Digitalisation remains the megatrend in the insurance industry. As big data feeds on new sources of information such as smart watches and fitness trackers, artificial intelligence (AI) and predictive algorithms are boosted to yield user-specific insurance products.

The Internet of Things (IoT) streams data such as vehicle information, unlocking unprecedented customer insight that is leveraged to better assess behaviour and risk. Social media targets and attracts new customers, but also predicts customer behaviour. Advancements in genomics and personalised medicine open up the opportunity to pinpoint risk and coefficients through better diagnostics.

Applying granular stratification and cohorting to this wealth of digital data, insurers are able to ultra-customise insurance products to individuals according to their risk profiles.

Insurtech’s history

The term ‘insurtech’ first appeared in 2010, and became a buzzword in late 2015 (Figure 1). Since, the industry has attracted worldwide attention and has become part of the diverse fintech frontier. Most insurtech start-ups are supportive in nature, partnering with incumbent companies (see Braun and Schreiber, 2017). However, competitive models are increasing in number, bringing with them disruptive potential.
The first generation of insurtech start-ups, founded between 2010 and 2016, focused on digitalising the advisory and mediation process of classic insurance products. One of the first was the Berlin-based start-up Friendsurance, which introduced the revolutionary peer-to-peer concept that annually repays contributions to insurance customers who have not made a claim, allowing the company to achieve a below-average claim rate. Pairing big data and digitalisation, the industry bellwether AXA entered into a partnership with Facebook in 2014 which transformed AXA into a digital and multi-access insurer. Predicated on this success, other traditional insurers such as Allianz and Munich Re have sought to keep pace by partnering with insurtech start-ups.

In early 2015, Google launched Google Compare, an online comparison platform for financial services such as car and travel insurance, credit cards and mortgages. Although the portal was discontinued in March 2016, Google remains a potential data broker that can profit from selling consumers’ data to. Google executive Alan Warren is now chief technology officer for Oscar Insurance, a New York based health insurance start-up. And a number of former executives from other multinational companies, such as Microsoft or AIG, have also taken up new managing roles in insurtech start-ups.

Towards the end of 2015, the first global insurtech accelerator, Startupbootcamp, was initiated in London, providing insurance start-ups with funding and mentoring. In late 2016, insurtech’s media exposure boomed.

A large number of start-ups do not compete directly with incumbent brokers and insurers; they provide technology-enabled solutions across the value chain and offer opportunities to cooperate via the digitalisation of central business processes. These collaborations demonstrate that the established can be enhanced by the new.

The field is also on investors’ radar, with a record investment of US$2.32bn in insurtech start-ups in 2017. And, in 2018, a new generation of insurtech start-ups emerged, heralding a new era of digital risk carriers who challenge established providers, competing for customers and talented employees.

The insurtech field is expected to remain hot in 2019. Millennials will become an important target market for digital insurers such as One, Coya and Element. These companies use state-of-the-art IT systems and have dynamic corporate cultures. They operate in select market segments and make innovative and extremely low-priced offerings that compete directly with traditional financial institutions.

Three new micro-trends

The core task for established companies is to master digital and social transformation. Three key micro-trends stand out.
1. Smart risk prevention

There is a growing trend towards strengthening risk prevention. Major industry conferences, such as the Digital Insurance Agenda (DIA), are introducing insurance companies to technologies that focus on reducing risk rather than improving operational efficiency. Examples come from all sectors of the insurance industry. In motor insurance, telematics solutions such as those provided by US start-up TrueMotion, together with gamification apps, contain playful elements such as rankings, points systems and awards, giving drivers strong incentives for careful vehicle operation. Also, today’s cars have advanced safety systems that help prevent accidents. In the future, autonomous vehicles could potentially be covered by insurance provided by vehicle manufacturers.

Similarly, we are seeing a wealth of technologies helping to detect health risks at an early stage. For example, the Dutch start-up, SkinVision, offers an app that uses smartphone cameras to analyse dermatological changes and prevent skin cancer. In the US, Neurotrack uses a similar approach to alert potential dementia patients, and in Germany the Preventicus Heartbeats app detects abnormal cardiac rhythm to prevent heart attacks and strokes.

The latest ‘smart home’ technologies can also help reduce risk. LeakBot uses sensors to detect leaks in pipes and, if necessary, reacts by switching off the central water supply. Comparable services are available from global plumbing supplier, GROHE, which has announced a collaboration with German insurance giant, Gothaer Versicherungen. Such applications are also expanding to other residential building risks, such as burglary, fire and natural disasters.

2. Solution-oriented value networks

In contrast to the current insurance industry value chain logic, with ecosystems or value networks, companies from various sectors are coming together to provide a comprehensive, integrated solution for a specified customer need. One such subscription model involves customers paying a regular fee to use a vehicle at any time, on call, without the hassle of financing, maintenance, and insurance. The insurtech scene is also creating the first value networks. South African insurer, Discovery Health launched ‘Vitality’, a platform that incentivises healthy lifestyles through points and badges for health ratings, with rewards such as discounts on gym fees, free coffee, cash back for fitness equipment, discount on flights, accommodation and car rental. Additional gamification encourages ongoing customer engagement and willingness to share data.

3. Decentralised insurance

Decentralised insurance cover through the use of blockchain technology is a trend with potentially disruptive consequences. Blockchain can remove market intermediaries with a peer-to-peer risk platform that helps insurance return to its roots as society’s ‘safety net’. The German start-up Etherisc is building decentralised insurance applications using cryptographic tokens that are purchased by investors to cover the entire insurance amount in advance. In return, investors collect the insurance premiums. In principle, this is a type of crowdfunding for risks. Through automation and decentralisation, operational costs are minimised, allowing for extremely competitive prices. Although such lean approaches are in their infancy, they have the potential to fundamentally transform the industry.

An alert and profitable industry
For industry incumbents who are alert to these trends, digital transformation has great potential: from improving the prevention and measurement of risk to ultra-customising coverage. New data and better information will allow companies capitalising on insurtech to continue to deliver operational excellence and innovative business models.

References: