15 ways technology is transforming insurance—and five to watch
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Insurance is known for being on the traditional side when it comes to modernising processes, but there are some in the industry who are already using technology to transform their businesses. *Intelligent Insurer* explores the top tech that is making a difference.

Before the latest crop of innovative insurtech rock stars thought of champagne riches and caviar dreams, other insurance firms were quietly, or not so quietly, developing and installing innovative technology such as big data analytics and blockchain.

The benefits range from faster processing to fraud detection, increased customer loyalty, and cost savings. Here are 15 candidates that are making a difference today, as well as five to watch for tomorrow.

1. B3i: collaborative blockchain supports certainty

The Blockchain Insurance Industry Initiative (B3i) was created in 2016, with backing from major re/insurers, to explore how blockchain technology and smart contracts in re/insurance could improve and cut transaction costs. With the goal of slashing administration costs by up to 30 percent, the technology makes deals faster and more efficient by bringing different stakeholders in the process together in one network.

This collaborative project has around 40 members including SCOR, Munich Re, Swiss Re, and Zurich Insurance, and the B3i group is evolving its technology to allow the network to have a single version of a record or document containing all previous changes so there can be no misunderstanding or missing information.
Documents exist in a very secure environment, allowing for the selective distribution of the information.

2. CyberCube: cyber risk modelling steps up

Designed to fill the gap in the market for a re/insurance industry-dedicated cyber risk product, this cyber risk modelling tool launched in March 2018 to offer the kind of risk-modelling platform for cyber risk that was already available for other lines of business.

Developed behind closed doors with the backing of tech firm Symantec Corporation and investor Trident Capital Cybersecurity, Trident’s co-founder and managing director J. Alberto Yépez said the cyber risk market had been constrained by a lack of robust analytics to price cyber risk or understand systemic risk.

The CyberCube product helps to address that issue and is already working with Chubb, Munich Re, Guy Carpenter, Aon, and CNA. In July 2019 CyberCube Analytics was recognised as a ‘Technology Pioneer’ by the World Economic Forum.

3. E-trading: deal automation boosts efficiency

It might not sound like the most innovative development, but e-trading has made a difference in the world of re/insurance, as it has become the go-to tool for daily transactions.

It’s about automating time-consuming tasks to boost efficiency for brokers and insurers. It also provides accurate and secure records for compliance purposes.

From Allianz to Liberty and even the three centuries-old market Lloyd’s of London, there aren’t many places that don’t now do some form of e-trading, as new e-trading platforms continue to launch at regular intervals.
There will always be some resistance to change as paper is the traditional medium of choice but in the UK brokers are increasingly modernising their trading practices to embrace e-trading, with 94 percent currently placing business electronically, according to a research consultancy FWD study in July 2019.

Aviva leads the market in UK e-trading with 73 percent of all brokers doing business via its Fast Trade online platform. However, the take-up of e-trading among brokers who use a managing general agent or a coverholder is just 41 percent.

4. Expert System: NLP speeds up automation

Making sense of large volumes of information, let alone getting the maximum value from it, can be difficult for insurers to manage in a timely and efficient way. Expert System uses artificial intelligence (AI) to develop natural language programming (NLP) to understand text by “mimicking human comprehension, but in a fraction of the time”.

The company has worked with large insurers to offer customer-facing chatbots, natural language Q&A, automatic email classification, and intelligent search applications.

Its tech also offers enhanced AI robotic process automation for claims management, policy underwriting, audit support, third party risk management, anti-money laundering and legal compliance procedures, and cybersecurity intelligence.

Expert System says NLP is capable of understanding text that is knowledge-intensive and available in a number of different formats, and content with multiple cross-references, making it a “perfect match” for underwriting uses.
5. Groundspeed: AI mines hidden data riches

US-based insurtech Groundspeed extracts critical data insights from unstructured documents using AI. Its technology uses computer vision (to gain high-level understanding from digital images or videos), machine learning, and natural language processing to apply computational techniques to analyse and combine natural language and speech.

The aim is to excavate the treasure trove of valuable information found in insurance loss runs, exposure schedules and policies. The company said that its clients say that before Groundspeed, 80 percent of this data was lost and the remaining 20 percent was used primarily for operational purposes.

With AI, the insurtech harvests, enhances, and extracts data to order, to improve margins, spot profitable pools of business and improve customer experience.

In April 2019, Aon partnered with the firm and said “invaluable insights” had been pulled out of its historical insurance documents that have helped it identify the underlying causes of claims, industry benchmarks and losses versus premium, among other benefits.

6. Hi Marley: AI engages service users

Chatbots are charming customers as Massachusetts-based insurtech Hi Marley’s AI-powered customer messaging and claims handling service works to improve the customer experience.

Described as the “first intelligent conversation platform specifically built for the insurance industry”, Hi Marley works with various insurers including Hiscox, QBE North America and, most recently re/insurance broker Aon, to support insurers’ customer engagement.

The conversation platform helps to shift communication from calls to more efficient messaging via text, connecting the various stakeholders in the insurance ecosystem.
7. Insurwave: smooth sailing blockchain

Blockchain-enabled marine insurance Insurwave was developed by EY and Guardtime, in collaboration with insurance industry firms, to integrate and secure the streams of disparate data sources involved when insuring global shipments.

The platform, launched in May 2018, brought together a whole insurance value chain, from container ship operator Maersk to brokers Willis Towers Watson, reinsurer AXA XL, and re/insurer MS Amlin. It supports thousands of automated ledger transactions and helps manage risk for around 1,000 commercial vessels.

It allows for faster payment of claims—within hours in some cases—and premiums can be agreed and settled within seconds as the information on the platform can be updated in real time. Shippers can use it to track assets and share this data with brokers and insurers, while insurers can use it to track their exposures in near real time to better match capital and accumulated risk. Insurwave can also digitally map warzones and calculate a premium if a ship is considering crossing that area.

8. Lemonade: AI-accelerated processes

Described as “the tech company doing insurance” this rapidly growing disruptor splashed onto the scene in September 2016 with AI-powered chatbots instead of brokers, behavioural economics and algorithms speeding up almost every part of the process.

Chief executive Daniel Schreiber said Lemonade was launched to change the way people think about insurance. He wasn’t just talking about its faster digital attributes, he also wanted to embed transparency and honesty as the firm’s core values. Schreiber said the technology reduces time, hassle and costs, and its behavioural economics displaces fraud and conflict. Its fast growth, big name backers and, most recently, the expansion into Europe, speak for themselves.
9. Mapfre: automobile VR training saves time and money
Spanish insurer Mapfre developed its CESVIMAP virtual reality (VR) project to boost training for automobile loss adjusters and to offer difficult-to-gain experience. At the same time it helps to enhance claims management.

Developers built a VR experience to mimic the physical assessment professionals would need to do on a real car. With a VR headset, trainees can “immerse themselves in practical learning”.

It means that learning that requires difficult-to-obtain car parts, or particular cars themselves, can be replicated in VR. This reduces the cost and makes potentially risky procedures safer for trainees to practise.

10. Markerstudy: automation and machine learning drive renewals
Technology plays such a defining role for insurer/managing general agent Markerstudy that it defines itself as “a digital company”.

It has embraced many forms of insurtech but one that has shown strong results is when the company started using machine learning to support renewals in 2018. With machine learning, the company can be transparent and show how it ensures customers get a fair deal, while still setting a competitive price.

Machine learning establishes the pricing point at which a customer is happy simply to renew, as opposed to shopping around for a different deal. With this technology, Markerstudy’s renewal rates on one book of business improved by 40 percent shortly after the company started using it.

11. McKenzie Intelligence Services: big data slashes claims costs
Former British Army intelligence officer Forbes McKenzie, CEO of McKenzie Intelligence Services (MIS), saw an opportunity to create accurate damage data for insurers by “automatically consuming and analysing big data” with MIS algorithms.
In 2015, it launched a cat damage analysis service based on satellite imagery from before and after an event, within hours of its happening.

McKenzie says his tech has “brought the cost of business interruption claims down to 10 percent of what they were estimated to be for hurricanes Harvey, Irma and Maria”. He cites another example: a managing agent had assumed it had $38.5 million of risk but the MIS system’s analysis showed it should be closer to $900,000.

12. New Paradigm: parametrics narrow insurance gaps

This company has specialised in developing parametric insurance and risk transfer, using a network of monitoring stations, to serve protection buyers in three countries, seven US states and one US territory.

Parametric insurance is an agreement to make a payment if a triggering event occurs, rather than for losses incurred after an event. This can be a certain wind speed or other variables measured by monitoring stations. Insurance cover is triggered if pre-defined event parameters are met or exceeded.

Parametric risk transfer has become more popular as the frequency and severity of natural catastrophes has increased because it can help address the protection gap where many types of risks are not insured or are excluded under traditional insurance programmes.

13. Shift Technology: AI fraud detection moves beyond traditional scores

Fraud remains the bane of many insurers, with companies investing in investigation teams to catch the criminals. The company developed AI-powered tech to go beyond traditional claim scoring based on probability analysis and is already working with AXA, Covea, and CNA among other insurers. It offers users analytics that show why a claim looks suspicious, so they can take action.
The company claims its AI tool is two-and-a-half times better at fraud detection and identification than the market average and says it adds new fraud scenarios regularly.

14. Unipol Group: telematics save drivers money

As cars become ever more digitally connected, insurers are looking more to telematics to assess the risks. Telematics can record and analyse the way people drive—from when and where you drive to your driving style, including the speed of your car. It enables insurers to offer personalised insurance and has been developed by many auto re/insurers, such as Munich Re, keen to have a more accurate picture of risk and price their policies accordingly.

The Unipol Group services millions of vehicles which are equipped with telematics boxes. In 2017, its subsidiary, Dublin-based UnipolRe, confirmed plans to expand its telematics operations in Europe to Germany, France, and the UK.

More generally, according to analysis from Consumer Intelligence in September 2018, telematics helped drive UK car insurance prices down 9.1 percent.

15. When Fresh: big data supermarket

This tech firm uses big data to help home insurers offer instant, accurate quotes with minimum information, sometimes just an address, via its “data supermarket”.

With data available from more than 200 private and public data feeds, including sources such as Airbus, Zoopla, and Bluesky, the insurtech’s API (application programming interface) pulls together data and presents it for a particular address to give a clear picture of risk.

Mark Cunningham, When Fresh CEO and co-founder, said the API makes the multiple datasets “easy to use, so you could be looking at any aspect of form filling, or enrichment, or looking at book value or reinsurance”.
The tech can give highly detailed assessments such as how many trees are near a property, the height of the trees, and the type of soil a property is built on and its subsidence impact, as well as identifying previously unmarked mine pits in the area.

... and five to watch

1. Uber and Inshur

In May, Inshur, the mobile-first provider of commercial auto insurance for private hire drivers, partnered with smartphone taxi app Uber to offer its drivers insurance via the Uber app. Risks and pricing are calculated using information about average trips, location and driver ratings in near real time to reward safe driving with cheaper policies.

2. Lloyd’s backs parametrics and smart contracts

Two July 2019 reports from Lloyd’s—Triggering Innovation: Parametric insurance, and Triggering Innovation: How smart contracts bring insurance to life—highlighted the benefits of parametric insurance and smart contracts technology. They emphasised the ability of parametrics to design products for risks that could otherwise be uninsurable or underinsured.

Smart contracts were lauded for their practical applications in the cargo, contingency/aviation, agriculture, and property catastrophe classes. Lloyd’s also said this work showed how full claims and/or workflow automation could be applied to more classes in the market.

3. Industrial insurer invests in IoT

HDI Global, the industrial insurance subsidiary of German firm Talanx and sister company of Hannover Re, has invested in Berlin-based Next Big Thing (NBT), a startup incubator for internet of things (IoT) services and blockchain technology as part of its digitisation strategy. HDI and NBT are developing joint IoT-based business models, and plan to deliver innovative products for their sector.
4. Azur: ‘explainable AI’

Managing digital agent Azur, launched in 2016 by AIG Europe as a joint venture with Ascot Underwriting, is developing and implementing “explainable AI” (XAI) to offer improved risk analysis.

Azur says that XAI will offer a window into the black box of AI algorithms so insurers will know the rationale of how the usually opaque tech arrived at its recommendation or decision.

In partnership with tech firm Logical Glue, Azur will address underwriting inefficiencies with a combination of XAI and machine learning to provide an “augmented underwriting solution”.

5. Telematics and drones

SkyWatch.AI, an on-demand telematics-based insurance platform for commercial drones, has launched in the UK after a successful run in the US. The insurtech startup will provide insurance policies to drone operators in the UK, and will be underwritten by specialty re/insurer Chaucer. Drone pilots will be able to buy third-party liability insurance via a mobile app.

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Find out more about our major insurtech event Intelligent InsurTECH Europe’ on October 14, 2019 in London here: http://bit.ly/2yb55gu

Plus - You can get a discounted rate if you register for the event now here: http://bit.ly/2XPB3yd