

NEXT/MARKET INSIGHTS

A young girl with blonde hair, wearing a white dress with a colorful floral pattern, is walking across a green lawn. The scene is set during sunset, with the sun low in the sky, creating a warm, golden glow and long shadows. The background shows a large, light-colored house with a gabled roof and some trees. The overall atmosphere is peaceful and domestic.

**THE MASS MARKET SMART
HOME:
EXAMINING USE CASES TO
DRIVE SMART HOME ADOPTION**

EXECUTIVE SUMMARY

One of the most exciting and fastest-changing markets in all of technology is the smart home. Recent advances in mobile, software, cloud computing and sensor technologies have ignited a reinvention of a market that for the first forty years of its existence was comprised of early adopters and hobbyists.

These advancements have resulted in an explosion in innovation that is bringing a host of creative and potentially disruptive new products and applications to market. The opportunity for smart home specific hardware and managed services itself represents a significant opportunity:

NextMarket Insights forecasts the combined do-it-yourself (DIY) smart device home and managed smart home services market to be nearly \$17.5 billion by 2019.

However, in spite of undeniable excitement about the smart home, its promise remains largely unfulfilled. This is because despite progress, the connected home industry is still in search of compelling use cases to drive adoption. Simply selling a smart home system that connects devices will capture the imagination of early adopters, but for the smart home to become as pervasive as other seminal product categories like the smart phone, consumers must see tremendous inherent value delivered by having a more connected lifestyle.

This is why the ability of the industry to show the smart home fulfills a set of needs across a variety of consumer segments is the most important collective challenge facing it today. Meeting this challenge will allow the industry to move beyond its Jetsons image, a caricature perpetuated by the industry's own emphasis on enabling futuristic scenarios and control while not adequately describing how the technology can make lives

better through fulfilling core needs and solving difficult problems. In other words, the transition of the smart home from an early adopter to mass-market industry depends on the creation of widely popular applications of the technology, rather than simply focusing on the technology itself.

And so that's the focus of this report. To look for and analyze compelling use cases and their related markets that drive home the value of what a smart home can deliver. To do so, we use a framework that does five things: identifies an existing market and related use case that is widely applicable; discusses why there's a need for market reinvention; examines the ways in which smart home technology can be applied to reinvent the market; identifies specific challenges for adoption of the smart home within this market; and finally, provides an outlook for smart home technology within the market.

The three use cases examined in this report are: 1) aging, retirement/eldercare and the smart home 2) pet care and the smart home 3) children and teenagers and the smart home.

The reason we chose these three areas to focus on is simple. They each have the following characteristics:

- Wide applicability – Each use case impacts the majority of people in the U.S. and also across the globe in some way during their lifetimes. Everyone gets old and has loved ones that grow old. Most people have a pet at some point in their lives. Everyone is young and most of us have children at some point in our lives.
- High emotional value – All of these areas of our lives, if applicable, are ones that touch us deeply. People are motivated to spend with their hearts more than their brains.

- Antiquated approaches – The current market approach and products/ services in these areas are antiquated and ripe for disruption. Innovation in the market requires market opportunity, and each of these offer significant rewards to offerings that can resonate with consumers.

TABLE OF CONTENTS

EXECUTIVE SUMMARY

SECTION 1: Eldercare and the Smart Home

The Opportunity: Why the Smart Home Makes Sense for an Aging Population

The Applications: Where Smart Home and Long-Term Care Intersect

The Challenges for Smart Home Technology in Eldercare

The Outlook for Smart Home and Eldercare

SECTION 2: Pets and the Smart Home

The Opportunity: Why Pets and Smart Home Make Sense

The Applications: Where Smart Home and Pets Intersect

The Challenges of Combining Smart Homes and Pet Care

The Outlook for the Smart Home and Pet Care

SECTION 3: Children and the Smart Home

The Opportunity: Why Kids and Smart Home Make Sense

The Applications: Where Smart Home and Kids Connect

The Challenges of Smart Home and Kids

The Outlook for Smart Home and Kids

ABOUT NEXTMARKET INSIGHTS

NextMarket Insights is a research firm focused on emerging consumer technologies. Our focus areas include smart home, Internet of Things, digital media, connected TVs and the broader digital media landscape.

NextMarket Insights was founded by Michael Wolf, a long-time connected home analyst. Wolf was the founding Vice President of Research for Gigaom Research and has held management and principal analyst positions at In-Stat and ABI Research.

Wolf hosts the most popular smart home podcast on iTunes, which you can find at www.thesmarthomeshow.com. If you would like to stay up to date on the smart home throughout the year, you can do so by reading Wolf's popular weekly smart home newsletter at: www.smarthomeweekly.net or subscribing to it by email [here](#).

For more information about NextMarket Insights, our analysts and our research, please visit NextMarket's website at www.nextmarket.co.

If you have questions about this report or would like to inquire about other research or advisory services, you can also contact NextMarket Insights by email at info@nextmarket.co.

This report is part of the Smart Home Insider service from NextMarket. To find out about the Smart Home Insider service and subscription options, [email us](#) or call 317-455-5529.

ABOUT VIVINT

Vivint is a leading provider of smart home technology. The company delivers services through a cloud-based platform that integrates a wide range of wireless features and components to provide simple, affordable home security, energy management and home automation. Dedicated to redefining the home experience with intelligent products and services, Vivint serves more than a million customers throughout the U.S. and Canada. For more information, visit www.vivint.com.



ELDERCARE AND THE SMART HOME

Caring for our elderly and infirm is one of the largest financial, emotional and societal burdens we have today. At some point in most of our lives, we have to consider how to care for older loved ones or, as we ourselves age, how to live productive and enjoyable lives while maintaining independence well into our retirement as we experience the impacts of aging.

In a macroeconomic sense, this is a big issue. Every modern country globally is feeling the stress of the aging population on their economies. Rising costs, overwhelmed eldercare infrastructure and increasingly dispersed families are all presenting challenges to our society at large.

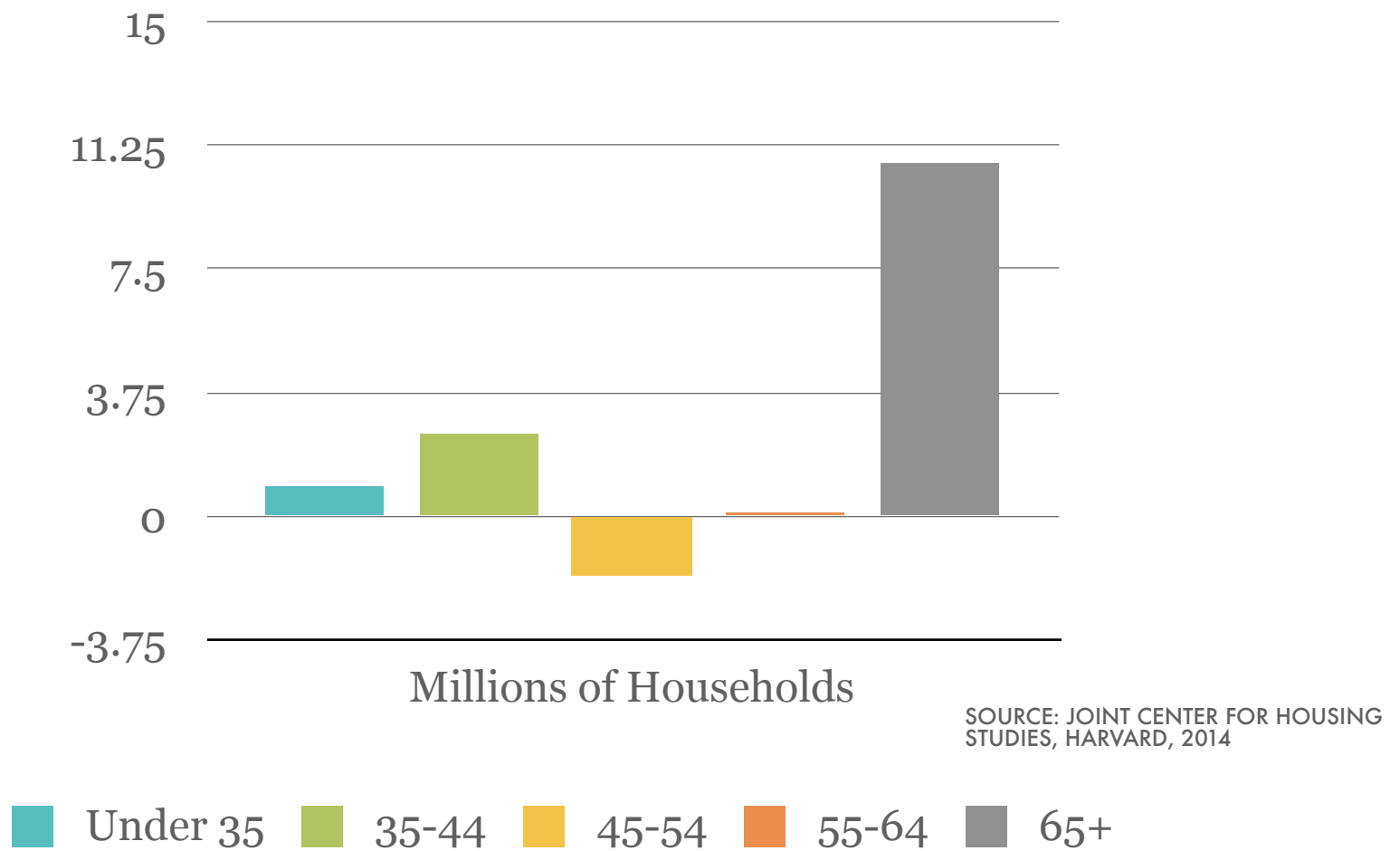
Smart home technology can address many of these challenges – both individual and societal – head on. In order to understand how, let's first examine the trends resulting from an aging population and how this creates a significant opportunity for smart home technology.

The Opportunity: Why the Smart Home Makes Sense for an Aging Population

People are living longer. A combination of new medicine, a better understanding of nutrition/exercise and its impact on long-term health, as well as a rising economic tide have contributed to longer life spans across all modern economies.

Because we're living longer, an increasing percentage of the population are entering their golden years. The Baby Boomers, the generation born between 1946 and 1964 that accounted for over 76 million births, are retiring. Worldwide, the percentage of the population that is over 65 years of age will go from 7 percent in 2013 to over 20 percent by 2050.

FIGURE: GROWTH IN HOUSEHOLD BY AGE GROUP BY 2025



The oldest baby boomers today are just under 70 years old, and over the next two decades the surge in the growth of this segment will result in a need for new approaches towards eldercare.

This growth of the elderly as a percentage of our population is resulting in some other interesting trends that will drive both the need and opportunity for new approaches to aging-in-place in coming years.

Large Number of Retirees Relocating

With retirement comes increased freedom. Retirees, often finding themselves no longer forced to be near a certain work location or serve as the primary caregiver, have more choice than ever before when it comes to choosing where to live. In fact, according to a study by Merrill Lynch, 37 percent of retirees have already moved in retirement and another 27 percent are anticipating moving in retirement.

Increased Expenditures on Home Improvement

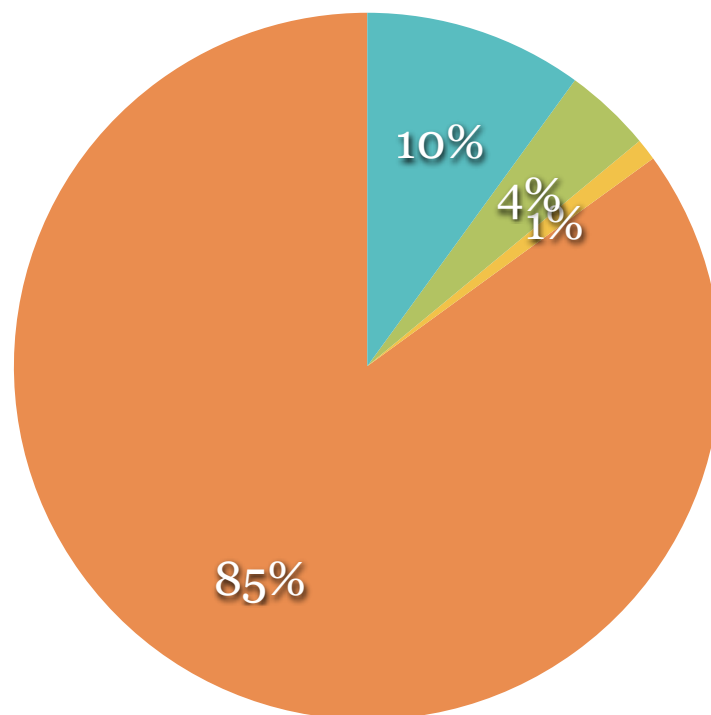
Increased freedom in retirement also means making changes to one's home. Whether to accommodate a newly empty nest, a desired lifestyle change as a result of the newfound freedom found with retirement or to support the increased health needs of an aging resident(s), many retirees expect to invest in changes to their home.

Increased Use of In-Home Care As Part of Long-Term Care Planning

As the population ages, more and more senior citizens and their families are exploring ways to lengthen the time they can enjoy a productive life well into retirement. Part of this is out of necessity, as the growth in the retiree population and the eventual stress on the long-term care infrastructure results in higher costs for long-term care facilities over time. But another driving factor is a strong desire by retirees for the independence that comes with living in their own home as compared to a long-term care facility.

According to National Center for Health Statistics, in 2012 there were approximately 8 million people in the U.S. utilizing the services of long-term care service providers. Of that, over half – 4.7 million – were utilizing home health care agencies. According to a Merrill Lynch survey of those facing retirement, when asked the desired preference for long-term care, over 8 in 10 (85 percent) responded the number one preferred location was their own home.

FIGURE: PREFERENCE FOR LONG-TERM CARE



- Assisted Living Facility
- Family Member Home
- Nursing Home
- Own Home

SOURCE: MERRILL LYNCH

With all of the long-term trends pointing toward more and more retirees staying in their home for much longer than previous generations, the challenge will be to enable this segment of the population and their loved ones to do so comfortably, affordably and with dignity.

Smart home technology can certainly play a big role in helping to meet this challenge. Let's look at some specific use cases and associated technology.

The Applications: Where Smart Home and Long-Term Care Intersect

When examining the application of smart home technology for the eldercare opportunity, there are few key application areas:

Location and Monitoring

Seniors living at home may eventually need some level of remote monitoring. The use of adaptive learning algorithms to understand living patterns combined with motion and location sensors and beacons will provide powerful new options in the Personal Emergency Response (PERS) market over the next few years.

Living Assistance Technologies

While a futuristic scenario where robots help us in our daily lives may seem far-fetched, we're beginning to see living assistance technology and small "robots" in all aspects of our lives, and targeted service robots for seniors can be an important aspect of a senior-optimized smart home.

Health Diagnostics and Management

Telehealth is a critical part of an assisted-living optimized smart home. By connecting a senior citizen's health monitoring to the smart home and to their medical practitioner, there is the ability for regular and real-time monitoring of health and wellness signals, particularly as newer and democratized health monitoring technologies using widely adopted consumer platforms like mobile phones become possible.

Connection and Communication

One of the key considerations for senior citizens and their loved ones is the ability to communicate with each other. While newer communication technologies such as video communication (e.g., Skype) are widely available, accommodating a senior citizen's specific limitations with a communication system is an important opportunity.

Cost Management

With senior citizens living longer, the need to manage their retirement nest egg becomes increasingly important. Technologies to monitor and reduce resource consumption will be important parts of a retiree's financial planning strategies in coming years.

The Challenges for Smart Home Technology in Eldercare

While smart home technologies can likely help create a longer, more enjoyable life over the span of retirement, there are unique challenges in the application of technology in the care and well being of senior citizens.

First and foremost, a technology must be easy to understand. While senior citizens are more technologically literate than ever, the pace of change can be confusing. Compounding the problem is that technology interfaces are usually optimized for digital natives rather than senior citizens

Secondly, technology must respect the privacy and dignity of aging users. In addition to senior citizens' desire that technologies have robust privacy measures in place, integration of these technologies with medical care providers puts strong legal oversight requirements in place for targeted smart home eldercare services.

Lastly, new technologies must be convenient and not add any additional requirements on the user. Technologies often have a learning curve for users, but in eldercare scenarios they need to be fully optimized for senior citizens.

The Outlook for Smart Home and Eldercare

Eldercare and aging-in-place are markets in need of alternative approaches that can be enabled through the use of new technologies and business models powered by the smart home. While applying smart home technologies to create longer and more enjoyable lives for seniors will be a significant opportunity in coming years, there are a few key factors that will determine the pace of adoption of smart home technologies in eldercare and aging-in-place.

Incumbent Providers Must Embrace Eldercare

The business models surrounding new smart home-centric approaches to eldercare will be critical gating factors in how fast they are adopted. Incumbents hold tremendous sway over markets, so if existing providers see smart home and IoT as an important way to reinvent themselves, the speed of adoption of new approaches will go much quicker.

New Approaches Will Be Critical

Existing managed care providers will evolve, but there's also a significant opportunity for new approaches in the market. Broadband service providers, security companies and other technology companies have ample opportunity to create service models. Typical live-in care costs \$3,000 to \$6,000 per month, which is a big financial burden and an incentive for existing managed care providers to embrace the status quo, so newer approaches from newcomers will create more competition in the market.

Approaches Needed for Each Life Phase

Like life itself, life in retirement has many phases. From the early active years of retirement to later years when assistance is needed for functional living, there is a continuum of approaches that those catering to senior citizens could take. A focus on wellness and activity monitoring should be important in the early healthy years of retirement, while product offerings that help loved ones and care providers monitor their loved ones will be important in the later years.

Overall we believe that aging, retirement and eldercare will present one of the biggest opportunities for innovators in the smart home and IoT space. A clear and growing need for new technologies and approaches to relieve an overburdened eldercare system, combined with clear financial incentives for seniors and their loved ones to embrace these new technologies, will translate to tens of billions in new product and service opportunities in the coming decades.



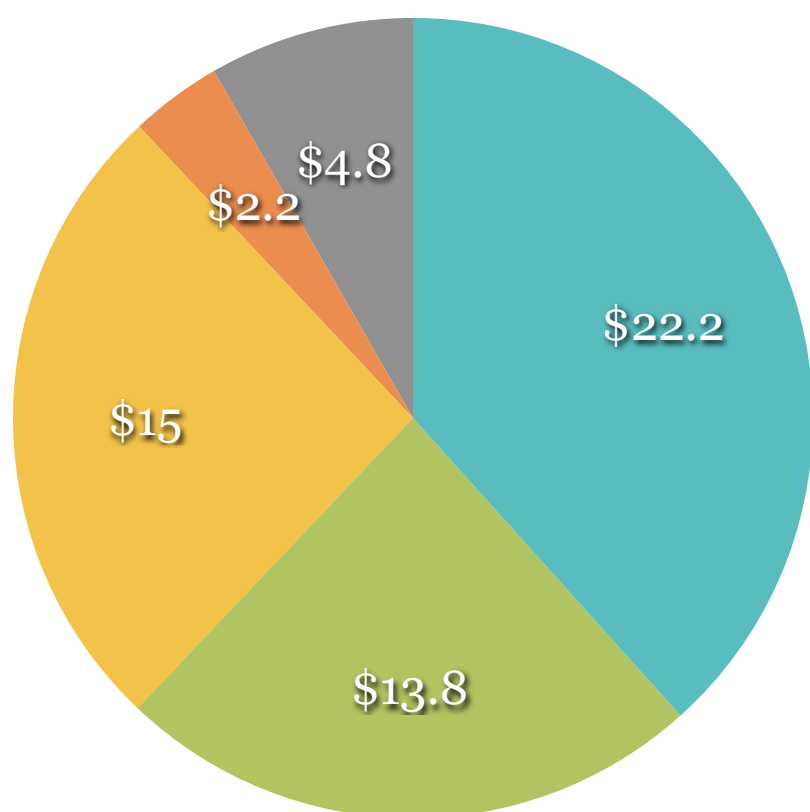
PETS AND THE SMART HOME

Pets are like family. Whether it's for companionship, protection, living assistance or recreation, pets are so valued because they can fulfill such a variety of needs for their owners.

While we're only at the beginning of exploring the connection between smart home technology and pet ownership, a brief survey of the market shows there are already companies looking for ways to use smart technology to help us make our pets healthier and happier, reduce the costs of owning a pet and make managing and monitoring pets easier and more convenient.

The Opportunity: Why Pets and Smart Homes Make Sense

FIGURE: 2014 PET EXPENDITURES, US (\$BILLIONS)



SOURCE: AMERICAN PET PRODUCTS ASSOCIATION

- Food
- Supplies/OTC Medicine
- Vet Care
- Live Animal Purchases
- Pet Services: Grooming/Boarding

Not only are pets members of the family, but they're also big business. Using smart technology to better care for their safety, health and overall care represents a significant new opportunity. How big? According to the American Pet Products Association, the cumulative amount of expenditures on pets every year in the US is nearly \$60 billion. The biggest overall expense is food, followed by vet care, pet supplies and pet services such as grooming and boarding.

Why are pet owners willing to invest so much in their pets? In short, because pets fulfill so many needs for people. When asked why they own a pet in a survey conducted by Gallup in 2007, 42 percent said the main reason for owning a pet is companionship, while another 24 percent said they "like or love animals." Another 10 percent indicated they have a pet for security purposes, while 5 percent pointed to recreational purposes like hunting.

The combination of a large incumbent pet care industry and the passion people have for their pets means a large market opportunity for those companies connecting pets and smart home technology.

The Applications: Where Smart Home and Pets Intersect

Lost and Wandering Pets

When examining the applications within pet care where smart home and IoT technology make sense, perhaps the most obvious one is helping to prevent and find lost pets. That's because stray pets are a big problem. Approximately 5 million pets are lost every year, and while many are eventually returned to their owners, 3.9 million pets enter pet shelters every year, a significant number of which are strays. Beyond strays, a significant number of pets – some estimates have it at 6 million – wander into the street and are killed every year.

The main use of technology today in resolving lost pet situations is microchipping. While embeddable microchips have a decent success rate of reconnecting strays with their owners – one study found cat return rates are 20 times higher with a microchip and 2.5 times higher for dogs – even these successful resolutions involve a pet ending up in a shelter, a highly stressful situation for both pet and owner.

Combine this with studies that have linked microchips to the growth of cancerous tumors in pets and there's ample reason to look for alternatives. The good news is much of this is avoidable. By using smart technologies to enable real-time tracking and monitoring, pet owners have a much higher likelihood of finding their pets and putting them back into safe situations quickly. Companies like Whistle are offering GPS-based tracking devices, which can allow people to instantly know the location of their pets and also get notifications if the pet wanders. Technology like this can be integrated with smart home systems to set up geofence boundaries to enable real-time alerts for pet owners, allowing them to quickly look for their pet.

Pet Feeding and Wellness

While many people like to show their kindness to their pets through food and treats, the end result is often an overweight pet. Pet obesity is at epidemic proportions, and a study by the Association for Pet Obesity Prevention found that more than half of dogs (52 percent) and nearly 6 in 10 cats (58 percent) are overweight or obese.

While a chubby pet might be cute, the long-term health impact of being overweight can include diabetes, high blood pressure, heart and respiratory disease and increased chance for arthritis. In sum, the impact of being overweight or obese in terms of lifespan could result in cutting up to two and a half years off a pet's life.

There are a number of ways in which smart home and IoT technology can be used to better manage and monitor a pet's food intake. One way is to connect the smart home to pet feeders, which allow close monitoring of food consumption as well as the ability to automate portion control.

One company applying smart home technology to feeding is PetNet. PetNet has created a Wi-Fi based smart feeder that utilizes volume and movement sensors to understand a pet's food intake, moderate portion control, as well as connect to food replenishment services to order pet food when needed. They are also working to integrate with other smart home and connected pet management platforms.

Just as food and feeding management is an important part of an overall health strategy for pets, the ability to track their activity and monitor their overall wellness is

important. Just like their owners, pets need to stay active to live longer lives and stay healthy. Studies have also shown a strong correlation in health between those who exercise their pets and their own health, giving another incentive for pet owners to track their pets' activity.

Interactive Video Monitoring

Another interesting application of smart home technology is the ability to monitor your pet using video technology. One of the most popular usages for connected cameras such as those from Nestcam or Vivint is to watch a pet. One company called PetCube has created a device of the same name that allows the pet owner to not only check in on their pets, but also to interact with them through a built-in laser. The owner can play with their pets remotely by moving the laser using a smartphone app.

The Challenges of Combining Smart Homes and Pet Care

Unlike using technology in human-centered applications, using smart home technology with pet applications has some unique challenges.

Pricing

While pets are considered by most to be family members, there are many who simply are not ready to spend a significant amount of money on new technology for pet care. This means that entry points for new smart devices and related services for pet management must be affordable and also present clear value relative to traditional pet management products.

Durability

Anyone with a dog or cat that likes to chew on things or jump in water knows that pets can be extremely tough on new products. Making things even more challenging is the sheer size and variety of pets, which means products need to also consider a range of sizes and temperaments.

Learning

In many ways, pets are easier to train than humans, who often bring biases, philosophies and decades of learned behavior that can prove difficult to overcome when adopting to new technology. On the other hand, pets won't understand instructions to use a new gadget or service, so these new approaches and technologies must be designed with a strong understanding of pets and pet owners' needs.

Outlook for the Smart Home and Pet Care

The use of smart home and IoT technology in pet care is likely to be one of the strongest demand drivers for the smart home in coming years. Pet owners have proven themselves both passionate and willing to invest in their pets' safety and comfort, a positive sign that pet-focused applications could be a significant entry point for many into the smart home. Advances in applications such as location-aware pet trackers, connected feeders and health and wellness trackers are just the beginning as smart technology becomes more pervasive in many pet care products.

How fast will this transition happen? This depends ultimately on a few factors:

Pet Retailers and Smart Homes

Today pet retailers like Petco and Pet Smart have shown extremely limited interest in creating a market for advanced technologies for pet care and pet management. Whether this changes is yet to be seen, but if large pet retailers begin to bring new technologies into their stores and help demonstrate the value to consumers through well-designed, in-store displays, this could help accelerate adoption of these technologies.

Veterinarians and Smart Homes

One of the most important influencers in pet care decisions is their veterinarian. Many of us make decisions on how to care for our pet based on the advice of our veterinarians, so it makes sense that they would be an important voice in the decision making process around smart home technology and pet care. Whether it's

the incorporation of smart pet food monitoring technology into prescribed pet care regimens or the placement of location-tracking technologies on the shelves at the local veterinarian, the vet will play an important role in the progress of this potentially big market.

Market Creation Built on Easy, Affordable, Valuable

This could be said of any new product segment, but for pet care it's crucial: new products must be easy to use, extremely affordable and provide value. The biggest reason this is so is most consumers don't see a need today to replace the status quo – that most products for pets work just fine. In short, the smart home and pet care industries need to create a market for this technology by ensuring new products are easier, more affordable and provide higher value than the products they are replacing.

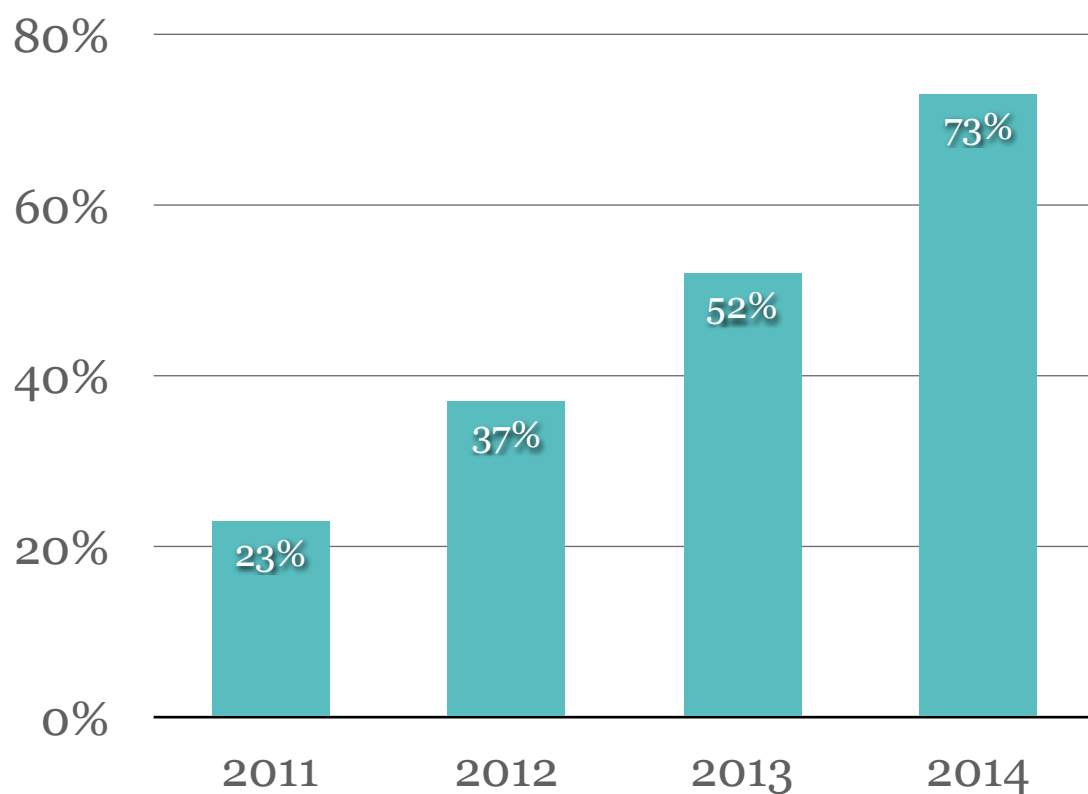


KIDS AND THE SMART HOME

When it comes to creating nurturing, safe and productive environments for children and young adults, it's not surprising technology has long played an important role. And not only is technology central to keeping kids safer both in the home and outside, but kids and teens themselves are often the earliest adopters and most intuitive users of technology.

Smart home will be an increasingly important technology in family life. Ensuring child safety, enhancing communications, providing enhanced learning and information services and the job of parenting are all made easier through applying smart home technology, and this section will examine how this intersection of the smart home and family could be one of the biggest opportunities in coming years.

FIGURE: PERCENTAGE OF US TEENAGERS WITH ACCESS TO SMART PHONES 2011-2014



SOURCE: PEW RESEARCH CENTER TEENS, SOCIAL MEDIA & TECHNOLOGY OVERVIEW 2015

The Opportunity: Why Kids and The Smart Home Make Sense

Technology plays a central role in nearly all of our children's lives. Whether it's the three in four teenagers who can reach their parents with a smartphone, or new child-sensing technology on cars or real-time first-responder alerting systems, there's no doubt that all of our lives are becoming safer because of the huge leaps we've seen in computing over the past few decades. But the story of technology and kids is one that goes beyond basic safety. This is a generation of children and young adults that has access to amazingly powerful digital technology, and it's a bond that is growing stronger every year. According to Pew Research on teens and Internet usage, nearly three out of four teenagers today have access to a smart phone, up nearly threefold from just three years ago. The end result is a generation of digital natives whose use of mobile phones, apps and messaging come as second nature, creating fertile ground for the adoption of smart home technology as a family to stay better connected and ease the burden of increasingly busy lives.

This growing use of mobile technology by kids and their caregivers provides a potential foundation for increased family communication and contextual understanding across a family's day and activities. New apps and services targeted specifically at families are helping parents coordinate with each other and their children and help monitor their kids presence and activities during the day. By integrating these apps with the smart home, unique needs can be increasingly met.

And it's not just kids, but their parents. Today's young parents are as busy or busier than their own parents, and they're most definitely more technology savvy. With the rise of dual income and single parent households, there's no doubt we will see many of today's young parents – many digital natives themselves – embrace new ways to use technology to make their lives easier and their kids' lives better.

The Applications: Where the Smart Home and Kids Connect

So how exactly can smart home technology be used to make kids happier, safer and better off?

Monitoring and Communication

One of the advantages of smart home and IoT technology is the ability to monitor presence in real-time. Whether it's through the use of networked cameras, motion sensors and beacons, access control systems like locks or networked garage door openers, today's modern smart technology gives parents the ability to communicate and better understand their child's current situation more than ever. One way this information is made available is through integration of smart home systems with social and communication apps. Whether a family's smart home sends alerts through integration with a social network or simply by sending an SMS, these systems can notify a family of each other's movement and location during the day.

One such example of smart home integration with family communication apps is Life360. The app has been integrated with Nest and ADT to enable integration with the smart home to not only help better understand the presence of someone within the home, but also to instantly communicate presence within the home to distributed families.

Safety and Security

There's no doubt that adoption of smarter security systems empowered by smart home technology will make children safer.

Many smart home systems today offer low-cost presence sensors, simple fob devices that can be tossed into kids' backpacks to let parents know when they've returned home. Another interesting product that combines longer-range tracking of GPS and smart home is the Filip smartwatch. A fully integrated phone and GPS locator device built specifically for kids, the Filip smartwatch uses Wi-Fi and GPS technology to locate children. By using smart home technology, it's not hard to

envision this type of technology sending parents an instant alert once their child moves outside of a safe zone.

Another example of a product already in the market today is networked cameras serving as baby monitors. These devices, available from a variety of companies, often come with specialized features like noise filters, night vision, two-way speakers and even the ability to remotely turn on lullaby music.

Special Needs

According to Jill's House, nearly 22 percent of households with one or more children have a child with special healthcare needs. Some conditions, like autism, are particularly challenging for parents because their children will often put themselves into dangerous situations. According to the American Academy of Pediatrics, nearly half of all children with autism will run away at least once before their 17th birthday. Because these kids typically don't have the communication skills necessary to notify their parents or ask for help, this provides a unique opportunity for smart home technology to offer specialized services for parents of autistic children to help them better provide for the safety of their children. Vivint, a smart home and security provider, has a program that tailors its smart home and security monitoring for families of children with autism to reduce runaway and "eloping" incidents.

Education

Because kids and young adults are often the most tech savvy among us, it's not surprising they are often first to embrace new ways of learning that leverage interactive technology. This gravitation towards technology-powered learning suggests young people could be receptive to using education and learning systems that leverage connected devices. One example would be a connected cooking device that utilizes an interactive teaching app that instructs a student in the proper way of cooking a recipe, using both instructional videos with a paired tablet and sensory-based feedback of a connected cooking device.

The Challenges of Smart Homes and Kids

There are some unique challenges that need to be considered with the application of technology to the specific use case of children and young adults:

Privacy

Guaranteeing privacy is always important when it comes to new technologies, but particularly so for those under the age of consent. Connected devices need clear guidelines and privacy protection measures for those under 18. Parents and even kids themselves are concerned about whether devices reveal personal information to others with or without permission, so device makers, service providers and those companies entrusted with access to personal data need to take robust measures to earn this trust.

A Wide Spectrum of Needs, Abilities and Willingness to Participate

One of the challenges for any parent or caregiver is the vast range of capabilities and personalities that children have regarding technologies across the age spectrum, from newborn to teenager, and how these evolve over time. A location-tracking and monitoring wearable might be completely acceptable and viewed as a fun or cool device by a 7-year-old, but a 14-year-old with an iPhone is likely to have a completely different perception. For those companies creating devices targeted at children or parents of children, understanding how to fulfill the needs of each unique age group, skill level and receptivity profile towards technology is an important consideration.

Durability and Findability

When it comes to kids and young adults, products need to be both durable and findable. Children are more likely to lose a wearable or tracking sensor device than an adult, but finding a device is generally easier when connected. Devices also need to be durable to withstand the wear and tear of children of all activity and age levels.

The Outlook for Smart Homes and Kids

Smart home technology enables a variety of new use case scenarios that can help provide families with enhanced security, communications, wellness and other life-changing benefits. However, like other markets, it will take time to develop. Below are some of the key factors that will determine how big the application of smart home technology to families and childcare will be over time.

Solutions Need to Meet Needs of Evolving Families

Families evolve over time. Young children become teenagers, families grow and economic and geographic situations change. Because of this, adoption of these offerings will be dependent on the ability of service providers and system manufacturers to understand the family “life cycle” and meet the needs of families along their entire journey, rather than just at one point in time.

Provide Safe, Non-Intrusive Solutions

As connected devices become more pervasive, one of the key concerns for families will be ensuring that these products and services are safe and respect a family’s privacy. Early, experimental approaches that do not provide well-thought-out approaches to safeguarding privacy or that create opportunities for nefarious access through security holes could do damage to the entire market. Hacked baby monitors are only one example of a product horror story that could set the market back.

Retrofit Technologies are Important

One of the key considerations for any smart home system is how well it fits into an existing family’s current home system. The availability of simple, low-cost retrofit technologies that leverage existing investments in home systems are going to be critical in reaching a wider audience of potential customers.