

2019

**Connected Home &
Entertainment Trends**

Smart Home

Home Security

Energy Management

**Health and Independent
Living**

Voice First and Smart Home

**Voice First and
Entertainment**

Video Services

OTT Video Services

Connected CE

AI and Blockchain

Safety and security continue to drive interest and adoption of smart home solutions.

- Alerts when someone enters the home have highest appeal.
- There is significant interest in other uses cases, such as protection from water damage, health monitoring, and energy management.

Partnerships create opportunities in channel expansion.

- Retailers, builders, insurers, manufacturers, service providers, and non-traditional competitors are all potential players and partners.

Lower-tier products expand affordability.

- DIY products are popular and disrupting the security industry.

Developments in AI will continue to improve product value and enhance personalization.

In-home consultations and experience centers help share the value of connected product experiences.

Voice improves the smart home user experience, providing a unified platform.

- With marketing driven by tech giants Amazon and Google, adoption and use case development has skyrocketed for smart home experiences and products.

More smart home device owning households have multiple devices than have only one device.

- Repeat purchases show that product owners understand the value smart home devices offer. However, smart home players must entice new buyers to grow the market.

The six most popular smart home devices are found in 22% of U.S. broadband households: smart thermostats, networked cameras, smart lightbulbs, video doorbells, smart garage door openers, and smart door locks.

Home Security Trends

Residential security holds steady—about 26% of U.S. broadband households have a home security system.

- Self installation is growing.
- Interactive services are mainstream. More than one-half of professionally monitored subscribers have at least basic interactivity.

Growth will be driven by a combination of DIY solutions, expanding distribution channels, innovative financing, and continued expansion of the value proposition through interactive services, home controls, and AI.

- New market entrants, like Ring and Google's Nest, are expanding consumer awareness.
- 25% of U.S. broadband households plan to buy a video doorbell in 2019.
- 63% of security system households own a smart home device.

Security dealers remain a strong channel for smart home products. They are responsible for nearly 50% of sales of smart door locks, garage door openers, water leak/humidity detectors, and networked security cameras.

For several years, interactive services and home control capabilities have driven RMR growth.

- Interactive services contribute to the success of security system sales by providing consumers the ability to remotely control and monitor their systems while also enabling greater engagement.

Companies in the home security space are well-positioned to expand their lineup to include care services that support aging comfortably at home and caregiving.

There is strong untapped demand for products and services that make homes more energy efficient.

- More than half of respondents feel it's very important to have an energy efficient home.
- 91% of U.S. broadband households take some mindful action to reduce their energy consumption.
- Familiarity with energy programs continues to grow slowly.

Smart thermostats can help utilities meet both energy efficiency and demand response goals.

- Adoption of smart thermostats is the highest of any home automation product, and purchase intentions for these devices continue to climb.
- New users come to the market through smart thermostat rebates and giveaways from electric utilities.

Consumers value access to real-time energy

information as well as cost savings. Smart home solutions can provide that functionality and reduce energy bills.

- Access to high-frequency energy data enables multiple value-added services, many of which can be easily monetized as a service to consumers or partners.

The growth of the smart home, distributed energy, and electric vehicle markets creates challenges for utilities but also opens opportunities for partnerships.

- Energy efficiency and DR programs are a starting point for developing ongoing relationships to benefit both parties.

Energy providers face significant challenges in maintaining reliable power delivery as solar and EV adoption increase and Net Zero homes become required in some states.

Need for innovative healthcare solutions is immediate:

- The number of Americans 65 and older will exceed 80M by 2050.
- Nearly 60% of consumers have a chronic condition.
- 49% of U.S. broadband households are concerned a lack of financial resources will disrupt their retirement plans.

The push to engage consumers outside of a facility and advances in consumer technology have created distinct markets.

- New connected healthcare markets include on-demand virtual care services, connected medical devices and consumer fitness products, and independent living solutions for seniors.

Consumers love the convenience of virtual care.

- Positive consumer experiences and expanding reimbursement from payers will drive the market forward.

Adoption of connected health devices is growing, driven by wearables.

- 14% of U.S. broadband households own a fitness tracker, and 12% own a smart watch with the ability to track fitness activities and heart rate. Another 2% own a GPS sports watch.
- The distinct form factors are blurring as fitness trackers and smart watches serve overlapping needs and marketing messages do not draw a clear difference.

Seniors' needs and reported interest indicate a strong opportunity for independent living solutions, though segments matter.

- Younger seniors and those with a home security system are more willing to pay for a solution than older seniors and those without a home security system. Caregivers show even higher interest and willingness to pay for an independent living solution for their loved ones.

Voice control and voice-based technologies have experienced massive growth in the past five years.

- Smart speakers with voice assistants are driving consumer familiarity with voice technology. Household adoption of these devices continues to grow at a rapid pace, reaching 31% in 4Q 2018, up from 7% in 1Q 2017.
- 16% of consumers have strong intentions to purchase a smart speaker in the next 12 months.
- Substantial demand exists for voice control of products beyond the smart speaker category.
- Voice commerce is emerging as a convenient alternative by streamlining the ordering process.
- As more sensors are added to the house, voice capabilities will expand to more rooms.

Voice has become a must-have feature for smart home products and systems.

- 68% of consumers intending to purchase a smart home device find it “important” or “very important” to be able to control the device using their voice.
- For smart home device purchase intenders who already own a smart speaker, a device’s compatibility with their smart speaker is more important than great reviews and brand considerations.

Security and privacy concerns are a barrier to adoption of voice control devices.

- In general, the vast majority want to keep tight control over their personal data, and about half are “very concerned” about hackers gaining control of their connected devices. Consumers may be particularly concerned about their privacy when using “always on” voice-first devices.

Consumer interest in voice control for entertainment is growing.

- 45% of U.S. broadband households find voice control of a TV to be appealing.
- Consumers rank simple control features – like turning on/off the TV, and controlling the TV volume – among their most desired entertainment uses cases.

Voice is becoming a common feature in connected entertainment devices.

- Manufacturers of streaming media devices have quickly expanded available products with voice control, with only the lowest priced products now lacking this functionality.
- Set-top box makers are also ramping up their voice control offerings in response to pay-TV provider demand.

Facing maturation and decline in traditional business, CE manufacturers and pay-TV providers have embraced voice control as a new revenue driver.

- Adoption of smart TVs with voice control is growing, yet it remains a fraction of sales. Limited product availability and high price points are hampering market expansion, but this will change as players enter the market and costs are reduced.
- CE device makers are using voice to give their products a wider role in home entertainment ecosystems while pay-TV providers are using it for differentiation and customer relationship building.
- 43% of U.S. broadband households that own or plan to purchase a smart TV or streaming media player in the next 12 month consider voice control as an important feature when selecting their next device purchase.

Video Services Trends

The pay-TV service provider market share has remained virtually unchanged since 2016.

- Areas of innovation include delivery performance, service definition, business models, channels, and brand engagement.

There is a continued slow decline of pay-TV subscriptions and an increasing diversity of choice in video services.

- Between 2011 and 2018, the percentage of broadband households that do not subscribe to a pay-TV service increased from 13% to 20%.

Pay-TV providers are competing against or partnering with OTT services to provide new compelling offerings.

- Cable networks and broadcasters now face increased costs and pressure to license or create the best content.

Viewing habits and perception of the value of video services are changing, forcing pay-TV providers to adapt.

- Social media and online influencers steer consumers to particular services or programs.

Consolidation has created large, innovative, and integrated companies that impact creation, licensing, and distribution of live channels and content assets.

- Online (or vMVPD) pay-TV services represent 12% of pay-TV subscriptions among U.S. broadband households.
- Virtual MVPDs have created a new segment of competition within pay TV.

Data is being used in new ways to define and drive business.

- Companies need to understand and adapt to the new approach for collecting, analyzing, and using data to effectively compete.

OTT services are mainstream, with the average number of services per U.S. broadband households approaching two. This extraordinary growth has caused a gold-rush mentality for service providers.

- Over 200 OTT video services are available in the U.S., with services targeting particular interests or segments.
- 70% of U.S. broadband households subscribe to an OTT video service.

Differentiation is a critical element of success.

- Content is one option for differentiation, but it is only sustainable for those services with unique access to fresh content. Other keys to growth include adding recognized brands and live TV channels / content.

There is massive competition in online services and an emergence of the OTT middle class with a mix of steady growth players and fast growing services.

Partnerships and aggregation are bringing OTT and pay TV together.

- Consumers are complementing their Netflix, Amazon, and Hulu subscriptions with more niche services. The percent of households subscribing to a top three OTT service *and* a service outside of the top three grew from 13% in Q1 2017 to 19% in Q3 2018.

The U.S. market is crowded and intensely competitive. Services want success in the U.S. but also look elsewhere for opportunity.

- Expansion into new markets brings unique challenges that OTT providers must understand and navigate in order to be successful
- Of the 226 services competing in the U.S., two-thirds are available in at least one other international market.

Connected CE devices are mainstream.

- Over 70% of U.S. broadband households own a connected CE device. Streaming video and audio content drives the value of connectivity in CE devices.
- Smart watches are poised for a breakout – one in six consumers in U.S. broadband households owns one.

With YoY consumer purchases falling, product makers are turning to the premium market to raise revenues.

- Purchasing of connected CE devices has slowed over the past four years.
- The top spending segment (~4M households) represents a group of consumers willing to pay for quality products.

Purchase channels for CE devices remain steady

- Nearly 50% of consumers purchase from a national or local retailer, and more than 25% buy from an online-only or primarily online retailer.

Growth in the connected CE marketplace is driven by video and audio devices: smart TVs, streaming media players, and smart speakers.

- Replacement cycles for these devices are longer than smartphones – manufacturers face the challenge of convincing buyers to upgrade their products.

Chinese smartphone OEMs will lose market share in the U.S.

- Over the next year, expect to see share of Chinese OEMs falling in the U.S. as consumer interest in premium models increases and geopolitical tensions raise barriers to entry.

Consumer familiarity with both VR and AR continues to grow, but adoption is low.

- Just 8% of U.S. broadband households own a VR headset. Demand in Asian markets encourages continued investment in VR products and content.

Innovative firms across product categories are actively deploying applications of artificial intelligence.

- Of all the forms of artificial intelligence, voice and natural language processing (NLP) provide today's consumers with the most common experience of AI and the most visible value.
- Video analytics applications employ artificial intelligence to detect and identify persons, objects, animals, packages, license plates, and other subjects of interest visible in video camera feeds—67% of consumers rate “alerts when someone enters your home,” a key video analytics capability, as the most appealing among a range of home security features.
- Artificial intelligence is used across the connected entertainment value chain by leading companies to gain cost advantages, increase speed to market, and strengthen customer loyalty.

AI is being applied to cybersecurity solutions to identify devices on the home network, monitor traffic and browsing, and support parental controls.

- Almost half (45%) of consumers are “very concerned” about the hacking of their devices and the historic data on those devices.

At its highest level, blockchain is a trusted distributed ledger which has a shared set of business processes across all the members of the business network.

- To avoid inhibiting adoption of connected products, solutions must help deter future hacks while allaying rising consumer concerns. Blockchain can provide that solution by eliminating a single point of failure and adding layers of protection from bad actors.

Most Influential Tech Analyst Firms in 2018

Parks Associates has been established since 1986, but it has seen strong growth in the past couple of years.

One of the reasons for this growth is its concentration on digital technologies for the home – whether it's smart televisions, smart speakers, smart doorbells, or any other smart home device or appliance.

Some tech observers say that household items will become more and more “intelligent”, in that they will integrate more chips and sensors, and, inevitably, they will collect more data – about the machine itself as well as its environment.

This places Parks Associates in the position of monitoring a massive and growing market.

Join Parks Associates at Upcoming Events



**Smart Energy Summit:
Engaging the Consumer**
February 18-20, 2019
Austin, TX



**CONNECTIONS™ Europe:
Strategies for the Smart Home and
Consumer IoT**
November 2019
Amsterdam, The Netherlands



**CONNECTIONS™: The Premier
Connected Home Conference**
May 21-23, 2019
San Francisco, CA



**Future of Video: OTT, Pay TV,
and Digital Media**
December 2019
Marina del Rey, CA



**Connected Health Summit:
Independent Living & Wellness**
August 27-29, 2019
San Diego, CA



**CONNECTIONS™ Summit at CES:
Consumer IoT and Smart Home**
January 2020
Las Vegas, NV

