

Disruption in the insurance industry

Here comes the Internet of Things

Massive changes are coming

The Internet of Things (IoT) is changing insurance industry dynamics. The IoT comprises millions of objects with embedded electronics that can transfer data over a network without human interaction. As it grows even more massive, one projection has more than 100 billion connected devices in use by 2050.¹ The IoT can be a disruptive force in insurance with the potential to create competitive advantage for first movers who are exploiting the opportunity it presents.

Reducing risk

The notion that it costs less to prevent a problem than it does to fix it led to Benjamin Franklin's axiom, "An ounce of prevention is worth a pound of cure." For years, the medical insurance industry has offered discounts for non-smokers and smoking cessation, as well as for enrolling in exercise programs. But until recently, other areas of insurance have been slow to adopt similar types of initiatives.

Because of the IoT, insurers now have new and better customer data they can use to measure behavior, which makes it possible to offer discounts or surcharges based on risk factors.

For example, an auto insurer might traditionally have measured a driver's risk against several public or easily available variables, such as credit score, location, type of car, miles driven per year, age and gender. These variables provided sufficient insight to properly rate an individual based on historical trends. By incorporating additional variables, insurers could

allow better pricing tailored to individual customers. With data from IoT telemetry, insurers could offer special discounts to drivers who rarely exceed the speed limit and always put on their seat belts.

In homeowners' insurance, IoT data can be used to alert residents to hidden water or gas leaks in the first few minutes to help avert disasters and reduce risk for both the insurer and the insured. The IoT also can be used to help detect fraudulent claims. Insurers could determine if a property is outside the area damaged by a hailstorm by combining location information with IoT micro-weather reports.

In addition to being used by forward-thinking traditional insurers, IoT data is also being captured and curated by a new breed of competitors called *insurtechs*. Insurtechs use technology to disrupt business models in the insurance industry in much the same way fintechs are attempting to disrupt the financial services industry.

One business model change would include who initiates contact. Today, after a traffic accident, customers typically contact insurance companies to initiate claims. Consider how the situation changes if instead, telemetry alerted an insurer to an accident as it occurred. Emergency services could be dispatched immediately if airbags were deployed, and adjusters, repair shops and rental cars could be alerted.

Of course, the use of IoT data increases privacy concerns. Data breaches on the insurer side result in loss of privacy for customers. According to a recent survey, 60 percent of millennials said they would purchase IoT-connected devices, such as a refrigerator. But when asked if they would be willing to share data with their insurers, only 20 percent said they would.³

Insurance carriers are faced with the need to demonstrate why customers benefit from sharing personal data. Incentives might include rate discounts, associated products, related services or experiences.

Ripple effects

IoT has the potential to reduce the risk profile in the property and casualty insurance industry as real-time insights from real-time IoT data become pervasive. Consider the dynamics of the automobile insurance business. With 94 percent of traffic accidents deemed to be the result of human error, the research and development of driverless vehicles puts this business on a path to lowering its risk profile.² It also raises the question of who pays the insurance bill. Does the liability belong with the vehicle owner? Or does it shift, in most cases, to the manufacturer?

Because customers can be price-sensitive, some insurers are looking at IoT devices as a new source of value to attract and retain customers. At least one automobile insurer has deployed a new Internet-connected sensor that plugs into a vehicle's accessory socket and senses collisions. It pairs with a cell phone and asks the driver if assistance is required. If the driver doesn't answer, the sensor generates an emergency call with the vehicle's location. The service is offered at a nominal cost and the device is provided for free to subscribers. The European Union (EU) is taking the step of requiring this eCall technology to be in all cars in the EU by March 31, 2018.⁴

Many of the interactions between customers and insurance companies are the result of negative experiences, such as car accidents, floods, fires, thefts and increasing premiums. The IoT is changing the dynamic with customers to one that is less focused on claims and more advisory-oriented.

Revenue growth

Some companies are using the IoT to explore new business models to increase revenues. Metromile, a San Francisco-based insurer, offers to charge low-mileage drivers by the mile. It uses telematics data to create a new type of insurance customer experience that includes tracking driving distances, diagnosing mechanical problems and sending alternate-side parking alerts.⁵ Many insurtechs have a variety of promising IoT technologies that may offer potentially powerful partnership opportunities for traditional insurers.

The IoT also can be used to generate new revenue opportunities by quantifying risk where it previously wasn't possible. For example, installing sensors that monitor environmental conditions, such as ambient sound, light and oxygen levels, may create new possibilities for underwriter productivity.

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For the insurance industry, the implications of the IoT are about more than adding additional data points to measure risk, retain customers or grow revenue. IoT technology is disruptive, offering the opportunity to be at the forefront of innovation. IoT-driven changes will put additional pressure on management teams to act and react to an impending industry transformation.

Driverless cars, smart homes and cars and new business models aren't just on the horizon. They're here. Insurance companies can take a few steps now to prepare for the relentless growth of the IoT.

1. Start small; learn and grow fast. Create proofs-of-concept in small, definable business or geographic areas. Engage customers at the beginning for design and throughout for feedback, and reward them for participating. Be prepared to scale ideas that work well and drop those that don't.

2. Building IoT skills should be a major focus.

While 46 percent of insurance execs told us they are prepared to invest in digital interconnection technology over the next 10 years, only 34 percent said the workforce has the skills to cope with it now.⁶ Even 10 years from now, only 49 percent expect the skills to be there.⁷

3. Create alliances with insurtechs and others in the insurance ecosystem to accelerate innovation and help define industry standards. When considering whether to build or buy innovation, look for areas where an insurtech has technology that fills a capabilities gap. An alliance can speed innovation, help share risk and cost less than an acquisition. Alliances can include other insurers, financing firms and even insurance regulators.

4. *Consider what customers value.* In an IoT-oriented, lower-risk future, an insurer's biggest asset may be its relationship with policyholders. Find ways to provide customer support in areas they personally value. Directions, points of interest, traffic and weather information are potential adjacencies for auto insurance customers. Social media is a data goldmine for finding and establishing communities of interest among customers and prospects. Look at new services to reduce risk. Home and auto security systems and cybersecurity are just two examples. Provide loyalty programs and premier, personalized customer service to the most profitable customers.

The impact of the IoT on the insurance industry is happening. Business models are coming under pressure. The choice is straightforward: get prepared for change and be ready to embrace it – or watch it happen and become a victim of it.

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