

Evolution of the Smart Home

Calix Smart Home & Business



Illinois
Telecommunications
Association

Illinois Telecommunications Association 2019 Vendor Showcase

Greg Baldauf
Calix Smart Home, Business, & Marketing Consultant



The
connected
home is
happening.





Just because
it's connected,
doesn't make
it smart.

(...or easy)



Subscribers are **creating their own** Wi-Fi experiences in their home.



The Smart Home Landscape

22%

of households have Wi-Fi extenders

37%

say Wi-Fi is slow at least once a week

11%

of households have whole home Wi-Fi mesh networks

50%

of calls to customer help desks are Wi-Fi related



Big Players are Targeting the Home



Market Dynamics

THE INVISIBLE
BRAND



THE HOME
INVADERS

amazon
SAMSUNG Google



INTERNET OF
THINGS
Smart Home



**BEST
BUY**



\$499
Lost Revenue

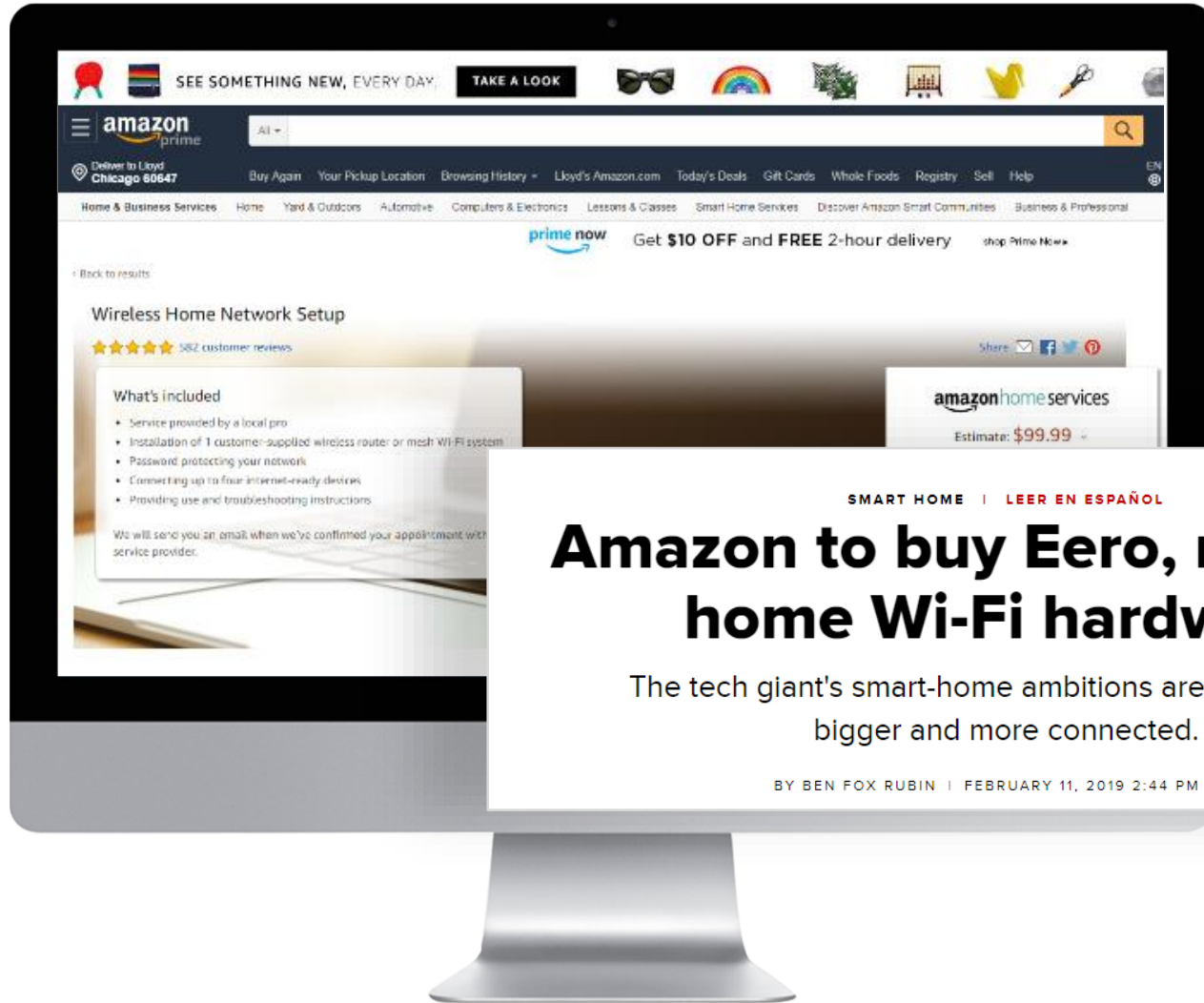


**Poor Subscriber
Experience**

50%
Support calls:
Wi-Fi related

3X
Call Length

Chasing the Opportunity

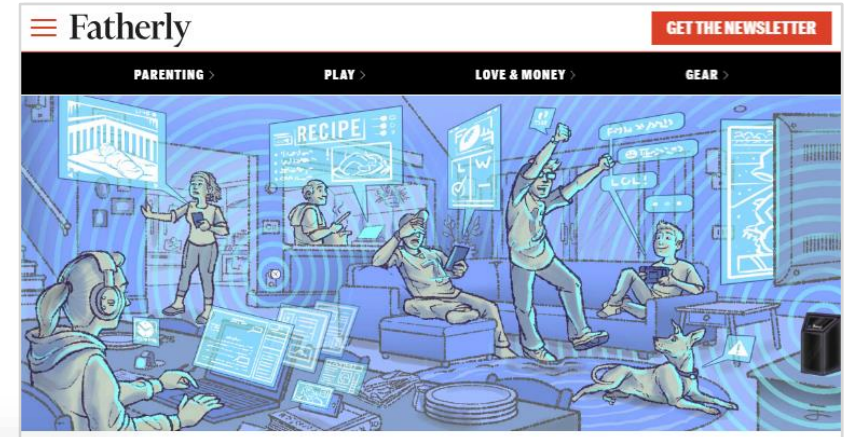


SMART HOME | LEER EN ESPAÑOL

Amazon to buy Eero, maker of home Wi-Fi hardware

The tech giant's smart-home ambitions are getting even bigger and more connected.

BY BEN FOX RUBIN | FEBRUARY 11, 2019 2:44 PM PST



GEAR

Why Families Choose Xfinity xFi to Support Their Smart Devices

SPONSORED BY

xfinity

Simplify everything about your Internet.

By Ben Radding Mar 08 2019, 9:00 AM

f SHARE

EMAIL

This story was produced in partnership with Xfinity xFi, the speed, coverage, and control you need for the ultimate in-home WiFi experience.

Think to back when you were a kid: there was probably only one thing in your house connected to the Internet — a bulky



Where to start?



Digital Day News

LEADING NEWS PROVIDER

HOME / 2019 / APRIL / 11 / MANAGED WIFI SOLUTION MARKET TO REFLECT IMPRESSIVE GROWTH RATE DURING 2018 – 2028

Market Research

Managed Wifi Solution Market to Reflect Impressive Growth Rate During 2018 – 2028

3 weeks ago kalyani badkas



“Latest research summary of Managed Wi-Fi Solutions market :



Scott Richert



Add Comment



Share This!

The new research report on the Global Managed Wi-Fi Solutions Market 2019 – 2025 provides a comprehensive analysis on the market on a global and regional front, based on the market size, share, services, solutions, product types, end users, industry verticals, and technologies. The report also presents an in-depth analysis of the factors affecting the growth of the market, including the drivers, restraints, challenges, threats, and the potential growth opportunities. The report on the global Managed Wi-Fi Solutions Market entails the prevailing market trends and the key strategies that are increasing the popularity of the market on a global basis. In addition, it provides the market estimates and forecasts for all the segments and sub-segments in terms of value and volume.

Check Out For Sample Report Here@: <https://garnerinsights.com/Global-Managed-Wi-Fi-Solutions-Market-Report-History-and-Forecast-2014-2025-Breakdown-Data-by-Companies-Key-Regions-Types-and-Application#request-sample>

The Managed Wi-Fi Solutions market report analyzes key players whose presence is impacting the market based upon their revenue, price margins and main products they offer: Cisco Systems, Aruba, Vodafone, Comcast Business, Rogers Communications, Verizon, Purple, Ruckus Wireless, Mojo Networks, Megapath, Wifi Spark, .



Proprietary and Confidential

Focus on your subscribers' problems

I want to be connected, not tethered



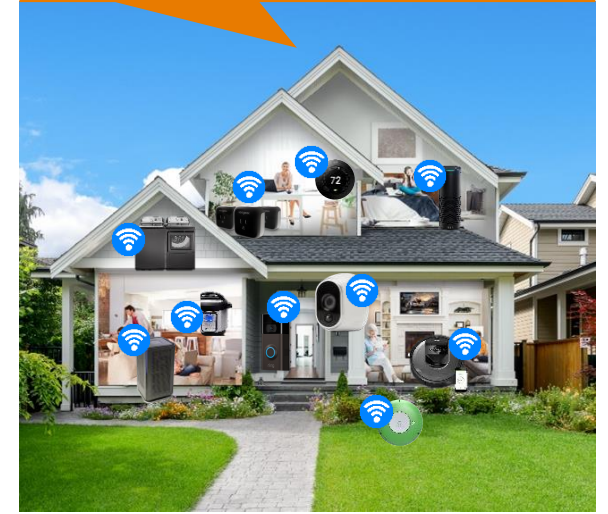
I want wireless, without the worries



I want coverage, everywhere



I want a smart home, but not the chaos



▶ Home Wi-Fi

▶ Managed Wi-Fi

▶ Whole-Home Wi-Fi

▶ Smart Home Services

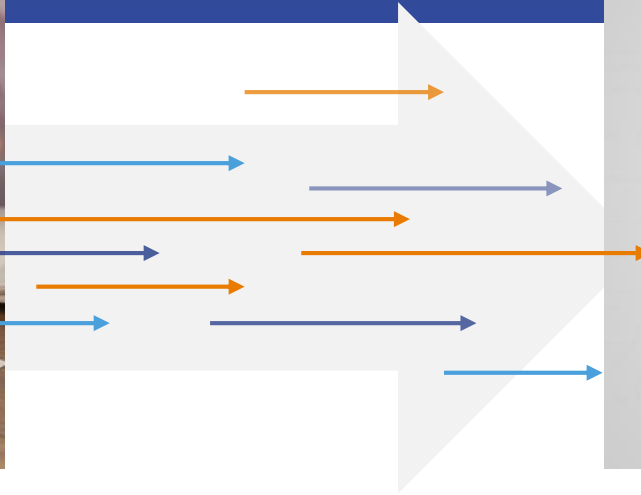
A Change in Perspective

Start thinking about the premises business in a new way.



Old Mindset

Focused on capital cost savings and squeezing out narrow margins by limiting the costs of the CPE you put in the subscribers' homes...



New Mindset

Focuses on a revenue opportunity where you invest in a platform that can scale your revenue through a stream of value added services layered on top.

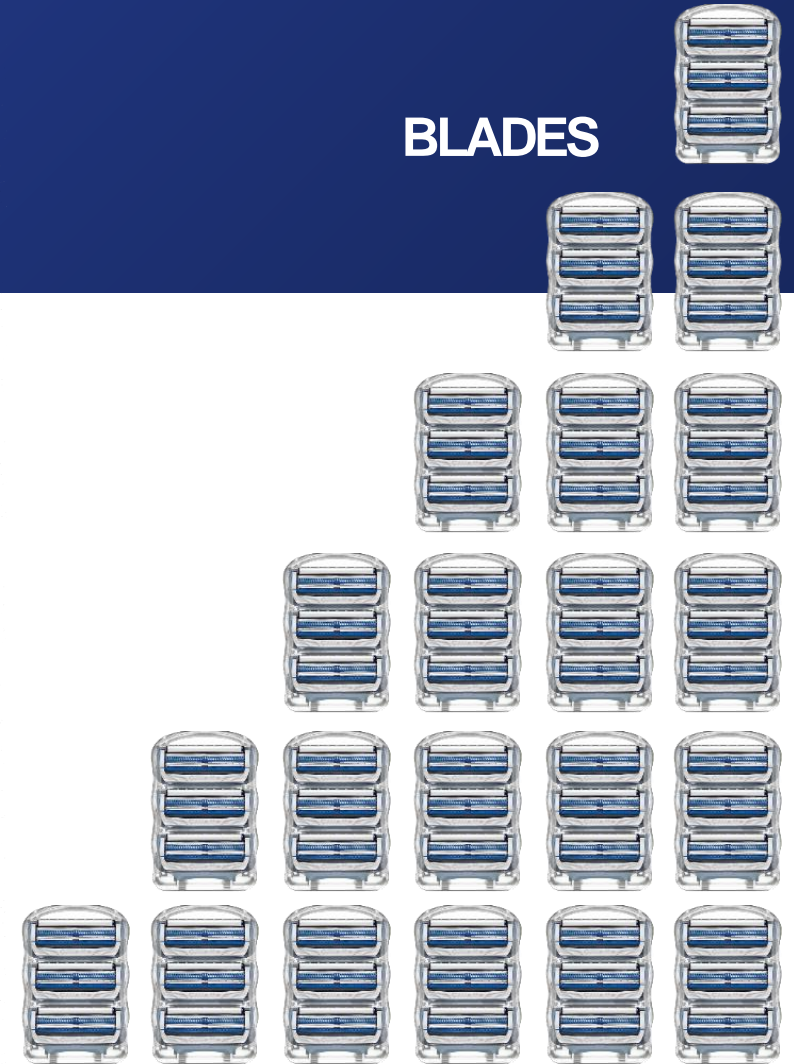


The New Approach

RAZOR



BLADES



Start building a Foundation with Managed Wi-Fi



Step 1

Managed Wi-Fi Offer

gigaCENTER



Step 2

Managed Whole Home Wi-Fi Offer

gigaCENTER + 804mesh

Expand the Foundation with New Revenue Generating Applications



Step 3

Managed Premium
Whole Home Wi-Fi Offer



GigaSpire
BLAST

GigaSpire
MAX

GigaMesh

Step 4: Smart Home Solution Bundles



Parental Controls

*Protect
Your Kids!!*



Network Security

*Protect Your
Home Network*



Security Monitoring



DIY Home Automation



Elder Care & More

**How do we help CSP's
Evolve to delivering a
Smart Home?**

EXOS

Powering Home Intelligence



The magic that powers the whole Smart Home platform and the Smart Home services it's connected to.

- Best possible managed Wi-Fi & whole home experience in the home
- Alexa capabilities
- **A Future Proof Platform** set up to bring new revenue opportunities down the road (blades) razor

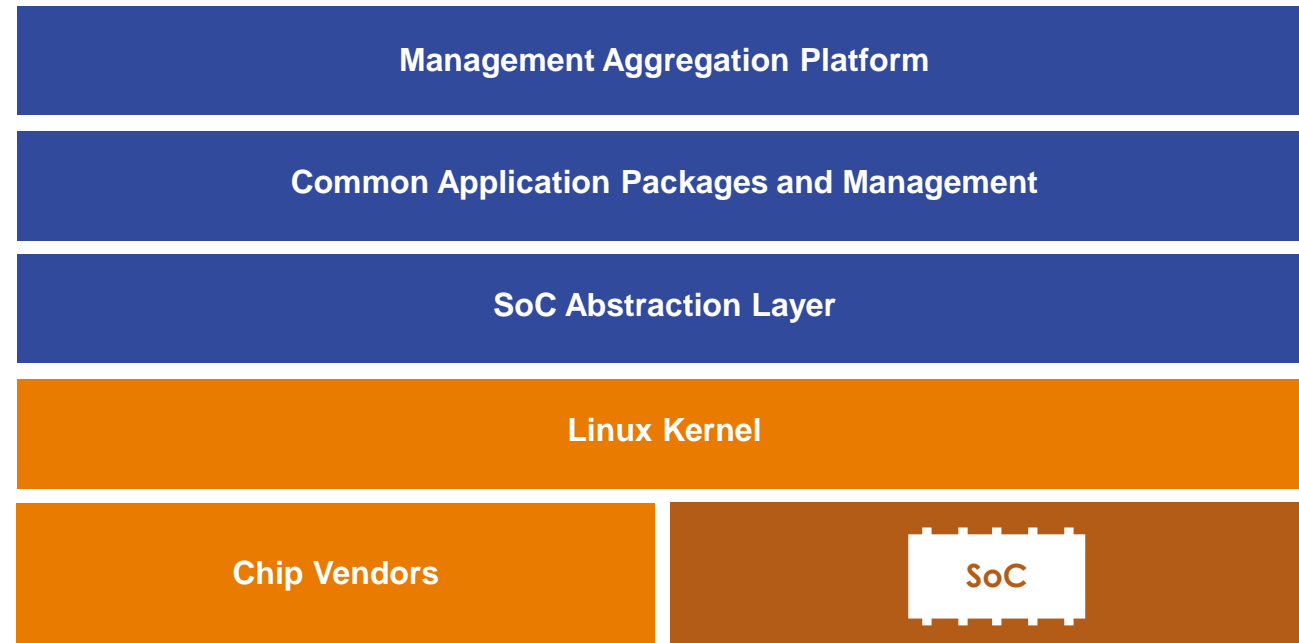


The Next
Gen Digital
Storefront

- Connected to the Cloud
- Hardware independent OS
- Containerized Services
- New Mobile Application

Foundation for Multi-Year ARPU Growth

by leveraging the speed and flexibility of software!





Gateway or Satellite



GigaSpire
BLAST



GigaSpire
MAX



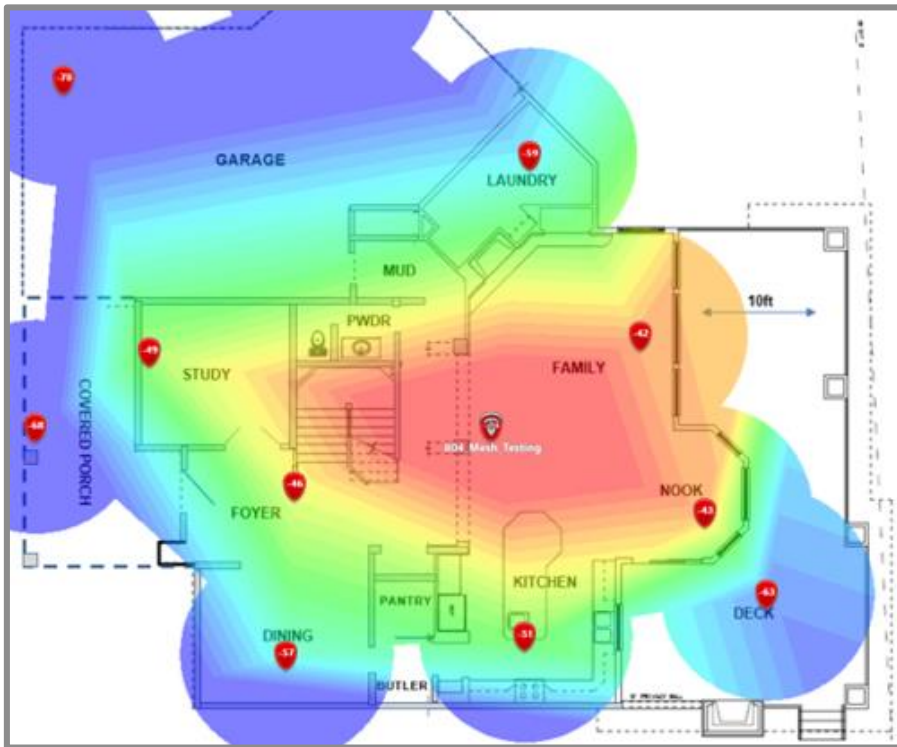
Satellite



GigaMesh
POWERED BY EXOS

**Why make the
switch to Wi-Fi 6?**

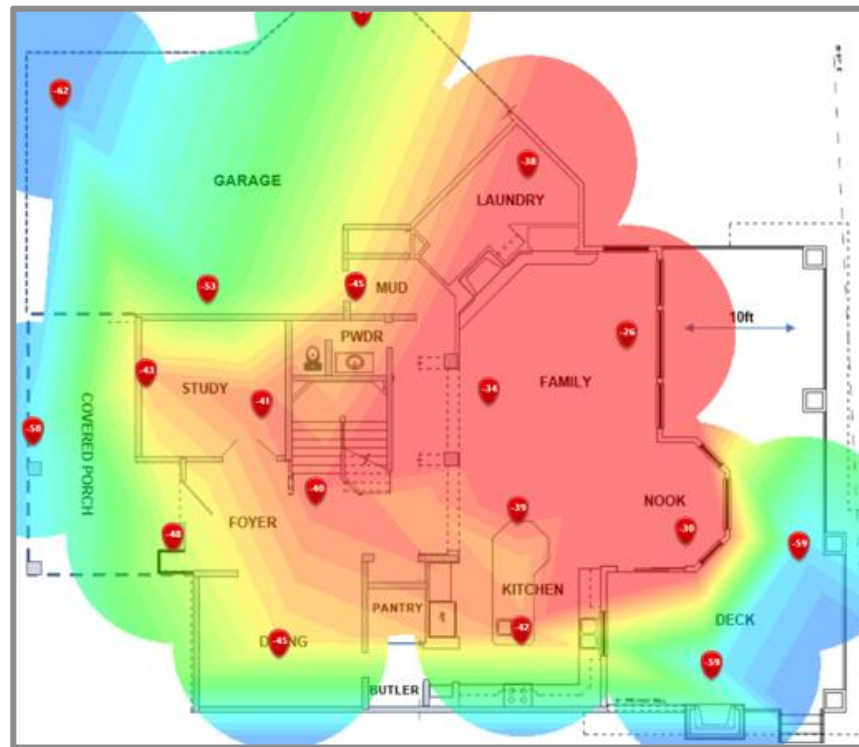
Typical 11ac



2.4Ghz & 5 GHz Combined Radios



POWERED BY EXOS



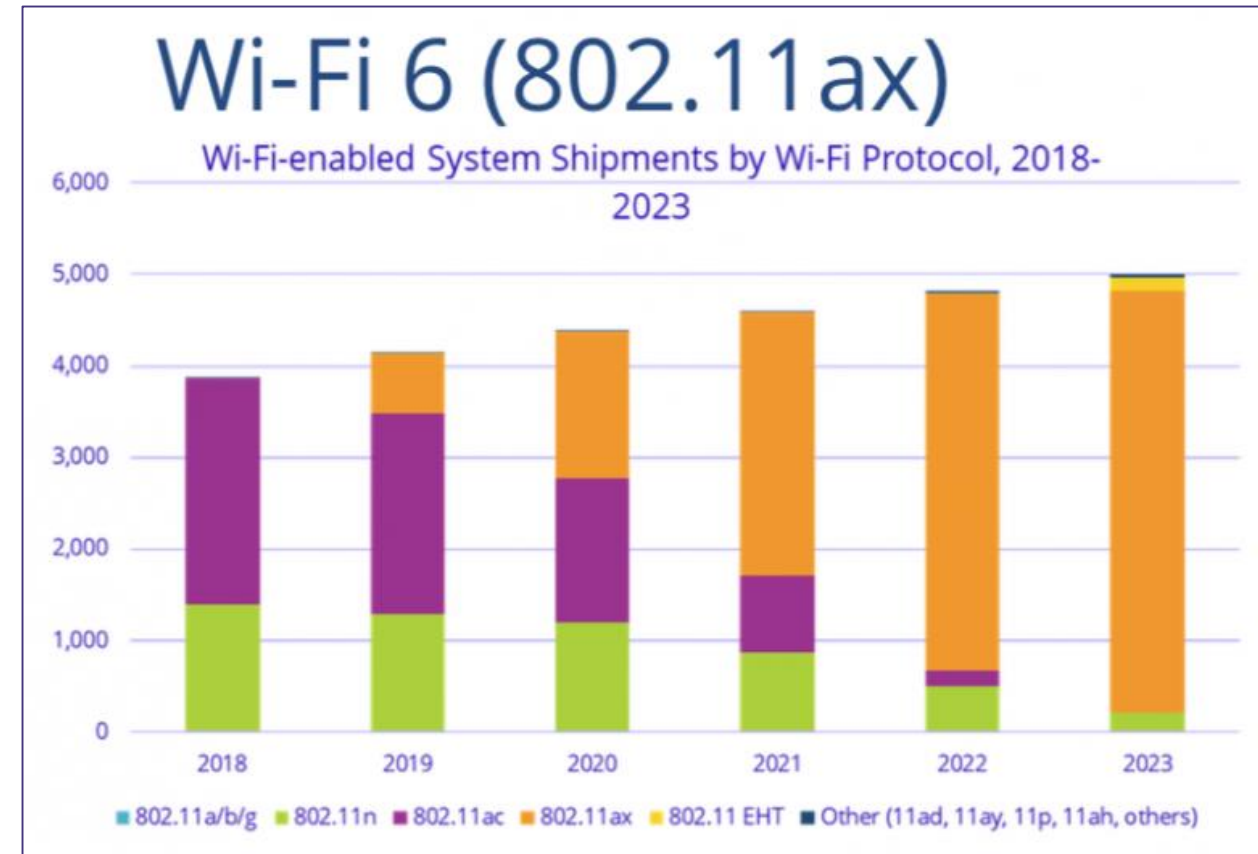
8x8 Antenna on 5Ghz & 4x4 Antenna on 2.4Ghz

3 Level, ~5300 sqft Home
Single GigaSpire
powered by EXOS



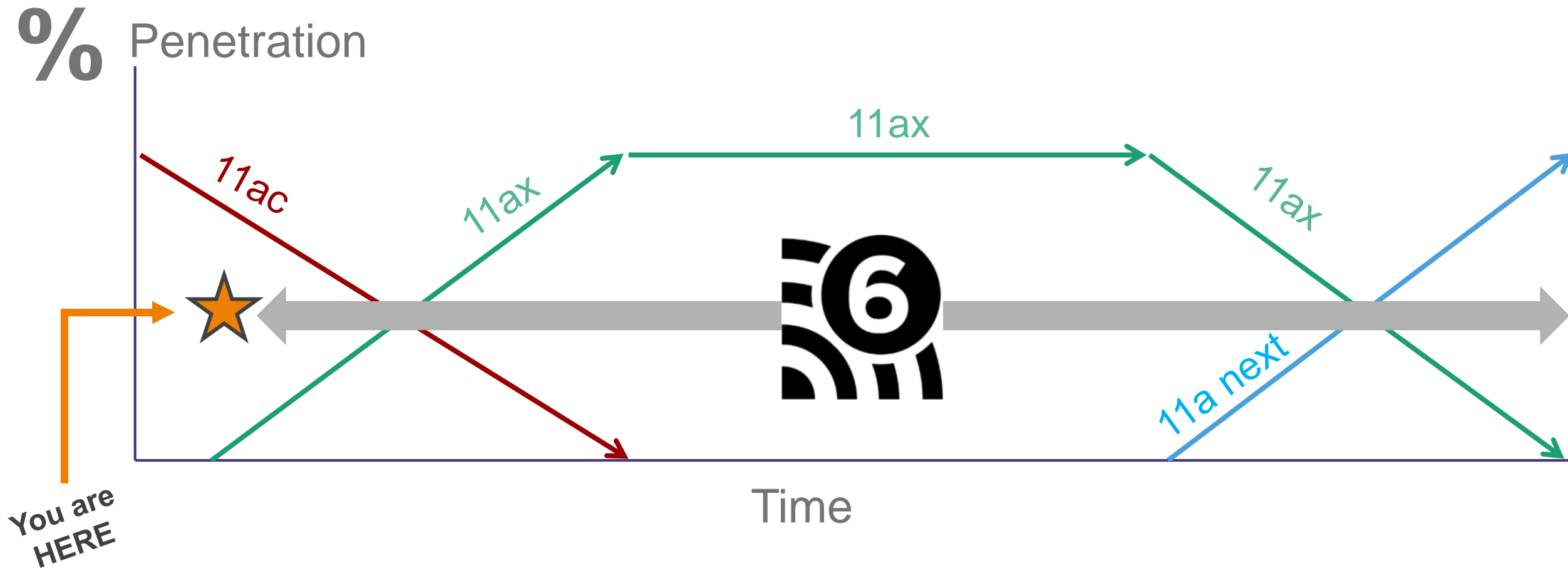
Wi-Fi 6 Explosion

- **Wi-Fi 6 is quickly becoming the de facto dominant networking technology**
 - Accelerating Wi-Fi 6 ramps
 - Faster than 11n to 11ac transition
 - Multiple Retail models already in market priced from \$350 - \$450



*Source: IDC 2019 – Wi-Fi chipset shipment forecast

The tipping point between AC & AX....



Prepare for the upcoming



Launching November 2019, Disney + is projected to have **130 million subscribers** by the end of 2024



Cloud-based gaming service with **4K resolution** by Google coming in November 2019



Slated for release between **Sept – Nov 2019**, Apple will become another major player in cloud-based streaming services



**How do you Evolve
with customers?**



Owning the Experience

Visibility into the home gateway extends huge benefits:

- decrease **support call times**
- minimize **field technician deployments**
- improve **first call resolution (FCR) rates**
- reduce **installation times**
- improve **customer satisfaction**

Your Secret Weapon



Understand what subscribers need, when is best to market to them, with which offer. And how to best support and solve their problems

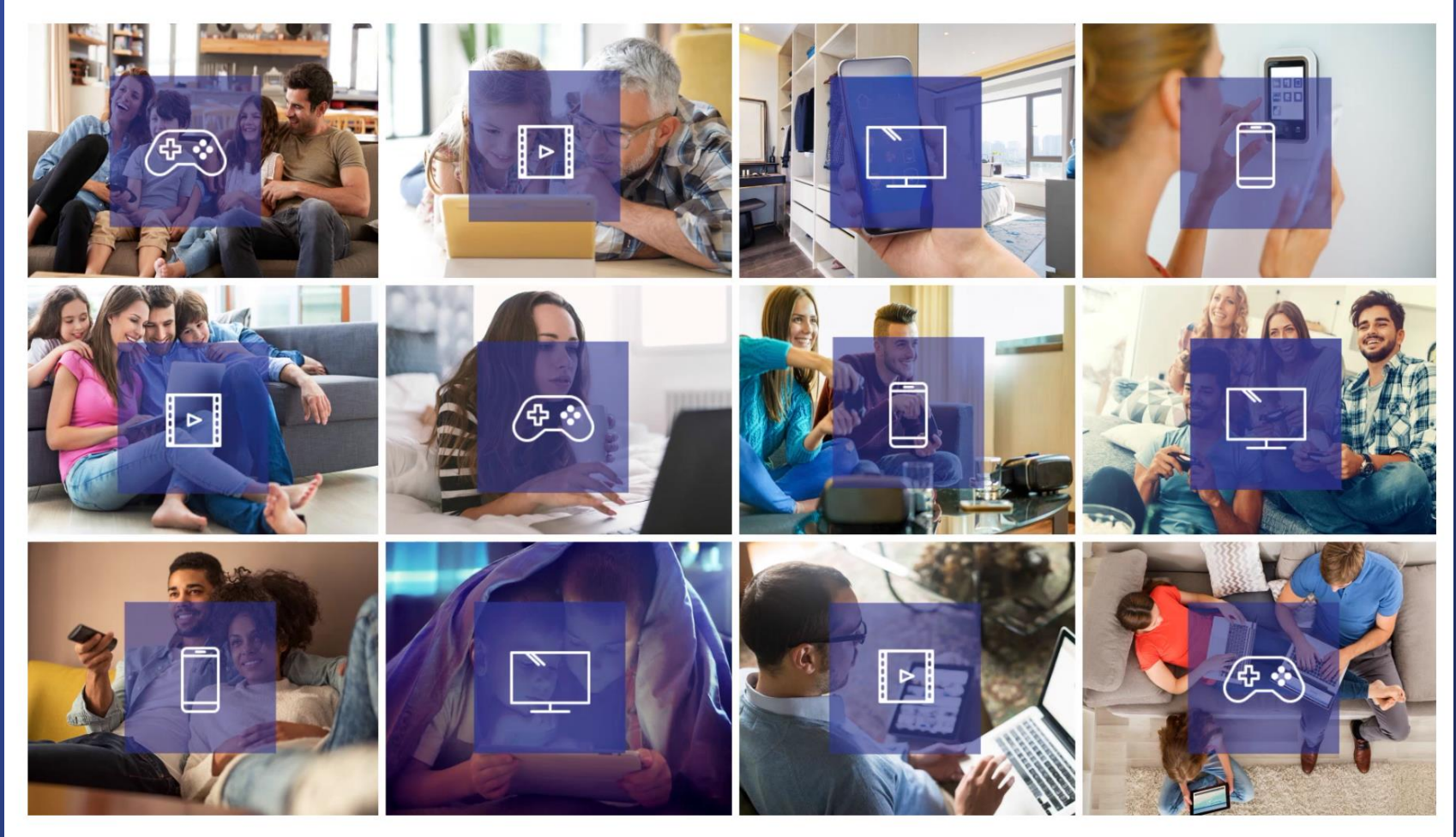
Tap your network intelligence & our expertise to deliver an unmatched subscriber experience.

Comprised of two elements: Marketing Capabilities and Support Enablement





Targeting the right Subscribers



Unlock the data trapped in your network

The key to understanding your subscribers...

...is to understand what kind of experience they are having and what kind of behavior they are engaging in...



What most CSPs typically understand.....



SMITH FAMILY
2204 Robin Lane
Madison WI 53715

- Demographics: 3.2 Children
- Family Income: \$65,000-\$85,000
- Service Tier: "Basic"
- Monthly Bill: \$62



JONES FAMILY
2235 Robin Lane
Madison WI 53715

- Demographics: 2.2 Children
- Family Income: \$65,000-\$85,000
- Service Tier: "Mid"
- Monthly Bill: \$72



What you know with CMC

WORK FROM HOME

VPN: 40 hpw,
Video Calls: 25 hpw

STREAM QUEEN

HULU: 15 hpw

SUPER SENIOR

Video Calls: 15 hpw

SMART THINGER

Voice Control: 27/day

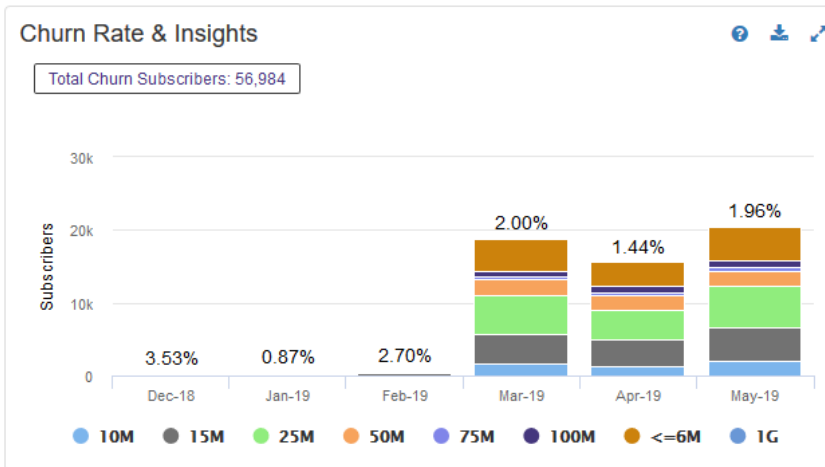
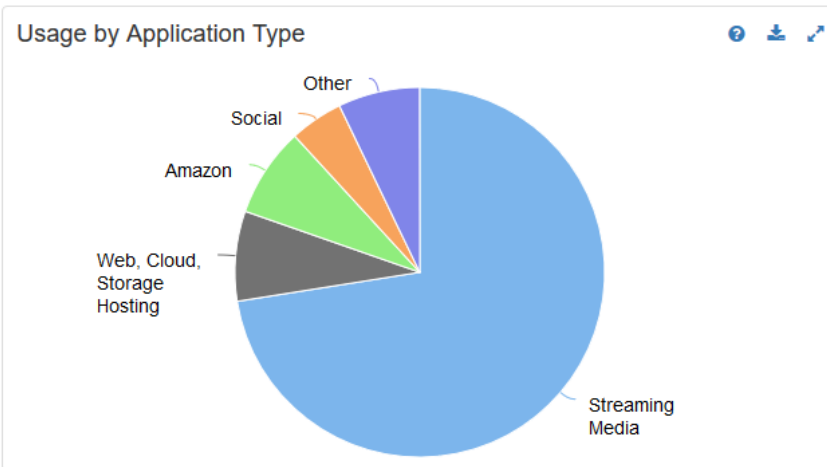
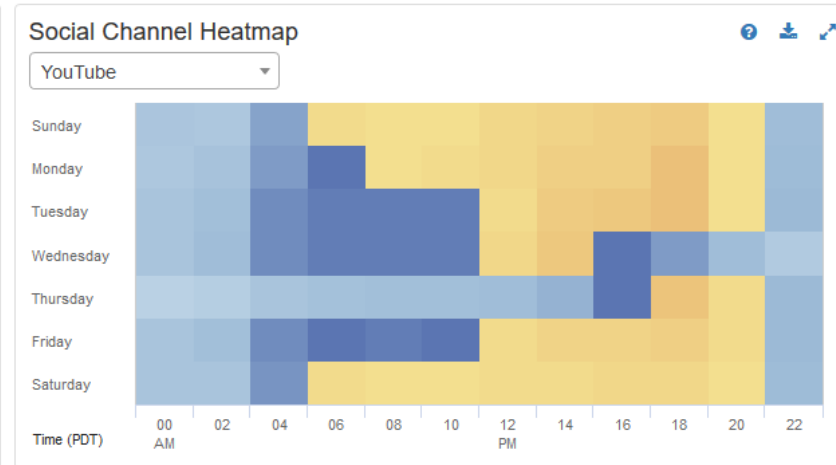
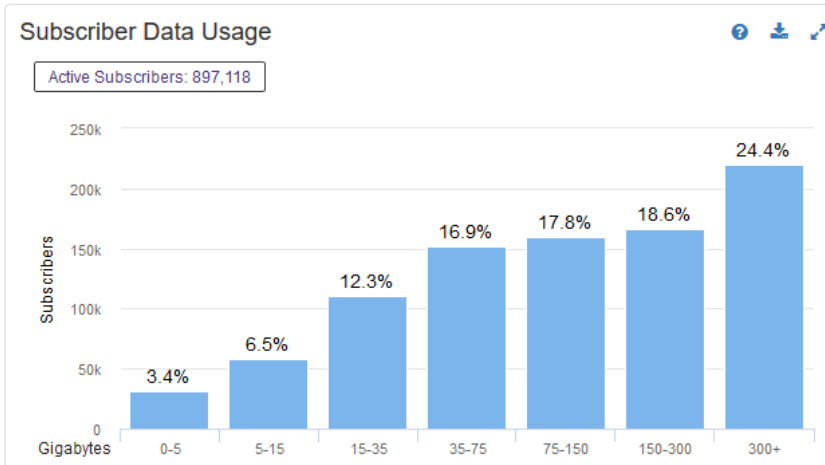
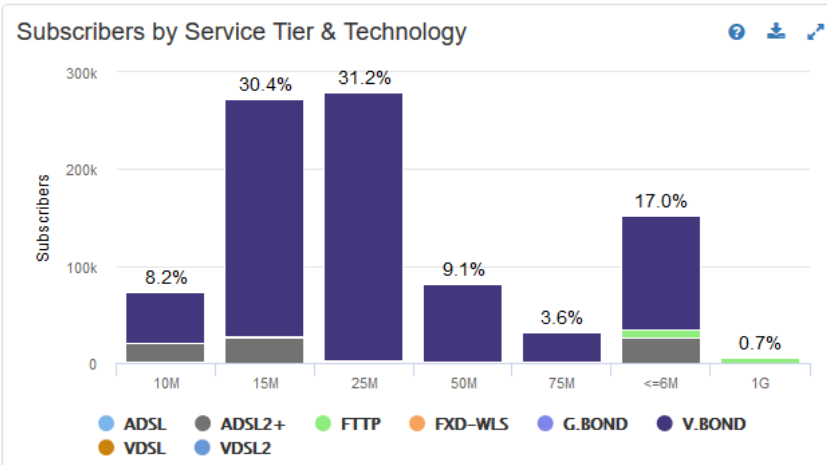
GAMER

Xbox: 18 hpw

SMITH FAMILY

- Speeds (D/U): 6/1 Mbps
- High Gaming: Yes
- High Social: Yes
- Work-From-Home: Yes
- Data Usage: 370 GB
- Streaming Usage: 280 GB
- Service Limit Hits: 42
- Speed Tests: 5
- Churn Risk: Yes
- Wi-Fi Score: 2
- No. of Client Devices: 14
- Smart Home Prospect: Yes

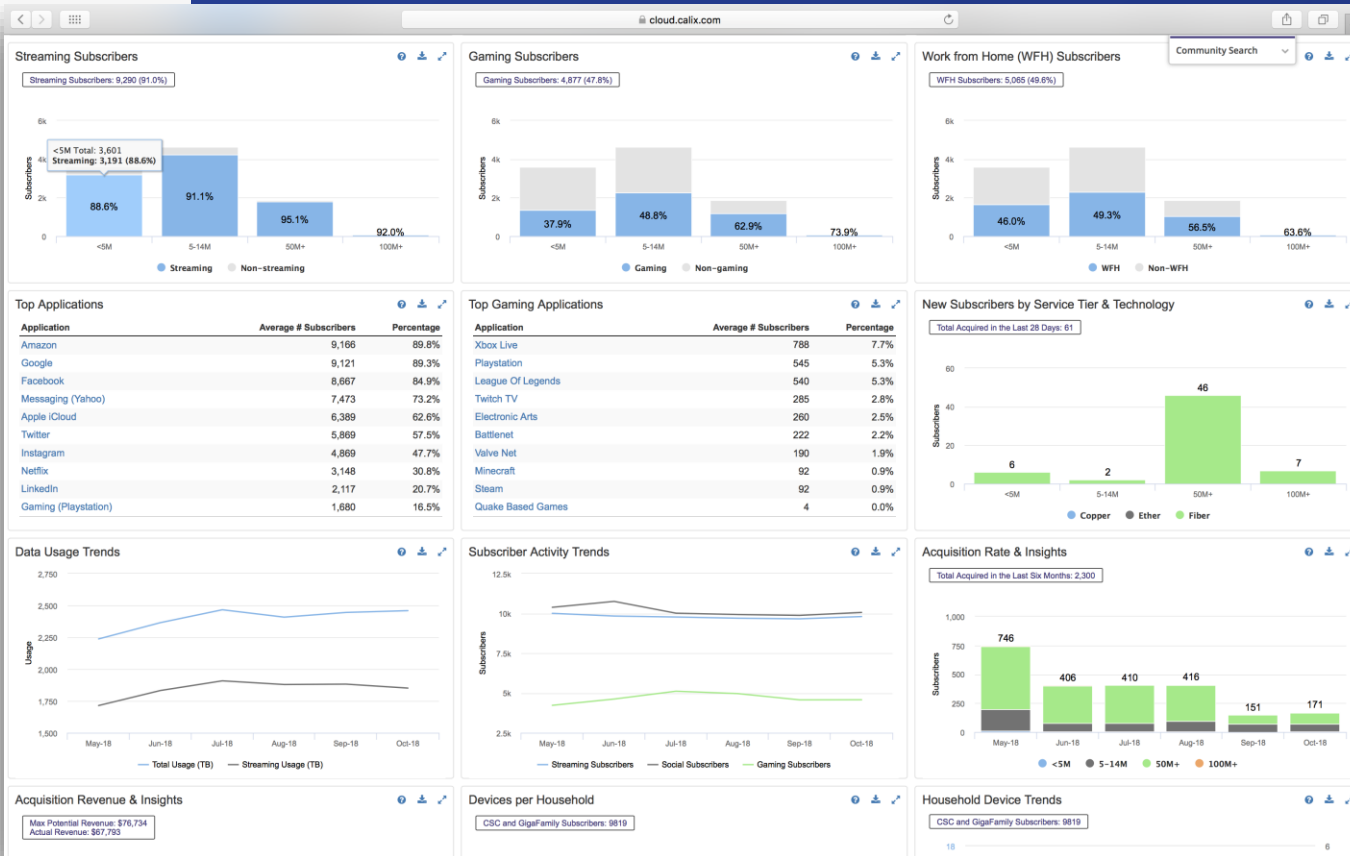
Calix Marketing Cloud Dashboard



Retention

Name	Service Limit Down / Up	Speed Tests	Competitor Visits
THOMAS MANTHEY	634 / 278	0	0
KATHY WOODS	633 / 28	0	0
BRENT & STACIE FRANCOIS	632 / 612	0	0
FRED MCCORMICK	631 / 600	0	0
LUIS DOMIGUEZ	630 / 1	0	0
KATHY COWAN	629 / 616	0	0
MELINDA WHIDDON	629 / 1	0	0
JANICE NICHOLS	628 / 55	3	2
SUSAN FIELDS	625 / 55	0	0
KENJII BOGGAN	625 / 44	0	0

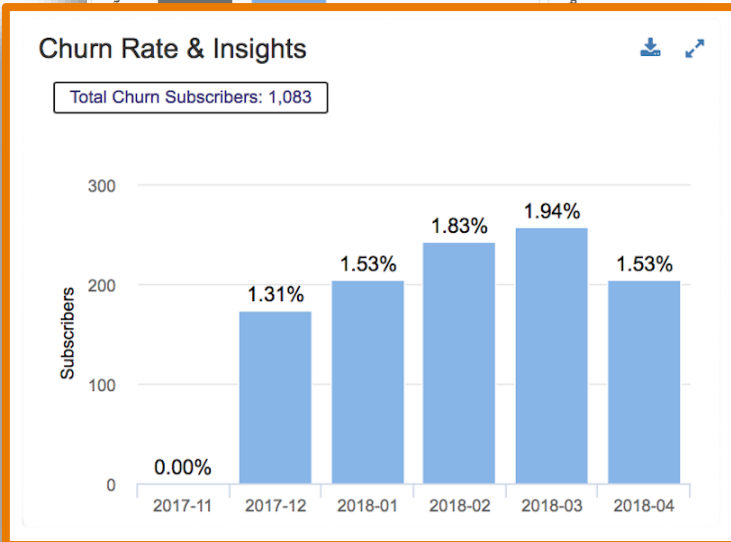
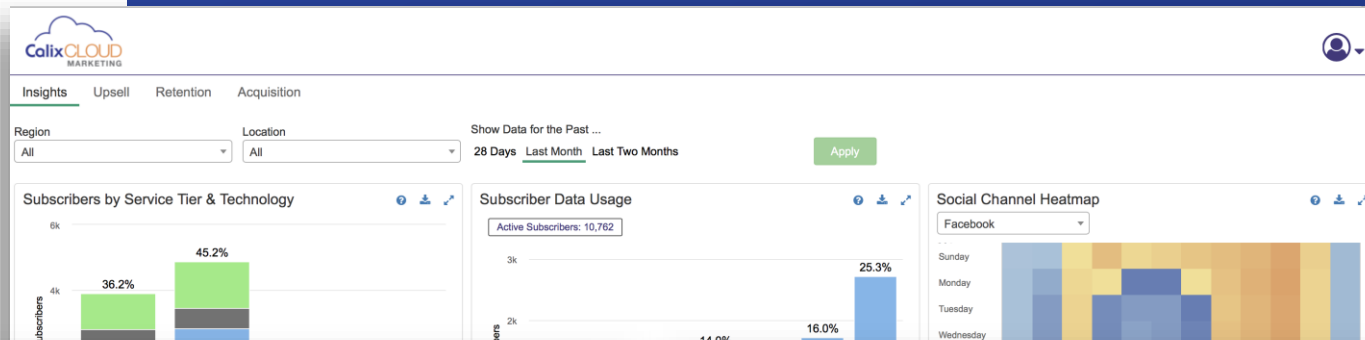
Discover Upsell Opportunities



- Microsegment subscribers
 - Per common usage, behavior, Wi-Fi experience, capacity & technology
- Ensure targeted campaigns meet subscribers' exact needs



Reduce Subscriber Churn



Churn Risk

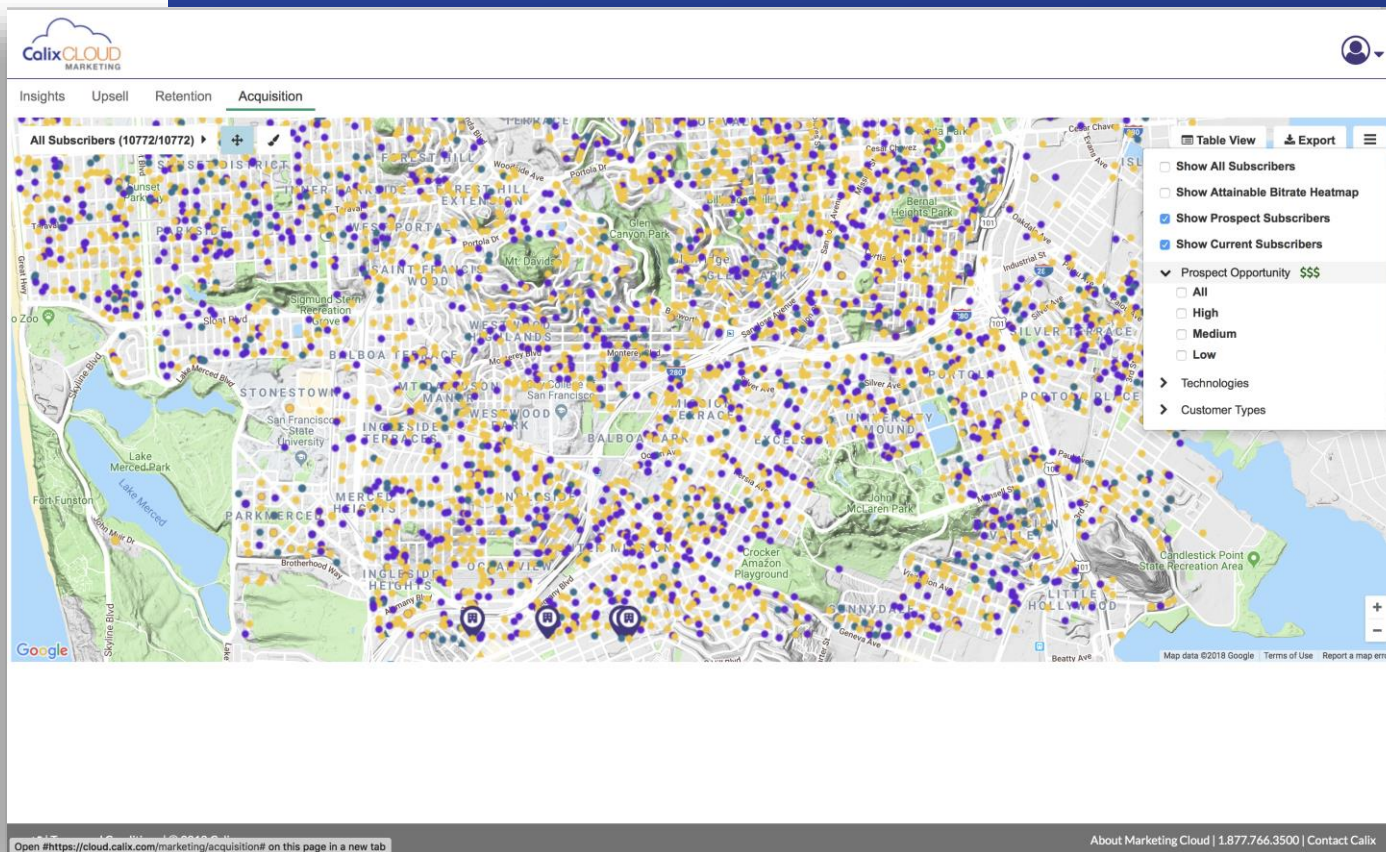
High=30, Med=50, Low=100

Subscriber Name	Score
Terence Pugh	High
Irwin Donaldson	High
Ashlee Moody	High
Lawanda Walls	High
Paige Taylor	High
Adela Schroeder	High
Dionne Floyd	High
Kareem Good	High
Clay Lara	High
Landon Smith	High

- Identify at-risk subscribers & risk level
- Get insights into past churn
- Be proactive with compelling retention offers & services



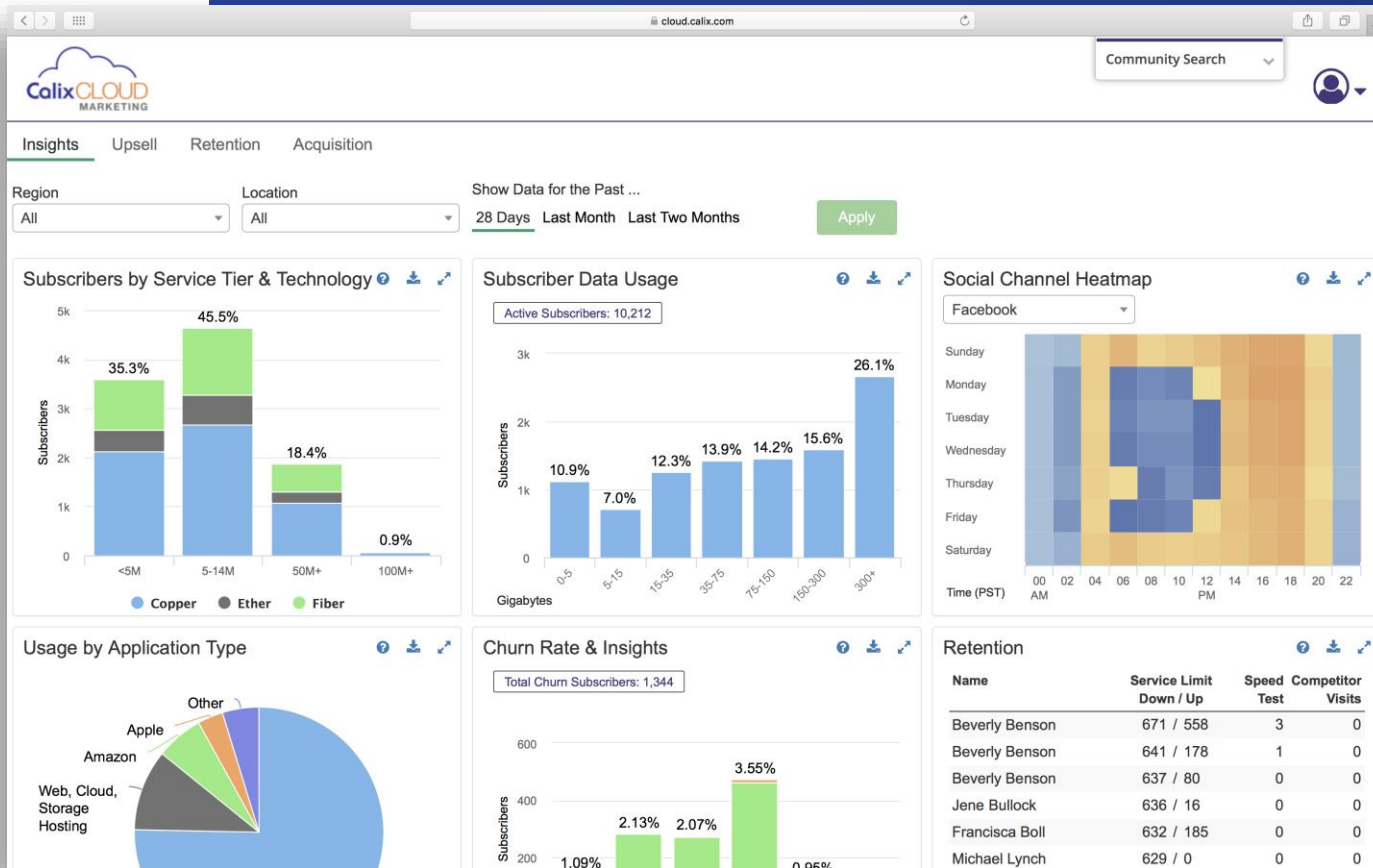
Acquire New Subscribers



- Tap into existing subscriber insights to segment, prioritize & engage with prospects
- Discover trends in newly acquired subscribers



Boost Your Marketing ROI



- Discover marketing opportunities based on subscriber behavior
- Identify maximum revenue potential
- Determine precisely where, how & when to invest marketing dollars

How most CSPs market to their customers...

Generic Message and Offer:

We have Internet... at low, low prices!



High-Speed Internet
CLICK ON AD BELOW TO ENLARGE AND OR PRINT.

Switch to Frontier High-Speed Internet and receive up to a

\$200 Amazon.com Gift Card

HOME SPEED HOME
Bring your home up to speed with super-fast in-home WiFi.

CenturyLink® High-Speed Internet

Any speed up to

100 Mbps **\$20 /mo.**

for 24 months. Speed may not be available in your area. Requires Unlimited Nationwide Calling, 24-month contract, AutoPay on.

High-Speed Internet from Frontier

19.99

per month with qualifying phone service. See restrictions and terms website.

Don't miss out on this exciting offer!

Frontier Gardnerville
Gardnerville: 775.782.0962

FAST INTERNET
STARTS HERE

HIGH SPEED + LOW PRICE = BEST VALUE

EVERYDAY LOW PRICE

FREE INSTALLATION SAVE \$90

Get a great Everyday Low Price on the best High-Speed Internet with Cable ONE. 100 Mbps for just \$55 a month. And for a limited time, save \$90 and get FREE Installation!

Power all your devices and get the best streaming on your TV, tablet and smartphone — all at the same time.

It's the High Speed you need at the Everyday Low Price you want.

up to **100 Mbps**
\$55 /mo.

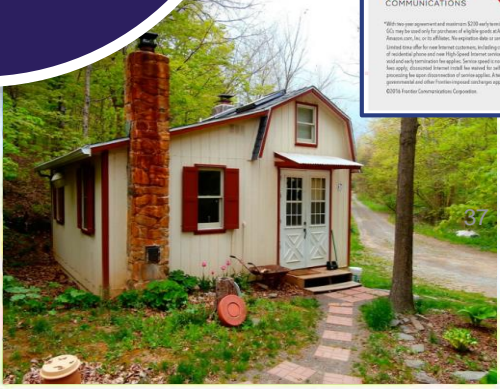
Charter Spectrum Internet™

\$29.99/mo for 12 mos when bundled*

ONLINE ONLY OFFER

LEARN MORE >

Restrictions apply



See... 'near real-time' data on experience & behavior

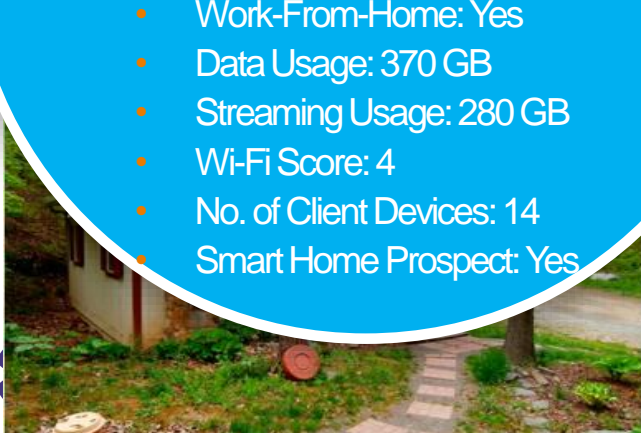


SMITH FAMILY

- Service Limit Hits: 42
- Competitor Websites 10
- Speed Tests: 5
- Churn Risk: Yes
- Speeds (D/U): 6/1 Mbps
- High Gaming: Yes
- High Social: Yes
- Work-From-Home: Yes
- Data Usage: 370 GB
- Streaming Usage: 280 GB
- Wi-Fi Score: 2
- No. of Client Devices: 14
- Smart Home Prospect: Yes

JONES FAMILY

- Service Limit Hits: 0
- Competitor Websites 0
- Speed Tests: 0
- Churn Risk: No
- Speeds (D/U): 20/5 Mbps
- High Gaming: Yes
- High Social: Yes
- Work-From-Home: Yes
- Data Usage: 370 GB
- Streaming Usage: 280 GB
- Wi-Fi Score: 4
- No. of Client Devices: 14
- Smart Home Prospect: Yes



Huge Benefits

Triangle Communications

23%

Increase in annual revenue

250%

Growth in top-tier subscribers

Midwest Energy & Communications

30%

Reduction in marketing OPEX

119%

Increase in Social Engagement



SAVE THE DATE

2019 **CALIX**

CONNEXIONS

OCTOBER 26-29, 2019

WYNN, LAS VEGAS
WWW.CALIX.COM/CONNEXIONS



**THANK
YOU!**

