Underwriters are improving analysis of the data they collect from customers’ homes, resulting in more accurate quotes.

By Oliver Ralph

It’s a common trick: leave the lights on when you go away and potential burglars will still think houses are occupied. The same thinking applies to homes elsewhere. Some people take additional precautions and just turn the lights on or off at random times to throw off potential burglars.

What if your lighting system went a step further and learned to mimic your movements around the house? What if it was able to control everything? It’s really exciting. The ability to stay connected to homes from anywhere in the world will help with risk mitigation. "This is about the risk and not about the personal touch," says John Roberts, head of the insurer Hiscox in London. "It is already available in some markets and the potential customer base is growing.

Roberts says the use of better data analytics is developing new ways of pricing and improving risk assessment. "We’ve built an analytical capability to look at our own data in comparison to that of industry models. In some cases we’ll look at our own data in comparison to that of industry models. We use best-in-class modeling and catastrophe rating tools from RMS and AIR, which help us to understand what the best models are," he says. "The insurance industry has to understand the cause and effect of climate change. It takes the air of mystery away from it look like any other financial product. It takes the air of mystery away from it.

These models have levelled the playing field. It is harder for an underwriter to price a risk when it comes to technology, new systems and new materials. It is really important to have a good understanding of the risks. “The technology and tools have allowed brokers and fund managers to package up large pools of insurance and make them more attractive to many other financial products. It takes the air of mystery away from it look like any other financial product. It takes the air of mystery away from it look like any other financial product.

The result has been the development of so-called insurance-linked securities (ILS) which allow big investors such as pension funds to put some of their capital into other risky assets and, in doing so, make a profit from it. Relatively straightforward policies, such as property catastrophe insurance, are better suited to ILS products because the returns are known and they are more liquid.

New capital has helped push down premiums, particularly for property insurance in the US, according to Mr Morgan. "The insurance industry models. In some cases we’ll look at our own data in comparison to that of industry models. In some cases we’ll look at our own data in comparison to that of industry models. We use best-in-class modeling and catastrophe rating tools from RMS and AIR, which help us to understand what the best models are," he says. "The insurance industry has to understand the cause and effect of climate change. It takes the air of mystery away from it look like any other financial product. It takes the air of mystery away from it look like any other financial product.

New capital has helped push down premiums, particularly for property insurance in the US, according to Mr Morgan. "The insurance industry models. In some cases we’ll look at our own data in comparison to that of industry models. We use best-in-class modeling and catastrophe rating tools from RMS and AIR, which help us to understand what the best models are," he says. "The insurance industry has to understand the cause and effect of climate change. It takes the air of mystery away from it look like any other financial product. It takes the air of mystery away from it look like any other financial product.

That allows AIG to make more accurate decisions about its underwriting. "We have the conversation with the client about the risk and about the market. That is really important as new you are in an insurance market that is very client-centric. Even in an industry that is going to technology more and more, it is still about the personal touch."
### Security
Sporadic assaults and cyber attacks are becoming more common, writes Ian Smith

When Islamist gunmen stormed the French shopping mall in Nau-"e in 2015 the ensuing gunfight with security forces left 17 dead and many wounded. It also resulted in 89 injured, including 12 children. The “military that went to war” in the attack had been trained by the Islamic State of Iraq and Syria (ISIS) in Syria and Iraq. They were part of a group that had travelled to Europe to fight with ISIS. The attackers included a man who had recently been to Jordan and who had been recruited to fight by his brother who had fought for the group. The group was part of a larger, international network of fighters who were trained in Syria and Iraq and who used social media to communicate with each other. The attack was the culmination of a wave of attacks by ISIS and other terrorist groups, including those in Europe. These attacks have increased in frequency and severity, and have targeted vulnerable targets such as places of worship, schools, and shopping centers. These attacks have resulted in significant loss of life and property damage.

### Insurers adapt coverage to meet evolving terrorist threat

The increased incidence of attacks by small groups of terrorists, including those in Europe and the US, has led insurers to adapt their business models and risk management strategies. Insurers are encouraging customers to provide them with more information, and to identify which claims have the potential to cause damage by attacks on digital infrastructure. Cyber hackers, which are more difficult to contain, have been behind the Islamic State of Iraq and Syria (ISIS) in Syria and Iraq. The group has used social media to communicate with each other and to recruit new members. The group has also used social media to spread propaganda and to recruit new members.

### The big data challenge

Insurers are encouraged customers to provide them with more information, and to identify which claims have the potential to cause damage by attacks on digital infrastructure. Cyber hackers, which are more difficult to contain, have been behind the Islamic State of Iraq and Syria (ISIS) in Syria and Iraq. The group has used social media to communicate with each other and to recruit new members. The group has also used social media to spread propaganda and to recruit new members.

### Understanding

Big data analysis has revolutionised many industries. For insurers, big data analysis can help insurers to identify potential claims, to understand customer behavior, and to predict future events. Insurers can use big data analysis to reduce costs, to improve customer loyalty, and to enhance underwriting.

### How will insurers use big data?

**Survey of property and casualty insurance executives (%)**

<table>
<thead>
<tr>
<th>insurer type</th>
<th>used now</th>
<th>expected to use in two years</th>
</tr>
</thead>
<tbody>
<tr>
<td>property-only</td>
<td>60</td>
<td>50</td>
</tr>
<tr>
<td>casualty-only</td>
<td>54</td>
<td>44</td>
</tr>
<tr>
<td>property/casualty</td>
<td>58</td>
<td>50</td>
</tr>
</tbody>
</table>

### Sources of data

#### Money

- Insurance claims data
- Financial statements
- Credit reports
- Social media
- Geospatial data

#### Non-financial

- Customer behavior
- Employee behavior
- Competitive intelligence
- Environmental data
- Internet

### Benefits of big data

- Improved underwriting
- Better fraud detection
- Enhanced customer experience
- Cost savings

### Challenges of big data

- Data quality
- Data privacy
- Data security
- Data governance

### The future of big data in insurance

- Personalization
- Predictive analytics
- Internet of Things
- Blockchain

### Conclusion

Big data analysis can help insurers to understand customer behavior, to predict future events, and to reduce costs. Insurers can use big data analysis to improve their understanding of customers, to reduce fraud, and to enhance underwriting. Insurers can use big data analysis to improve their understanding of customers, to reduce fraud, and to enhance underwriting.
Reinsurer provides lifeboat for flood victims

Water damage
A new industry scheme hopes to make itself obsolete within 25 years, writes Oliver Ralph

In the UK, an estimated 10% of homes face water risks are rising, and argued that if a property is not resilient, and what the most cost-effective measures are.

Given the scale of the task ahead for Flood Re, it is unsurprising that there are questions about whether it can achieve its aims. A paper published in February by the University of Oxford and the London School of Economics said: “We have yet to see evidence that “it remains unclear if and how Flood Re will succeed to cope with future risks and build in the state”. For the public, it is unclear whether the state is clear about what the schemes might be.

That means making more homes resilient to flooding will happen. How to do that will be a whole different story,” says Mr Gibson of Cunninghame Land. “I don’t think that people think much about flood risk resilience measures.”

These measures, he adds, can include changing the natural landscape and floodplains, replacing wooden window frames with stainless steel and running services such as electricity and telephones into the properties from above instead of below. However, he adds, “There is a lack of clarity around when a property is and is not resilient, and what the most cost-effective measures are.”

Netherlands
Rivers given more room to meander along path of least resistance to avoid flooding

The North Sea flood of 1953 is well commemorated in the Netherlands, where 920 people died and nearly 13,000 properties were damaged or destroyed. The country was already familiar for its engineering prowess in flood defence, formed by an elaborate system of earthworks — making use of dams, dykes, levees, locks, sluices and river barriers.

Near the mouth of the river, on level land that the country’s engineers approach by prioritising public safety and property by sacrificing local or other flood safety needs. But rising river levels in 1993 and 1995 forced the government to that the effectiveness of local flood defence, beginning the dykes, a scheme of complex measures to include relocating dykes and bypasses, and creating an authority for waterways and public works. “As we are essentially still working on the dykes is, including a growth in the natural vegetation, which can lead to soil instability,” says Mr Brouwer. “There has been a growth in the natural vegetation, which can lead to soil instability,” says Mr Brouwer.

Flood-Re’s role is not limited to flood defence, and it wants insurers and authorities to do more work to under- stand the effectiveness of flood defences, and it wants insurers and householders to work together to help bring down claim costs.

The scheme is supposed to last for 12 years. The idea is that in that period, the insurers will have plenty of time to be done with the end result of making an environment in which insurance is affordable for everyone without the need for state intervention.

With that in mind, Flood Re produced a guidance plan in February. That laid out how it plans to ensure that there will be no big differences in pricing once it begins to exist. That partly involves collecting data to analyse the costs and flood properties.

Flood Re is supposed to last for 12 years. The idea is that in that period, the insurers will have plenty of time to be done with the end result of making an environment in which insurance is affordable for everyone without the need for state intervention.

With that in mind, Flood Re produced a guidance plan in February. That laid out how it plans to ensure that there will be no big differences in pricing once it begins to exist. That partly involves collecting data to analyse the costs and flood properties.

Flood Re is supposed to last for 12 years. The idea is that in that period, the insurers will have plenty of time to be done with the end result of making an environment in which insurance is affordable for everyone without the need for state intervention.

With that in mind, Flood Re produced a guidance plan in February. That laid out how it plans to ensure that there will be no big differences in pricing once it begins to exist. That partly involves collecting data to analyse the costs and flood properties.

Flood Re is supposed to last for 12 years. The idea is that in that period, the insurers will have plenty of time to be done with the end result of making an environment in which insurance is affordable for everyone without the need for state intervention.

With that in mind, Flood Re produced a guidance plan in February. That laid out how it plans to ensure that there will be no big differences in pricing once it begins to exist. That partly involves collecting data to analyse the costs and flood properties.

Flood Re is supposed to last for 12 years. The idea is that in that period, the insurers will have plenty of time to be done with the end result of making an environment in which insurance is affordable for everyone without the need for state intervention.

With that in mind, Flood Re produced a guidance plan in February. That laid out how it plans to ensure that there will be no big differences in pricing once it begins to exist. That partly involves collecting data to analyse the costs and flood properties.

Flood Re is supposed to last for 12 years. The idea is that in that period, the insurers will have plenty of time to be done with the end result of making an environment in which insurance is affordable for everyone without the need for state intervention.

With that in mind, Flood Re produced a guidance plan in February. That laid out how it plans to ensure that there will be no big differences in pricing once it begins to exist. That partly involves collecting data to analyse the costs and flood properties.

Flood Re is supposed to last for 12 years. The idea is that in that period, the insurers will have plenty of time to be done with the end result of making an environment in which insurance is affordable for everyone without the need for state intervention.

With that in mind, Flood Re produced a guidance plan in February. That laid out how it plans to ensure that there will be no big differences in pricing once it begins to exist. That partly involves collecting data to analyse the costs and flood properties.

Flood Re is supposed to last for 12 years. The idea is that in that period, the insurers will have plenty of time to be done with the end result of making an environment in which insurance is affordable for everyone without the need for state intervention.

With that in mind, Flood Re produced a guidance plan in February. That laid out how it plans to ensure that there will be no big differences in pricing once it begins to exist. That partly involves collecting data to analyse the costs and flood properties.

Flood Re is supposed to last for 12 years. The idea is that in that period, the insurers will have plenty of time to be done with the end result of making an environment in which insurance is affordable for everyone without the need for state intervention.

With that in mind, Flood Re produced a guidance plan in February. That laid out how it plans to ensure that there will be no big differences in pricing once it begins to exist. That partly involves collecting data to analyse the costs and flood properties.

Flood Re is supposed to last for 12 years. The idea is that in that period, the insurers will have plenty of time to be done with the end result of making an environment in which insurance is affordable for everyone without the need for state intervention.

With that in mind, Flood Re produced a guidance plan in February. That laid out how it plans to ensure that there will be no big differences in pricing once it begins to exist. That partly involves collecting data to analyse the costs and flood properties.

Flood Re is supposed to last for 12 years. The idea is that in that period, the insurers will have plenty of time to be done with the end result of making an environment in which insurance is affordable for everyone without the need for state intervention.

With that in mind, Flood Re produced a guidance plan in February. That laid out how it plans to ensure that there will be no big differences in pricing once it begins to exist. That partly involves collecting data to analyse the costs and flood properties.

Flood Re is supposed to last for 12 years. The idea is that in that period, the insurers will have plenty of time to be done with the end result of making an environment in which insurance is affordable for everyone without the need for state intervention.

With that in mind, Flood Re produced a guidance plan in February. That laid out how it plans to ensure that there will be no big differences in pricing once it begins to exist. That partly involves collecting data to analyse the costs and flood properties.

Flood Re is supposed to last for 12 years. The idea is that in that period, the insurers will have plenty of time to be done with the end result of making an environment in which insurance is affordable for everyone without the need for state intervention.

With that in mind, Flood Re produced a guidance plan in February. That laid out how it plans to ensure that there will be no big differences in pricing once it begins to exist. That partly involves collecting data to analyse the costs and flood properties.

Flood Re is supposed to last for 12 years. The idea is that in that period, the insurers will have plenty of time to be done with the end result of making an environment in which insurance is affordable for everyone without the need for state intervention.

With that in mind, Flood Re produced a guidance plan in February. That laid out how it plans to ensure that there will be no big differences in pricing once it begins to exist. That partly involves collecting data to analyse the costs and flood properties.

Flood Re is supposed to last for 12 years. The idea is that in that period, the insurers will have plenty of time to be done with the end result of making an environment in which insurance is affordable for everyone without the need for state intervention.

With that in mind, Flood Re produced a guidance plan in February. That laid out how it plans to ensure that there will be no big differences in pricing once it begins to exist. That partly involves collecting data to analyse the costs and flood properties.

Flood Re is supposed to last for 12 years. The idea is that in that period, the insurers will have plenty of time to be done with the end result of making an environment in which insurance is affordable for everyone without the need for state intervention.

With that in mind, Flood Re produced a guidance plan in February. That laid out how it plans to ensure that there will be no big differences in pricing once it begins to exist. That partly involves collecting data to analyse the costs and flood properties.

Flood Re is supposed to last for 12 years. The idea is that in that period, the insurers will have plenty of time to be done with the end result of making an environment in which insurance is affordable for everyone without the need for state intervention.

With that in mind, Flood Re produced a guidance plan in February. That laid out how it plans to ensure that there will be no big differences in pricing once it begins to exist. That partly involves collecting data to analyse the costs and flood properties.

Flood Re is supposed to last for 12 years. The idea is that in that period, the insurers will have plenty of time to be done with the end result of making an environment in which insurance is affordable for everyone without the need for state intervention.

With that in mind, Flood Re produced a guidance plan in February. That laid out how it plans to ensure that there will be no big differences in pricing once it begins to exist. That partly involves collecting data to analyse the costs and flood properties.

Flood Re is supposed to last for 12 years. The idea is that in that period, the insurers will have plenty of time to be done with the end result of making an environment in which insurance is affordable for everyone without the need for state intervention.

With that in mind, Flood Re produced a guidance plan in February. That laid out how it plans to ensure that there will be no big differences in pricing once it begins to exist. That partly involves collecting data to analyse the costs and flood properties.

Flood Re is supposed to last for 12 years. The idea is that in that period, the insurers will have plenty of time to be done with the end result of making an environment in which insurance is affordable for everyone without the need for state interven...
Number of earthquakes, magnitude 3.0 and greater
Source: USGS
Oklahoma earthquakes
A Halliburton oil well worker at a fracking rig site near Mercedes, Oklahoma.

Earthquake officials say Oklahoma’s fracking industry poses a risk to natural disasters.

The courts are yet to decide who is liable for damage caused by increased ground movements.

Insurance industry
A property insurance market that is incapable of being sustained may have to be 'big enough to be big', says Robert Hartwig, president of the Risk Management Solutions.

Three years after the disaster, the insurance market is still struggling to come to terms with the costs of the disaster.

We cannot keep badging property to spend money that they clearly don’t need, says Mr Hartwig.

The insurance market has identified a lack of adequate planning as a hallmark of building resilience. Insurance policies should be designed to pay out in the face of building failures or geo-hazard risks.

We have to come to the realisation we cannot keep badging property to spend money they don’t need.

The insurance market is important to educate customers on the risks of building by telling them property is not badged.

Bent Goetze, an insurance claims expert, argues that the market has yet to develop its own proper mitigation approach.

The government has not placed official produced water in disposal wells as a last resort.

A recent study by Deloitte Access Economics, which will be published in its report, estimates that Australia’s natural disasters cost $100bn.

The government has proposed to investigate the cost of such events and how better to prepare for them.

The insurance market is important to mitigate the risks of property and other losses.

The government has not placed official produced water in disposal wells.