



Evolution instead of revolution

The ten most important IT trends in the insurance industry for 2020

By Michael Kimmig, ISG Information Services Group

The transition to a platform economy and the standardisation of product portfolios are among the top priorities of the insurance industry. In addition to classics such as regulation, cost reduction and increasing customer loyalty. More than ever before, the orientation of IT determines how sustainably companies can exploit the development opportunities of their markets. In 2020, ten trends will determine how companies act. They range from the evergreen cloud computing to the rising star of the year, Robo Advisory. Above all, however, there is the tenth trend: the cultural change in the minds of employees. If it succeeds, the digital transformation will play out its strengths to the full. It has been shown that an evolutionary, step-by-step approach is much more promising than pushing through the change in a top-down process.

IT Trends 2020: Top 10

- 1 Cloud Computing
- 2 Open API
- 3 Identity platforms for customer onboarding
- 4 Internet of Things (IoT)
- 5 Blockchain-based process automation
- 6 Next Gen Cyber Security
- 7 Robotic Process Automation
- 8 Artificial intelligence
- 9 Robo Advisory



10 Digital cultural change

If one wants to understand the significance of IT trends, which extend to the very foundations of business models, it is worth taking a brief look at the Far East first. There, the Chinese insurance group Ping An has used the past decade to migrate its entire existing business to cloud-based platforms. Each of these platforms promotes the development of ecosystems that go far beyond the previous core business and thus offer completely new value creation opportunities. In the transport sector, for example. The starting point there was the AutoHome trading platform, which handles around a third of China's car sales. In 2016, Ping An acquired half of the shares in AutoHome. Since then, the Group has been driving forward the expansion of the platform. In some cases, the company has taken unusual paths. Among other things, the peer-to-peer awarding platform Lufax was integrated into the car portal. Its most important asset is a scoring solution that provides information on the creditworthiness of prospective buyers. Ping An shares this information with other capital providers, including more than 200 banks. According to the platform, it thus receives data on around 700 million potential buyers. Parallel to the increase in reach, the significance of the credit check is growing.

Top Trend 1: Cloud Computing

The gradual expansion of the core business, such as Ping An is doing in a large number of sector-specific ecosystems, would be unthinkable without the continuing high innovative power of cloud computing. However, the provision of sufficient and precise computing power is by no means the only driving force behind this development. At least as important is the fact that many of the most innovative methods of data analysis are first available in the public cloud. Among the most important goals here are the fine-tuning of data models and better monetization of inventory data.



Despite this, most insurance companies in the DACH region still do not outsource the so-called "Systems of Record" to the public cloud. The supporting legacy IT has such an abundance of legacy systems at different stages of development that cloud migration would involve incalculable risks or high costs. In contrast, a number of new developments that build the bridge to the operational business are already running predominantly in the public cloud. In this mixed situation, hybrid infrastructures ensure that the two system worlds can be managed and further developed in line with the overriding business objectives. The hybrid cloud also provides the platform for streamlining the application landscape. In addition to standardizing existing products and tariffs, the aim is also to quickly implement new market ideas and integrate suitable external partners. Support now also comes from the regulatory area. Both the institutes together with their service providers and the supervisory authorities have built up massive know-how on how the cloud can be used securely in the area of conflict between data protection and information security. A central milestone was the publication of the insurance supervisory requirements for IT (VAIT). Since then, it has become clear that insurers have become much less reluctant to use cloud solutions.

Top Trend 2: Open API

Open web-based programming interfaces (Open Application Programming Interfaces, Open APIs) are becoming the means of choice for integrating innovative software services into insurance companies' legacy IT in a timely and cost-effective manner. Open APIs create an agile alternative to conventional integration projects in which the architecture of the legacy systems is drilled out project-specifically, which is a complex undertaking with often uncertain outcomes. In contrast, Open APIs provide standardized program code that precisely regulates the interaction of a newly developed software service with the



insurer's proprietary database and software systems. This provides a pragmatic means for platform operators to leverage the knowledge and skills of freelancers and insurtechs to help their ecosystems grow flexibly. The [Open Insurance Initiative](#) currently provides the largest range of insurance-specific programming interfaces. In addition, major insurers, such as [Allianz](#), also offer such interfaces to expand their developer community.

Top Trend 3: Identity platforms for customer onboarding

In order for the demand side to accept the differentiating offers of the platform economy, it is essential to make user access as easy as possible. Centralized login services - a market that has been dominated by Facebook and Google for years - are a first fundamental step in this direction. However, what is now becoming a real must, especially from the point of view of the financial industry, are solutions that allow customers to centrally manage their verified digital identity and make it available to the cloud services they trust with the simplest possible means. The [verimi](#) platform, which was founded in 2018 and in which Daimler, Deutsche Bank, Lufthansa, Deutsche Telekom and Allianz also have a stake, is well positioned to tap this newly emerging market. In Germany, verimi is competing with the [netID](#) platform, which also started in 2018 and is backed by United Internet and the media groups ProSiebenSat.1 Media and RTL. The Scandinavian service provider [Signicat](#), which has been offering cloud solutions for customer onboarding since 2007, is considered a pioneer on the European market.

Top Trend 4: Internet of Things

The Internet of Things (IoT) has dominated the trend lists for a number of years. Nevertheless, the web-based networking of physical objects



and virtual systems is experiencing a further boost this year for a number of reasons. First and foremost, the rollout of the new mobile phone standard 5G is worthy of mention. Whether in the area or in the campus networks of large company locations. Both developments mean that a large number of new devices can be integrated into the IT architecture of companies. At the same time, IoT will reinforce the trend towards edge computing. Edge Computing analyzes data where it is generated and makes it available to other systems near the edge of the network as required. For the insurance industry, this opens up ever new application possibilities. For example, car insurance companies with telematics tariffs, smart home cover letters (cooperation between ERGO and Deutsche Telekom) or health insurance companies that analyze personal behavior and, together with artificial intelligence, support behavioral changes.

Top Trend 5: Blockchain-based process automation

Blockchain technologies have now reached a high level of market maturity. Service providers such as Amazon Web Services already offer special platforms on which the services required to build a block chain are made available in such a way that they can be used without in-depth developer knowledge. Even though the majority of insurers have so far followed the development of the topic more from an observer's perspective, more and more companies are now investing in building block chain expertise and launching initial pilot projects. Especially in the areas of premium payment and claims processing, insurance companies have a great need to use block chain solutions. Blockchain also allows the design of parametric insurance policies in which the payment of the sum insured is based on the extent to which a previously agreed threshold value - such as the amount of precipitation on an agricultural area - is undershot or exceeded. Here, Blockchain



builds a bridge to the top trend IoT by cryptographically linking the data sets to ensure the integrity of the transmitted sensor data.

Top Trend 6: Next gen cyber security

The growing digital ecosystems raise the issue of IT security to a completely different level. It is no longer just a matter of protecting one's own infrastructures, databases and application landscapes from attacks. Instead, the requirements of a fully integrated security that takes all partner systems into account are coming to the fore. The establishment and continuous expansion of a central Security Operations Center (SOC) is the prerequisite for meeting the new framework conditions. From a technological point of view, the SOC is based on a Security Incident and Event Management (SIEM), which collects information from sensors and monitoring protocols, identifies and monitors corporate weaknesses and incorporates externally collected threat information into its work. Leading SIEM solutions provide AI-based functionality that enables data correlation and pattern detection, so anomalies become visible earlier. In this way, the security paradigm is shifting from a "detect and fight" approach to "predict and prevent". The first insurers are recognizing the market and have not only responded on the technology side, but have also built appropriate insurance products to cover cyber risks. For example, [Allianz](#) or [Zurich](#).

Top Trend 7: Robotic Process Automation (RPA)

In 2019, RPA has reached the breadth of the market. Also in the insurance industry. Almost all larger companies use RPA to automate transactional mass processes where the process-supporting IT systems are not sufficiently networked. This particularly affects the areas of purchasing, finance, accounting and human resources. With increasing cognitive and natural language skills, however, Robotic Process



Automation is also suitable for more intelligent forms of process automation. RPA now also addresses the actual value creation, such as in the areas of underwriting and customer interaction as well as claims settlement and receivables management.

Top Trend 8: Artificial Intelligence

Complex business processes, diverse customer requests and large amounts of different data make the insurance industry a natural use case for artificial intelligence (AI) and cognitive technologies. However, strong regulation by market regulators and the rather conservative risk culture in the executive floors have contributed to the fact that AI rollout has only recently started to gain momentum. On the other hand, the comparatively late market entry ensures that insurers have access to increasingly mature technologies in numerous AI areas. AI and automation enable faster and more efficient processing of insurance claims where large amounts are not involved. For example, photos of accidental damage can be evaluated much more quickly and efficiently with AI than by humans. But even for more complex claims in the commercial insurance sector, the use of AI can accelerate decisions and optimize claims service. Life or health insurance companies use artificial intelligence as early as the formulation of contracts and the verification of claims. In addition, they benefit from the ever more extensive linking of neural networks, which produces multidimensional intelligence that can be used to address a constantly expanding spectrum of application areas. This is the case, for example, in the field of advanced analytics, which can investigate content (partially) autonomously and thus go far beyond the traditional methods of business intelligence (BI).

Top Trend 9: Robo Advisory

One of the most dynamic fields of application of artificial intelligence is



Robo Advisory. Here, algorithm-based analysis systems open completely new sales and communication channels. Insurers get a powerful tool to expand their omnichannel strategy and actually pick up customers where they prefer to be. For a steadily growing proportion of customers and prospects, this is the smartphone. The financial sector in particular is now benefiting from the fact that the first AI systems are learning to derive synthetic personalized information from applications without having to process personal data. The resulting data processing respects the privacy of customers, is DSGVO-compliant and meets the requirements of the supervisory authorities. After Robo Advisors were initially used primarily in investment consulting and asset management, insurers are now also beginning to take an interest in them. A good example of this market, which is still very young in Europe, is the Swiss start-up [vlot](#), which focuses on consulting services in the life insurance sector.

Top Trend 10: Digital cultural change

The following applies to all IT trends: Their added value for the insurance business is measured by the extent to which employees embrace the change that comes with new technologies. This comprises two dimensions: On the one hand, parts of the insurance business are very persistent, so that change and the recognition of its necessity must be supported by organizational change management programs. Finally, the culture of a traditional insurance company is not the same as that of a start-up. On the other hand, the introduction of new technologies requires competence building on the employee side. Be it in the application of the technologies. Be it in taking on alternative tasks when familiar activities are replaced. In the course of this transformation process, the concept of the agile enterprise is undergoing a fundamental change: While many companies initially saw agility and DevOps as a model for transferring their entire organization to the new



world in the form of a concerted effort, a more evolutionary approach is now becoming apparent. This approach concentrates transformation work initially only on all those instances that actually have a current need.