



# Data-Driven Opportunities in the Smart Home and Implications for Insurers

March 23, 2018

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# In just an average 60 seconds in 2017...

So much happened in our digitalized world in 2017 – and we have the numbers behind it

Things that happened online in 2017 within 60 seconds



Source: Go-Globe.com, Company Information, Statista Research

statista

# Agenda

- The Connected Home Market Landscape
- Position of Voice Assistants
- Insurance Applications – Claims
- IoT Opportunities and Trends





# Verisk Team – Connected Property



**Sandra Maples**  
Director of Product Management  
IoT/Telematics

# Connected Home Market Trends

# The Connected Home

## 1. Concept of Connected Home

1. 23-25% have home security, ~5-10% have smart home tech
2. Discounts are being offered today

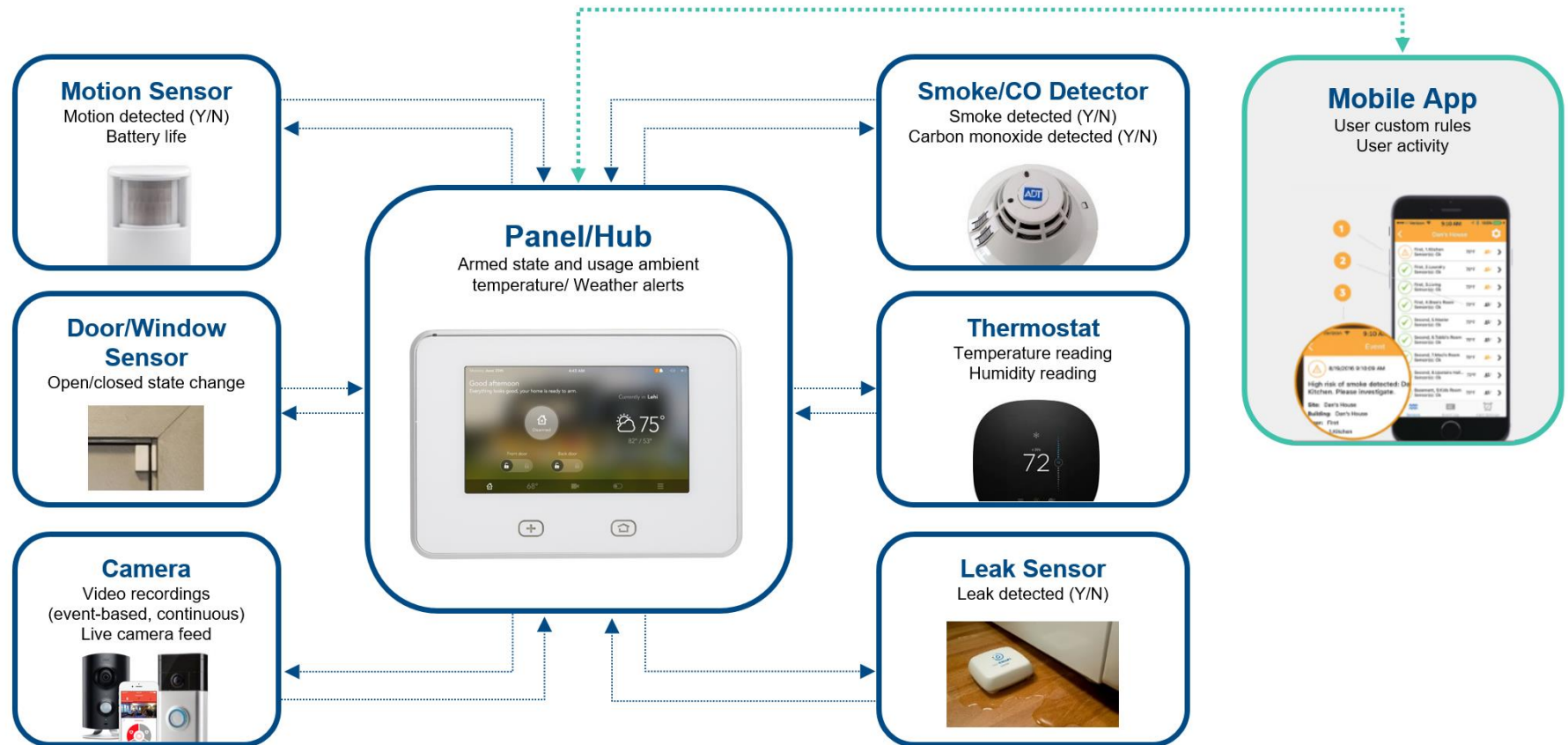
## 2. Basic capabilities of a Connected Home:

- Security
  - Automation
  - Energy Efficiency
  - Entertainment
3. Shifts, emerging trends in the market place
- DIY vs. Prof Install
  - Prof Monitored vs. Self- Monitored
  - Insurtech funding increasing the number of :  
Platforms, and Hardware companies
  - End to End Systems vs. Point Solutions
  - Voice at the center of the home





# Common Devices and Data



# A View of the Technology Landscape

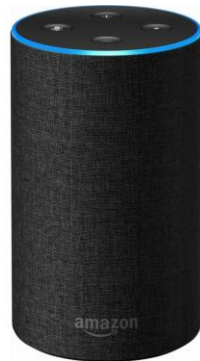




# Voice Assistant Landscape

The choices are growing, and so are sales...

Amazon Echo "Alexa"



Google Assistant



Apple HomePod



*"[...] We believe voice is the most natural user interface and can really improve the way people interact with technology."*

**Dawn Brun**

*Public relations Senior Manager at Amazon*

## Additional Voice Assistants

- Smartphone-enabled voice assistants

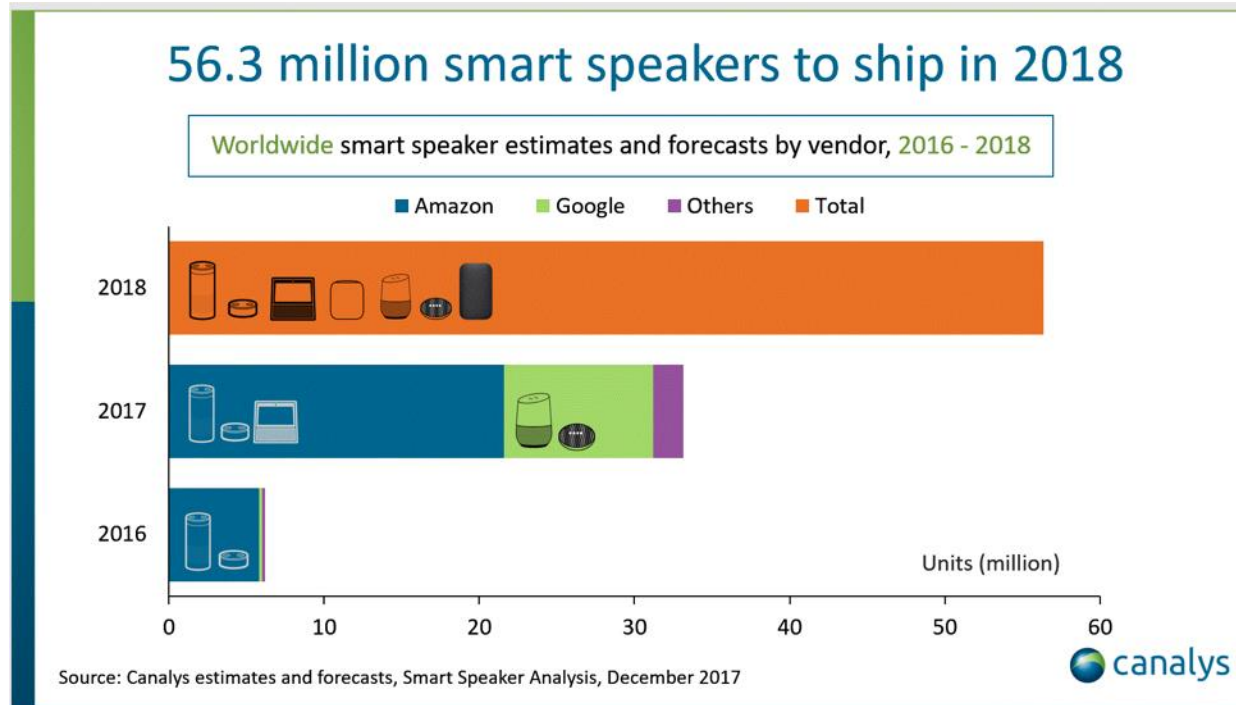
Samsung

Microsoft



Hey Cortana

# Voice Assistant Sales Continue



# Insurance Applications



## Distribution and marketing

- Value-added services
- Customer interaction/intimacy



## Product, pricing, and underwriting

- Segmentation of risk
- Usage-based insurance and telematics
- New products



## Claims

- Loss mitigation
- Data-powered claims handling

## IoT – Insurance Opportunities

- Roughly **60%** of consumers are likely to purchase a smart home product that **can detect, notify of, or prevent damage or loss.**
- Nearly **40%** of consumers would **switch insurers** to obtain smart home products.

Parks Associates, 2017, [Insurance Opportunities in the Connected Home](#)

## IoT – Insurance Opportunities

- Nearly **50%** of consumers are interested in receiving **additional services** from their insurance provider.
- Roughly **75%** of respondents willing to purchase a smart product are willing to let the **devices automatically communicate** with insurance companies.

Parks Associates, 2017, [Insurance Opportunities in the Connected Home](#)



# Illustrative Connected-Home Road Map

## Pilot/Test

Gain familiarity with the technology and data through a pilot to develop your own hypotheses.

## Verify

Use basic data elements from connected homes to systematically verify existence of protective devices at point of sale and renewal.

## Expand

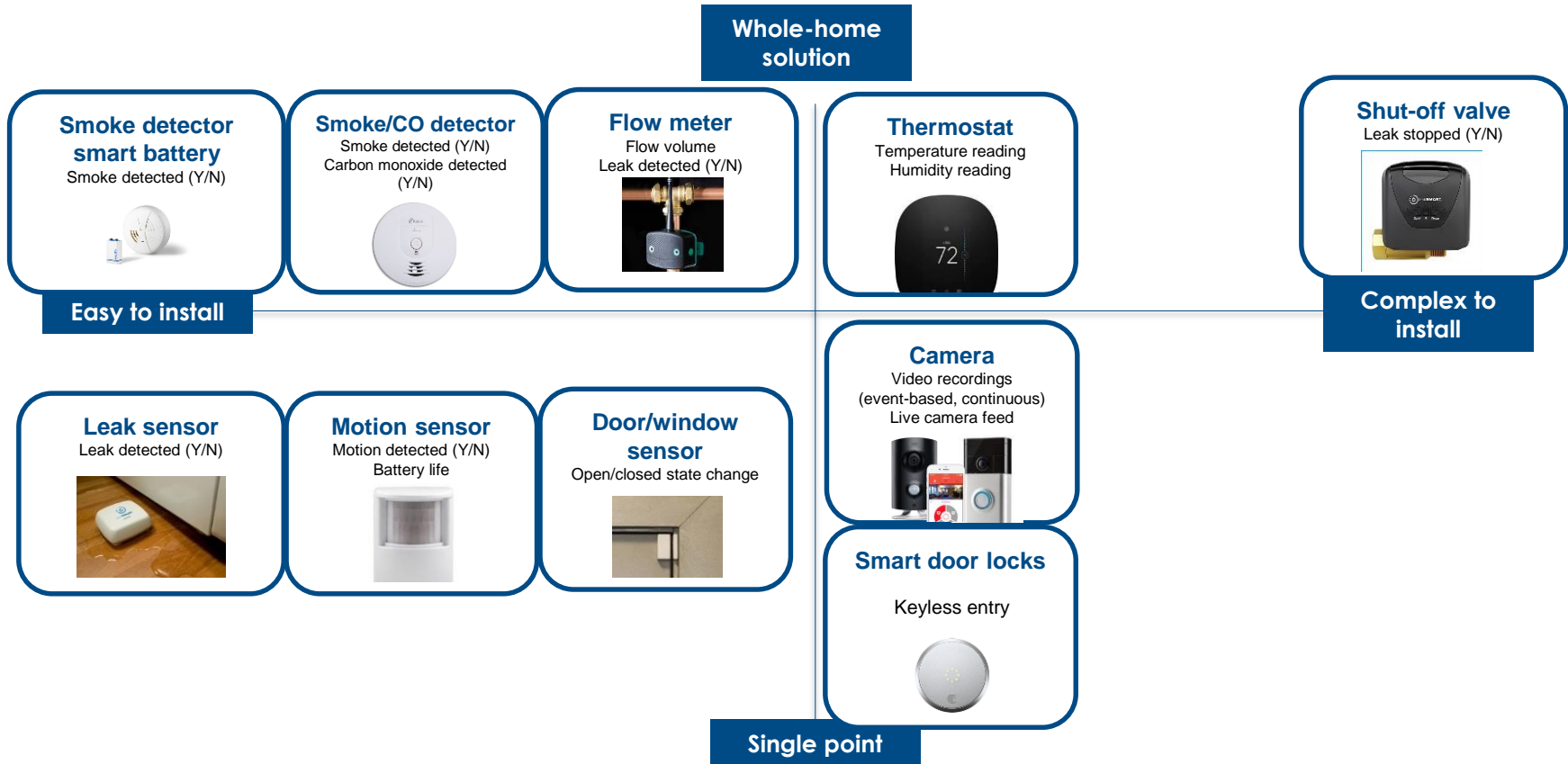
Collect a greater variety of connected data across a variety of providers to create and increase segmentation and expand discounts.

## Predict

Use real-time connected-home data to develop predictive, usage-based insurance models to offer the best price to the best risks.




# User Experience and Common Devices





# Water

**Flow meter**  
Flow volume  
Leak detected (Y/N)



**Shut-off valve**  
Leak stopped (Y/N)



**Leak sensor**  
Leak detected (Y/N)



- Alert property owner of possible water leak, risk of leak or shut of water
- Potential opportunity to eliminate some water leaks
- Provides date and time of event for one location
- Leverage machine learning to determine property behavior

# Fire

## Smoke detector smart battery

Smoke detected (Y/N)



## Smoke/CO detector

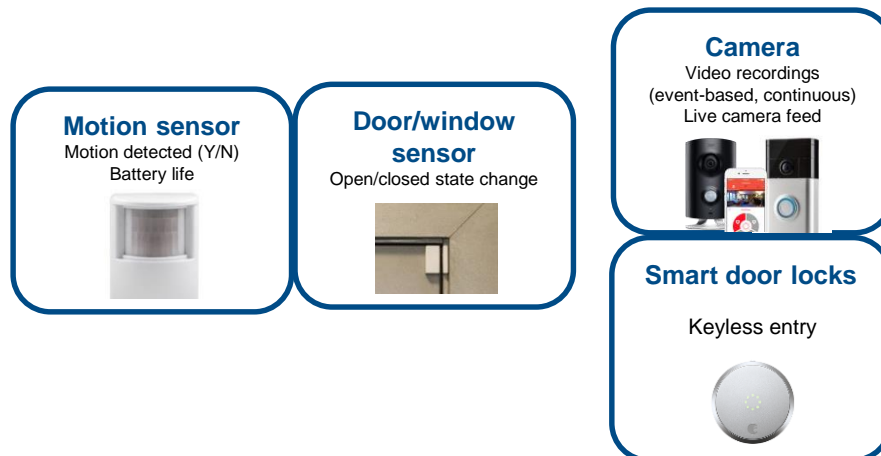
Smoke detected (Y/N)  
Carbon monoxide detected  
(Y/N)



- Alert property owner of potential fire based on smoke
- Devices provide date and time of event for smoke or fire
- Smoke/CO detector can show changes to readings leading to an event
- Leverage machine learning for predicting fires or CO

# Theft






- Alert property owner of activity
- Discourage or identify intruder, thief, or vandal
- Indicate path of intruder or point of entry
- Identify or document data, time and trigger





# Environment

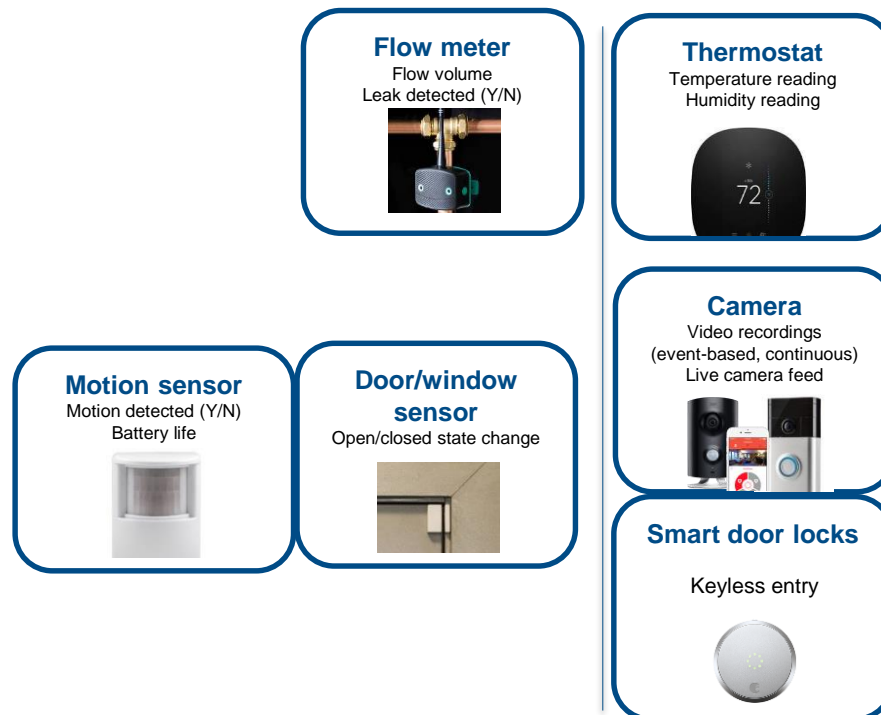
- Monitor changes such as humidity, temperature or physical environment
- Receive notices regarding freezing risk

<p><b>Smoke/CO detector</b> Smoke detected (Y/N) Carbon monoxide detected (Y/N)</p> 	<p><b>Flow meter</b> Flow volume Leak detected (Y/N)</p> 	<p><b>Thermostat</b> Temperature reading Humidity reading</p> 
<p><b>Leak sensor</b> Leak detected (Y/N)</p> 	<p><b>Camera</b> Video recordings (event-based, continuous) Live camera feed</p> 	



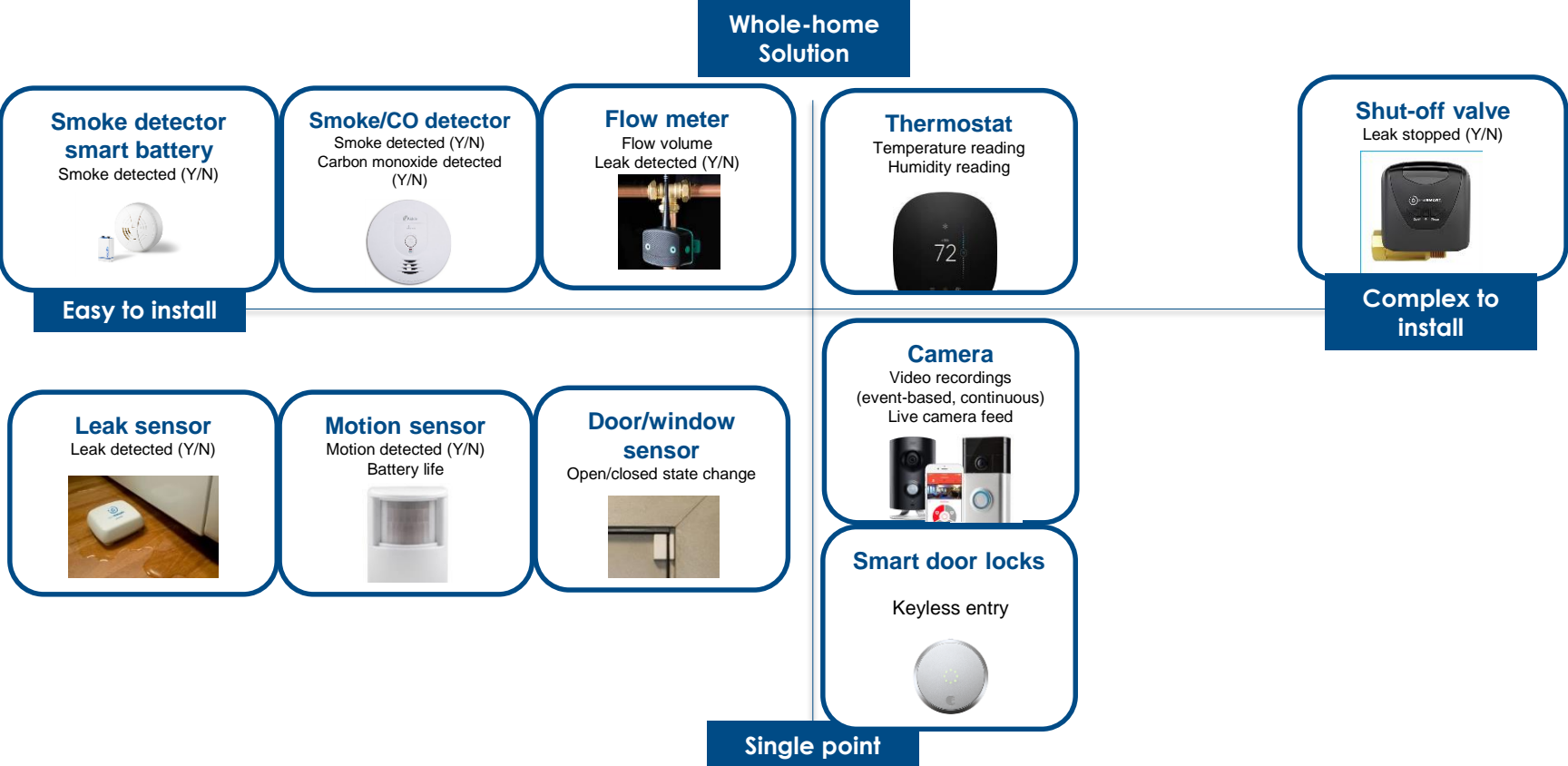
# Determine Occupancy

- Determine if the property has occupants or is vacant





# Use IoT Devices for Insurance



# Challenges for Insurers

**Navigating a Complex  
Connected Home  
Ecosystem**



**Consumer privacy  
& security  
concerns**



**Connected  
Device Selection**

**Data Volume &  
Structure**





## Top Initiatives

- The “connected world” continues to be among the top 5 initiatives for insurers.
- Data and analytics are among the top initiatives for 90% of property/casualty insurers.

IoT is disrupting insurance!

Source: Strategy meets Action





# Questions?

Thank You

Sandra Maples

[smaples@verisk.com](mailto:smaples@verisk.com)

Mobile/text: 608.335.7769