



# IoT Disruption and Opportunity in the U.S. Insurance Industry

NTT DATA study finds 2 in 3 consumers would change  
insurance companies to get homeowners policy discounts for  
using Smart Home devices

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## Introduction

How well do insurers really know their customers' habits and behaviors? A carrier may know that a customer has a 10-year-old furnace and uses natural gas to heat the house, but be completely in the dark about the customer's patterns for raising and lowering the heat, the efficiency of the furnace or the likelihood of it malfunctioning. The advent of the Internet of Things (IoT) — specifically sensor-enabled Smart Home devices that gather and transmit data — and sophisticated data analytics capabilities offers insurers the opportunity to connect with customers like never before. Smart Home technology also has the power to make homes safer, thereby helping to mitigate the homeowner's risk. With so much change afoot, what are the implications and benefits to insurers and their customers?

The opportunity to connect with customers on a more detailed and personal level, beyond simple application or claim interactions, represents a competitive opportunity, creating an imperative for insurance companies to embrace Smart Home devices and encourage consumers to do the same. Beyond reshaping one-to-one interactions, IoT is disrupting the whole insurance ecosystem, inviting new competitors and potential partners, and changing how products and services can be delivered. It ultimately has the power to change the insurance business model from reactive/claims processing to proactive/loss avoidance.

To get a better understanding of the specific barriers, threats and opportunities that IoT will have for the insurance industry, NTT DATA surveyed more than 1,000 U.S. consumers and 100-plus U.S. insurance carriers, examining both consumer and carrier readiness for Smart Home technology.

The results of NTT DATA's IoT Disruption and Opportunity in the U.S. Insurance Industry study reveal a large distinct group of homeowners insurance customers who represent both a substantial opportunity and potential risk for carriers when it comes to the adoption of Smart Home devices. These "Seekers" — nearly two-thirds (64%) of survey respondents — are willing to invest in Smart Home technology; however, they are less loyal to their current carrier, saying they would change insurance companies to get homeowners policy discounts for using Smart Home devices, including smart thermostats, smoke/carbon monoxide detectors and garage door openers. How carriers prepare for and respond to this shift in customer expectations and behaviors — and affiliated threats of industry disruption — could well determine the insurance industry landscape of the future.

**There is a large distinct group of consumers who are willing to invest in Smart Home technology; however, they are less loyal to their current carrier.**

# 59%

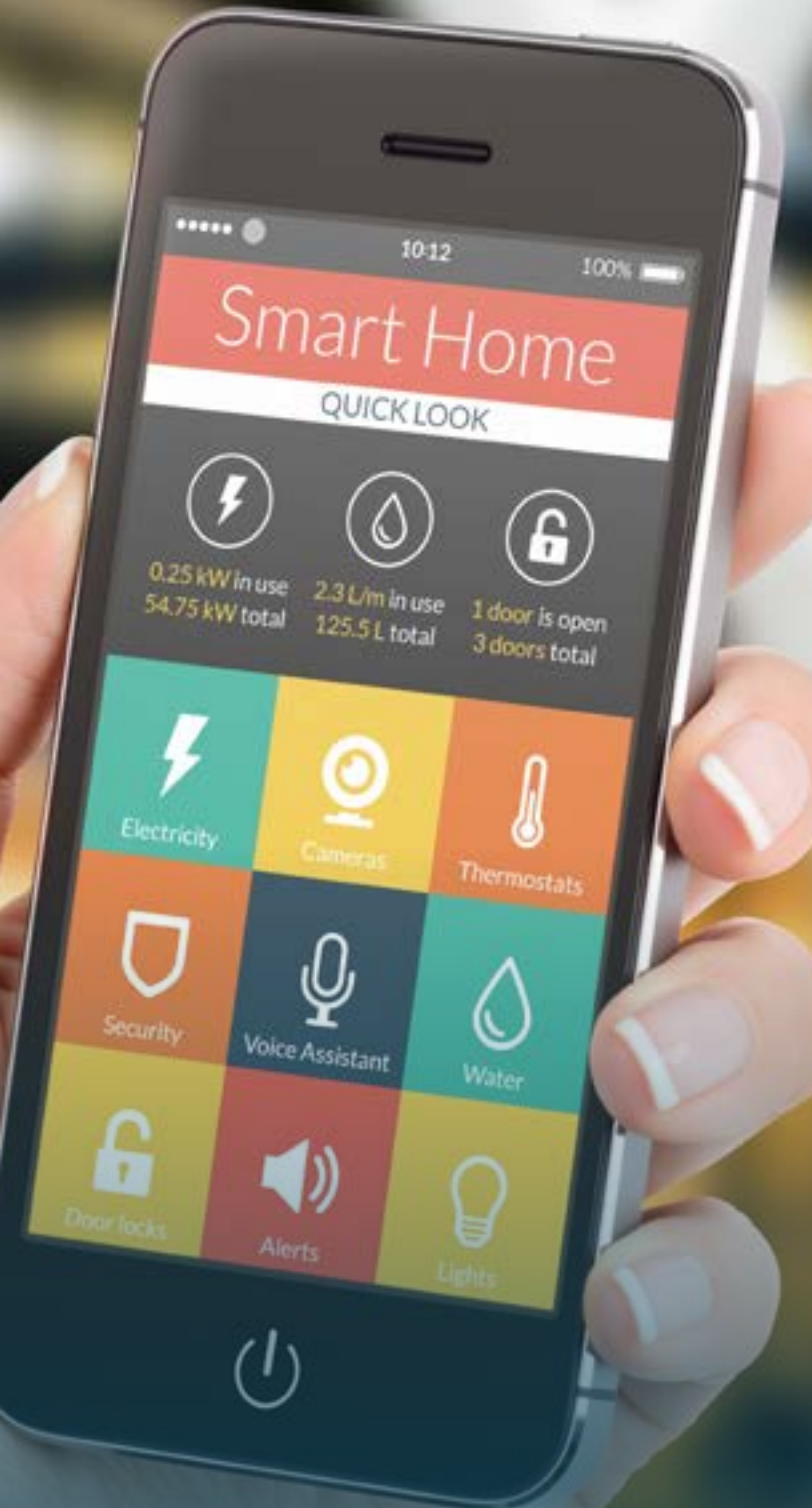
**of carriers have made strong progress with leveraging Smart Home technology to improve products.**

**Consumers want their insurance company to be advisors.**

**The majority of consumers find the Smart Home to be expensive and a challenge.**









**Carriers recognize the importance of IoT to improve their business.**



## Study Definition of Smart Home Devices

We are interested in understanding your views and interest to invest in “connected home” or “Smart Home” technology. The Smart Home includes devices that have networked connectivity, allowing them to send and receive data. **Categories include:**

-  Security Systems
-  Smoke/CO Detection
-  Frozen Pipe Sensors
-  Doorbells
-  Cameras
-  Lights

### VENDOR EXAMPLES



## Market Drivers for Insurers to Invest in IoT

The top three reasons why U.S. consumers buy Smart Home devices are the same reasons they buy homeowners insurance – safety, security and cost savings. This is good news for the insurance industry and it provides guidance for how insurers should plan to incorporate IoT into their businesses.

**NTT DATA's survey asked insurers to rate on a scale of 1-10 the most important drivers for investing in IoT.**

### THE TOP FIVE DRIVERS ARE:

1. Improve the relationship with customers	87%
2. Create additional value-added services	83%
3. Attract potential customers	83%
4. Improve ability to personalize offerings	81%
5. Improve brand	80%

It's no surprise that the top driver for carriers is to **improve the relationship with customers**. A large majority, 87%, of carriers surveyed believe that IoT will improve customer relationships, affording them the opportunity to connect with customers in new and highly personalized ways. Fortifying customer relationships is one of the best ways to engender loyalty and reduce churn.

What's new is the opportunity for carriers to **create additional value-added services**, not just products. Smart Homes are sparking new behaviors that carriers can capitalize on to play a larger role in customers' lives.<sup>1</sup> For example, 35% of consumers surveyed said they would like their homeowner's insurance company to provide them with support calling carpenters, plumbers or electricians on their behalf to fix a problem that the insurance company discovered from monitoring their Smart Home. Carriers are already thinking along these same lines: 74% believe that IoT will have an important influence on how products and services are rolled out in the future. Turning these possibilities into realities will require insurers to think creatively and focus on creating new value-added services as a way to expand customer relationships, create strong loyalty and generate new revenue streams.

Carriers also see IoT as a customer acquisition tool, with 83% viewing IoT as an opportunity to attract new customers. This goes hand in hand with another new driver – **improving the ability to personalize offerings**. Personalization is increasingly important with homeowner insurance policy holders, yet nearly half, 48%, of consumers surveyed stated that their current homeowner's insurance policy is not personalized. The same percentage of consumers said they would value a more personalized homeowner's insurance policy offer, and would go so far as to switch providers to receive the personalization they crave. If an insurance company knows that a customer activates her home alarm every time she leaves the house – and is willing to adjust premiums to reward her home security practices – they will be in a position to not only retain and grow that customer relationship, but attract new customers who are looking for similarly personalized treatment.

Carriers understand that, taken together, these drivers – improved customer relationships, value-added services, attractiveness to new customers and more personalized offerings – will lead to an improved brand image.



## Trade-offs with the Consumer Decision to Engage

THE QUESTION:

### How does IoT fit into the insurance value proposition for customers?

There are several factors that will influence the consumer's decision to go down the Smart Home road with their insurance carrier. And, as with most relationships, there are compromises and concessions to be made.

**When it comes to sharing data from Smart Home devices, 80% of U.S. consumers are concerned about security of information and 73% are concerned about privacy.**

Among the upside for consumers is improving safety and convenience, and avoiding liability. In return, they are looking for carriers to provide them with cost-savings and access to the value-added services they want from their carriers.

The downside: consumers are worried about the privacy and security of data. When it comes to sharing data from Smart Home devices, 80% of U.S. consumers are concerned about security of information and 73% are concerned about privacy. They also have reservations about the perceived cost and complexity of installing Smart Home devices leading to a desire to see a more advisory relationship with their carrier.






Across the board, consumers see increased interaction with carriers as a con. Our survey asked a series of questions about the number of interactions consumers have annually with their carrier, if they were satisfied with the number of interactions, and if they'd want to increase the number of interactions. Their response was nearly unanimous with 92% saying they do not want more interactions

with carriers. However, there is hope: 24% of customers strongly believe that their insurance company could provide more personalized products and value-added advisory services for their homeowner's policy. They do want help with Smart Home implementation but don't want an intrusive change in the level of interaction, a delicate balance that carriers will need to manage.





We believe homeowners insurance carriers must seize the IoT opportunity to transform their largely transactional relationships with customers to more personalized and advisory-based relationships. Insurers are experts about assessing risks and what can be done to keep homes safe from robberies, fires and floods. Finding proactive ways to share this insight with policyholders — even if it's a reminder to set a timer for lights before leaving town for the holidays to give the appearance of home occupation — can help make the insurer a more positive and appreciated presence in their customers' lives.<sup>2</sup> Over time, customers will make the transition from viewing interactions as purely transactional (submitting a claim) to appreciating them as a valued source for improving the quality and security of their lives.

**There are trade-offs with the consumer decision to engage...**  
How does IoT fit into the insurance value proposition?

**PROS**

-  Safety
-  Cost Savings
-  Convenience
-  Avoid Liability
-  Opportunities for value-added services


**CONS**

-  Privacy and security of data
-  Expensive
-  Complicated and difficult to implement
-  Increased interaction with carrier



## Two Distinct Groups of Customers Inform Homeowners Insurance Carrier Strategies

The NTT DATA study found that homeowners insurance customers are segmented into two groups – identified as:



**“Seekers”**  
(nearly two-thirds of respondents)



**“Keepers”**  
(about one third of respondents)

We categorized these groups based primarily on their attitudes towards their insurance companies and comfort level using technology – especially Smart Home technology.


**Seekers** are the most important customer segment for insurers to pay attention to as they pose both an opportunity and a risk.

Seekers think their homeowners policies are static and inflexible, feel that insurers don't see them as unique customers and believe that carriers could provide more personalized services. What makes Seekers a particularly promising segment is their willingness to invest in Smart Home technology.

However, they are less loyal and would consider leaving their carrier to save money. **In fact, more than half, 53%, of Seekers would trust a non-traditional provider – such as Google or Apple – for insurance coverage.** As insurers step up their efforts to court Seekers, they must be mindful of the risks they represent.

**Keepers**, on the other hand, are generally content customers. They like the structure of their homeowners policies the way it is, feel protected by their current policy, and believe their carrier does a good job of tailoring their policy to their needs. While not likely to be susceptible to an expanded profile of IoT-driven products and services, Keepers are worth retaining for their loyalty and easy-to-meet service standards.

Keepers and Seekers are found across all demographic segments but there are important distinctions. Keepers tend to be older and less comfortable with technology. They also are more comfortable with their agent relationship and value service above other factors. Seekers are largely a younger, more technology-savvy group, but engaging a demographic that is hard to acquire and retain makes the Smart Home opportunity with Seekers even more attractive.

**“Seekers”**  
younger and always looking for improvement

**Younger**  
Includes 72% of overall respondents in the 25-34 age group


**Technology Early Adopter**  
77% are early adopters

**Moderate Satisfaction with Policy**  
Includes 77% of all responders who rated satisfaction 7 or lower (out of 10)

**Value Cost-savings**  
73% of Seekers want to know the cost savings in order to consider carrier Smart Home programs

**Value Personalized Offerings**  
81% of respondents who would value a more personalized policy from their carrier

**Always Try to Make it Better**  
Significantly higher percentage of respondents always want to make their policy better



**“Keepers”**  
struggle with technology and focus on relationships

**Older**  
Twice as many respondents in the 45-64 age range

**Technology Laggards**  
Twice the percentage of late adopters

**Satisfied with Policy**  
35% of respondents rated their satisfaction with their policy a 10 vs 23% for other respondents

**Value Relationships**  
More likely to choose a policy because of a relationship with a broker

**Value Service**  
Reputation for service is more important in selection, but Keepers are more likely to switch carriers due to a service problem

**If It Works, Don't Fix It**  
If satisfied, prefer not to make changes

SWITCHED CARRIERS WITH CURRENT HOME	
35%	22%
WILL CHANGE CARRIER IF NOT INNOVATIVE	
46%	26%
WANT CARRIER TO ANTICIPATE NEEDS	
71%	59%



## Privacy and Security Concerns Loom Large

Despite their differences, Seekers and Keepers do see eye-to-eye on a key set of issues: data sharing and privacy. All consumers we surveyed are wary about sharing data from their Smart Home devices because of security and privacy concerns. In fact, it is their largest concern about engaging in Smart Home programs with carriers.

Seekers, however, are significantly more willing to share data than Keepers. Yet their comfort level depends on the device and the personal nature of the data. For instance, Seekers are more willing to share data from devices like smoke/CO detectors and thermostats than from cameras within their homes.



**Seekers are more willing to share data**  
But it depends on how personal the data is

Device	“Keepers” (%Responded 8-10)	“Seekers” (%Responded 8-10)
Thermostats	28%	47%
Security Systems	30%	41%
Smoke/CO Detectors	37%	59%
Frozen Pipe Sensors	32%	54%
Doorbells	25%	40%
Cameras	18%	24%

Consumers fear that data collected and shared from their homes could be misused by insurers. But defining what counts as misuse can be difficult.<sup>3</sup> For example, the same data that allows a company to prevent damage from water leaks might also be used to profile customers as being more likely to engage in risky behavior. The former benefits from the shared data, but the latter may see their premiums quietly raised.

## Top Five Smart Home Devices

1

Thermostats

2

Smoke/  
CO Alarms

3

Garage Door  
Openers

4

Door Locks

5

Door Bells

50%

of survey respondents expect to purchase Smart Home devices in the future.



Millennials are becoming the dominant purchaser of Smart Home devices.

### CASE STUDY

## Nest Helps Insurers Provide Transparency on Data Security and Privacy with Customers:

**Nest’s Safety Rewards program helps Nest Protect smoke and carbon monoxide alarm owners get discounts on their home insurance, and discounts on Nest Protect through its insurance partners, including Liberty Mutual Insurance. Liberty Mutual gives the \$99 Nest Protect for free to home policyholders and offers a five percent discount on home insurance.<sup>4</sup>**

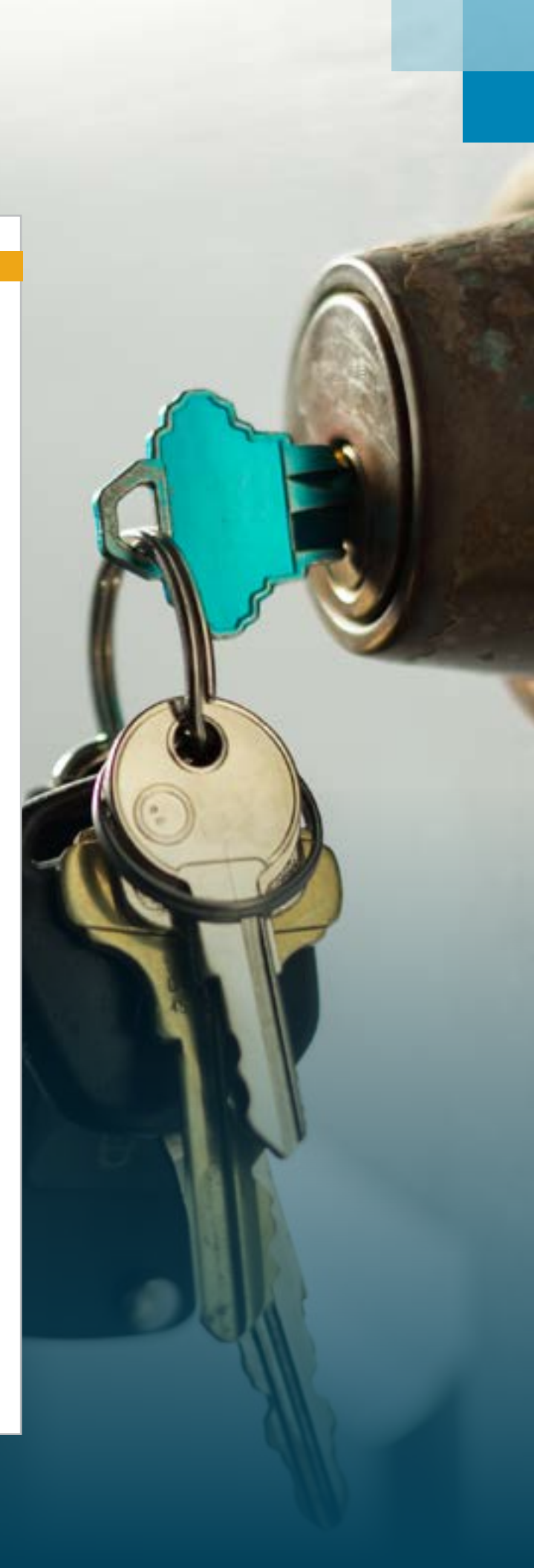
Working in tandem, both the Nest and Liberty Mutual websites explain that through Nest Safety Rewards customers can authorize their smart home provider to share basic information with Liberty Mutual to verify that the devices are installed and working correctly.

When enrolling in Safety Rewards on the Nest website, customers are asked to grant Nest permission to provide basic information about their Nest Protect to their insurance company. Each month, Nest tells Liberty Mutual if Nest Protect’s batteries are charged, its sensors are working, and its Wi-Fi connection is good. The status report is limited to basic values such as “Good” – functioning normally, “Low” – battery charge is low, and “Issue” – problem with one or more sensors.<sup>5</sup>

The monthly status summary also includes the customer’s ZIP or postal code and the names of the rooms where customers have Nest Protects installed. The ZIP or postal code information enables insurance companies to verify that the devices are in a home covered by the customer’s insurance policy.<sup>5</sup>

Nest goes on to explain what data they won’t share with insurers, that the data is shared in a limited way, that the data is secure, and that customers are able to review the data before granting permission to share it. If customers choose to not grant permission, Nest will not send any more monthly status reports to insurers and the customer can cancel the Safety Rewards program.<sup>5</sup>

Liberty Mutual spokeswoman Karen Pevenstein said data that Liberty Mutual collects from the program doesn’t influence the company’s decisions about policy cancellations, renewals or claims, according to a Chicago Tribune article.<sup>6</sup>



## The Opportunity for Smart Home Programs

Despite data sharing concerns, Seekers are more willing to engage carriers who will act as advisors and provide services to assist with Smart Home technology – even if those providers are not traditional insurance companies. In fact, more than half would consider an alternative provider of coverage, including their primary bank (41%) and major technology companies such as Apple, Amazon and Google.

### CONSIDER AS AN ALTERNATIVE INSURANCE PROVIDER







Company or type of company	Answered 4 or 5
Primary Bank	41%
ADT	39%
Apple	33%
Google	31%
Amazon	28%
GE	22%
Samsung	21%
Cable	17%
Walmart	11%

Q72: Would you trust any of the following companies as an alternative to your traditional homeowner's insurance provider? Provide a rating on a scale from 1 to 5 (5-meaning you completely trust, 1-meaning you don't trust at all)

When comparing the types of companies that Seekers would trust with their Smart Home data and the types of companies Seekers would consider as an alternative to their insurance carrier, the list is quite similar. Seekers have a high level of confidence sharing data with the companies that already know a lot about them, such as their city, bank, smart device manufacturer and insurance company.

### Most Sought-after Advisory Services:

Seekers are interested in carriers providing them with these proactive services to protect their homes and minimize liability:

-  Assessing structural problems
-  Identifying and using plumbers, electricians or other home services
-  Detecting unauthorized access to a home
-  Monitoring services for water pressure, the presence of gasses (radon or natural gas)
-  Evaluating heat loss
-  Evaluating Smart Home device installation



### TRUST SHARING SMART HOME DATA

Company or type of company	Answered 4 or 5
City Services	51%
Your Insurance Company	48%
Apple	46%
Primary Bank	42%
Amazon	40%
Google	40%
GE	31%
Another Insurance Company	30%
Utility Provider	29%
Samsung	29%
Lowe's	26%

Q70: Would you trust sharing Smart Home technology data with the following companies? Provide a rating on a scale from 1 to 5 (5-meaning you completely trust, 1-meaning you don't trust at all)

Additionally, Seekers have a strong willingness to share data if they derive benefit from it. Our study found that receiving discounted pricing motivates 60% of respondents to let go of their reservations around privacy and security. Customers are more comfortable sharing data from their Smart Home devices when insurance companies agree to reduce their policy premiums.

Our survey asked, "If Smart Home technology were necessary for additional insurance discounts, how would you feel about that?" 38% of Seekers answered, "If it provided lower premiums, I would love it."

Based on the consumer insights revealed by our study, NTT DATA believes that carriers should not only encourage the adoption of Smart Home devices through discounts and incentives, but also focus on providing value-added services that will increase and differentiate the benefits that customers receive in return for sharing their data.



SEEKERS ARE READY FOR SMART HOME PROGRAMS FROM CARRIERS

**...but are looking for the Benefit**

- Cost savings through discounts
- Proactive services to protect dwellings and minimize liability
- Customized homeowners policies
- Programs to facilitate Smart Home installation

Q36. Will data from Smart Home devices become more centralized, or will it remain fragmented?

**52%** } Are interested in understanding the potential savings

**26%** } Believe that any investment that will reduce premiums is a good idea

**22%** } State that it sounds great and to sign them up!

## Perception Gap Between Carriers and Seekers

Carriers are looking to increase the value they provide to meet customer expectations, and most carriers believe they are doing a pretty good job. But, there is a perception gap between carriers and Seekers that must be addressed.

Our survey asked consumers a set of questions about how they would react to an offer from an insurance company to use data from Smart Home devices to help protect their home, offer lower prices for their homeowners insurance policy, and provide new services, such as calling a plumber on their behalf when insurers are alerted to a water leakage. The same set of questions were posed to carriers asking them how they believed their policyholders would respond. The responses demonstrate a significant perception gap — one that must be bridged in order for Seekers to be satisfied and carriers to be successful.

### Converging Attitudes

There is a perception gap between Carriers and Seekers

	Carriers	Seekers
I feel protected by my policy	72%	30%
I think my insurance company really cares about improving my safety and security	77%	26%
My carrier does not see me as a unique customer	63%	33%
My agent helps me understand how I can optimize coverage	84%	21%
Price	42%	61%
It sounds great – sign me up!	55%	22%

The most noteworthy discrepancies center on the central mission of the insurance industry—to provide safety, security and peace of mind.<sup>7</sup> More than double the percentage of carriers, 72%, than Seekers, 30%, believe that customers feel protected by their homeowners policies. And, 77% of carriers compared with 26% of Seekers think insurance companies really care about improving customers' safety and security. But this isn't the only area of disconnect. Carriers must carefully assess how they view their distribution channel relative to the two distinct consumer segments and focus on how they can add value to consumers directly and jointly with their producers. There's a sizeable difference in how carriers and Seekers view agents. Only 21% of Seekers think their agent helps them understand how to optimize their insurance coverage versus 84% of carriers. Keepers, however, strongly value their agent relationship and are best engaged for Smart Homes with their collaboration.

Lastly, carriers tend to have a Field of Dreams "if-we-build-it-they-will-come" attitude about Smart Home programs. More than double the percentage of carriers, 55%, versus Seekers, 22%, say "It sounds great – sign me up!"

Achieving convergence will be key to tapping the Smart Home growth potential, but it will not be easy. We believe carriers must be willing to invest in understanding consumers' goals and developing value-added services that address their concerns around managing risk, improving safety and installing Smart Home devices — all at an attractive price point.







## Carriers Are Ramping Up IoT Initiatives

Insurance carriers are enthusiastic about the adoption of Smart Home technology and are moving aggressively to incorporate IoT into their operating models. Three quarters of the insurance carrier executives we surveyed said that their companies are ramping up IoT initiatives and believe it will have an important influence on their products and services.

These initiatives are happening in targeted areas across the organization with customer service — the main IoT investment driver for insurers — topping the list. Technology, which ranks in second place, is reflective of the fact that most carriers are looking to enhance their technical skills to keep pace with big data and streaming analytics. Insurers also recognize that IoT will predicate changes to their partnerships strategies, sales and distribution channels, and underwriting processes. Underwriting in particular will be heavily impacted once Smart Home devices are in place and they have enough evidence to influence how the risk can be assessed.

### RANKING OF INITIATIVES

- 1 Customer Service
- 2 Technology
- 3 Partnerships and Alliances
- 4 Sales/Distribution
- 5 Underwriting

## Uncertainty Creates Challenges and an Opportunity for Disruption

Smart Home technology holds incredible promise, but its success relies on an IoT ecosystem that involves many different stakeholders, including technology companies, appliance manufacturers, sensor and control device manufacturers, utility companies, telecommunication firms, security companies, insurance carriers as well as others.

A critical component to the ecosystem coordination will be how companies access and use data from Smart Home devices. NTT DATA's study found a large majority of insurers, 94%, believe that data from Smart Home devices will become centralized, not fragmented. While we don't foresee the rise of a single aggregator of IoT data, similar to Dun & Bradstreet's role with business data, we do believe that multiple firms — which ones are yet to be determined — will own and aggregate the data. Carriers will be able to leverage the aggregated data, reducing their need to collect data directly from individual policyholders.

Uncertainty around the role insurers will play in the IoT ecosystem and how they will gain access to the data from customers' Smart Home devices is a major challenge. In fact, 68% of carriers surveyed said the inability to gain access to data from Smart Homes is making it difficult to finalize IoT programs.

NTT DATA recommends insurance companies develop a partnership strategy to align with the key firms who will own or aggregate the data coming from Smart Home devices. This will ensure that insurers don't get shut out.

## Key Capabilities that will Drive Smart Home Ecosystem Leadership

When we asked carriers what are the two most important capabilities to be a major ecosystem player, they called out data analytics and proven IoT capabilities. These are the top capabilities that will

define leadership, data ownership and access issues. Partner management and security were both identified as key capabilities for anyone that wants to play in the Smart Home ecosystem. Global reach and operational maturity also made the list of key capabilities for anyone that wants to play in the Smart Home ecosystem.

It's not surprising that operational maturity ranked the lowest of all the capabilities. We believe carriers understand that the IoT ecosystem and Smart Home devices are in nascent stages and that much of the technology is emerging from InsurTechs. The insurance industry doesn't have a high expectation that a company needs to have strong operational maturity to be a major player.

## Firms Best Positioned for Smart Home Ecosystem Success

Topping the list of competitor segments that insurers believe are best positioned to be major players in the evolving Smart Home ecosystem:

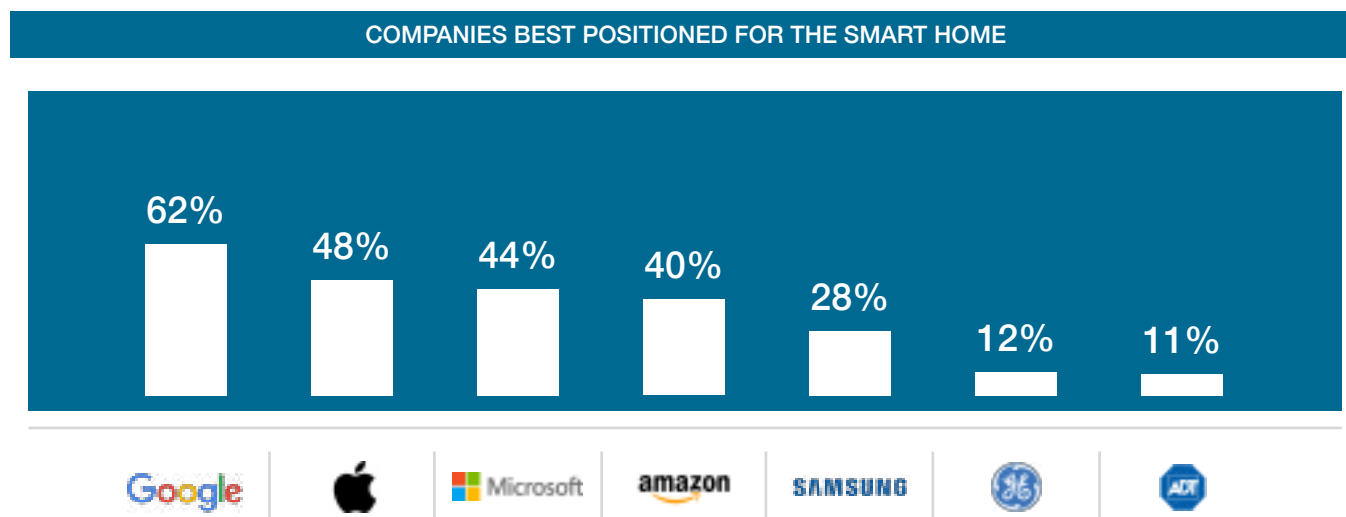
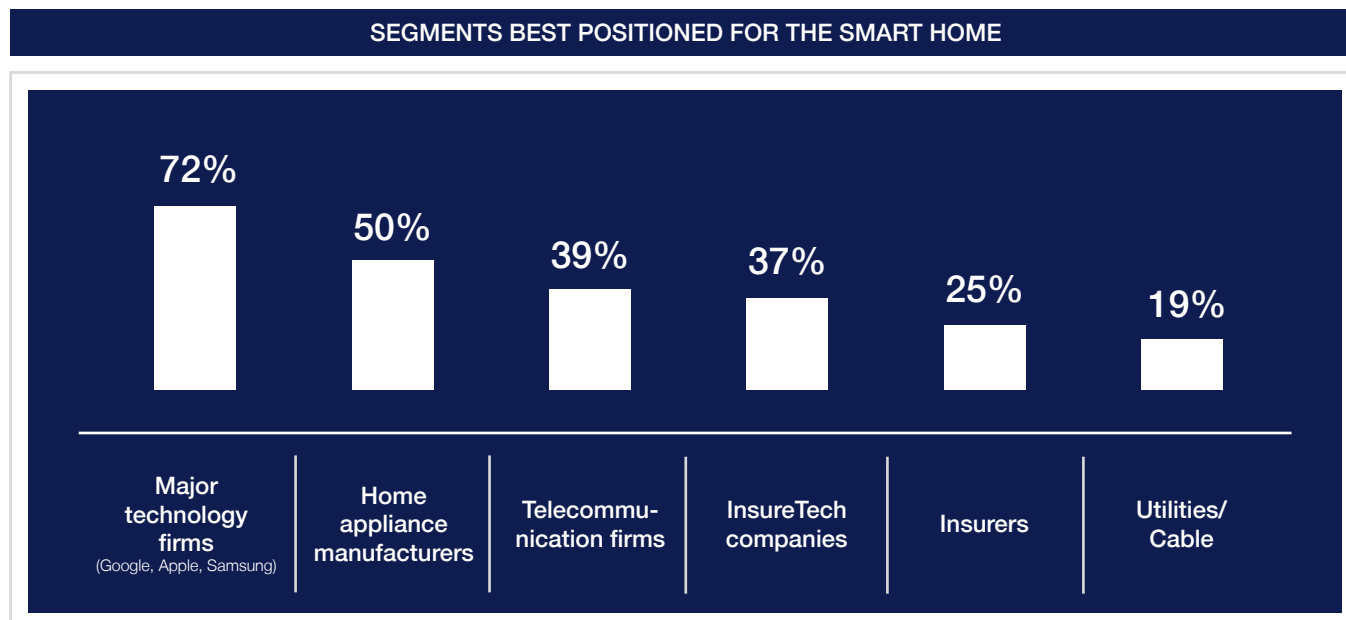
**major technology firms** (i.e. Google, Apple, and Samsung) **(72%)**, followed by **home appliance manufacturers (50%)**, **telecommunication firms (36%)**, **InsurTech companies (37%)**, **insurers (25%)** and lastly **utility / cable companies (19%)**.

We believe the companies that own and have access to the customer data will be best positioned to be major players in the evolving Smart Home ecosystem. Most of these companies are major technology firms who manufacture Smart Home devices — think Google owning Nest — as well as technology firms that control Smart Home devices — think Apple controlling access to Smart Home devices via Siri or an app on your mobile device, or Amazon Echo controlling lights, thermostats and much more.



## Carrier Executives See Technology Firms as the Top Players

Potential partners could be disrupters



“The IoT ecosystem is disrupting the insurance industry, inviting new competitors, potential partners and changing how products and services can be delivered. Accessing the data that comes from Smart Home devices and being ready to leverage it will be key to carrier success. NTT DATA recommends insurance companies prioritize the development of partnerships with the Smart Home gateway firms who will control the flow of this data. Don’t get shut out.”

– NORMAND LEPINE,  
SENIOR DIRECTOR, DATA AND ANALYTICS, INSURANCE FOR NTT DATA



## Seizing the IoT Opportunity: Recommendations for Carriers

The Smart Home growth opportunity for carriers is clearly with the Seekers – two out of three respondents in this research study – but the road to success is multi-faceted. Smart Home incentive programs and discounts provide the vehicle for engaging their willingness to embrace technology, innovative products and services and a good old-fashioned deal, but close attention must also be paid to their concerns.

Based on NTT DATA's research and our consulting experience with top U.S. insurance carriers, we believe now is the time for carriers to pursue their place in the IoT ecosystem.

### Here are four NTT DATA recommendations for carriers to succeed:

#### 1 Resolve the data issues

Addressing consumers' data concerns will require carriers to develop an ethics policy for IoT and provide transparency on data security and privacy, while dealing with the challenges of the required data and analytics infrastructure. Smart Home data is not only about privacy and security but impacts how carriers can evaluate risk and engage consumers in co-managing that risk. As such, the Smart Home will affect many aspects of the organization and its processes meaning IoT ethics must be addressed through a consistent corporate-wide standard.

The data itself represents a new level of complexity and carriers must prepare for managing not only big data but fast data and the inclusion of real-time and edge analytics. The faster and more effectively carriers can get these data issues under control, the more likely it is they'll be able to use data to their advantage – in service delivery and underwriting/pricing – and successfully address the impact of InsurTech firms and other disruptors.

#### 2 Align IoT objectives

Carriers will also need to align their IoT objectives and planning initiatives with consumer goals and desires and gain internal agreement among business and IT stakeholders. The perception gaps uncovered by the survey indicate that many carrier executives do not clearly understand the goals of their policyholders regarding Smart Home technology. They need to consider the consumer experience related to Smart Homes and how their products and services can engage the consumers. They must also ensure that they have integrated their business and technology initiatives to satisfy their business objectives around customer acquisition, retention and relationship management.

#### 3 Focus on value-added services

A promising strategy for carriers is to initially focus on value-added services (a high priority for consumers) and offer advice and assistance with Smart Home adoption. Carriers can then use these services to build loyalty and new revenue streams while they gain an understanding of the underwriting implications. Consumers clearly indicated a desire to be rewarded for their efforts to improve their safety, security and liability, but not all value and differentiation need to be tied directly to product features and pricing. Additional inputs must be evaluated to determine how best to drive better underwriting using Smart

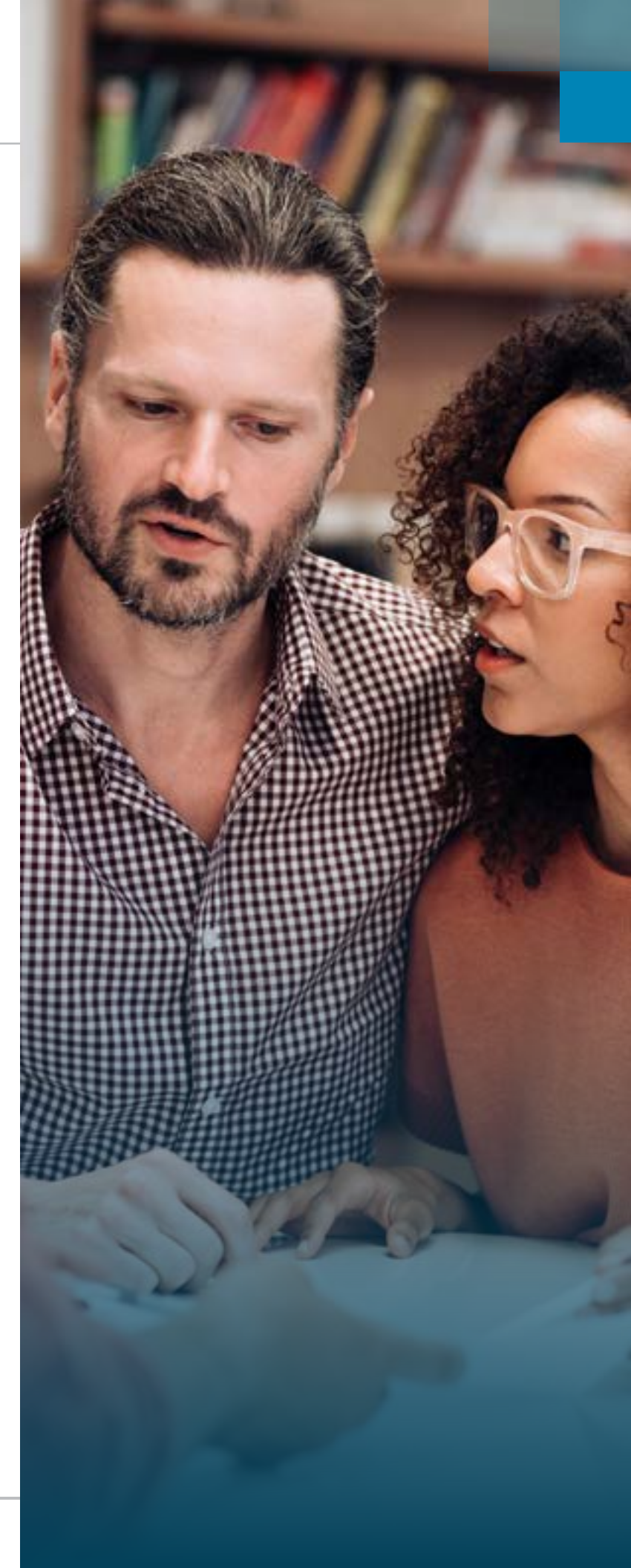
Home data. In the meantime, security and risk assessments, IoT device recommendations and numerous other services can be delivered and turned into new revenue streams that can offset any eventual premium discounts resulting from the revised underwriting process.

4

#### 4 Partner with potential disruptors

Finally – and perhaps most importantly – carriers must leverage partnerships to manage the parts of the ecosystem they cannot control, especially data access. Turning potential disruptors into allies and finding cost-sharing arrangements may prove highly beneficial for all. Most carriers recognize that they are not well-positioned to drive the evolution of the Smart Home ecosystem on their own. Consequently, finding the right partners and their best fit in the ecosystem greatly reduces the effort and cost to participate. Carriers should look to the many partnership and customer engagement models that already exist. Leveraging this early adopter wisdom can accelerate the time to market for new services and product opportunities.

For the carriers who are willing to listen to the needs of Seekers, align their IoT investments with business goals and establish mutually beneficial partnerships, the Smart Home revolution is an opportunity to differentiate and grow like few market opportunities in recent memory.





## Key Take-aways for Insuring the Connected Home

Safety, security and cost savings – the bedrock of the insurance industry – are the top three reasons why U.S. customers buy insurance and the same reasons they purchase Smart Home devices. Avoiding liability and value-added services are nearly as important to customers.

IoT is making it possible for insurers to truly know their customers' daily habits and behaviors and cater to their individual needs. Thanks to IoT and data analytics, carriers can know how often a customer forgets to turn off the coffee-maker when he leaves home and if he sets the thermostat temperature high enough to prevent water pipes from bursting when he leaves for a winter vacation. This knowledge has the power to change the dynamic between insurers and their customers and the industry as a whole — from a reactive model focused on claims processing to a proactive one focused on risk minimization and loss avoidance.

The opportunity is particularly promising for insurers that can close the gap between what Seekers want from their carriers and what carriers are able to provide given their uncertain role in the IoT ecosystem. Taking the time to understand customers' goals, provide transparency on data security and data privacy and offer value-added services are the keys to improving carrier-customer relationships and cultivating new revenue streams.

Most importantly, insurance companies must prioritize partnerships with Smart Home ecosystem players — especially the gateway firms who will control the flow of the data collected from Smart Home devices. Carriers could easily find themselves on the outside looking in should they fail to secure a strong position in this new world.



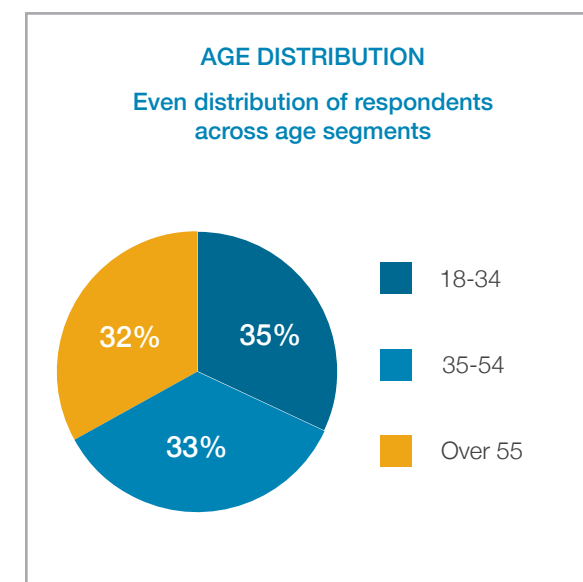
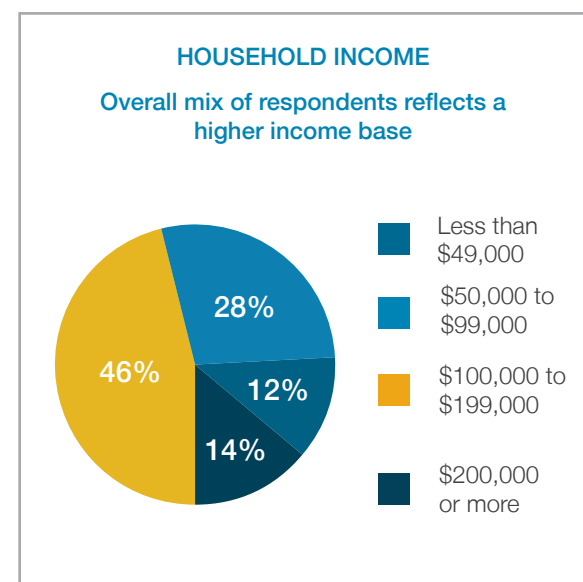
## Research Methodology and Demographics

### Consumer:

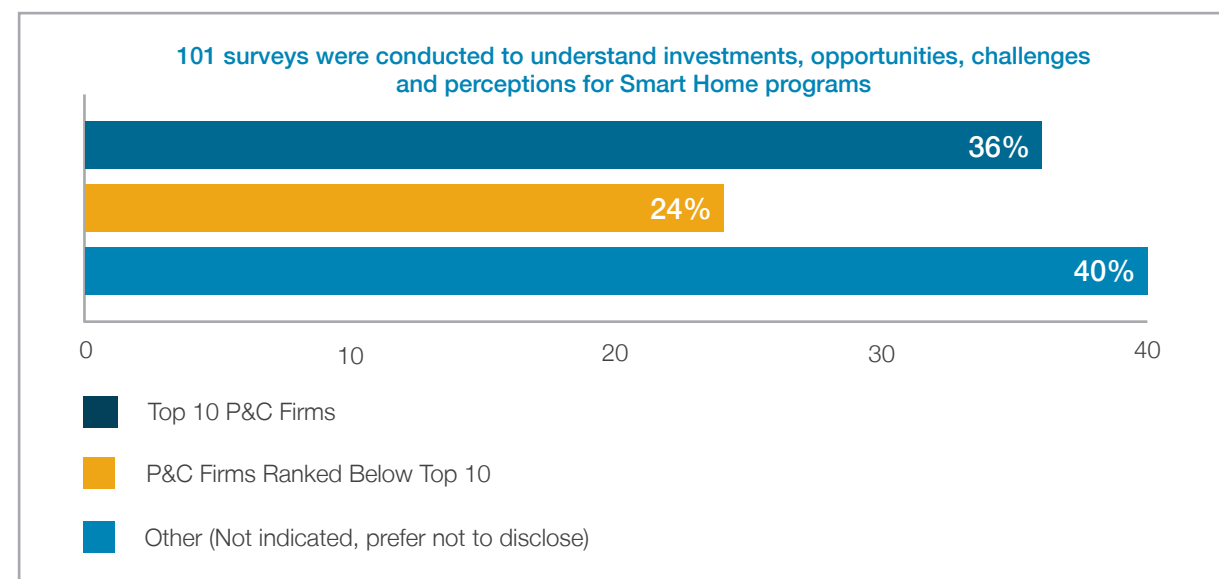
- 1,006 consumer survey responses
- Online survey
- U.S.-based
- Reflect higher income
- Required to be 18+, a homeowner, and currently has homeowner insurance policy

### Insurer:

- 101 insurer surveys conducted with executives involved in decision-making, budgeting, strategy or execution
- Director-level employees and above
- Distributed between regional and national firms



### CARRIER INTERVIEW SUMMARY



## Let's Get Started

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## About NTT DATA Consulting

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## Sources

1. "Smart Home Technology Poses New Opportunities and Challenges for Insurers," Denise Johnston, Claims Journal, May 3, 2016 [<http://www.claimsjournal.com/news/national/2016/05/03/270566.htm>]
2. "Consumers Aren't Buying the Smart Home, But Insurers Are," Stacey Higginbotham, Fortune, December 9, 2015 [<http://fortune.com/2015/12/09/smart-home-insurance/>]
3. "Why Insurance Companies Want to Subsidize Your Smart Home," Stacey Higginbotham, Technology Review, October 12, 2016 [<https://www.technologyreview.com/s/602532/why-insurance-companies-want-to-subsidize-your-smart-home/>]
4. <https://nest.com/insurance-partners/>
5. <https://nest.com/support/article/When-I-enroll-in-Safety-Rewards-what-kind-of-data-is-shared-with-my-insurance-company>
6. "Insurers' discounts for smart home devices raise privacy concerns," Becky Yerak, Chicago Tribune, October 15, 2015.
7. "Why Insurance Agencies Should Embrace The Smart Home," Insights Blog, October 17, 2016 [<https://www.icontrol.com/blog/why-insurance-agencies-should-embrace-the-smart-home>]

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