



Insight

## Home is where the smart is: the insurance implications of the connected home



While the use of telematics in cars is nothing new, the idea that this can be extended to the home marks a significant change both for our customers and the household insurance market as we know it.

The application of smart technology in the home is wide-ranging; from smart security systems to fridges that reorder your favourite foods when stocks are running low, it seems there is a smart device for almost everything, to improve the comfort and safety of your home.

The prolific amount of household data that these smart devices collect present significant opportunities for insurers to not only insure but even prevent accidents in the first place and so improve the proposition for the customer.

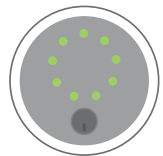
This data will also give insurers the ability to detect fraud and validate claims remotely. As such, it's an area of growing interest in the industry, as increasingly the substantial benefits of the connected home are being realised.

### Defining the smart home

Smart or connected homes can be broadly defined as a home equipped with lighting, heating and electronic devices that can be controlled remotely by smartphone or computer.

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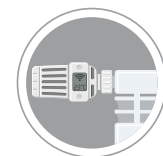
There are numerous different connected home devices available, including:



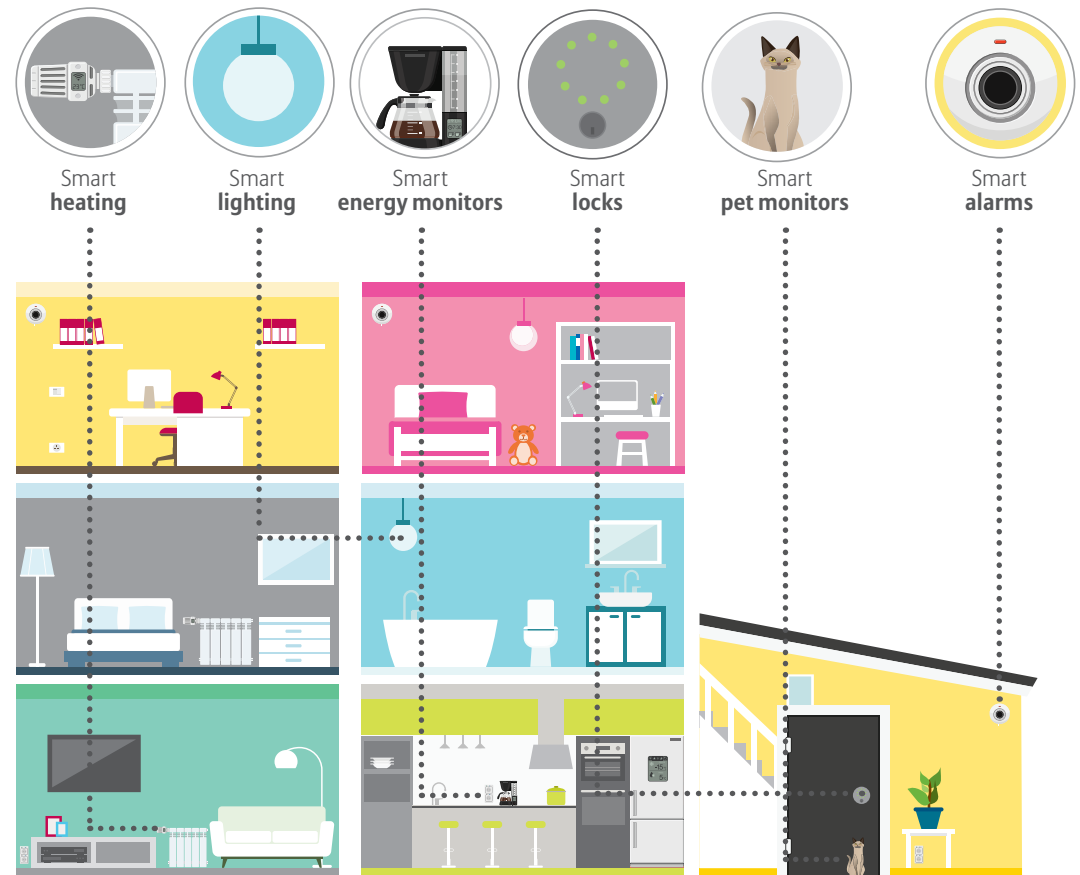
- **Smart locks** – these allow you to check, lock and unlock your house remotely, quite literally at the press of a button on your smartphone. They offer direct and flexible control over your home, meaning you can unlock the doors if, for example, you have a delivery arriving at midday. Certain types that allow you to authorise who can enter or that use fingerprint scanning and other recognition software are also available.



- **Smart alarms** – there are many different types, with different features. Some of the most popular include motion sensors that can be set to turn light(s) on in your house if movement is detected, to deter thieves. Special intruder alarms can not only detect intrusion, but also make calls and take pictures and videos. Smoke and water alarms are also able to detect any leaks, alert owners and shut off supplies, before disaster strikes.



- **Smart heating** – offer huge cost savings through thermostats that learn your heating habits and can be switched on or off through an app on your phone, allowing you to control your heating remotely. According to the BBC, it's estimated that by 2020 most homes in the UK will have a smart thermostat installed.





- **Smart lighting** – another useful theft deterrent, these can also be controlled remotely and used when you're away from home. A room lit 24/7 can be conspicuous – smart lighting can create a much more realistic impression that someone is at home.



- **Smart pet monitors** – these enable pet owners to use their smartphone to view their pet at home. You can check on your pet when away from home, record their behaviour and even monitor your home's temperature. Door sensors can also monitor when a dog walker or cat sitter comes in and out of the house and if your pet goes in a room it's not allowed in! Other features allow you to switch on a radio, light or portable heater to keep your pet comfortable and content.



- **Smart energy monitors** – these allow users to monitor their energy usage by specific device such as kettles, washing machines or lights, among others. By tracking the energy consumption of each device, they are also able to predict when items have developed a fault and are likely to break.

## Paving the way: application within insurance

The benefits these devices bring extend beyond the practical advantages they offer to the individual homeowner. Their application within insurance could provide many additional benefits to insurers and customers alike.

Initial actions by insurers in the connected home space have largely involved entering into partnerships with technology providers, under the assumption that consumers who have smart devices installed within their homes are generally a lower risk. The logic behind this is that if an individual has, for example, a smart security system installed in their home, they themselves become a better risk manager, taking extra provisions to secure their home and prevent unwanted intrusions.

However, smart home technology's potential within insurance is much greater than this. The next step is to, with permission, utilise the data they collect to gain a greater insight into customers and evaluate if certain behaviours lead to increased or decreased risk. The benefits of doing so are wide-ranging. These include:

### Improved and tailored insurance offerings

The huge and various amounts of household data that these different devices collect could be utilised to give insurers a better understanding of the individual customer and therefore improve risk profiling and underwriting capabilities.

Connected devices offer insurers a more granular method of pricing, by providing insight to what actually goes on within a home, rather than using general data such as a person's postcode and demographic profiling. As a result, smart home devices could enable insurers to improve their product offerings, through policies and pricing which reflect actual, individual risk.



#### Damage prevention and accident prediction

Connected home devices are able to predict accidents before they happen and, as a result, prevent damage to the home. Examples of this include motion sensors which detect intruders and trigger an alarm; smart smoke systems which predict a fire by monitoring temperature and humidity and contact a professional to resolve the issue before it happens; heating systems which detect when your pipes are about to freeze and interfere; and even water systems that detect common sources of potential water leaks and interrupt the water supply. By reducing accidents and therefore the number and severity of claims, there is no doubt that the application of these devices in insurance could prove valuable to both the customer and insurer.

#### Fraud detection

Furthermore, data from connected homes could detect or deter fraudulent claims, such as claiming accidental damage when it can be proven that no one was at home.



#### Claims validation

Data gathered from connected homes can also be used to validate claims remotely. Take for example, a smart energy monitor, which has detected a fault with your hair straighteners. Imagine that these faulty hair straighteners cause a house fire and the smart smoke system detects this; the data from both these devices could be used to help validate a claim for fire damage.



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### The consumer crux: barriers to the adoption of the connected home

Despite the numerous benefits these connected devices can bring to our customers, one of the main obstacles preventing its widespread adoption is consumer hesitancy. In a recent PwC survey, 28% of respondents were aware of devices available to monitor the security of their home but chose not to use them.



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of respondents were aware of devices available to monitor the security of their home but chose not to use them.

The main reason for this is due to concerns about data privacy. Of course the more devices you have in your house, the more data there is being collected on your daily habits. For example, some devices automatically track when you are away from home and your daily patterns – information which, in the wrong hands, could potentially leave your home vulnerable to a physical attack. It's important that each device in your home has good security settings to deter and prevent hackers.

Customers are also faced with an often overwhelming range of different devices to choose from, which are often self-install, have no emergency assistance and cannot speak to each other due to a lack of interoperability. Therefore, while starting to use a smart plug might be relatively simple to do, creating an actual 'Smart Home' can prove to be fairly complex.



46%

of respondents said that they would consider using these devices if it saved them money.

Furthermore, with these devices there is a single point of failure: the smartphone. A large majority of these devices are controlled through your phone, making it the critical equipment for utilising all that smart devices can offer – in other words, lose or damage your phone and you could lose access to all your devices.

Insurers have a job in encouraging consumers to adopt connected home technology. In the same survey by PwC, 46% of respondents said that they would consider using these devices if it saved them money. Perhaps by demonstrating how smart devices can lead to a more accurate method of pricing, consumers may be encouraged to adopt the technology.

### Seizing the opportunity

It's important for insurers to have the right systems and processes in place to deal with these advances in technology, which in turn can deliver substantial benefits for our customers. Smart home devices have the potential to transform the household market as we know it, enabling us to develop products which are centred around customers.

**As with all emerging technology, there is work for us all to do to ensure we remain abreast of the new trends and are prepared to manage both the risks and rewards associated with the connected home.**



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