IoT: Upgrading the Insurance ecosystem

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They say change is the only constant, but with the advent and development of technology, the speed of change is unlike ever before. Something relevant today might not be tomorrow. We have embarked upon broad journeys with various technologies to make our lives simpler, smarter and connected ranging from our phones to our homes. While the businesses and customers are adapting to smart devices, the thrust now is to make strong ecosystems around these.

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The classification of application for various segments is being introduced, for instance, telematics applications for motor insurance and wearable device based health insurance. All these connected applications bring a set of specific data to the insurers. IoT and wearable built with extremely narrow focus, such as Kinetic for monitoring back injuries or devices for gauging stream pressure have brought insightful details to the insurers backed by the cost and value equation. Interestingly, the technology is capable of impacting more than just one aspect of the insurance industry.

Underwriting and Pricing

The sole purpose of underwriting is to understand and price the risks right and it can be more efficient if based on granular data. IOT offers this level of granularity, for instance, by introducing telematics, insurers are able to collect the data on usage and driving behaviour and they can evaluate this customized data at the time of renewals. This is a stepping stone for Usage Based Insurance. Similarly, with the advent of fitness wearable and health applications on smartphones, insurers know more about their customers' health. A person scoring well on these devices reflects a good risk and vice versa and may even fetch you a better deal on renewals. Although, this data is not a sole criteria to write a risk, yet a vital one. Within group health insurance, discounts are offered to fitness conscious employees to encourage them and in the long run, it can effectively bring the premiums down. Thus, the convergence of different data types leads directly to increased precision in assessing risk, pricing policies and estimating necessary reserves. This indeed is a sharper approach as compared to historical claim data and risk studies. In the long run, IOT can become the product itself. I firmly believe this will be the future of insurance.

Claims and Loss minimization

Micro level data on loss location through geo positional sensor based devices or accurate weather reports through weather stations on crop fields are all examples of how IOT can contribute to claims. IoT can be used not just to verify conditions at the time of claim but can also act as deterrents for normal losses, for instance, an IoT device in health insurance can alarm the customers about possible health risks well in advance and later reducing the claim incidents. This makes a lot of sense in the Indian scenario where underwriting profits are still a distant reality for the majority of the market, and the industry relies on investment profits only.

Similarly, sensors put within cargo can help minimize marine insurance losses and can aid in the recovery of stolen crates. Thermostat based sensors can provide timely warnings of fire and even auto activate fire fighting mechanisms such as water hydrants to minimize loss before extensive damage has been done. Even in your houses, a connected ecosystem of IOT enabled devices such as cameras, smoke detectors can help safeguard your house against intruders, fires and even flooding in the long run. The most important part over a period of time is assessing this data and using this as underwriting repositories to help enhanced decision making. The claims saving via these smart devices don't just save the bottom line for insurers but help safe guard assets of customers, truly adding value. These will benefit both the policyholder and the carrier by avoiding a claim and in the long run establishing a relationship beyond insurance.

Sales and Ecosystems

From a marketing perspective, IOT and gadgets offer an effective sales differentiators and give an edge to the product features. They offer a lot of value to customers and the control of IOT based insurance solutions on a smartphone makes them a simple engagement tool. Robust ecosystems can be built around such offerings to establish customer engagement, enhance their experience and increase brand loyalty. Citing an example, if a telematics based offering allows customers to have a look at their car's engine health, geo tags their chauffeur driven car and offers brownie points for good driving behavior, more likely customers will use

it extensively and be a part of data related to their driving behavior. Wearable sensors for geriatric care are also important and can act in case of falls, injuries, irregular physical activity and even help to track down people suffering from amnesia.

Data Analytics

The preliminary purpose of data collection is to use it for future reference. Typically, till now data has been of descriptive nature, i.e. telling insurers what happened. Post this they have been able to do a diagnostic analysis of why did it happen. IOT when combined with artificial intelligence, will take this to automated predictive analysis and even prescriptive models of analysis and operation. Imagine cars that can foresee accidents based on what the collective memory has seen earlier and is able to apply brakes well in time. In the near future, companies that evolve beyond building mere data centers and instead focus on building self-learning intelligence units are going to rule. In the end, in order to harness the power of the IoT, insurers will have to work creatively on choosing data and its usage. Carriers striving for competitive advantage will need to make significant investments in technology and must re-tool their business processes and the skills set to transform their operations.

The ever rising machine-to-machine communications, Artificial Intelligence, and cloud computing, with algorithms, will determine the industry movements and actions in the future. The role of IoT in insurance has just ignited and as insurers become more tech-savvy, and as many more millions of devices connect to the Internet this is going to grow by manifold.