

Unlocking Growth of the European Smart Home

A Parks Associates Whitepaper

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This whitepaper addresses the increasing concern expressed by European smart home companies that the growth of this emerging category in Europe is simply too slow.

With the explosion of connected products (the Internet of Things, or IoT), the consumer electronics industries are anxious to ride the approaching wave, which promises new revenue streams and new roles to play in serving connected consumers.

What will it take to stoke consumer demand for new products and services?

Why is uptake for smart home products in Europe seemingly behind that of North America?

This paper addresses the adoption of smart home products and services in Europe, the value propositions that most resonate with consumers, and examples of innovation and new business models as well as recommendations for key stakeholders to move ahead.

The Latest Adoption Numbers

Smart home devices, defined as those that control systems in the home and offer a connection to the Internet, are increasing in number as well as in breadth.

Smart Home Device Adoption

U.S. broadband households

13% 2Q 2014

U.S. broadband households

18% 2Q 2015

Western European broadband households

14% 3Q 2015



Parks Associates finds overall adoption of smart home devices has increased from **13% of U.S. broadband households** in the second quarter of 2014 to **18% in the second quarter of 2015**, with nearly 50% of these households planning to buy a smart home device in the next 12 months.

New research from Parks Associates finds that **adoption of smart home products has risen to 14%**, with the U.K., Germany, Spain, and France having roughly the same penetration among broadband households.

Over 50% of broadband households in the U.K., Germany, and Spain are “not at all familiar” with smart home products or services.

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There are key differences between the U.S. and Europe that contribute to their disparate smart home growth rates.

First, houses in Western Europe average just over 100 square meters; houses in the U.S. average more than 200 square meters. The demand for automation, therefore, is, quite literally, larger.

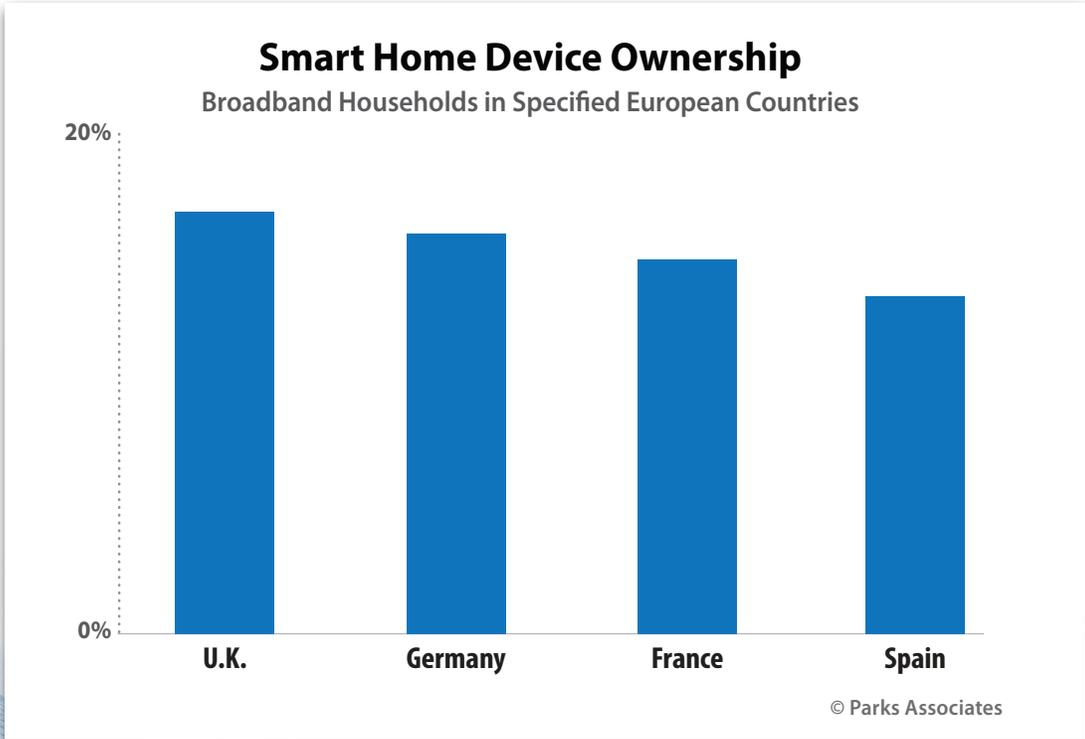
Next, the percentage of multifamily housing in Western Europe is much higher than the estimated 35% in the U.S. The higher percentage of European households in multifamily units decreases the need for in-unit home security systems, as the security systems within these buildings often fulfill the need for individual systems.

Is the growth rate for smart home in Europe disappointing?

Perhaps if compared directly to the growth rates of smartphones and tablets. Projected 2015 year-over-year household growth of tablets and smartphones in Western Europe is 25% and 9%, respectively, compared to a slowing 9% and 5% in North America. If these are the expectations for all product categories, then growth rates less than double digits would fall short of many expectations.

In actuality, the growth rate for smart home product adoption in Western Europe is very good—and especially when considering that smart home products have only begun to address consumer needs. Awareness is still low, hovering around 10% for products and services. France professes the highest awareness levels, with 12% of broadband households who are very familiar with smart home products and services.

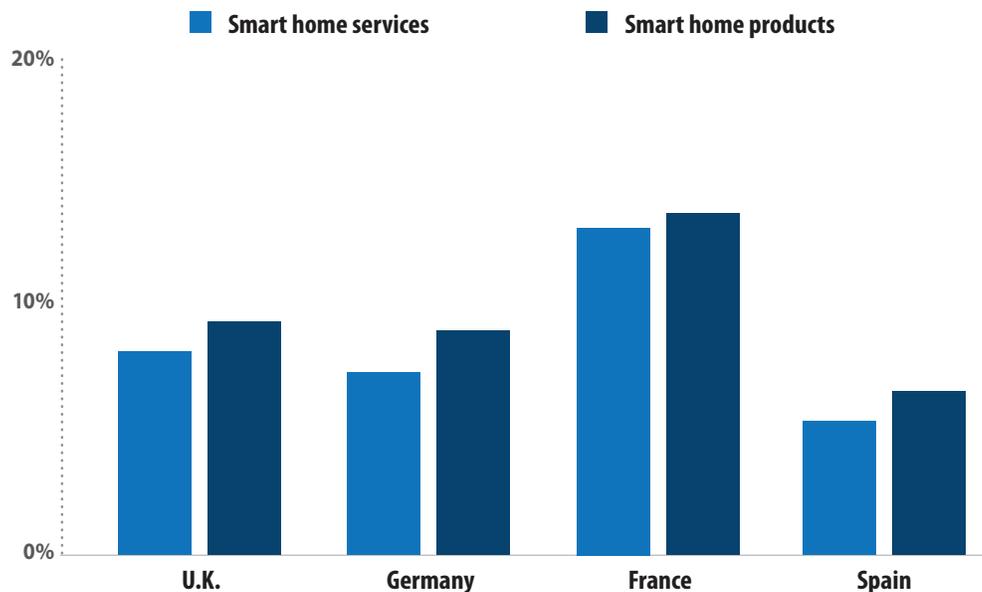
There are technology and interoperability issues that need to be resolved, but also value propositions and marketing efforts need to be clearer to help drive the adoption of smart home products.



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Households who are “Very Familiar” with Smart Home Services and Products

Broadband Households in Specified European Countries



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Adoption Drivers in Europe

Aside from North Americans' penchant for spending, the U.S. smart home market is fueled by a strong understanding of home security systems. Market leaders such as ADT, Vivint, Comcast, and AT&T have found that offering smart security systems has invigorated and extended a mature market.

While European demand for home security overall trails that of the U.S., the U.K. market most closely resembles that of the U.S. European security vendors Verisure – Securitas Direct and Tyco International have built substantial monitoring revenue bases throughout Europe.

Europeans also express similar motivations when considering security and smart home purchases. In every country that Parks Associates surveys, safety and security are the top priorities for consumers considering home security.

U.K. home security provider myFox suggests that self-installed, self-monitored systems will well serve this need by providing faster responses to break-ins by alerting one's social media network. CEO Jean-Marc Prunet claims that DIY systems will double the penetration of security systems in ten years.

For smart energy solutions, the EU regulatory framework could help drive wider adoption. European Union mandates for reduced energy consumption and greater use of renewables combined with relatively high energy prices in some European countries raise the importance of energy management relative to the North American market.

Munich's Allianz, the world's largest insurance company, seeks to leverage smart home technologies to help reduce claims from burglaries and damage from fire, smoke, and water. Realigning insurance premiums based on a household's use of home monitoring equipment will be a reality, given

the availability of data generated by the connected home. Subsidies and discounts for smart home systems offered by energy and insurance providers will accelerate adoption in all markets.

The smart home industry is, in many cases, focused on providing systems that can be expanded to provide added features and functionality while also protecting consumer privacy. While this is the right approach, until vendors first provide elegant solutions to actual consumer needs, there is little demand (pull) for smart home systems.

The steps to consumer adoption must follow an increasingly clear set of guidelines:

- Focus on a consumer need, not on a system
- Embrace industry standards
- Create an emotional attachment to a product
- Offer alternative business models

Focus on a consumer need, not on a system

Nest provides a simple example of a path from single use to system. The company's product line expanded from a single consumer use case—ceasing to heat or cool a home when it is not occupied, without the complexity of programming—to a system solution that now includes a camera and a smoke detector.

While Parks Associates agrees that offering a single "point" product solution is a dead end, offering a point solution that does a good job of addressing a consumer need is a critical step that many systems providers seem to have skipped. As Dixons Carphone's Dave Ward states, smart home vendors are focused on devices and not consumers.

Embrace industry standards

Often, Parks Associates is asked to identify the winner of the smart home interoperability challenge. The answer, very clearly, is that multiple standards will continue to coexist. Wi-Fi, Bluetooth, and LTE will continue to connect millions of devices, and new versions will become more powerful, reliable, and power efficient. Specialized radio frequencies, which effectively address specific device applications, will face increasing competition from improved versions of these common standards. New alliances, including Thread Group and Allseen, offer a number of paths to interoperability without mandating a winning radio standard.

The key point, as emphasized by retailer Euronics' Joey Tang, is that products simply must offer interoperability or they will not be offered in the company's pan-European retail outlets.

Create an emotional attachment to a product

Portugal's Eduardo Pinheiro is CEO of Muzzley, an app that provides smartphone control over all other smart devices. He reports that the most downloaded smart home app is Philips' Hue.

Why would a device designed to change the color of your lighting be a top smart home product?

Entertainment, convenience, and control are strong motivators, arguably stronger than the motivation to save money. British Gas found that their Hive temperature control product is used more frequently from the couch or the bed than from outside of the home. Financial savings is important when rationalizing the purchase of a product, but the use case of "not getting out of bed to change room temperature" proved far more engaging than saving a few pounds on the heating bill.

Success in smart home products is a result of aligning consumer needs with vendor needs.

In the case of Scottish Power and its control device partner climote of Ireland, the alignment of customer convenience and energy savings with the utility's need to conform to government conservation mandates while lowering churn makes for happy consumers and suppliers alike.

As U.K. energy controls company geo, makers of the Cosy remote boiler control device, states, convenience and simplicity inspire consumer confidence.

Offer alternative business models

Parks Associates' European surveys confirm that consumers prefer a one-time purchase model over a recurring monthly fee. Consumers who are convinced of the value of their smart home solutions, however, are willing to purchase add-ons, including monitoring, expanded storage, and additional sensors.

London-based nCube Home believes that the smart home should be self-contained, which means that it would not rely on the Internet for functionality. However, customers are offered a choice and can tap into cloud services as desired. D-Link's mydlink home is a solution based on hardware one can purchase at retail, and its cloud services allow consumers to expand their functionality by paying to unlock access to other vendors' cloud services.

Energy providers and insurance companies, such as those mentioned in previous sections, provide subsidized equipment and monitoring in exchange for loyalty.

As diverse players enter the smart home market, equally diverse business models will entice consumers by addressing their unique pain points.

Vendor/Consumer Alignment

| | Needs and Desires | Avoidance |
|----------|-----------------------------------|--|
| Consumer | Comfort Convenience Control | Safety Savings Management of Devices |
| Vendor | Compensation for Service | Customer Defection |

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Signs of Success

Simple solutions which simply work, simply sell.

eQ-3, a German controls manufacturer, has sold several hundred thousand wireless boiler control apps and modules since June of 2015. The company offers a plethora of connected devices as part of its proprietary ecosystem and the option to connect to other networks; however, its emphasis is on building products that are simple and affordable.

British Gas' Hive system is approaching 150,000 users. RWE is another example of a retail energy provider with a vision for smart home. RWE has developed a smart home platform that includes security- and energy-related products and has over 50,000 subscribers.

Management of Dixons Carphone, the combination of two of the U.K.'s largest retailers, states that smart home products and surrounding services will be a critical part of its future. The retailer stocks multiple smart home products in its stores despite stating that consumer awareness is quite low. European retailers John Lewis and Euronics have also committed to the smart home category, acknowledging that a great deal of awareness-building will precede strong sales.

Deutsche Telekom's smart home offering has been through several iterations. Having learned a number of lessons from its initial QIVICON market entry, the company is now aggressively embracing and integrating third-party solutions and standards into its solutions, stating that multiple business models must be offered to generate significant interest in smart home products.

European telcos including Orange, Swisscom, Telefonica, SFR, and others offer a number of smart home options, providing a growing number of solutions while raising consumer awareness.

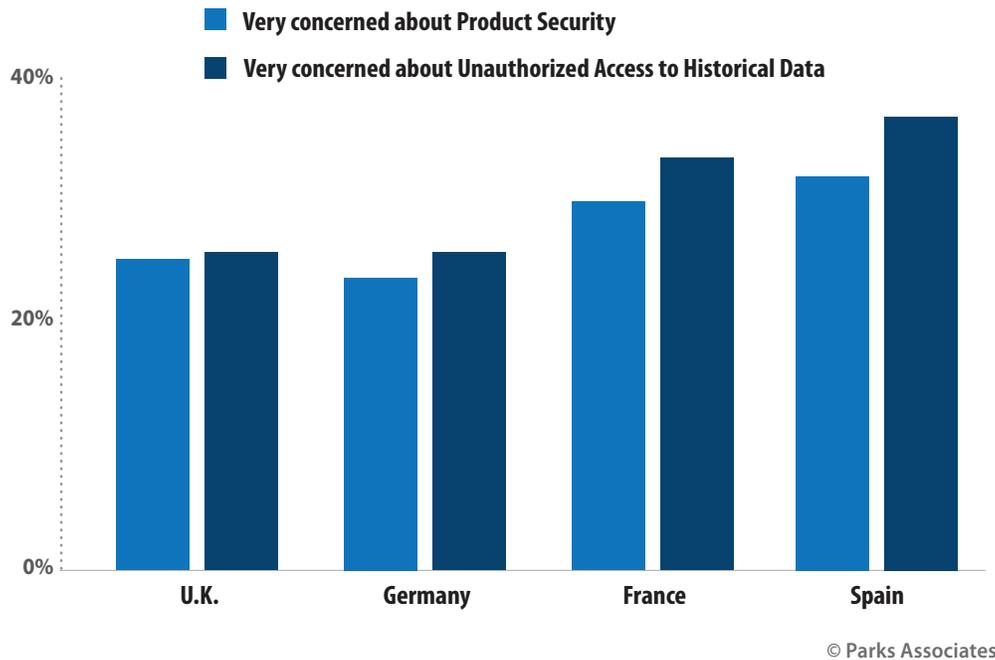
New smart home providers such as Croatia-based Zipato, Austria/Silicon Valley's ROC-Connect, and Finland's Cozify have entered the race, joining established European security offerings from players such as Verisure -- Securitas Direct. CES® 2016 will be crowded with new, low-cost smart home solutions. All will not survive, but each will help raise consumer awareness of the possibilities available today.

A Good Start but a Long Way to Go

Like the U.S., the European smart home market is well on its way to steady growth. Lower demand in Europe for professionally monitored home security means that energy providers, insurance companies, telcos, and retailers will have to share the load of driving awareness and interest and creating new business models that lower barriers to adoption. They will also have to counter consumer security concerns regarding the smart home. One-third to one-fourth of broadband households in Western Europe are "very concerned" about unauthorized access to smart home solutions.

Concerns about Smart Products

Broadband Households in Specified European Countries



These are the early days, when the formation of key partnerships and alliances may protect current market participants from future disruptions. As Wouter van der Beek, VP of UPnP Forum, states, now is the time for existing players to work together and show some strength before the giants come to the market.

Perhaps the best lesson can be taken from car maker Tesla. This company has created a product whose performance and beauty make it a highly coveted premium product that also lowers the petrol bill.

As we examine the wave of new smart home product offerings that will surely arrive in 2016, **we must ask three questions:**

Do these products solve a tangible consumer need?

In so doing, are they delighting those that use them?

Will they interoperate with other smart home products and services?

i Source: www.demographia.com

ii Source: The Demographic Shift From Single-Family to Multifamily Housing, The Federal Reserve of Kansas City, <http://www.kansascityfed/> Jordan Rappaport

iii Source: Parks Associates Tablet and Smartphone NUMBERS™, 2015

iv Source: Bernd Grohman, company CTO



Parks Associates is an internationally recognized market research and consulting company specializing in emerging consumer technology products and services.

The company's expertise includes the Internet of Things (IoT), digital media and platforms, entertainment and gaming, home networks, Internet and television services, digital health, mobile applications and services, support services, consumer apps, advanced advertising, consumer electronics, energy management, and home control systems and security.

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About The Author



Stuart Sikes, *President*, Parks Associates

As president of Parks Associates, Stuart and team assist clients around the world by predicting trends in consumer technologies and identifying evolving business models. The Parks Associates team serves the world's leading semiconductor, software, consumer electronics, telecom equipment, and entertainment companies, providing them with industry analysis, consumer research, and go-to-market recommendations. Stuart's recent industry presentations include the outlook for residential energy management, new business models for the connected home, and the evolution of new video services.

Stuart has served technology companies for over twenty years, designing technical service, software, and hardware solutions for companies ranging from global semiconductor manufacturers to one of the nation's largest airlines. In his positions with companies including AT&T, NCR, OpenConnect Systems, and Intelligraphics, Stuart's roles have included sales, product marketing, marketing communications, and executive management.

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New Consumer Research from Parks Associates

CONSUMER Demand for
Smart Home Devices,
CONNECTED ENTERTAINMENT
& **TECH SUPPORT**

Survey Topics

Digital Media and Connected Entertainment

Engaging Smart Home Consumers

Connected CE and Tech Support for Consumer IoT

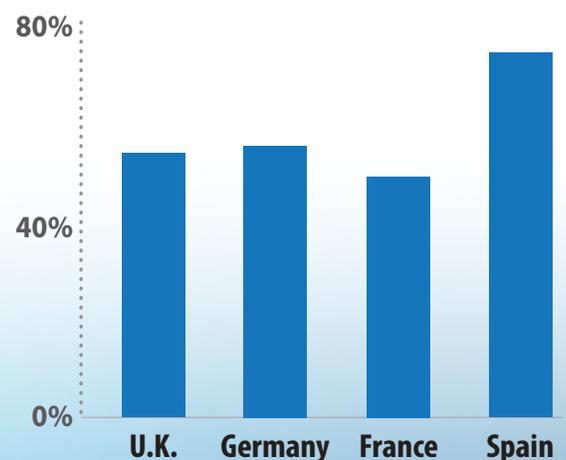
Surveyed Countries

Germany • The U.K. • Spain • France

Research Benefits

- **Consumer demands** and market factors driving adoption and usage
- **Cross-country comparisons** on all topics
- **Strategies to attract** and retain premium service subscribers and product consumers
- **Identification** of winning business models and monetization strategies

Broadband Households that Watch Internet Video



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