.

Apple also said it would upgrade its original watch, now called series 1, with a faster processor and sell it for just \$269.

Analysts quickly noticed the more focused emphasis. “Apple appeared to break from touting Apple Watch’s health applications, instead introducing sports features to cater to runners and swimmers,” Bernstein Research analyst Toni Sacconaghi wrote.

“Apple is clearly focused on gaining share in the fitness community,” Deutsche Bank analyst Sherri Scribner noted. “The standalone GPS is an important upgrade and the lower price of Watch series 1 puts the product in a more competitive price range.”

Among Fitbit’s newer trackers is a \$250 almost-smartwatch called the Surge that includes built in GPS tracking and heart rate monitoring. The even newer \$200 Blaze looks more like a smartwatch, with a color screen and brightly colored bands, but also has the GPS tracking and other fitness-oriented functions. And Fitbit has revamped its app to make it easier to connect with friends and create social fitness challenges, like a group of runners living in different places who all time themselves and compete running a certain distance.

Both companies could use a boost as far as Wall Street is concerned. Apple’s stock has barely budged in the past year, down 3%, while Fitbit has lost more than half its value, down 54%. Apple investors would love to see a new hit product, while Fitbit investors are fearful of the challenge from Apple.

Still, it is possible that both companies could thrive. Apple’s cheapest watch is still priced higher than Fitbit’s most expensive tracker. And there may be room in the market for both lines to flourish. At a recent event touting Fitbit’s new \$100 Flex 2 tracker, one executive even noted that the device was slender enough to wear on the same wrist with a watch, though he didn’t name any watchmakers.

And some analysts say the greatest risks in this battle are for smaller fitness tracker players, like Garmin. Garmin makes a range of devices including some that look like smartwatches and cost over \$500, but its main focus is on fitness tracking features. Apple’s moves could steal away some of its sales. “We view the inclusion of GPS in the Watch and the partnership with Nike, in the context of a greater focus on fitness by Apple, as a risk for Sell-rated Garmin, particularly as new features are largely geared towards runners and swimmers,” Goldman Sachs analyst Simona Jankowski warned.

Sometimes when the giants fight, it’s the smaller players that get trampled.

[fortune.com](http://fortune.com)

## Amazon's Alexa Finds Its Way Into Tablets. Where Next?

September 8, 2016

When Amazon's done, it may very well have shoehorned its digital assistant Alexa into your sink, your sofa and your walls. For now, Amazon will settle for connecting Alexa to as many electronic and Wi-Fi-enabled objects as it can.

Amazon's push toward Alexa dominance took another step forward Thursday, when the online retail giant added Alexa for the first time to its own Fire tablets.

Alexa -- which responds to voice commands to, for example, report the weather, set a timer or buy more soap -- will be included in the new Fire HD 8, which was unveiled Thursday, as well as the current Fire HD 8, Fire HD 10 and \$50 Fire tablet. All these models will gain Alexa through a software update this fall.

Alexa's move into the Fire tablets points to Amazon's ambitions to expand the digital assistant's reach, using it to coax more customers to buy Amazon devices and to shop on Amazon.com. Already available in Amazon's Echo smart speaker and Fire TV streaming box, Alexa can control dozens of smart-home products including lightbulbs and door locks. Last week, a Lenovo executive told CNET

that the PC maker has held talks with Amazon on potentially bringing Alexa to its computers and other devices.

Also, bringing Alexa to Amazon's tablet line could help Amazon keep up its rapidly growing sales in the otherwise lagging tablet market. While Apple, the No. 1 tablet maker, struggles to boost revenue from its higher-priced iPads, Amazon has succeeded in selling its cheaper devices. Unit sales of Amazon tablets have more than doubled since last fall, thanks to the low-priced Fire tablet, Amazon said Thursday. The company declined to provide specific numbers.

Amazon isn't alone in trying to add a chatty companion to ever more gadgets, with Microsoft's Cortana, Apple's Siri and Google Assistant all in the mix. Cortana made the jump from the phone to Windows 10 PCs last year, and Siri will do the same on Macs with a software update planned for this fall. Google plans to release an Echo competitor called Google Home, putting more pressure on Amazon to make Alexa the leading voice assistant, and fast.

Unlike with the Echo, which awakens to answer your questions when you simply say "Alexa," users will need to press on a Fire tablet's home button to address the voice assistant. Alexa could be used on these tablets to operate smart-home objects -- much as it can on the Echo -- but it will have new features targeted more toward the ways people use tablets.

"From a tablet perspective, we suspect it's more around entertainment," Kevin Keith, general manager for Fire Tablets, said in an interview.

For instance, Alexa could be used to open apps and games. Also, in several cases Alexa will augment voice responses with visual cards, such as album art when asked to play music on Pandora and the weekly forecast when asked about the weather.

Since Alexa may be used in different ways on the Echo speaker and Fire tablets, Keith said he didn't expect lower-priced tablets will eat into Echo sales, saying one experience is hands-free and from a distance, and the other is hands-on and nearby.

"I see them being complementary, not cannibalistic," he said.

[cnet.com](http://cnet.com)

## Emerging Technology

### Google's DeepMind Achieves Speech-Generation Breakthrough

September 9, 2016

Google's DeepMind unit, which is working to develop super-intelligent computers, has created a system for machine-generated speech that it says outperforms existing technology by 50 percent.

U.K.-based DeepMind, which Google acquired for about 400 million pounds (\$533 million) in 2014, developed an artificial intelligence called WaveNet that can mimic human speech by learning how to form the individual sound waves a human voice creates, it said in a blog post Friday. In blind tests for U.S. English and Mandarin Chinese, human listeners found WaveNet-generated speech sounded more natural than that created with any of Google's existing text-to-speech programs, which are based on different technologies. WaveNet still underperformed recordings of actual human speech.

Many computer-generated speech programs work by using a large data set of short recordings of a single human speaker and then combining these speech fragments to form new words. The result is intelligible and sounds human, if not completely natural. The drawback is that the sound of the voice cannot be easily modified. Other systems form the voice completely electronically, usually based on

*"U.K.-based DeepMind... developed an artificial intelligence called WaveNet that can mimic human speech by learning how to form the individual sound waves a human voice creates."*

rules about how the certain letter-combinations are pronounced. These systems allow the sound of the voice to be manipulated easily, but they have tended to sound less natural than computer-generated speech based on recordings of human speakers, DeepMind said.

WaveNet is a type of AI called a neural network that is designed to mimic how parts of the human brain function. Such networks need to be trained with large data sets.

### 'Challenging Task'

WaveNet won't have immediate commercial applications because the system requires too much computational power: it has to sample the audio signal it is being trained on 16,000 times per second or more, DeepMind said. And then for each of those samples it has to form a prediction about what the soundwave should look like based on each of the prior samples. Even the DeepMind researchers acknowledged in their blog post that this "is a clearly challenging task."

Still, tech companies are likely to pay close attention to DeepMind's breakthrough. Speech is becoming an increasingly important way humans interact with everything from mobile phones to cars. Amazon.com Inc., Apple Inc., Microsoft Inc. and Alphabet Inc.'s Google have all invested in personal digital assistants that primarily interact with users through speech. Mark Bennett, the international director of Google Play, which sells Android apps, told an Android developer conference in London last week that 20 percent of mobile searches using Google are made by voice, not written text.

And while researchers have made great strides in getting computers to understand spoken language, their ability to talk back in ways that seem fully human has lagged.

### Strategy Game

WaveNet is yet another coup for DeepMind, which is best known for creating AlphaGo, an AI system that beat the world's top ranked human player in the strategy game Go this year.

Still, Google has disclosed little about how DeepMind's research has helped it commercially, although the company has revealed that it has used DeepMind's technology to reduce the power demands of its data centers by 40 percent, saving enough money to justify the amount Google spent to buy the London AI company. It has also said that DeepMind has helped achieve "substantial improvements to a set of services from YouTube and Google Play to Google's advertising products."

[bloomberg.com](http://bloomberg.com)

## Snapchat Fuels Augmented Reality Hardware Rumors

September 6, 2016

*"The sudden move from software to hardware has been reported to fuel speculation that the firm must be working on AR wearable devices."*

If rumors in the tech world are to be believed, Snapchat is gearing up to enter the hardware industry on the back of recent acquisitions.

Reports stated that the popular photo sharing mobile service is set to enter the augmented reality (AR) field. Snapchat is said to have joined the Bluetooth Special Interest Group (SIG) which maintains the Bluetooth wireless standard.

With the recent move by the firm, rumors have further gained ground as being a part of the SIG is the required prerequisite for firms that wish to employ Bluetooth in any hardware devices.

According to a Tech Crunch report, "Snapchat is an 'adopter' in the SIG, which is a free tier that provides member-companies with a license to build Bluetooth-enabled products, and to work with other Bluetooth SIG makers on collaborative efforts."

The sudden move from software to hardware has been reported to fuel speculation that the firm must be working on AR wearable devices.

Further, Snapchat recently acquired Vergence Labs, a start-up that had been developing a headset similar to Google Glass.

Some tech reports further stated that the company has been making swift and stealthy progress in getting the right team in place to begin its hardware work and produce an actual gadget, much like the Google Glass. The company is said to have hired hardware engineers and experts in the field of wearable devices. Snapchat is also said to have hired veterans from Logitech and Nokia.

Even though speculations regarding an actual device being created are rife - analysts claim that the social media software giant is most likely working in the field of augmented reality or virtual reality glasses.

[mobile-tech-today.com](http://mobile-tech-today.com)

## Mergers and Acquisitions

### Google To Acquire API Management Provider Apigee For \$625 Million

September 8, 2016

Google has announced plans to acquire Apigee, a company that offers software for predictive analytics and management of application programming interfaces (APIs).

Google will pay \$17.40 per share in cash to acquire the company, for a total value of around \$625 million.

"APIs — the mechanism developers use to interface and integrate with outside apps and services — are vital for how business gets done today in the fast-growing digital and mobile marketplace," said Google SVP Diane Greene, in a blog post. "The addition of Apigee's API solutions to Google cloud will accelerate our customers' move to supporting their businesses with high quality digital interactions. Apigee will make it much easier for the requisite APIs to be implemented and published with excellence."

Founded in 2004, San Jose-based Apigee went public in April 2015, popping 17 percent on its NASDAQ debut after raising \$87 million in the IPO. Its shares were more or less in free-fall until February this year, when it hit a \$5 low, but it has steadily risen again, and, as of yesterday, was roughly at its IPO level.

Apigee counts a number of big-name clients, including Walgreens, which uses Apigee to manage the myriad APIs it offers to third-party developers. These include its Photo Prints API, which allows other companies to enable photo-printing features in their own apps.

In short, APIs allow developers and companies to open up additional revenue opportunities beyond their own closed silos. But APIs need to be secure and support multiple development environments, while at the same time being maintained and tested and offering analytics and data around their

usage and uptake. This is where companies such as Apigee come into play. Indeed, Forrester reckons the API management market will be a \$660 million annual industry by 2020.

With the cloud computing industry heating up, Google is looking for differentiators and value-added services to offer its cloud-computing customers. Now, with Apigee's API smarts integrated into its enterprise offering, Google has added a valuable string to its bow.

There's nothing to suggest that anything will be changing at Apigee — existing and new clients will still have access to the service.

"We've entered a new era of cloud computing, where enterprises are increasingly running business-critical applications in the cloud — and across multiple clouds," said Apigee CEO Chet Kapoor, in a statement.

"Google is the open cloud provider committed to delivering new software for not only hybrid-cloud environments, but also for the multi-cloud world," he continued. "With their history of innovation in web and mobile technologies, we believe Google is the partner for companies embarking on digital transformation. We look forward to being able to accelerate our mission to connect the world through APIs as part of the Google team."

[venturebeat.com](http://venturebeat.com)

## Dell Gets Bigger And Hewlett Packard Gets Smaller In Separate Deals

September 7, 2016

*On Wednesday, Mr. Dell... officially completed his giant \$67 billion merger with EMC, a data storage company with interests in software and security... Later in the day, Ms. Whitman, the chief executive of Hewlett Packard Enterprise, announced a sale of most of her company's software assets to a British outfit called Micro Focus for about \$8.8 billion."*

Michael Dell and Meg Whitman may be business competitors, but they can each claim a technology industry superlative. One has overseen one of the largest mergers in the tech industry. The other has engineered its biggest breakup.

Different as they seem, both deals were in reaction to tough competition and declining markets. And so far, neither has provided a clear way for how a storied giant can survive changes like the rise of so-called cloud computing that are undermining the way they operate.

On Wednesday, Mr. Dell, who 32 years ago started a personal computer business from his college dorm room, officially completed his giant \$67 billion merger with EMC, a data storage company with interests in software and security. He also changed the name of his operation to Dell Technologies. Later in the day, Ms. Whitman, the chief executive of Hewlett Packard Enterprise, announced a sale of most of her company's software assets to a British outfit called Micro Focus for about \$8.8 billion. H.P.E. also announced higher earnings in the company's most recent quarter, but a decline in revenue from the same period a year ago.

Shares of H.P.E. moved down about 2 percent in after-hours trading Wednesday evening. H.P.E. itself is a \$36 billion computing giant created last year from half of Hewlett-Packard, a record separation that ended one of Silicon Valley's most iconic companies and neatly mirrored Mr. Dell's move. The other half of the old company, which specializes in PC and printer sales, is now called HP Inc.

With a constant mantra of building shareholder value, Ms. Whitman, who a year ago talked about growth strategies for H.P.E., has sold off big parts of the empire she took over five years ago. Last May, this involved selling off her services group, which employed 110,000 people. In an interview, Ms. Whitman said that after that sale, by the end of October, H.P.E. would have between 50,000 and 60,000 employees.

“We have to understand our place in the world,” she said. “There are elements of our world that are shrinking.”

Mr. Dell’s move in the other direction has meant taking his company private, in the process taking on \$33.4 billion in long-term debt at relatively little personal risk. He owns 70 percent of Dell Technologies, a company he is counting on to throw off a lot of cash to quickly repay the debt, even as the overall business computing industry shrinks.

If his gambit succeeds, within a few years he could multiply by several times his personal fortune, already estimated at \$18.5 billion, according to Bloomberg.

Dell Technologies starts life with revenue of \$74 billion and 140,000 employees, but in an interview on Wednesday Mr. Dell declined to say what those numbers might look like in two years.

“Things are going well on a personal basis,” he said. “Market consolidation is definitely occurring.” With companies like Amazon Web Services and Google providing cloud computing services, corporations increasingly rent the use of computers they used to buy from Dell and H.P.E., for a lot less money. Other cloud companies, like Salesforce, rent software this way, something A.W.S. and Google also do.

Along with the rise of mobile computing, cloud computing is radically altering the computer industry. According to IDC, global demand for traditional data storage fell 7 percent in the first quarter of this year. Server revenue fell 3.6 percent globally. Second-quarter PC sales were down 4.5 percent. In a market like that, big companies like H.P.E. and Dell can only hope for a bigger slice of a shrinking pie. Compare that with Amazon’s fortunes. Since A.W.S. first disclosed its earnings in April 2015, Amazon’s stock has nearly doubled, and despite a 40 percent increase in the tech-heavy Nasdaq stock market, shares of almost all the older business technology companies have barely budged.

Cloud companies now get about 10 percent of all spending on business computing, and they are growing at a 30 percent annual clip, said Toni Sacconaghi, an analyst with Bernstein Research. “That’s 100 percent of the growth, maybe a little more” of the whole business technology sector, he added. “A year ago Meg talked about growth, but in the past six months it’s all been about capital allocation and return to shareholders.”

Compared with many in the old guard, the H.P.E. and Dell strategies may be doing well. At least for now.

Shares of H.P.E. have gained about 30 percent in the last year, largely in the last two months, as rumors spread that besides selling services and buying back shares, Ms. Whitman would sell the company’s laggard software division.

Pre-EMC, Dell was known mostly for PCs and computer servers. While the financial information released by the private company is limited, in the three months that ended April 29 it had revenue of \$12 billion, down 2 percent. Operating income was higher, Dell said, using nonstandard accounting. Selling computers still throws off a lot of cash, which is good for paying debt. Mr. Dell said that Dell Technologies threw off \$3.6 billion just in its most recent quarter. EMC also owns a software business, called Pivotal, which Mr. Dell is expected to take public soon.

“He’s betting that size and scale will help him gain share, not that the market will be great,” Mr. Sacconaghi said.

Computing, once the province of a few business tasks and consumer activities like video games, has with cloud computing attached itself to much of the world, making it possible to connect phones, tablets and sensor-equipped machines to huge computing resources.

Both Dell and H.P.E. make the computers and related devices that amount to the infrastructure necessary to this new economy. Increasingly, however, the profit margins can be found above the computing guts, in particular with artificial intelligence technology that helps companies scour data to make smart decisions. Both Microsoft and IBM have invested heavily in both cloud computing and A.I.

Mr. Dell said that he had spent \$12.7 billion in research and development in the last three years and is gaining some A.I. technology in the EMC deal.

In turn, when asked about its innovations, H.P.E. noted changes to its server and storage businesses, along with the acquisition of companies like Silicon Graphics, a high-performance computing company that peaked in the 1990s.

[nytimes.com](http://nytimes.com)

## Industry Reports

### Apple Music Vs. Spotify: Guess Who's Winning Now

September 9, 2016

New subscriber figures suggest Apple just can't catch up, even though the rival music services are both jolting forward at the same rate.

Apple tried to wow audiences over the progress of its music service, but perhaps it's Spotify that really deserves your slow clap.

Cupertino, California-based Apple boasted at its iPhone 7 launch event on Wednesday that its Apple Music subscription-streaming service had accumulated 17 million paying members since it launched in June 2015. It added 2 million in less than three months.

That's a peppy uptick, but some quick math indicates Apple and Spotify are adding subscribers at about the same rate. And thanks to its sizable lead, Spotify is outstripping Apple in sheer numbers.

The figures reaffirm the notion that more consumers are opting to stream music buffet-style versus buying songs a la carte. That's partially thanks to the heavy marketing Apple pumped into its own subscription music service. The numbers also offer a peek into a horse race between two companies that's grown bitter this year.

Spotify and Apple both updated their subscriber figures in the last two weeks, and they both released their member counts roughly five months earlier, giving a snapshot at how much each company is growing during the same approximate time period.

Spotify has added 9 million members to reach more than 39 million in the five months since late March through late August. Apple Music gained 4 million subscribers to reach 17 million in the four-and-a-half months since late April.

That means both Apple and Spotify grew their membership about 30 percent in the same approximate time period. But because Spotify has a much bigger base of subscribers, the number of actual people who signed up was more than double the number who joined Apple's service. If Apple wants to close the gap and overtake Spotify, it needs to start growing faster than its rival.

"The reality at the moment is Spotify is winning," said Russ Crupnick, analyst and managing partner of MusicWatch. In addition to having the highest total of paid listeners and the strongest net additions,

*"...Apple and Spotify are adding subscribers at about the same rate. And thanks to its sizable lead, Spotify is outstripping Apple in sheer numbers."*

Spotify boasts users who tend to spend more time on its platform than Apple Music subscribers spend on Apple's service, according to Crupnick's research.

Sweden-based Spotify launched nearly eight years ago, compared with Apple Music's late launch in the market, a year ago. Apple Music's rollout also faced early hiccups, including bugs that wrecked some customers' iTunes libraries.

Spotify has another substantial advantage: It's the only service allowed to stream free, on-demand tunes with advertising. So competitors like Apple Music and Tidal are leaning on exclusives, like Apple's lock on Frank Ocean's album "Blonde" and Tidal's hold on the Beyoncé album "Lemonade." That's led to reports that Spotify is retaliating against artists who grant exclusives elsewhere.

Because the recording industry insisted that most paid services charge the same price for comparable catalogs of millions of songs, the competition between streamers has grown more cutthroat this year. Exclusives represent one of the key ways the services are setting themselves apart from the pack. But the streaming-music market still has "much more field to plow," Crupnick said. "It's way too early to pick a winner."

[cnet.com](http://cnet.com)

## AT&T Continues To Court DirecTV Customers With Wireless Offers

September 8, 2016

AT&T continues to court its DirecTV customers with wireless offers. The carrier this week announced an update to its DirecTV App that will allow customers to watch live TV on their mobile phones. The new app also allows users to watch content stored on their DVR.

The service works over a Wi-Fi or a cellular connection, and AT&T says content viewed through the app won't count against the customer's data cap if they're an AT&T wireless customer.

The news follows on another promotion that offers new and existing DirecTV and U-verse customers a free smartphone, or \$695 in monthly bill credits when they trade in their old device and activate the new phone with eligible service. An AT&T spokesman said the offer applies to the new Apple iPhone 7, and Samsung S7 and is limited to one free phone per account.

The free phone offer begins tomorrow, September 9.

[wirelessweek.com](http://wirelessweek.com)

## Mobile Scammers Becoming More Effective, First Orion Survey Finds

September 8, 2016

More than 4 percent of U.S. mobile users said they gave away credit card information to a scammer over their phones, twice as many as reported doing so last year, according to a new survey from First Orion. And 2.4 percent said they disclosed their social security numbers, up from 1 percent last year.

First Orion's announcement didn't outline the survey's methodology, and the company clearly has a vested interest in promoting the dangers of scammers who target consumers on their mobile phones: It operates PrivacyStar, an app that uses the company's database to identify callers and robocalls,

inform recipients of why they meet be calling, and provides a way for users to file complaints with the Federal Trade Commission.

But the news underscores a problem that has become big enough to attract the attention of federal regulators.

PrivacyStar, which is First Orion's flagship app, is available on the web and through apps for Android and iOS, and carriers such as MetroPCS offer it under different brands.

First Orion surveyed 1,000 U.S. adults and said nearly 3 percent of those polled received 10 or more scam calls in the last month, and nearly 5 percent of those changed their phone numbers to avoid unwanted calls. Half of respondents said carriers should be responsible for protecting them from scams, and two-thirds said they would choose an operator that automatically blocked unwanted calls from reaching them over a carrier that didn't offer such a service.

"A growing number of people are being harassed by scams," said Jeff Stalnaker, CEO of PrivacyStar. "This problem is not going away; it's only getting worse."

First Orion was founded in 2008 to help both wireless and fixed-line operators identify and block unwanted calls. Like some others in the space, it offers a network-based solution that act before calls actually reach the handset. And like Hiya, which also offers a network-based caller ID and call-blocking service, First Orion maintains its own database, enabling the company to identify callers based on reports from PrivacyStar users.

The company's survey results come as the market for mobile caller ID and call-blocking is beginning to heat up. Like its competitors, First Orion is positioning its solution as a potential way for the U.S. mobile industry to avoid federal regulations such as the proposed ROBOCOP Act, which would require telecoms to offer free, optional robocall-blocking technology to their customers.

FCC Chairman Tom Wheeler backed the Act in July, sending letters to the CEOs of AT&T, Verizon and other major carriers calling on them to offer call-blocking services to customers at no charge.

"My perspective is that the industry has been shaken with the chairman's letter saying he's no longer going to wait and hope somebody is working on this; he's going to push the pressure," Stalnaker said. "I think the FCC starting it and pushing it was definitely needed in the industry. There's been too much talk about doing something and not enough doing."

[fiercewireless.com](http://fiercewireless.com)



120 Madison Street, 15<sup>th</sup> Floor  
Syracuse, New York 13202  
[www.ksrinc.com](http://www.ksrinc.com)  
(315) 470-1350  
1-888-8KSRINC