Key Competitive Elements for Smart Home Service Providers

A Parks Associates Whitepaper

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Key Competitive Elements for Smart Home Service Providers

The smart home market and the explosion of connected consumer products, which falls under the umbrella term "the Internet of Things," have created a dynamic environment filled with opportunities and risks for service providers.

Both conditions are standard for a market that is in an early-adopter stage. The speed with which it migrates to early majority depends on the quality of marketing, the functionality of products/services, and the strength of new business plans.

TODAY THE SECURITY INDUSTRY IS LEADING THE TRANSITION TO THE SMART HOME.

Currently 16% of U.S. households have at least one smart home device, such as smart sensors, lighting, and door locks.

Nearly two-thirds of these owners have their devices attached to a centralized controller provided by the company providing professional security.

Among U.S. households without a security system, 20%-40% express a willingness to adopt a home security system with smart home features.

Security providers such as ADT have provided the marketplace with its early punch, and they are in a strong position to take advantage of the early growth potential in the smart home.

Strong consumer interest has attracted many new entrants. Broadband service providers, including Comcast, AT&T, Time Warner Cable, Cox, Comporium, Suddenlink, and Rogers Communications, are all actively selling professionally monitored security systems.

Many broadband service providers can embed smart home systems into their existing gateways, eliminating part of the upfront cost, and their use of common protocols such as ZigBee and Z-Wave enable inexpensive, yet full-featured products.

With these advantages in place, and lured by the incremental ARPU opportunity from residential security, along with an emerging smart home and aging-in-place market, ***these new entrants are moving into the smart home market, and they are bringing buzz, competition, and excitement to this industry.***

Factors Driving Service Providers into the Smart Home Market

PAY-TV PROVIDERS ENCOUNTER MULTIPLE THREATS

- **Pay-TV markets in the U.S. are mature**, with 87% of TV broadband households having subscription entertainment.
- **Over-the-top (OTT) threats abound from smart TVs and new types of connected entertainment devices**. These include streaming video players, streaming music systems, and connected gaming consoles and Blu-ray players.
- **Content licensing is increasingly expensive** and dips into margin; in some cases, it stymies availability of desired content.

BROADBAND SERVICE PROVIDERS EXPERIENCE SLOW MARKET GROWTH

- **Broadband adoption is reaching saturation levels**, and subscriber growth is slowing.
- **Consumers are abandoning landline phone and even fee-based VoIP** in favor of mobile phones. This trend is most pronounced in young households, but its occurrence is increasing across all age groups and even income tiers.
- **Pressure on broadband prices**, a lucrative side of the providers' revenue, will increase.

BENEFITS IN THE SMART HOME

- **Increased number of services** taken by new customers, creating higher ARPU
- **Increased target market volume** by offering higher-value propositions in green fields like security, controls, and health (wellness, fitness, and medical)
- **Increased service stickiness** over time

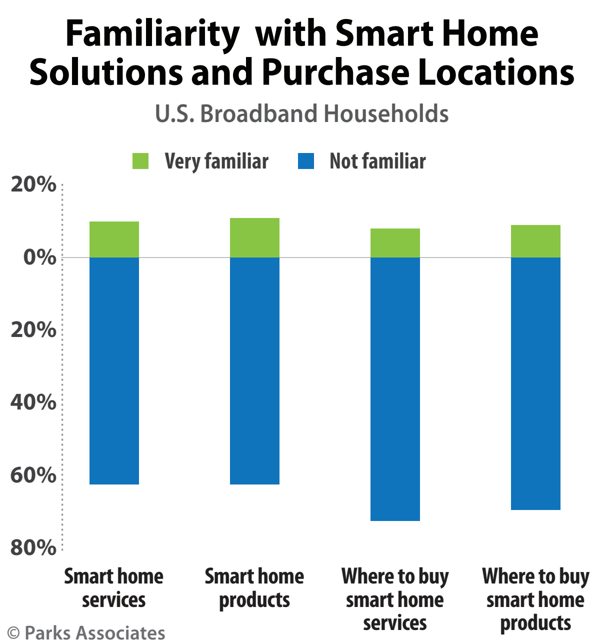
Building Consumer Awareness of the Smart Home

THE MARKETING CLOUT THAT THESE GIANTS BRING WILL BE IMPORTANT FOR ALL PLAYERS.

In a recent Parks Associates survey of U.S. broadband households

60% were not familiar with smart products and services, and even more did not know where to buy them.

The strong brands, large customer bases and marketing budgets, and extensive direct sales experience of providers like AT&T and Comcast can help increase awareness and educate the mass market about the capabilities and value propositions of smart home capabilities.



That brings into focus the next challenge for smart home service providers, which involves how to communicate the value proposition. The smart home has multiple use cases of varying value and resonance to different consumers. It is for this reason that the security industry is an early leader in this market. It is a mature market with a clear, well-understood value proposition that can also serve as an anchor for additional smart home offerings. The same sensors that are used to detect break-ins can be managed remotely to turn off lights and control the thermostat.

Security dealers have been early leaders in the smart home due to the consultative, one-to-one selling approach of their sales channel.

This method addresses both the lack of awareness and the importance of selling appropriate value propositions to each customer. Sales channels that use a consultative selling approach have been the most successful in the smart home. At retail, sales of smart home systems have not been successful without a dedicated, knowledgeable sales staff for these products.

Service providers have the customer relationship to build a business model for this type of consultative outreach.

The service provider that creates two-way avenues that provide a concerted educational outreach to subscribers and opens options for households to come back with questions and issues will have an important sales advantage when trying to bring new customers onboard.

Market Forces toward Open Systems

CONSUMERS, DESPITE LOW AWARENESS OF SMART HOME PRODUCTS, DO HAVE STRONG OPINIONS ON HOW THESE PRODUCTS SHOULD WORK TOGETHER.

They want and expect products to be interoperable and in fact prefer the smart home as a system of interoperable products over stand-alone devices.

This requirement has not been a major barrier yet. To acquire a broad group of products that work together, consumers' only choice is to select a service provider or home control platform.

Today, smart home service providers control almost every aspect of their offering.

Consumers choose their service provider, and the provider chooses everything else—the compatible products, the algorithms that control those products, the look of the user interface, and the installation process. Most smart home systems are closed systems in order to control the user experience and maximize profitability.

However, as the market expands, this approach will become untenable. Consumers are already chafing under their lack of control, especially as they bring new products into the home.

For example, many smart home devices are popular as gifts.

Among the smart home devices purchased in the first three quarters of 2014, 22% of smart security cameras and 27% of smart plugs/adapters were given as gifts.

If the recipients have a system in place, they will expect these new devices to work with what they already have, regardless of its source.

Service providers understand these market forces and the effect of increasing competition—open systems will conquer closed systems in the long term.

Today, control over the ecosystem is one of the major competitive elements in the market, but this will shift to an open-systems approach. Over time, as interoperability technologies coalesce, the market will shift from vendor-controlled systems to consumer-controlled systems. Consumers will get what they want—how they want it. Consumers will choose what products to purchase, when they are purchased, how they are purchased, what apps or subsystem controllers control those products, and what smart home platform, if any, they want.

Value-added Services and Product Breadth and Depth

SERVICE PROVIDERS THAT CAN DEPLOY OPEN SOLUTIONS AND GIVE CONSUMERS MORE CONTROL OVER THEIR ECOSYSTEM WILL HAVE A MAJOR COMPETITIVE ADVANTAGE IN THIS MARKET.

They will be in a better position to monetize this shift toward open systems, which will require innovative business models and create opportunities for new and unique partnerships, including software, hardware, and other service players.

This step is a key challenge. Smart devices are entering the market in increasing numbers, expanding both the quantity of different devices and the functionality within each category. Product categories are expanding beyond networked cameras, lighting, thermostats, and door locks to include water and gas shut-off valves, smoke and carbon monoxide detectors, smart TVs, utility meters, and health monitoring devices.

Integrating the ever-expanding number and types of smart products is a significant challenge for smart home platforms, and service providers must stay ahead of the game to support the devices that customers will want to add in the future. To the end, when selecting or developing the platforms for their smart home offerings, service providers must select solutions that are open to integration with new products, open to apps, and include advanced data analytics capabilities.

At the same time, as products integrate more sensors and the accompanying value-added services, the depth of products, meaning the scope, complexity, and service component of products, is also increasing. For example, a door lock may add a networked camera, two-way voice, and an accelerometer in order to sense when someone is approaching the door, send an image, and also sense forced entry.

As manufacturers add more of these value-added services to their devices, service providers will have to examine steps to integrate those services into their existing platforms while keeping the user experience simple and easy to use.

While these services could add new value, additional "stickiness," and even new revenue potential, they also introduce competition from other verticals, as manufacturers will work aggressively to fight commoditization through industrial design, enhanced product features, and whole-product solutions.

There is the opportunity for partnership as well.

For some products, smart home service providers can become a new channel, providing incremental product sales, and if the sales provide adequate revenues, manufacturers will likely accept the cost for integrating with smart home platform vendors.

But either as partner or competitor, service providers must ensure that new services can be deployed without generating false alarms or negatively impacting service functionality while maintaining a simple and accessible user experience.

Data Analytics—Creating New Business Models

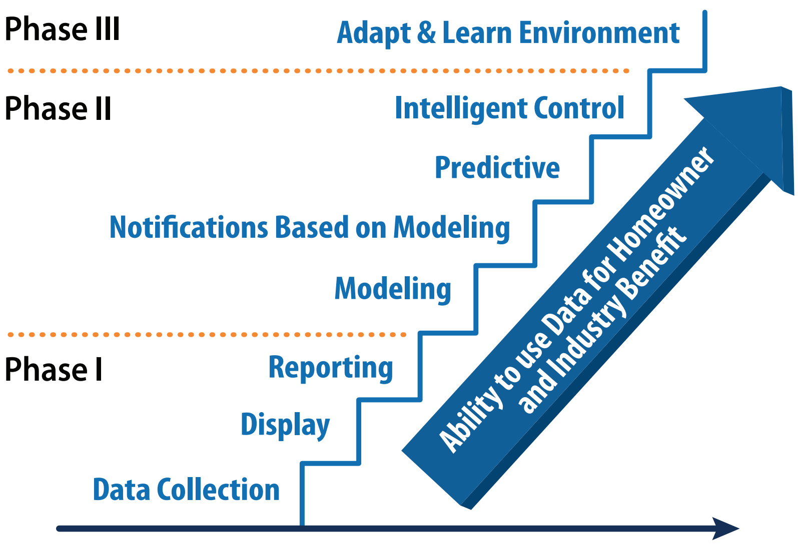
THE USE OF CLOUD-BASED DATA ANALYTICS IS AN IMPORTANT DIFFERENTIATOR.

Data analytics can enable rapid service deployment and integration, which are key competitive advantages for service providers.

The direction of evolutionary progress bends towards devices that act on an owner's behalf, according to lifestyle and preferences and without needing owner intervention.

Given that every player within the smart home ecosystem will focus on providing value-added features and intelligence that relies on data and cloud processing capabilities, smart home platforms will transition from simply providing a broad group of interoperable products to providing a group of highly differentiated interoperable products.

Evolutionary Phases for Data Analytics in Smart Devices



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As these smart products become more intelligent, they will be able to leverage a distributed-intelligence architecture that allows each smart device to gather information from other smart products in the home using a peer-to-peer communication scheme, either locally using the home network, or via APIs in the cloud.

ANALYTICS IN ACTION

For example, it appears that Google is pursuing a distributed-intelligence architecture, which would allow multiple devices to coordinate without a central controller. The Nest thermostat and smoke detector integrate with Dropcam, and the Nest API integrates with a broad array of third-party connected products, including Chamberlain garage door openers and Mercedes connected cars.

New Business Models

DATA ANALYTICS WILL ALSO BE KEY IN DRIVING NEW BUSINESS MODELS FOR SERVICE PROVIDERS.

Service providers have multiple strengths when competing in the smart home ecosystem, but a key weakness is a reliance on a revenue model based on recurring monthly fees.

There are some segments of consumers who prefer recurring fees over higher up-front fees, but to the mass market, ongoing fees are generally not appealing. Parks Associates research has found over and over again that consumers are reluctant to take on a new service or solution if it means taking on new monthly fees.

SWOT for Smart Home Service Providers

"Protect & Leverage"	**STRENGTH** Single user interface Coordination between devices Common protocols Customer relationships	**WEAKNESS** Proactive replacement System cost, recurring fees Product aesthetics, capabilities	"Address & Improve"
"Strategically Seize"	**OPPORTUNITY** New business models Integrated hub, bundling OEMs integrated into platform	**THREAT** Differentiated products Open APIs, app developers Open operating systems Peer-to-peer communications	"Minimize & Eliminate"

The current business models that rely on recurring consumer fees will eventually give way to alternative business models.

Many different business model opportunities are being developed that leverage the data and connection to a specific product or end user. For example, service providers can shift to business models that are indirectly consumer funded. Advertising, lead generation, participation in energy markets, and in-app product sales allow service providers to collect recurring revenue, but not in the form of a monthly fee paid by the consumer.

Changes in this direction are already underway, and the providers that can successfully navigate the need for innovation service combined with a simple consumer solution will find success in the smart home—and unlock the revenue potential in this new market.

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

Founded in 1986, Parks Associates creates research capital for companies ranging from Fortune 500 to small start-ups through market reports, primary studies, consumer research, custom research, workshops, executive conferences, and annual service subscriptions.

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

Tom Kerber, *Director, Research, Home Controls & Energy,* **Parks Associates**

Tom leads Parks Associates research in the areas of home controls, energy management, and home networks. Tom authors numerous reports on energy management and home controls covering the evolution of technology, partnership opportunities, and new business models. Tom's work at Parks Associates includes managing consumer surveys that track trends and market opportunities and enable insightful evidence-based forecasting for energy, security, and home controls.

Tom has done extensive consulting with electric utilities operating in a variety of regulator structures and numerous firms within the smart home ecosystem. Recent utility engagements include defining the home area network roadmap for a California IOU, updating the consumer engagement strategy for a traditional vertically integrated IOU, providing consumer and industry analysis to refine EE and DR programs for an IOU in a restructured market, and providing insights on the evolution of the connected home for a large Midwest IOU. Tom has also led projects for many Fortune 500 companies, helping clients refine smart home strategies, develop scenarios of the future of the smart home market, enhance product roadmaps, and refine specific product features.

Prior to working at Parks Associates, Tom worked as director of engineering and director of product management in multiple industries. Tom began his career in the U.S. Navy nuclear power program on submarines. He holds a Bachelor of Science degree from the U.S. Naval Academy in systems engineering and a master's in software engineering from the University of Texas.

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