

**somewhat  
different**

## Digital Strategy 2018–2020



# About us



Hannover Re, with gross premium of over EUR 16 billion, is the third-largest reinsurer in the world.

We transact all lines of property & casualty and life & health reinsurance and are present on all continents with around 2,900 staff. Established in 1966, the Hannover Re Group today has a network of more than 100 subsidiaries, branches and representative offices worldwide. The Group's German business is written by our subsidiary E+S Rück.

The rating agencies most relevant to the insurance industry have awarded both Hannover Re and E+S Rück very strong insurer financial strength ratings: Standard & Poor's "AA-" (Very Strong) and A.M. Best "A+" (Superior).

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## Preamble

Similar to other industries and society as a whole, digitalisation is also impacting business models in insurance and reinsurance. In today's insurance industry we can already see many innovative approaches which have led to a large number of start-ups and carve-outs (InsurTechs). On the reinsurance side nearly all digital innovations are related to optimisation in the processing of data and data exchange either internally or between business partners.

Within the framework of this Hannover Re Group Digital Strategy, digitalisation is understood in a broad sense as the goal-oriented implementation of new technologies and concepts such as

- Big Data, Data Analytics, Artificial Intelligence, Machine Learning, Blockchain, Peer-to-Peer (P2P), risk prevention and mitigation, etc.,

with the potential to change business models in the insurance and reinsurance industry

- directly, through implementation of technologies and concepts along the value chain in insurance and reinsurance, or
- indirectly, through implementation of digital technologies and related concepts in other industries, e.g. autonomous driving, Internet of Things (IoT) in general, and corresponding changes in insured and insurable risks, or through changes in entire ecosystems and new trends in society, e.g. Sharing Economy.

The implementation of such technologies will bring about lasting changes in certain parts of the industry. The focus is initially on the primary insurance markets, but it also extends to business areas close to primary insurance, i.e. personal lines, facultative business and life and health reinsurance.

### Assumptions for primary insurance:

- The main goal is to reduce claims settlement and transaction costs (commissions, brokerage, overrides, etc.), thereby impacting distribution networks.
- Standardisation as well as automation in data processing, both internally and externally, have the potential to leverage administrative efficiencies.
- The trend towards more flexible and individually customised products leads to an increasing need for data analytics and systems supporting automated decision-making.

### Assumptions for reinsurance:

- New technologies are key to maintain a cost leadership, even though substantially lower administrative expenses in a by far smaller market (compared to the primary insurance) make economies of scale more difficult to achieve.
- Assuming and diversifying insurance risks remain the key functions for reinsurers.

## Specific assumptions for Hannover Re:

- As an international player, Hannover Re is perfectly placed to enter into strategic partnerships and capitalise on exporting successful business models into international (re)insurance markets.
- Concrete business and payback opportunities combined with high scale-up potentials are a prerequisite for in-house developments of digital solutions for Hannover Re's customers.
- Servicing the very different levels of digital sophistication and requirements in the widely differing international insurance and reinsurance markets will present a major challenge.
- Extensive automation and digitalisation of internal processes is necessary to allow Hannover Re to cooperate flexibly with different customers in different markets.
- The staff's digital expertise is key to evaluate digital business models of existing and future customers, detect potential deficiencies and propose adequate support.
- Strategic partnerships outside of the traditional (re)insurance ecosystem will be of growing importance.

Based on above assumptions, Hannover Re, within its corporate strategy, aims to fulfil the expectations and requirements of its clients, intermediaries and other partners when it comes to its competence and know-how in the field of digitalisation. Its overarching strategic digital targets are outlined as follows:

- To generate new business Hannover Re aims to (1) reinsure new start-up companies that operate digital business models, (2) perform digital services for its clients along the entire value chain, and (3) write new risks, such as the reinsurance of cyber insurance, as well as develop an understanding of the changing risk profiles of primary insurance and reinsurance risks through digitalisation.
- To increase its efficiency, Hannover Re aims to (1) automate its internal processes "end-to-end", (2) support and launch initiatives to automate the interaction at the interfaces to its clients, intermediaries and other partners, and (3) develop an ability to utilise all internal and external legally available data.

The Hannover Re Group Digital Strategy sets concrete targets within seven different digital dimensions and must be reviewed at least on a yearly basis since underlying conditions are expected to change significantly over time and fields of action and priorities need to be more frequently adjusted than the traditional corporate three-year strategy cycle.

## I. Position on InsurTechs

New market players (InsurTechs) are developing new solutions in the insurance industry. Along the value chain from consumer to capital market InsurTechs are positioned between the insurance customer/agent/broker and the primary insurer, in some cases moving into the role of becoming insurers themselves.

Hannover Re

- observes the landscape of InsurTechs in every relevant reinsurance market and is able to identify promising business models.
- contacts successful and promising InsurTechs to explore possibilities for cooperation, potentially giving them access to its unique expertise on risk analysis and its worldwide insurance network.
- is aware of the importance of quick decision-making and flexibility when dealing with InsurTechs.

Direct equity investments in InsurTechs will be considered if (re)insurance business is generated and InsurTechs are aggregated in an incubator.

## II. Cooperation with business partners

In the context of digitalisation all primary insurers are facing pressure to increase their level of automation due to two drivers: (1) customers are asking for enhanced digitalised products and (2) costs for distribution and administration have to be reduced.

Due to the heterogeneity and different levels of digital readiness in the markets, there is no unified standard for data exchange. Hannover Re participates in industry initiatives with a view to contributing to the development of such a standard. Given that Hannover Re uses its worldwide core system Re7, it only needs one interface in the future.

Hannover Re

- understands the digital strategies of its business partners in detail.
- assesses the attractiveness of new or existing business partners according to its level of digital readiness.
- participates in selected and highly focussed industry initiatives to develop standards for process automation and data exchange (such as Rüşchlikon and B3i).
- makes investments in promising projects with start-ups if there is a positive cost/benefit perspective.
- provides interfaces for automated process chains between itself and its business partners.
- provides platforms for the automation of underwriting processes and decision-making.
- processes low-premium contracts by interfacing external and internal systems and using automated decision-making.

## III. Approach to data and analytics

In a digitalised industry the ability to use all relevant available data for product design and decision-making constitutes a core competence. Hannover Re therefore expects to see increased demand for support with data analytics, both for its business partners and for internal use cases.

Hannover Re

- ensures that the potential of “Big Data”, i.e. more precisely Data Mining, Machine Learning/Predictive Analytics, Deep Learning, etc., is well-known in the organisation in order to apply new methods to promising use cases.
- uses its own competence centre to support Big Data use cases, if needed together with a partner network able to implement specific solutions.
- systematically identifies new data sources and uses external data services as a basis to support automation and faster decision-making in underwriting and risk management.

- evaluates large data volumes such as generated in primary insurance for e. g. telematics or Vitality products, however stores and aggregates them only in exceptional cases.
- participates in platforms to access valuable data for risk evaluation and includes external data and Machine Learning in provided client systems.
- uses Data Analytics to generate enhanced/improved or new insurance products, e. g. cyber covers, parametric covers, P2P or new concepts such as on-demand covers and continuum underwriting.
- offers analytics services on a case-by-case basis for high-value clients.

## IV. Provision of client systems

Primary insurers need systems for automated decision-making, if they are to offer digital products. Not all insurers can build such systems on their own: Either the cost of knowledge or analytic capabilities may be too high or the necessary data is not available.

Hannover Re

- provides client systems where necessary and valuable, and where additional reinsurance business can be generated.
- uses data from these systems to enhance its capability for automation and risk analysis.
- keeps existing client systems up-to-date so as to be ready for future challenges of digitalisation (e. g. Machine Learning, Chatbot user interface). There is a clear focus on a few core systems with the aim to maintain the best solutions in the respective markets.
- creates and participates in platforms to enable digital capabilities for its clients.
- provides client systems on a per fee basis only in exceptional cases.
- provides systems for automated decision-making to Inter Hannover's agencies in order to improve the quality of underwriting decisions.

## V. Development of products

Digitalisation in general is giving rise to new risks such as cyber, IoT-based supply chains and self-driving cars.

Hannover Re

- aims to offer reinsurance solutions for all relevant upcoming risks.
- analyses the need for digital products in primary insurance.
- develops new products and solutions in partnership with start-ups.
- evaluates partners and explores opportunities to develop products based on data (e. g. telco providers).
- offers IT services on a per fee basis, however in dedicated cases only and where exceptional business opportunities exist.
- maintains a portfolio of digital solutions and transfers these, via its Digital Marketplace, to markets in which such solutions are not available yet.

## VI. Internal automation

In a digitalised industry cross-company-processes are expected to be fast-running and automated. Additionally, there is a general need to operate as efficiently as possible internally in order to maintain Hannover Re's market position as expense leader.

Hannover Re

- continuously analyses and optimises its core processes end-to-end in order to identify and mitigate significant inefficiencies.
- identifies opportunities for automated decision-making across all internal processes.
- prioritises projects to implement automated solutions within a dedicated fixed budget after a detailed cost/benefit analysis.
- supports automated solutions with external business partners through automated internal processes.
- fosters and supports promising projects designed to compensate additional costs resulting from multiple reporting regimes.

## VII. Internal organisation

In order to support the digital dimensions described above and implement digital solutions, Hannover Re constantly challenges its organisational setup. New structures will reflect the successful combination of decentralised responsibility and central coordination.

### Hannover Re

- is aware that digital skills are needed on all levels, e. g. underwriters must have the necessary digital skills to be able to evaluate the needs and long-term success of its clients, and sets up a corresponding training programme.
- ensures that every organisational unit names at least one employee for digital topics who will take part in an internal network for digitalisation (similar to the Hannover Re key user network).
- has formed a competence team of digital specialists (“Digital Incubator”) supporting global and local, internal and external activities as well as to determine the strategic business impact of emerging technologies. On request, further knowledge and resources can be brokered through access to a network of internal and external specialists. This team is aware of all digital initiatives in the Group so as to be able to leverage innovation activities and facilitate mutual benefits.
- develops innovations externally in dedicated projects. External initiatives and the development of new external business models are coordinated by a specific team, supported by the “Digital Incubator”.

Hannover Re creates opportunities for digital initiatives:

- allocates resources to digital initiatives on the basis of clear top-down leadership.
- encourages interdisciplinary teams to work on digital topics in a lab environment.
- supports “Digital sabbaticals” to promote internal innovation, i. e. employees from various organisational units have the opportunity to spend periods of weeks or months on digital projects.
- utilises a variety of communication tools to foster knowledge sharing and non-hierarchical cooperation within the Group.
- delivers digital solutions using agile methodology.
- supports a “try and fail fast and cheap” approach on all levels.



