Weekly *Wireless* Report

KS&R
Data to Knowledge

This Week's Stories

Millions Of Verizon Customers Exposed By Third-Party Data Leak

July 14, 2017

It's not easy for businesses to protect their customers' data these days, particularly when they share it with their partners. When that data is shared, keeping it secure can become a Herculean effort and sometimes those efforts come up short. That's when you find yourself reading yet another headline about an information leak that affects millions of people.

According to the "cyber resilience" experts at UpGuard, a configuration oversight allowed data on upwards of 14 million Verizon customers.

A third-party analytics provider, NICE Systems, was using Amazon's S3 cloud platform to store "customer call data" from telcom providers including Verizon.

A statement provided by NICE downplays the severity of the leak.

"A human error that is not related to any of our products or our production environments nor their level of security, but rather to an isolated staging area with limited information for a specific project, allowed data to be made public for a limited period of time."

Ultimately, the S3 data "bucket" that contained data on millions of individuals was unintentionally left exposed and discovered by UpGuard's Chris Vickery. While UpGuard didn't specify the total amount of data stored in it, some of the individual files were as large as 23GB. They were organized by month and every day of the year had its own sub-folder.

There's something about this breach that's more alarming than the number of files, how large those files are, or even how many people were impacted. In addition to name, address, and phone number, some of the Verizon customer data included plain text PINs.

With a customer's other details and a PIN in hand, a criminal could, according to UpGuard, pull off a SIM card swap. That's where fraudsters trick a wireless carrier into moving a customer's phone number to a new SIM.

Such scams have cost people thousands of dollars, and they can give an attacker access to sensitive online accounts that have been protected by two-factor authentication. If that second factor is a text message, the SIM card swap will redirect those messages to the criminal.

As a Verizon customer, you may not have had any idea that NICE -- or any other company -- had access to your data.

Now that you do know... just imagine how many other companies you deal with are doing the exact same thing. Hopefully they haven't made any configuration mistakes that will allow your data to leak all over again.

forbes.com

Microsoft Eyes White Spaces For $10B Plan To Bring Broadband To Rural Users

July 11, 2017

"Microsoft has long pursued white space technology, which the company claims is an efficient and affordable way to provide access in rural areas."

Microsoft today will unveil a proposal to help form a $10 billion public/private initiative to provide wireless broadband to rural users in the United States, according to multiple reports.

And it's looking to unlicensed TV white space (TVWS) spectrum to facilitate the offering.

The Seattle Times was among the first to report that Microsoft President and Chief Legal Officer Brad Smith is expected to introduce the plan during a speech today in Washington.

The company will propose that corporate and government funds support the service, which aims to provide access to the 23.4 million unconnected Americans who live in areas where broadband isn't easily available.

Microsoft has long pursued white space technology, which the company claims is an efficient and affordable way to provide access in rural areas. In a May filing with the FCC, the software developer unveiled plans to continue to evaluate the suitability of white space spectrum for narrowband sensor operations and to study the efficacy of those systems for precision agricultural applications. And earlier this year during a Senate committee hearing, it said that unlicensed spectrum is vital in low-, mid- and high bands to meet ever-increasing demand for technologies that use licensed spectrum.

"We strongly support action at the FCC to ensure that enough TV white-spaces channels remain available for unlicensed use and hope the FCC will finalize commercially reasonable white-spaces rules soon so we can move ahead," Dave Heiner, Microsoft's VP of regulatory affairs, said in March in written testimony before the Senate Committee on Commerce, Science and Transportation Subcommittee on Communications, Technology, Innovation and the Internet.

Closing the so-called "digital divide" between rural users and those in more highly populated areas has become a top priority for both federal authorities and some service providers.

FCC Chairman Ajit Pai, for instance, plans to meet with rural broadband providers, entrepreneurs and small businesses during a mid-Atlantic tour of three states next week to discuss the matter. And AT&T is moving aggressively to expand its fixed wireless internet offering in states including Kentucky, Mississippi and Louisiana as part of its participation in the FCC's Connect America Fund Phase II.

Not everyone is thrilled with Microsoft's plan to use white spaces, however. The National Association of Broadcasters slammed Microsoft's proposal, noting the software developer's decision to sit out the FCC's incentive auction of 600 MHz airwaves, which ended a few months ago.

"It's the height of arrogance for Microsoft—a $540 billion company—to demand free, unlicensed spectrum after refusing to bid on broadcast TV airwaves in the recent FCC incentive auction," said Dennis Wharton, NAB's executive vice president of communications, said in a terse statement.

"Microsoft's white space device development has been a well-documented, unmitigated failure. Policymakers should not be misled by slick Microsoft promises that threaten millions of viewers with loss of lifeline broadcast TV programming."

fiercewireless.com

Products & Services

Google Play Music Gets More Personalized With New Release Radio, Customized To Your Tastes

July 14, 2017

It's no longer enough to simply offer on-demand music as part of the value proposition for music streaming services – you have to enable discovery of new tunes and make recommendations, too. While it's fair to say that Spotify is leading the market in terms of its influential playlist selections, rivals are quickly following suit – including Apple Music and Google Play Music. This week, the latter rolled out its own curated mix, New Release Radio, which it says is crafted with an eye towards the individual listener's tastes.

The company had first tested the feature through its global partnership with Samsung, announced in April. At that time, Google stepped into become the default music player and service on new Samsung phones and tablets, in the wake of Samsung's Milk Music closure in the U.S.

According to Google, it was able to gather feedback from Samsung users through an early access program, and is now able to roll out New Release Radio to all Google Play Music users.

The personalized mix itself is designed to showcase newly released songs from artists you like, or those Google believes you might. The station uses machine learning technology to select from singles and album releases from the past two weeks, based on your listening history on Google Play Music, as well as your broader musical preferences, the company explained in an announcement on Thursday.

The ability to personalize a music service to an end users' likes is a competitive advantage in today's streaming music race – an area where Spotify today excels. Its Discover Weekly playlist helped differentiate the service early on, growing to over 40 million listeners as of last year. Spotify then capitalized on that momentum to roll out even more personalized products, including its own Release Radar of suggested new releases you'll like, which hit last summer; and Daily Mix, a combination of favorite tracks and recommendations, which arrived last fall.

Apple Music also introduced its variations on this theme with personalized playlists like "My New Music Mix" and "My Favorites Mix," and more recently, a playlist to "Chill" to.

Google's New Release Radio is currently available to free radio listeners as well as paying subscribers, and will be continually updated with the latest releases, the company says.

techcrunch.com

Amazon Wants To Disrupt The Television Industry All Over Again

July 13, 2017

In a flurry of acquisitions and product launches that marked the beginning of this season, there has been a lot of talk about how the mega corporation intends to monopolize over every sphere of our daily lives. Amazon, the fabled behemoth of online commerce, just entered the profitable grocery market with its acquisition of Whole Foods Market for a whopping $13 billion. The corporation has already been toe-to-toe with commercial giants like Walmart and Target for the last ten years, and with the acquisition of the sixth-largest grocery store in the world, it has now made a dramatic entry into the fresh foods market as well. Critics around the country have been surmising as to what this

could mean for the future of the eCommerce industry, both immediately and in the long run. However, as much of hype and publicity as Amazon's acquisition of Whole Foods Market may have received, this is hardly the corporation's first attempt at completely revolutionizing the shape of an industry.

In December 2015, Amazon announced the launch of 40 different subscription channels to its already brimming collection of on-demand television content made available through Amazon Prime Video. This new service, aptly named Amazon Channels, offers an entirely new way to go cordless and free yourself from the stagnated sufferance that is the cable industry. While disruptors like Netflix and Hulu are more concerned with the supply of on-demand entertainment material in the form of individual series, Amazon Channels offers a subscription based service that allows Prime users to buy into any of the major content providers in the television industry in the form of a monthly subscription, gaining access to any and all content available in their collection.

Without the need for subscribing to "traditional" on-demand content providers like Netflix and Hulu or cordcutters like Sling TV and PlayStation Vue, Amazon Channels offers you the opportunity of being able to enjoy all of your on-demand content side-by-side your a-la-carte subscription of channels such as HBO, Showtime and Cinemax using a single service. The list of content providers packed into Amazon's holster has only been increasing in the past few months, with HBO, Showtime, Starz, Cinemax, PBS Kids, History Vault and Comedy Central already thrown into the mix. There's also a healthy catalog of fringe providers available, including Anime Strike, Gaia and Curiosity Stream.

Amazon's mode of distribution is simple, but different. For $99 a year, you can become a valued member of Amazon Prime, which gets you in on a host of advantages across eCommerce, Kindle and Amazon Video.

With your usual Prime Membership, you automatically receive free access to the service that is Amazon Channels, although you must still pay individual subscription fees each month based on the channels you subscribe to. HBO, for example, costs $14.99 per month. This eliminates the need to subscribe to an expensive $40-a-month service such as Vue or Hulu Live and pay a much lesser amount based on exactly the kind of channels you'd like to avail.

I've been using Amazon Channels for exactly two months now, starting towards the end of May. From what I have found, it is a truly awesome way of getting access to a niche roster of programs and television series based on content providers you enjoy, such as HBO's Game of Thrones or American Gods on Starz. If, however, what you're looking for is a complete replacement for your usual cable subscription, full with live television and access to a host of channels available via traditional cable, Playstation Vue, Hulu Live and Sling TV might just be the way to go. Over to you.

forbes.com

Suppose.tv Launches A Service That Helps Cord Cutters Find The Best Deal
July 11, 2017

"The service could help would-be cord cutters figure out if they can actually save money by ditching cable, without losing access to their favorite programs."

With a growing number of streaming TV services entering the market, it's becoming difficult for consumers to make comparisons. People want to know which service is best for them in terms of channel selection, feature set and price, but this involves a lot of research these days.

A new startup launching today called Suppose.tv aims to help, offering an online utility that lets consumers input which channels they want to access, then compare pricing and other features, – like whether or not a DVR is offered – across both streaming TV providers and traditional pay TV operators alike.

The service could help would-be cord cutters figure out if they can actually save money by ditching cable, without losing access to their favorite programs. It could also help those who already pay for a streaming TV service of some kind, by checking to see if another service has a better deal. Honestly, this is data that I had been collecting in a spreadsheet for personal use, which I long ago gave up updating, given how quickly the market was changing, in terms of new services as well as channel availability.

For example, one thing that's especially difficult to monitor is whether or not local channels – like CBS, ABC, NBC or FOX – are available on a given service. That's because in most cases, a streaming service has to cut deals with local affiliates in each market in order to offer the broadcast channels to customers.

Suppose.tv grabs your location (or allows you to manually enter it) so you can find out if local channels are available on the services you're comparing. This feature isn't available across the U.S. at this time, says Suppose.tv co-founder John Tantum, but is live in the top 50 markets. That covers 70 percent of the U.S. population, however, so there's a good chance that the local channel selection feature will work for you.

In addition, not all pay TV providers are available either – as the service seems to lean more towards helping consumers compare the live TV streaming options like Sling TV, DirecTV Now, PlayStation Vue, Hulu Live, YouTube TV, HBO Now, and others. Tantum, whose background is in telecom, previously started and was president of Virgin Mobile USA. He also started other mobile tech companies, like mobile payments service Wipit and e-book distributor Livrada, before shifting into independent consulting, and then, Suppose.tv.

Suppose.tv co-founder Andrew Shapiro had worked in the past on a mobile email startup PocketMail, and personal radio system ioCast. Explains Tantum, the idea for Suppose.tv emerged after he had consulted with Virgin Group, which was considering an investment in subscription video services a few years ago. Soon after, the market for streaming TV began to boom.

"We had been following the space closely and it became apparent that there was a new entry every month or two," he says. "But their services are very complicated – Sling TV, especially, with their number of add-ons and their two base packages," Tantum continues. "It's an incredibly complicated choice for a customer to make between the different services, and even within a single service. And not to mention trying to compare that to your satellite and cable provider and the options there." Suppose.tv's new website probably won't win any design awards, but it serves a practical and much-needed purpose. To use the site, you click on the channels you want on the left, which are then added to a list. You favorite (heart) those you must have included, and then prioritize your list by dragging channels up and down to indicate how important they are to you.

Across the top are other sliders and filters, allowing you to filter for only streaming services, for example, or choose which features you need (e.g. number of simultaneous streams, a DVR). You can can also drag a slider to prioritize whether you're more concerned with cost savings or channel lineup, which will help better rank Suppose.tv's recommendations.

The service will then return a list of all the available options, including pay TV and streaming TV, as well as their pricing, and what channels the package includes. Suppose.tv also combines services as needed. For example, it might suggest you buy Sling and CBS All Access, along with an HBO add-on, when you tell it you want a combination of local channels, including CBS, some cable TV fare, and HBO.

It will show you how much you can save by giving up certain channels, too. In the future, Tantum says Suppose.tv will include on-demand services like Netflix, Amazon Prime Video, and Hulu on-demand, and will allow consumers to search not just by channels, but by programming. It's also manually updating data and information available from the public domain, instead of working directly with

service providers (or APIs), and hopes that will change in the future, as well. Suppose.tv, which is a self-funded project, isn't currently making money, but could generate revenue through affiliate deals or ads later on. In the meantime, the service is free to use from its website here.
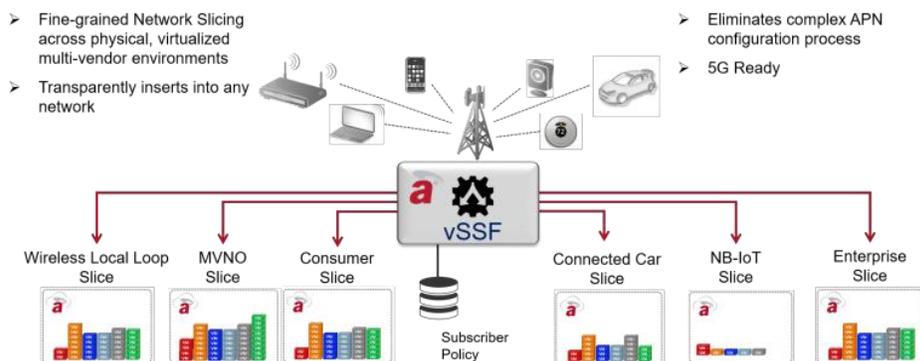
techcrunch.com

Emerging Technology
Affirmed Networks Rolls Out "5G Ready" Network Slicing Carriers Can Use Now
July 11, 2017

Affirmed Networks is aiming to help prepare operators for the demands of 5G with a new network slicing function that enables fine-grain network control.

The Virtual Slice Selection Function (vSSF) announced Tuesday will reportedly enable slicing across legacy (including 2G, 3G, and 4G), virtualized, and multi-vendor networks, allowing resources to be allocated by device and service types, customer ID, location, time of day, and other attributes. Affirmed Networks indicated these "5G ready" slicing capabilities will enable enhanced flexibility and control, as well as differentiated services and improved quality of experience.

Affirmed Networks said the function will offer a marked improvement in efficiency and speed over the use of Access Point Names (APNs) for resource allocation. When combined with other Affirmed solutions, the company said the vSSF can help slash time-to-market and other operational costs by as much as 90 percent. Introduction of the vSSF is also said to be a breeze, with multi-vendor compatibility and no configuration changes necessary to existing network notes (DNS, MME/SGSN, SGW/PGW/GGSN). The vSSF will evolve to the 3GPP Network Slice Selection Function, Affirmed Networks noted, so operators' investment won't be wasted.

"Un-relenting mobile traffic growth and competition from over-the-top providers has changed service provider business models. Operators now require enormous control and flexibility from their networks to maximize profitability," Affirmed Networks CEO Hassan Ahmed noted. "The vSSF is a result of Affirmed's continued focus on providing operators with advanced capabilities to drive revenue growth and profitability." Affirmed said its vSSF solution is available immediately.

wirelessweek.com

Ericsson Aims To Ease Massive IoT Deployments With New Services, Software

June 11, 2017

"We anticipate IoT devices will surpass mobile phones as the largest category of connected devices as early as 2018 and, according to Ericsson's latest Mobility Report, there will be 18 billion connected IoT devices in 2022."

Ericsson is hoping to smooth massive Internet of Things deployments with a new set of network design services and software features.

The company on Tuesday announced a new set of network services specifically for IoT applications, including IoT network design and optimization, deployment, and operation and management.

Those come as a complement to Ericsson's existing IoT software, Accelerator and Support Services offerings. The network services are being offered specifically for LTE-M and NB-IoT technologies, the company added.

On the design and optimization front, Ericsson said it will offer scenario assessments, network modelling, design development, and developmental appraisal. The company said the operation and management side of things will feature automated machine learning to help cut costs by identifying problems without human intervention.

Ericsson is also rolling out IoT software support for LTE-M features like voice-over-LTE (VoLTE), a move it said will open up opportunities in areas such as security alarm panels, remote first-aid kits, wearables, digital locks, and disposable security garments, among others.

"We anticipate IoT devices will surpass mobile phones as the largest category of connected devices as early as 2018 and, according to Ericsson's latest Mobility Report, there will be 18 billion connected IoT devices in 2022. This massive uptake requires a different approach to network planning, design, operations, and capabilities than traditional mobile broadband networks," Peter Laurin, Ericsson's head of Business Area Managed Services, commented.

Ericsson's announcement comes amid a flurry of activity around IoT, and not a moment too soon.

Verizon and AT&T earlier this year both launched nationwide LTE-M networks, with the latter pursuing plans to do the same in Mexico. Sprint also said it's working on deploying LTE Cat-1 technology across its network this summer and is looking to LTE Cat-M roll outs in the middle of next year.

On the chip side of things, Qualcomm last month debuted Snapdragon Wear 1200, a new IoT platform aimed at expanding LTE narrowband compatibility in wearable devices to enable features like VoLTE.

But Ericsson will be going up against equipment rival Nokia, which has been pushing hard on the IoT front. Nokia in February unveiled its Worldwide IoT Network Grid to offer a "one-stop shop" service model that includes provisioning, operations, security, billing, and dedicated enterprise customer services. Back in January, Nokia also launched a new set of applications for its Intelligent Management Platform for All Connected Things offering, including analytics capabilities powered by Nokia Bell Labs' machine learning algorithms and new connectivity options including licensed NB-IoT and unlicensed LoRa.

wirelessweek.com

Mergers and Acquisitions

Uber Acquires Social App Studio Swipe Labs
July 14, 2017

Why would Uber buy a team that builds Snapchat competitors? To make its driver app feel more human. Uber has acqhired Swipe Labs, the social product studio run by Marwan Roushdy. He and a selection of engineers from the dozen-person startup will join Uber to work on the driver experience within the driver earnings team.

Over the past 4 years it had raised $8.2 million and built four apps for sharing photos, videos, and group texts. But while the terms of the acqhire weren't disclosed, the deal's valuation is almost surely much less than the $56 million valuation Swipe Labs scored with $5.6 million late 2014 series A from First Round, Lowercase, Sherpa, and now-disgraced Binary Capital. That's the risk of investing in early stage social startups: the odds are against them ever capturing lightning in a bottle and growing huge.

Swipe's founders Roushdy and Addison Hardy met while working at now-defunct social map app Connect. They set off to launch a furniture rental startup called Fonzy but that flopped. The two managed to raise a seed round to build Tag for privately sharing photos with groups of friends, and it too naver gained traction.

But the duo took the ideas and built them into Swipe, which lets you post photos and videos that appeared in a stack alongside other users' content on the Swipe home screen of friends. It grew to over a million users in the first few weeks, attracting the $5.6 million round and lofty valuation. Yet as Snapchat continued to explode in popularity, Swipe petered. out, and Hardy eventually left the company. Swipe kept swinging. It built Channel, which was sort of a mix of Snapchat Stories and YouTube. Its final pivot Chitchat was a spontaneous group chat app that worked like a Houseparty for texting. In the end, though, Swipe Labs' engineering team would prove more valuable than its products.

Uber is in a tough position after CEO Travis Kalanick resigned amidst sexual discrimination scandals, a lawsuit from Google, and extensive culture problems. These issues might be making it a bit harder for Uber to hire right now in the competitive Silicon Valley job market. Acqhiring companies like it's doing here with Swipe Labs lets it roll up a bunch of good talent at once.

Uber's driver monetization experience is undergoing a significant shift as the company rolls out tipping. The Swipe Labs team could make it easier for drivers to make more money, understand what they're earning, and get the payouts they need to support themselves and their families. Hopefully Uber won't try to launch its own Snapchat clone. But it could use a human touch to keep drivers loyal in these trying times.

techcrunch.com

Samsung To Back European Start-Ups With $150 Million Investment Fund
July 12, 2017

Samsung's venture capital arm announced Wednesday it is expanding into Europe to invest in the continent's start-up scene. Samsung NEXT will use a $150 million global fund raised in January to target early stage start-ups in Europe for investment or acquisition, focusing on tech companies working on artificial intelligence, the internet of things, augmented reality and virtual reality. This comes as venture capital in the continent reaches a multi-year high.

"Felix Petersen, managing director of Samsung NEXT in Europe, says it is looking for companies building products that will transform how consumers connect with the world."

Connect with us 🐦 f g in ▶   Visit our website www.ksrinc.com

The investment arm was founded in 2013 to discover, build and scale new enterprises by providing them with investment capital, expertise and other resources. Since launch, it has invested in more than 60 companies and made 15 acquisitions, and is now expanding into Europe starting with a headquarters in Berlin and plans to open other locations throughout the continent within the next year.

Felix Petersen, managing director of Samsung NEXT in Europe, says it is looking for companies building products that will transform how consumers connect with the world.

"I'm excited to lead our expansion into Europe. The combination of deep tech talent and cultural diversity makes this market very attractive," he said in a press release.

"It also gives us a great opportunity to become the place for European entrepreneurs looking to build and grow their start-ups and turn them into revolutionary companies."Nick McQuire, vice president of enterprise research at CCS Insight, said this was a good move by Samsung, as it allowed the company to gain new capabilities and expertise from the start-ups.

"It wants to be at the forefront of tech discoveries," he told CNBC during a phone interview. "Setting up a fund allows them to buy into strategic products and develop skills."

This news comes as venture capital investment in Europe reaches its highest level since 2007, according to a new report from Invest Europe released Tuesday. Fundraising in the continent reached 6.4 billion euros ($7.35 billion) in 2016, 10 percent of which came from North American investors.

"Global investors are recognising that European venture capital offers a rich A-to-Z of investment opportunities: trailblazing tech innovation born in cities from Amsterdam to Zurich," said Nenad Marovac, Invest Europe vice-chair and founder and managing partner of venture capital firm DN Capital, in a press release.

"Anyone who has ever played 'Angry Birds' or searched for flights via Skyscanner is benefiting from Europe's highly talented entrepreneurs."The announcement follows news from France-based investment firm Partech Ventures that is has raised 400 million euros to invest in U.S. and European start-ups. Over the past 18 months, Partech has raised nearly 1 billion euros to invest. The company said this will provide key support to Europe's start-up scene.

"With this strong growth in investments, made possible by several generations of extraordinary entrepreneurs, dozens of tech and digital champions are emerging in Europe. The promising new tech companies are financed by venture funds which now have both the critical size and the means to support these entrepreneurs on a very operational level," the firm said in a press release.

This Samsung NEXT announcement takes place as the South Korean company increases its acquisition rate. It acquired eight companies in 2016, more than in previous years. These were mostly companies in Canada and the U.S., including car electronics company Harman in a deal worth $8 billion. So far this year it has acquired four companies, including Swedish headphone manufacturer Melaud and Greek text-to-speech start-up Innoetics.

Europe is an important market for Samsung's products. Around 19 percent of Samsung's revenue is generated in the continent, according to data from Statista.However, Samsung's share of the global smartphone market is slipping. It remains the largest mobile phone maker in the world, but its market share slipped to 20.7 percent in the first quarter of 2017 from 23.3 percent the year before. Samsung smartphone shipments also dipped to 78.67 million during the quarter from around 81 million the year before.

cnbc.com

Industry Reports

Tech Companies Plan Virtual Protest To Protect Net Neutrality

July 11, 2017

You might notice something different about your favorite websites and apps on Wednesday.

Tech companies plan to display special messages as part of a "Day of Action," an online protest of proposed changes to net neutrality rules that would loosen regulations.

Googles doing it. Facebook too. Snap announced it will join Amazon, Reddit, Airbnb, Twitter and more than 70,000 other sites, organizations and individuals taking part in the online protest, according to Fight the Future, one of the groups organizing the day of action.

The Federal Communications Commission wants to undo regulations passed in 2015 that require internet service providers to treat all online content the same. Without the rules, telecommunication and cable companies could slow down, speed up, or charge more for access to different sites and services.

But Mark Zuckerberg and Larry Page will not be marching outside FCC headquarters with protest signs. To show their objection to the changes, participating companies and organizations will post messages on their sites and apps for the day.

The exact display will vary from site to site — some will show an image mimicking a slow loading symbol, Vimeo is showing a special video and Firefox will link to an FCC comment page. Other companies, including Facebook, said they're participating but are not sharing their plans.

Corey Price, vice president of PornHub, said the site is still working on its message's exact wording but noted it will be concise.

"Internet users will definitely notice which companies are standing up for their rights and which ones aren't," said Evan Greer of Fight the Future.

Without the current rules, opponents say a company like Comcast or AT&T could offer faster streaming for video services they own, and slow down content from competing sites or apps. Objectionable sites could be blocked, and faster service could be offered to the companies willing to pay a higher price.

FCC chairman Ajit Pai first announced the proposal in April. The commission voted to move forward with the roll-back in May and is taking comments from the public until next week. Pai said the regulations have a negative impact on businesses and decrease innovation and investment in infrastructure.

Tech Companies And Websites Disagree.

"Net neutrality has serious implications for the adult entertainment industry, particularly the online porn industry," said Price in a statement. "Internet service providers could create special fast lanes for content providers willing to pay more. That means slow streaming, which, especially in regards to online porn, is quite problematic as you can imagine."

The actions on July 12 will be similar to 2012's protest against SOPA and PIPA, two previously proposed bills activists feared would allow censorship online. Those protests, which included Reddit and Wikipedia blackouts and in-person rallies in major cities, are credited with killing the legislation.

Protesters will face even more push back this time. Republicans control both the House and the Senate, and Pai is a long time critic of net neutrality.

In addition to the big names taking part tomorrow, the Internet Association -- a trade group for the major tech companies -- has made a special site to "save the open internet." Smaller companies and individuals also plan to join in.

"This is a massive grassroots mobilization," Greer said. "A lot of the traffic on these days of action comes from individuals with just a few fans on Instagram or Twitter sharing on social media, or from the neat and weird nooks and crannies of the Internet like online gaming forums, discussion groups, YouTubers and and artist communities."

cnn.com

Siri Usage And Engagement Dropped Since Last Year, As Alexa And Cortana Grew

July, 11 2017

"Overall, the study found that phone-based personal assistants, Siri and Samsung's S-Voice, are declining in popularity, while those associated with voice computing in the home, like Alexa and Google Home's mobile app, are growing."

Siri remains the most popular virtual assistant with 41.4 million monthly active users in the U.S., according to a new report from measurement firm Verto Analytics out this morning, but it has seen a 15 percent decline since last year – or 7.3 million monthly users. In addition, the study found that engagement with Siri has also dropped by nearly half during this period, from 21 percent to 11 percent.

Meanwhile, Amazon Alexa usage has been skyrocketing – jumping 325 percent in monthly active users – that is, from 0.8 million to 2.6 million monthly users, as its user engagement also increased from 10 percent to 22 percent during the same time frame.

Cortana has seen an increase as well, growing from 0.2 million monthly users in the U.S. to 0.7 million, or a 350 percent increase. Its user engagement tripled, from 19 percent to 60 percent.

Subject	Monthly Unique Users [M]		Net Reach [%]		Stickiness [%]		Time Spent per User per Month [Hours]		Sessions/User/ Month [#]		Average Session Duration [Minutes]	
	May 2016	May 2017	May 2016	May 2017	May 2016	May 2017	May 2016	May 2017	May 2016	May 2017	May 2016	May 2017
Siri (for iOS)	48.7	▼ 41.4	22.60	▼ 19.24	21	▼ 11	00:39	▼ 00:14	14	▼ 5	02:53	▲ 02:59
S Voice	24.8	▼ 23.2	11.53	▼ 10.76	18	▼ 14	00:06	▲ 00:07	13	▼ 9	00:29	▲ 00:46
Cortana	0.2	▲ 0.7	0.10	▲ 0.32	19	▲ 60	00:11	▲ 02:31	14	▲ 177	00:51	00:51
Google Allo	n/a	▲ 1.0	n/a	▲ 0.46	n/a	▲ 43	n/a	▲ 02:30	n/a	▲ 122	n/a	▲ 01:14
Google Now Launcher	0.0	▲ 0.1	0.01	▲ 0.05	25	▲ 26	00:00	▲ 00:01	2	2	00:28	▲ 00:42
Google Home	4.5	▲ 4.7	2.10	▲ 2.20	7	▼ 6	00:04	▲ 00:05	5	▼ 4	00:55	▲ 01:28
Google Text-to-Speech	7.6	▲ 19.8	3.51	▲ 9.18	8	▲ 11	00:02	▲ 00:05	4	▲ 5	00:33	▲ 01:07
Amazon Alexa	0.8	▲ 2.6	0.37	▲ 1.21	10	▲ 22	00:07	▲ 00:18	6	▲ 16	01:10	▼ 01:07
HOUND Voice Search & Assistant	0.1	0.1	0.03	0.03	33	▼ 29	00:02	00:02	11	▼ 2	00:12	▲ 01:02

The new report is based on data collected by Verto Analytics from over 20,000 U.S. consumers from May 2016 to May 2017. Like most measurement firms, its behavioural data is collected from a

statistically representative group of panelists, who agree to have their device usage monitored. This is combined with the firm's consumer survey data, which helps to better explain user sentiment around the behavior.

This is how Verto Analytics is able to determine when the personal assistants are being used, when, by who, and what user engagement is like. In this case, its report defines engagement as a sort of "stickiness" factor – a metric that compares daily users to monthly users.

Overall, the study found that phone-based personal assistants, Siri and Samsung's S-Voice, are declining in popularity, while those associated with voice computing in the home, like Alexa and Google Home's mobile app, are growing.

The company also analyzed which apps were used immediately after the assistant to see why people are using assistants – the assumption being that assistant apps are often used to search for apps or websites.
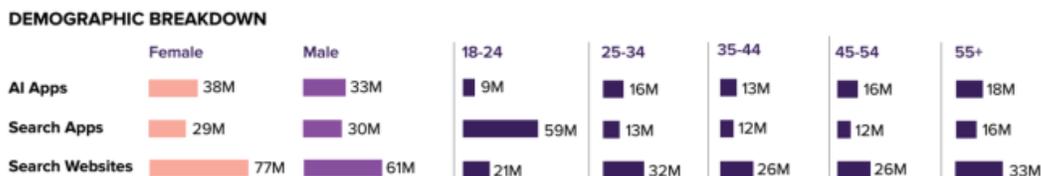
Chrome, Google Maps and the Google Play Store were the top three apps used, which is likely due to the high number of Google-owned personal assistant apps in the ecosystem. Outside of Google, the other top apps launched after assistant usage were Facebook, Messages, and Safari, which points to Apple device users taking some advantage of Siri for everyday tasks, like messaging and web browsing.

FUNNEL REPORT (MAY 2017)

Before Personal Assistant App [%] ← - - - - - - - → ← - - - - - - - → After Personal Assistant App [%]

Before	App		App	After
14.8	Chrome		Chrome	13.2
9.8	Maps		Maps	8.6
7.8	Google Play Store		Google Play Store	7.2
4.2	Facebook		Facebook	4.7
4.2	Safari		Messages	4.1
3.3	Messages		Safari	4.0
2.2	Amazon Kindle		Google	2.8
1.9	YouTube		Contacts	2.7
1.9	Google		Netflix	2.2
1.8	Contacts		Gmail	1.8
1.7	Settings		YouTube	1.7
1.6	Netflix		Amazon Kindle	1.5
1.4	Gmail		Messenger	1.3

Assistant usage was found to peak at 10 AM and 1 PM, and it also sees a steady climb from 2 PM to 7 PM before dropping off in the evening. This seems to indicate how people often use personal assistants while moving from place to place, or to launch apps like Google Maps while commuting.

In addition, the study found that women use personal assistants slightly more than men do, with 54 percent of the total user base.

Also of note, older age groups have heavily adopted assistants – in particular, the 45-54 and 55+ age groups. In fact, the demographics of an assistant "superuser," someone who spends twice the amount of time with personal assistants on a monthly basis than average – is a 52-year old woman, spending 1.5 hours per month with assistant apps.

DEMOGRAPHIC BREAKDOWN

	Female	Male	18-24	25-34	35-44	45-54	55+
AI Apps	38M	33M	9M	16M	13M	16M	18M
Search Apps	29M	30M	59M	13M	12M	12M	16M
Search Websites	77M	61M	21M	32M	26M	26M	33M

Because Verto Analytics analyzed only mobile use of assistant apps on smartphones, like Siri, Alexa, and other Google-owned properties, for example, it doesn't paint a full picture of the voice assistant landscape.

It skipped over calculating usage of the Google Search app, too — that's Google's flagship application, which includes voice features. Google searches and other assistant tasks like setting reminders, can be done using either text or speech. Verto may not be able to tell when it's used as an assistant, or by voice. Still, it's likely a popular place for voice assistant usage that isn't being addressed here.

Plus, Amazon's Alexa app isn't really used as a way to interact with the assistant, but more so as a control center for configuring and interacting with Echo devices. The same goes for Google Home. Siri, meanwhile, can be used on mobile but also on Mac, and soon, HomePod.

But this report doesn't get into assistant usage in the home or on desktop, only mobile.

That being said, much of Google and Siri usage is on smartphones, which is why it's interesting to see a drop in Siri usage, year-over-year. It could be that with the growing popularity of voice assistants in the home, the need for Siri has been impacted; or perhaps Google's decision to roll out voice support across its apps (e.g. the Google Search app; Google Now launcher; Google Allo; Google Maps, etc.) combined with its sizable device ecosystem is playing a role in diminishing Siri usage. Or maybe Siri is just not living up to the hype.

Still, Siri remains the personal assistant to beat here, having many more active users than the others in this space, and the advantage of deep integration with the mobile OS. And with HomePod's launch later this year, it should grow its numbers once again.

techcrunch.com

Connect with us *Visit our website* www.ksrinc.com