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# THE FUTURE OF INSURTECH IN GERMANY

## THE INSURTECH RADAR 2017

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Dear readers,

In the summer of 2016, we launched the first InsurTech Radar covering the German market. Our objective was to shed light on the still young phenomenon in a systematic, detailed and unbiased manner. The Radar was intended to enable you to make informed decisions in this high-growth area.

Your overwhelmingly positive feedback has encouraged us to keep track of digital start-ups in the insurance industry. In May of 2017, we published an international, English-language version covering the global InsurTech landscape. Now, it is once again time to critically reflect on what is currently happening on the German market. Therefore, you hold in your hands our second report which offers an in-depth evaluation of the InsurTech phenomenon in Germany. To give access to larger community we decided to also publish an English version of this report.

So what has happened in Germany? The established insurance industry has certainly not been asleep. Politicians are also pointing the way with their hub activities in Cologne and Munich or the success in hosting the leading European DIA (Digital Insurance Agenda) conference in Munich. On the InsurTech side, the start-up boom continues apace: we now count more than 100 InsurTechs in Germany. The scene is already showing some significant changes in course, as well as new trends and open flanks. You might already be aware of some of them, while others may still be news to you.

As a new topic, we will be highlighting the theme of InsurTech financing in this edition – a crucial factor for the success of any start-up. Interviews with InsurTech founders offered us some very illuminating insights into this subject, so that we decided to dedicate a separate chapter to the results of our survey. Not everyone will be pleased with the results, but they do constitute a reality that will have to be dealt with.

There is currently a lot of movement – and yet we believe that none of this will be enough to give Germany the lead when it comes to digitizing the insurance industry. Further action is needed. Navigate by the InsurTech Radar!

We hope you will find this report interesting!

Sincerely,

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# MANAGEMENT SUMMARY

The German InsurTech market continues to develop very dynamically. One can rightfully speak of a start-up boom. But how sustainable is it? We applied the tried and tested InsurTech Radar methodology to evaluate the developments and compare the results to those obtained in 2016. With this, our InsurTech Radar provides orientation for all players in the insurance market.

## HARDLY ANY GAPS LEFT ON THE RADAR

Over the past 18 months, the number of German start-ups in our database has more than doubled, meaning that since 2016, the InsurTech start-up boom in Germany has continued to gain momentum. Newcomers dare to venture into new areas of business that had still been untapped in 2016. Our research shows that most of the previous gaps have by now been closed.

## DIGITAL “FULL STACK CARRIERS” AND DIGITAL MANAGING GENERAL AGENTS ARE ENTERING THE MARKET

There has been a lot of activity in the area of digital low-cost models, in particular due to the establishment of fully digital insurers, so-called digital “full stack carriers”. A surge can also be observed among digital MGAs (Managing General Agents) that try to exploit the benefits of fully digital platforms – without bearing the underwriting risk or being subject to insurance industry regulation by the German Federal Financial Supervisory Authority (BaFin). Nevertheless, neither digital full stack carriers nor MGAs have so far ventured into the rather complex business models “Risk Partner” or “From Insured to Protected”.

## INSURTECH DISTRIBUTION MODELS WITH MIXED RESULTS

Our forecast regarding the business models in the area of distribution has come true: the boom among e-commerce type distribution models which had been one of the key InsurTechs themes last year has reached its natural limits due to the complexities of the insurance world. This is clearly evidenced by the number of companies either exiting the market or pivoting away from distribution models which in 2016 had still dominated the German market. Together with an increased number of newly established companies in the areas of proposition and operations, the share of InsurTechs with a distribution focus is declining and has now reached roughly the international average. “B2C Online Brokers”, however, continue to be overrepresented in the distribution segment. For some of these providers, things will get tight.

## INSURANCE OPERATIONS CONTINUE TO OFFER OPPORTUNITIES FOR INSURTECHS

We still see a lot of room for improvement for German InsurTechs, especially when it comes to innovation in the area of insurance operations. An international comparison confirms this notion. So far, there is still too much of a focus on the business model of “Digital Sales Enabling”. There is no doubt that digital insurance sales will gain in importance, but the potential in this area depends to a large extent on the willingness and ability of insurance distribution channels to invest in promising IT systems. This holds especially true for brokers. Other business model categories such as “Underwriting”, “Service and Administration” or “Claims” require even more insurance knowledge, but also offer more potential for disruption through the use of innovative technologies. So far, activity in Germany is still relatively subdued in this area. Should the German InsurTechs continue to hesitate, they risk increased competition from their foreign counterparts.

## SECOND INSURTECH WAVE REQUIRES MORE THAN JUST TECH-SKILLS

Tech-skills are essential for the survival of InsurTechs. In line with this, we now observe even more “tech” in the InsurTech environment than 18 months ago. Basic technologies such as big data or artificial intelligence (AI) form an increasingly important part of the business models pursued by German InsurTechs. First start-ups are now even using blockchain technology. A crucial question, however, will be whether the InsurTechs of the emerging second wave will be able to bridge the gap between technological competence and insurance competence. Especially the areas of the Radar which continue to be sparsely populated in Germany will require exactly this kind of combination. The key question will be whether or not there are enough people with insurance expertise and entrepreneurial genes willing to jump into the deep end and become founders.

## MORE COOPERATION, LESS CONFRONTATION

InsurTechs are not always successful in establishing their business model. The first start-ups have already disappeared from the market. Overall, we observed that some of the still young players have recognized which concepts are less feasible and have therefore shifted their business models towards more promising approaches. Quite a few start-ups are now also increasingly reaching out to established insurers and distributors: “cooperation rather than confrontation” is a strategy that is becoming increasingly common. Primary insurers and reinsurers are following suit and taking advantage of this opportunity by further increasing their involvement in the InsurTech scene.

## DEARTH OF FINANCING OPTIONS IN GERMANY

Lastly, our survey among InsurTech founders shows: not only does the search for investors tie up valuable time of the founders, but the outcome is also anything but certain. From the start-ups’ point of view, the overall financing options are inadequate. While initial seed capital is usually not too hard to find, obtaining larger follow-up financing seems to be a totally different story. The situation here is seen as more difficult than in the UK or US - a clear competitive disadvantage. A small consolation: over the past 18 months, foreign venture capital investors have expanded their financing activities in Germany. A notable aspect, however, is that InsurTech founders are under the impression that venture capital investors overall lack sufficient insurance know-how – a factor that is certainly not very helpful when it comes to financing decisions. The InsurTechs for their part are picky: investments by primary insurers are often only the second best choice, as the side effects appear to be too large. Reinsurers are seen in a much more positive light: they are generally not assumed to have overriding strategic interests, and they are almost always highly welcomed as investors.

## A LOT HAS HAPPENED – BUT IT IS NOT ENOUGH YET

Overall, the InsurTech market has moved in the right direction over the past 18 months: new fields are being pioneered, misalignments are receding, and technologies employed are becoming more and more innovative. However, old and new imbalances remain:
- the large number of digital “full stack carriers” and digital MGAs (Managing General Agents);
- the massive accumulation of business models focused on “Digital Sales Enabling”;
- little activity in the more complex areas of “Risk Partner”, “From Insured to Protected”, “Underwriting”, “Service and Administration” and “Claims”; and, last but not least, the difficulties in financing. A lot remains to be done if Germany wants to join the upper ranks in terms of digital insurance and avoid falling behind international InsurTech hot spots such as the US, the UK and – most recently – China.

# THE INSURTECH RADAR

What drives the InsurTech players? Can the young business models truly become disruptive forces? Or are insurers and other established market players in a better position to win the race? And: what are the chances for tech players with roots outside of the industry?

We have held numerous discussions with InsurTechs, insurers, investors and other market participants on the findings of the first two InsurTech Radar reports. Valuable insights were also gained at the world's largest industry event "InsureTech Connect" in Las Vegas, which Oliver Wyman presented once again in October of 2017. However, the core of the Radar remains our proprietary database. Through continuous market observation, we have identified about 1,300 InsurTechs and related FinTechs worldwide to date.

## ENHANCING OUR TRIED-AND-TESTED APROACH

In the **first part** of this report, we discuss observable **trends and key changes** compared to our findings from 2016.

In the **main part**, we follow up with a current **overview of the German InsurTech market** structured along the insurance industry's value chain (proposition, distribution, operations). For this, we retained the logic underlying the business model categories, but further refined it in order to take the insights gained into account. You will find a detailed description of the resulting 19 business model categories in the first appendix.

For each business model, we examine the InsurTech activities in Germany, compare them to the situation abroad and examine to what extent the existing strategic potential – consisting of the respective market potential and the chances of success – is being exploited. Methodological details are explained in a second appendix.

Following the market overview, **the third section** outlines the **results of a survey on financing** conducted for the first time among InsurTechs in Germany. Based on this online survey, in which almost 40 young companies participated, we continue to further develop the contents of the Radar. The results reflect the German InsurTechs' position on the financing situation and their view of the various sources of financing.

On the basis of all these analyses, we then draw a **final conclusion and** make several **forecasts** regarding the further development of the InsurTech scene in Germany.

The start-up boom in the German InsurTech market continues apace. The number of InsurTechs has more than doubled over the past 18 months.

# INSURTECH IN GERMANY– TRENDS AND CHANGES SINCE 2016

In the start-up world, 18 months can feel like an eternity. Accordingly, there has been a lot of movement on the German InsurTech Radar. The following chapter highlights the most significant market changes.

## THE START-UP BOOM CONTINUES

The **number of InsurTechs** in Germany has **more than doubled** since the last report. While in mid-2016 there were just over 50 active start-ups, this number had already grown to more than 100 by the end of 2017. So the start-up boom continues. What is striking is that the **gaps** identified in the 2016 Radar were **largely closed** with new start-ups, as the extensive discussion of developments within the business model categories in the main section illustrates.

## DIGITAL INSURERS ARE EN VOGUE

As anticipated in the InsurTech Radar 2016, a remarkable number of **new digital** insurers were founded recently. These so-called digital **"full stack carriers"** employ fully **digital platforms to achieve cost and agility advantages.** Start-ups in this area were therefore initially placed in the "Low Cost" proposition business model. Depending on how they will fine-tune their business model, some of them will likely need to be reclassified at a later point in time. An early example is the digital "full stack carrier" Ottonova which offers private health insurance. As its main focus is clearly on service, comfort, simplicity and services beyond pure insurance such as the 24/7 concierge and less on price, Ottonova's business model has already been classified as part of the "From Insured to Protected" category.

The most important start-ups in the area of "full stack carriers" include Coya, Element (a venture by Berlin-based incubator Finleap), Flypper, Neodigital and One (a subsidiary of Wefox).

In addition, Munich-based start-up Karlsson is targeting the German health insurance market.

Numerous primary insurers are also currently launching their own digital insurers – in most cases in the form of subsidiaries. The most well-known ones are Friday (subsidiary of Swiss company Baloise, conceived as a "Low Cost" offering motor vehicle insurance), Nexible (subsidiary of Ergo again for motor vehicle policies) and Adam Riese (subsidiary of W&W).

## NEW OPENNESS TOWARDS DIGITAL MANAGING GENERAL AGENTS

They are considered **"the insurers light"**: the so-called underwriting agents or MGAs (Managing General Agents). Formally, these are usually agents with a power to hold the pen for underwriting and adjusting claims. They **transfer the actual underwriting risk** to a primary insurer or to a reinsurer, provided that the latter offers a corresponding vehicle with a primary license.

Some InsurTechs act as MGAs to **maximize the benefits of** consistent and complete **digitization.** They tailor underwriting concepts to specific customer groups, are permitted to issue policies on their own and usually handle all customer acquisition and service processes – including premium collection and claims adjustment. The partnership with the insurer is close: the latter not only bears the underwriting risk, but also ensures regulatory compliance. The criteria according to which an underwriting agent may issue policies are therefore closely coordinated with the insurer holding the license on a granular level.

The retained value per policy clearly exceeds those of a broker. After all, an MGA covers much larger parts of the insurance industry value chain on its own.

As a result, an InsurTech can digitally conduct all process steps through software developed in-house, and act as a product provider to the customer without being subject to the same strict regulation by the German Federal Financial Supervisory Authority BaFin. In particular, an MGA is not required to hold regulatory capital or to build up the personnel structure required for a full-fledged insurer. This allows them to achieve efficiency gains similar to those obtained through the establishment of a new digital "full stack carrier" – but with a much lower capital investment.

The price for this is the dependency on a primary insurer which might exert a strong influence on the product and also the distribution strategy. Practice will show in which cases the benefits above outweigh these disadvantages. At any rate, primary insurers and reinsurers are currently very open to partnering with InsurTechs pursuing digital MGA models. Up until a few years ago, they would not have entered into such partnerships with anybody but established major brokers.

The following InsurTechs are pursuing underwriting agent activities:

- In the area of "**Proposition**", you have Cyberdirekt (classified as "New Digital Risks"), Perseus ("From Insured to Protected"), Inxure.me (classified as "Risk Partner"), and Getsurance (also classified as "Risk Partner")
- Examples of business models currently falling into the "**Distribution**" segment include Getsafe ("B2C Online Broker") and Simplesurance ("Affiliate Integration")
- An example from the area of **"Operations"** is Covomo ("Digital Sales Enabling")

An interesting question is how primary insurers and BaFin will deal with the first negative events with digital MGAs. Because sooner or later, they are bound to occur.

## PIVOTING – THE OLD BUSINESS MODEL IS DEAD, LONG LIVE THE NEW ONE!

Some InsurTechs have already repositioned their business model over the past 18 months. In Germany, this so-called **"pivot"**, **a strategic change of course towards more lucrative fields**, usually points in one direction: away from distribution and towards proposition or operations.

These pivots are not surprising if you consider the business models' market potential and chances of success. Most "B2C Online Brokers", for example, are struggling with the challenges already identified in the InsurTech Radar 2016: relatively low entry barriers for this business model translating into hard-fought battles over a relatively limited market potential.

**Pivoting from "Distribution" to "Operations"**: Wefox is a typical example: originally launched as a pure B2C online broker under the name Financefox, the start-up quickly made its software available to other brokers as a Platform-as-a-service Solution (PaaS – an offering including business services such as commission agreements or specific insurance products in addition to Software-as-a-Service (SaaS)). In February 2017, the company was renamed Wefox. Recently, the company teamed up with digital insurer One in order to enhance its value-added. The future positioning of the Wefox Group on the Radar will depend on the concrete implementation of its overall concept. Due to its focus on providing services to brokers, Wefox is currently classified as "Digital Sales Enabling".

As part of its partnership with Munich Re Digital Partners, Heidelberg-based start-up Getsafe announced a similar move away from a heritage focus on distribution towards becoming a "Risk Partner". The market launch of the first personal liability insurance marked the first step.

Mainz-based Massup, originally a pure "Affiliate Integration" player, has shifted its business model in the direction of "Enabling Insurance Sales".

Covomo and Gewerbeversicherung24 have undertaken similar moves. Covomo, launched as a specialized comparison portal in the travel sector, has meanwhile established itself as a provider of a PaaS solution for annex insurance in brokerage sales on the basis of proprietary rate comparison engines.

Gewerbeversicherung24 has also transformed itself into a "Digital Sales Enabling" player. Initially, the Frankfurt-based company had focused on independent agents and small and medium-sized enterprises (SMEs) as a "B2B Online Broker". Today, the focus is clearly on providing a PaaS solution in the commercial sector to brokers, pools and other distribution intermediaries. Meanwhile, Finanzchef24 has also made steps to complement its positioning as a pure "B2B Online Broker" with a "Digital Sales Enabling" solution for insurance intermediaries.

**Pivoting within the "Proposition" segment**: Repositioning is also happening within the "Proposition" segment. Our last InsurTech Radar had already classified community-based business models as not very attractive, due to the limited targeted premium pools and the low chances of success. Generally, community based business models work best for clearly identified and targeted niches but not the wider market. It is therefore not surprising that even one of the world's pioneers of peer-to-peer insurance has gradually changed its business model: Friendsurance from Berlin had previously been categorized as a "Community-based" business in the InsurTech Radar. Given the recent changes in its go-to-market strategy (which is now based on promising cost savings), we now see the business model primarily as "Low Cost", still using the peer-to-peer model as a means to lower the cost of insurance. As the product portfolio has been extended to include an app as cover further insurance lines, Friendsurance is now also competing directly with "B2C Online Brokers".

## THE MARKET SHAKEOUT AMONG INSURTECHS HAS BEGUN

The statistics show: only one in ten start-ups will be truly successful. The failure rate is high, especially in the early phase. In this respect, InsurTechs share the fate of all young companies. In the InsurTech Radar 2016, we had already identified certain business models as critical. The doubts with regard to their chances of success were justified: first companies have already exited the market, **the shakeout has begun**.

In other countries we have already seen spectacular insolvencies, such as the once-hyped peer-to-peer insurer Guevara in the UK. Exits in Germany, on the other hand, have happened relatively quietly. The tranquil nature of the observed departures were also caused by the relatively low amount of invested capital which needed to be written off.

The merger of Knip with the Dutch software company Komparu is unlikely to have been a marriage of love – and can certainly be seen as the biggest "exit" of the past few months. Under its new name Digital Insurance Group, the company now intends to focus on providing insurance software. The business model pursued by the "B2C Online Broker" Knip – in a market segment the InsurTech Radar 2016 had already identified as extremely competitive – does not seem to have worked out as planned.

Things have also become very quiet around the two "B2C Online Brokers" Okotta and Safe.me. While at the beginning of 2015 Safe.me had still wanted to disrupt the insurance market with flat-rate insurance and commission-free products, the website has since disappeared. Vertragium as a "Life Digitizer" and Zenpension as a "Corporate Platform" have suffered the same fate. The two projects Suprsafe (situational insurance) and Coverion (D2C), both of which were part of the Allianz X start-up hub, also no longer seem to be active.

The second wave of InsurTechs is starting to swell. The market shakeout has also begun.

In January 2017, the "Financial Partner" Treefin was able to find a new home and became part of the W&W Group. Given the lack of information on the purchase price, it is hard to say whether this sale can be considered a success. In the fiercely competitive business models "Financial Partners" and "B2C Online Brokers", customer growth is hard to come by without strong sales partners. This logic is likely to have been the basis of this transaction, as well. Conversely, the W&W venture Rentenhero no longer seems to be active.

The niche comparison website Comparon has also found a new home with industry heavyweight Check24. One thing is certain: in view of the intense competition, the trend towards more market exits will inevitably continue.

## COOPERATION RATHER THAN CONFRONTATION – PARTLY OUT OF CONVICTION, PARTLY OUT OF NECESSITY

Cooperation instead of confrontation, alignment instead of disruption – the shift towards making common cause with traditional players is becoming more and more prevalent. Nevertheless, this new form of thinking is still relatively fresh: a large number of start-ups had originally launched with the intent to disrupt the insurance industry. In many cases, however, reality now looks a lot less revolutionary.

There are many **reasons for peace offerings**: the insurance industry is very complex and customers are difficult to inspire. But even a better product does not necessarily translate into success if there is only little customer pull. **Investors are increasingly pressuring InsurTechs** to start earning money. This has clearly influenced their willingness to cooperate. The **pivoting and market consolidation** trends also have an accelerating effect.

Both sides can benefit from such partnerships – InsurTechs as well as traditional companies. But there is, of course, no guarantee. In their role as junior partners, InsurTechs are in danger of being crushed by the embrace of the big insurers.

The next problem: many start-ups have now moved in the direction of "Digital Sales Enabling". The degree of activity in this segment has today risen to what we consider to be an overheated level. Not all market participants will have success in this area.

## INSURERS ARE INCREASING THEIR INVOLVEMENT

**Primary insurers and reinsurers** have heard the InsurTechs' wake-up call loud and clear and have **massively expanded their activities**. Just a few years ago, it was very difficult for a start-up to get an appointment with a senior insurance company executive. Nowadays, however, it is the enterprise leaders who are actively reaching out to founders. Cooperation and partnerships with InsurTechs are regarded as a sign for innovativeness.

Some insurers have announced plans to invest tens of millions in InsurTechs, including, for example, Baloise, Helvetia or Signal Iduna. Others focus on supporting accelerators or hackathons, i.e. events for collaborative programming.

In Cologne and Munich, insurers have established so-called "InsurTech Hubs" in order to accelerate cooperation through physical proximity. The Federal Ministry of Economics and Energy supports these models as part of its Digital Hub Initiative. The model is inspired by Silicon Valley, where the geographic proximity and networking of founders, start-ups, technology companies and science has resulted in the emergence of the world's leading digital companies.

On the InsurTech investor side, Allianz is particularly active with its new unit Allianz X.

Reinsurers like Munich Re (via HSB Ventures and directly), Hannover Re, Swiss Re or US-based RGA are also investing in Germany's digital transformation and supporting many InsurTechs in the operational development of their business models. An interesting effect: with this involvement, **reinsurers are coming one step closer to end customers**. This development has the potential to lead to more pronounced upheavals within the insurance industry.

## INNOVATIVE TECHNOLOGIES ARE TAKING OVER THE INSURTECH WORLD

InsurTechs are focusing increasingly on the power of technologies which could potentially change the industry as a whole. Digitization allows for innovative insurance solutions on various levels: on one hand, there is the possibility of enhancing traditional insurance products with digital elements. On the other hand, completely new digitally enabled propositions are being created. In many cases, the insurance cover offered is only one component of a package – and often not even the dominant one.

Two major technology trends have reached the InsurTech sphere:

- **Artificial intelligence (AI) and machine learning (ML)** are becoming increasingly important. They can streamline processes to achieve cost efficiency, for example through the use of chatbots or by automating parts of the claims adjustment process. The technologies support the development of new products and exploit existing data for possible implications in terms of risk assessment, for example in the area of underwriting. AI is firmly anchored as a topic at the insurance and start-up conferences worldwide. Today, even board members of insurance companies are predicting that the use of artificial intelligence will have a significant impact on the industry's workforce. Life insurer Fukoku Mutual Life Insurance in Japan, for example, plans to replace around 30 percent of its employees in claims adjustment with AI. 2017 saw an explosion of the use of AI among InsurTechs. As a result, start-ups like to publicly highlight AI applications, even if in some cases this is no more than the use of a chatbot, which can be launched within available frameworks with only a few lines of code.
- The second technology hype has risen around the topic of **blockchains**. Here, too, the potential field of application is very wide, and the resulting effects on the industry might become fundamental. The insurance industry – led by reinsurers – has joined forces in the B3i (Blockchain Insurance Industry Initiative) consortium to test and exploit the potential of this technology. With Keysurance and Etherisc, it has also been adopted by the first InsurTechs in Germany. Any forecast would be premature: developments in this area are only just beginning.

But one thing is certain: InsurTechs which have built up a knowledge edge in these fields are sought-after cooperation partners for insurers.

## INITIAL COIN OFFERINGS (ICOS) – A NEW SOURCE OF FUNDING?

Can digital currencies help get new InsurTechs up and running? Does this mean that venture capital investors are being pushed out? These questions have recently arisen. For example, InsurTech Aigang from Singapore is breaking new ground in financing, made possible by the world of cryptocurrencies. The company is planning an initial coin offering (ICO), meaning that it intends to **issue new cryptocurrency coins to finance the company**. In contrast to an IPO on the stock market in which real equity securities, i.e. shares, are issued, ICOs only involve the issuance of profit participation certificates. It remains to be seen whether this is an isolated case or whether this opens up a completely new source of funding for InsurTechs.

Success in this area will be mostly dependent on the general development of the ICO concept. First bitter disappointments have already considerably dampened the initial enthusiasm. Many people are well aware of the fact that the blockchain company Tezos imploded, that ICOs were banned in markets such as China and that a disaster unfolded with the hack of the blockchain fund DAO. BaFin has recently issued a consumer warning regarding the risks of ICOs.

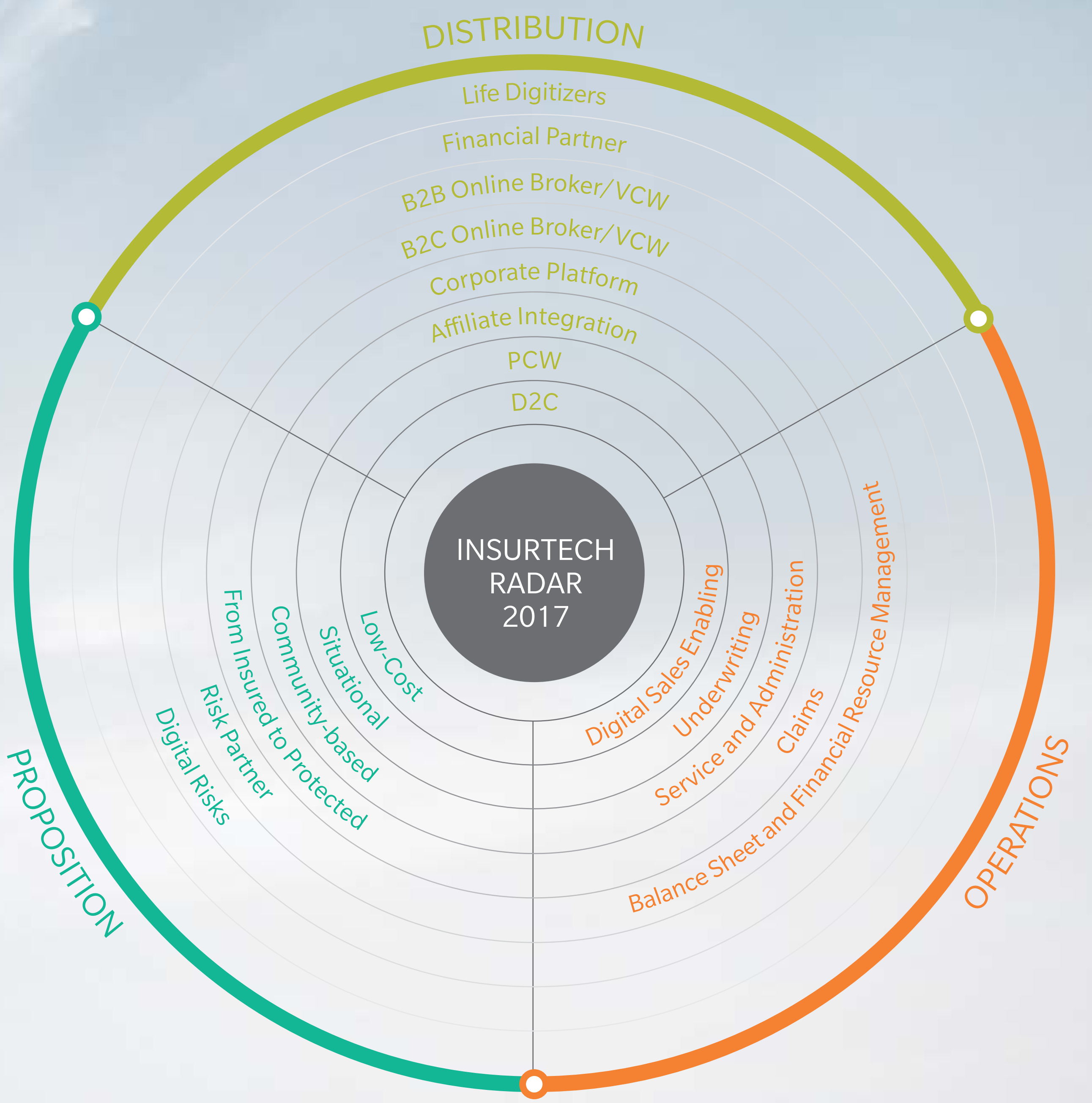
# INSURTECHS ON THE RADAR: MARKET POTENTIAL AND CHANCES OF SUCCESS

The InsurTech Radar categorizes the insurance industry along its **value chain** into the segments of **proposition, distribution** and **operations** – and positions different InsurTech business models within these categories. Many discussions with InsurTechs, insurers and investors have shown that this approach has proven to be very effective. We will therefore maintain it in this second edition.

In total, we again distinguish **19 categories of start-up business models**. These have evolved, however, compared to the business model categories of last year's Radar. We have already used the new categories in the international version of the InsurTech Radar in mid-2017. In order to minimize repetitions, we have moved details regarding definitions and differentiation as well as an explanation of the new categories to **Appendix 1**.

In terms of **activity**, the following analysis of the German market focuses on three central issues: what is the current status in each business model category? What developments have been observed since 2016? Where does the German InsurTech industry stand in individual categories compared to other countries?

We also assess the **strategic potential** of each category, which is derived from the addressable **market potential** (premium pools and depth of value-creation) and the **chances of success** (customer needs and entry barriers) of the business models. Further details on the evaluation methodology can be found in **Appendix 2**. Conclusions are therefore drawn by comparing the current level activity in each category with its strategic potential.



# DIGITAL INSURANCE PROPOSITIONS

InsurTechs offering new insurance propositions through digital means have significantly increased their activities since 2016. Today, approximately **22 percent of the German InsurTechs are active in this segment.** This has not only increased the relative importance of the Proposition segment, but also places Germany slightly above the international level of activity. We differentiate between **six business model categories**:

1

## LOW-COST

WE ARE THE PRICE/COST LEADER FOR OUR TARGET CUSTOMERS.

This category was **one of the key areas of investment in 2017**. The main drivers of this development were, above all, new fully digital insurers ("full stack carriers") and digital managing general agents (MGAs) whose first promise is to pave a cost-effective way into the digital future for end customers or partners. Besides cost-effectiveness "Low Cost" business models also promise agility advantages. Ventures that do not expressly pursue a different business model (such as e.g. Ottonova) are currently assigned to the "Low Cost" segment – at least on a temporary basis. However, we expect some start-ups to move on to other categories. One and Karlsson, for example, have already announced their intention to position themselves as "Risk Partners" – without, however, having actually taken this step yet. A comparison of the activity level with the strategic potential offers a positive signal: apparently, the opportunity associated with this business model was exploited more consistently in Germany than abroad. In the meantime, however, the level of activity has risen to a degree where the air is slowly but surely becoming thinner for further newcomers.

2

## SITUATIONAL

WE PROVIDE PERFECTLY CUSTOMIZED SHORT-TERM RISK COVERAGE.

Coverage for mountain bike tours, a day on the ski slopes or for driving a borrowed car: in this category, there has been **very little movement**. With Hepster, a new start-up has appeared on the market. Virado, on the other hand, already discontinued its Scan2Insure services back in 2016. The relative importance of situational insurance policies has declined in Germany. This goes hand in hand with our assessment of its strategic potential: situational insurance coverage needs a solid platform rooted in a different business model as a basis, since insurance are not interesting enought, per say, for end customers to make stand-alone situational propositions successful. If such a basis exists, a situational adjustment of coverage can be very interesting. On an international level, this insight is not yet widely accepted, resulting in a higher level of activity which will presumably lead to the disappearance of some of the market participants.

3

## COMMUNITY-BASED

WE USE SOCIAL MECHANISMS TO LOWER DISTRIBUTION COSTS OR COSTS OF CARRYING RISKS

In 2017, the idea of using social mechanisms to reduce distribution costs and risks **made only few new friends**. Crowdheroes is the sole newcomer. This is in line with our previous assessment that community-based offerings will probably remain a niche market. The fact that Friendsurance, one of Germany's best-known InsurTechs, is pivoting its business model out of this category underscores this point. While Friendsurance is still pursuing a peer-to-peer model, the associated community concept, however, is clearly receding into the background. The main proposition now is to lower the cost of existing insurance covers. Accordingly, we have moved Friendsurance into the "Low Cost" category. Internationally, there are still more community-based insurances than in Germany. But as in the case of situational offerings, we expect this difference to level out in the medium term.

4

## FROM INSURED TO PROTECTED

WE NOT ONLY PAY IN THE EVENT OF DAMAGE, BUT PROTECT YOU

This category, which strongly embraces the concept of prevention, was the **second key investment area in Germany in 2017**. Start-ups such as Perseus from Berlin brought innovative models to market. We are convinced of the potential of this category and see considerable scope for further innovations, despite the new entries. A look at the broader international activity shows that focused models with a clear value proposition can also be a way of achieving success in this category. One example of this is the US start-up Ring.com. It promises effective burglary protection through a combination of hardware, software coupled with insurance provided by American Family. Ring.com has proven its potential to lower the number of burglaries in the United States. With its positioning as a "digital doorbell", it also offers a simple value proposition that is easy to understand for end customers. The entry barrier is significantly lower than for the full-scope "Smart Home" solutions which are often pursued in Germany.

5

## RISK PARTNER

WE OFFER YOU CUSTOMIZED RISK COVERAGE FOR ANY SITUATION IN LIFE

We are fully convinced of the prospects for success in this category which we consider on a stand-alone basis for the first time this year. First German offerings such as Getsurance or Inxure.me are experimenting with some basic mechanisms of the "Risk Partner" model, although without fully exploiting its potential. In line with international developments, we see plenty of scope for further innovation. With Getsafe, One and Karlsson, three other German InsurTechs have also announced their intention to pivot their offer in this direction. The development of this category will be one of the most exciting topics in 2018.

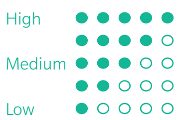
6

## DIGITAL RISKS

WE PROTECT YOU FROM THE PITFALLS OF DIGITIZATION

In 2017, InsurTechs in Germany continued to leave the coverage of new digital risks largely to traditional insurers. New products offered are mostly aimed at cyber risks. In Berlin, the InsurTech Cyberdirekt was launched. A look at international developments, however, shows that there are many other ways to cover the risks arising from digitization. London-based Tapoly, for example, deals with new digital risks of the sharing economy and the geek economy - a broad playing field for further innovation in Germany in the years to come.

## PROPOSITION - COMPARISON OF INSURTECH ACTIVITIES AND STRATEGIC POTENTIAL


### CONCLUSION

Overall, it can be concluded that the development in Germany shows a certain initial "maturity" in the first business model categories (1 - 3). The level of activity in Germany is increasingly reflecting both the strategic opportunities and the existing risks – if you consider the many startups which are likely only temporarily classified as "Low Cost". In the more innovative categories (4 - 6), however, many opportunities remain untapped. Some of the ideas from abroad could also catch on in Germany.

# DISTRIBUTION OF INSURANCE PRODUCTS

In this section of the value chain, we look at InsurTechs aiming to redefine insurance sales in the digital world. In 2016, this was the largest segment in Germany by a far cry. Almost two thirds of the InsurTechs had their focus on this area. Today, only **41 percent of start-ups remain active in this field**, which corresponds to the observed international activity level. Start-up activity declined in comparison to other segments. Companies either dropped out of the market or pivoted into a different area – mainly towards "Digital Sales Enabling" in the Operations segment. In the Distribution segment, we differentiate between **eight business model categories**:

1

## D2C (DIGITAL TO CUSTOMER)
### WE SUBSTITUTE THE MIDDLEMAN WITH DIGITAL TECHNOLOGY

In 2017, **most new companies founded** in the Distribution segment fell into the "D2C" category. Particularly InsurTechs focused on life insurance. The problem in Germany: direct sales models need to attract the attention of enough customers, and given the structure of the German market, buying qualified leads is very expensive compared to many other markets. "D2C" companies therefore need to build their own brand or create differentiated direct marketing capabilities, for example on Facebook. Not everyone will succeed with this. As the launch of further direct offerings is expected, some of the players will most likely have to drop out in the medium term.

2

## PRICE COMPARISON WEBSITES (PCW)
### WE FIND THE CHEAPEST INSURANCE FOR YOU

The InsurTech **population** in the Comparison Websites segment has **slightly decreased**. Covomo has shifted its focus to the Operations model "Digital Sales Enabling". "Price Comparison Websites" with a generalist orientation such as Check24, Verivox and Toptarif continue to dominate. Due to their maturity, however, they are no longer classified as InsurTechs. Other providers have remained niche players due to the marketing pressure exerted by the heavyweights. We remain convinced that this category is a tough one for InsurTechs.

3

## AFFILIATE INTEGRATION
### WE SUPPLEMENT OUR PARTNERS' OFFERINGS WITH RISK COVERAGE

Insurances presented as an add-on to a main product – this category has also seen **hardly any movement** recently. The main reason: due to its large installed base and development lead, it is difficult to get past market leader Simplesurance. Newcomers therefore have a hard time. The Berlin-based company is also expanding internationally. With this, Simplesurance is currently one of very few German InsurTechs to successfully implement an internationalization strategy.

4

## CORPORATE PLATFORM
### WE INSURE YOUR EMPLOYEES

Be it insurances for corporate pension schemes or other policies that are relevant for employees: we consider sales solutions in this new category to be **promising**. With Beeline Solutions/onnest from Münster, HeavenHR from Berlin and Penseo from Hamburg, there are several German companies active in this space, although HeavenHR seems to have deprioritized insurance at the moment. Internationally and especially in the US, a lot more is already happening. One of the employed go-to-market approaches is to provide novel human resources software or solutions as a platform that can also serve to market insurance. We believe that some of these ideas will also be finding their way to Germany.

5

## B2C ONLINE BROKERS
### WE OPTIMIZE YOUR PERSONAL INSURANCE PORTFOLIO

While in 2016 the Distribution segment had still been dominated by "B2C Online Brokers", the **wave of new start-ups has diminished considerably**. This confirms our general skepticism regarding this approach, as without strong sales partnerships success is doubtful. In addition to a B2C model, the most successful brokers have meanwhile also established a B2B2C model (e.g. Clark). Their plan is to use the market access of partners such as banks to promote their products and services to end customers.

6

## B2B ONLINE BROKERS
### WE OPTIMIZE YOUR CORPORATE INSURANCE PORTFOLIO

Despite a lot of movement, the importance of B2B online brokers has remained **more or less unchanged**. Gewerbeversicherung24, for example, has shifted its focus to "Digital Sales Enabling". Meanwhile, newcomers include Optisure with a classic broker model, as well as the two ambitious players Finlex and Liimex. They want to be more than just the digital version of a broker with an online insurance portfolio. In particular Finlex could be, in our view, a potential trailblazer for start-ups which not only wants to equip traditional brokers with digital tools, but also expand their business through bionic offerings, meaning the combination of human skills with the use of digital technology. In the near future, we will presumably see further promising developments in this area, possibly coupled with digital managing general agent models.

7

## FINANCIAL PARTNER
### WE OPTIMIZE YOUR FINANCES AND INSURANCES

The Financial Partner category has remained **mostly stable**. Companies operating in this space are digital versions of bancassurance distributors and advise on both financial and insurance needs. Apart from start-ups, this area is also being targeted by many established companies. W&W, for example, has built up "Financial Partner" skills by acquiring a majority stake in Treefin. Alte Leipziger, meanwhile, has launched its Fin4U offering. Insurance manager Clark has entered into numerous partnerships with banks, integrating its insurance portfolio with their banking products. Price comparison website Check24 has also expanded its "Insurance Center" with the offering "Kontoblick" to cover banking products. We expect further activity from banks and major insurers in this area. All of this reinforces our assessment that this business model is attractive. However, it is also becoming clear how difficult it is for start-ups to achieve a permanent positioning with this model. If established companies succeed in establishing an effective financial partner model and in addition manage to transfer many of their existing customer relationships to this model, things will get tight for InsurTechs.

8

## LIFE DIGITIZER
### WE MANAGE YOUR DOCUMENTS – AND OFFER RECOMMENDATIONS UPON REQUEST

This category also saw **very little new activity** in 2017. While theoretically there is potential to use this business model for insurance sales, the topic is not at the top of the list of providers' priorities.

## DISTRIBUTION - COMPARISON OF INSURTECH ACTIVITIES AND STRATEGIC POTENTIAL

| | 1 D2C | 2 PCW | 3 Affiliate Integration | 4 Corporate Platform | 5 B2C Online Brokers | 6 B2B Online Brokers | 7 Financial partner | 8 Life Digitizer | Level of Activity |
|---|---|---|---|---|---|---|---|---|---|
| | · AstraDirect Versicherung<br>· BRIX<br>· fairr.de<br>· FIBUR<br>· Fintiba<br>· grün versichert<br>· kawadu<br>· L'AMIE direkt<br>· myPension<br>· OnlineVersicherung.de | · autoversicherung.de<br>· Bürgschaft24<br>· Cyberinsurance 24<br>· EINFACHSPAREN24<br>· i-finance<br>· passt24<br>· Zahnarzt-Preisvergleich | · simplesurance | · beeline solutions/ onnest<br>· HeavenHR<br>· Penseo | · allesmeins<br>· asuro<br>· Clark<br>· FinanzRitter<br>· GetSafe<br>· gonetto<br>· Knip<br>· TED<br>· Versicherungsakte | · BrokingX<br>· Finanzchecks<br>· Finanzchef24<br>· FINLEX<br>· Liimex<br>· Optisure | · compaio<br>· feelix<br>· Fidor Bank<br>· finatra<br>· moneymeets<br>· Rentablo<br>· treefin | · fileee<br>· Gini | |
| **Level of Activity** | | | | | | | | | |
| Germany 2017 | ●●●●● | ●●●●○ | ●○○○○ | ●●○○○ | ●●●●○ | ●●●○○ | ●●●●○ | ●●○○○ | 41% |
| | | | | | | | | | - 22% |
| Germany 2016 | ●●●○○ | ●●●●○ | ●●○○○ | N/A | ●●●●● | ●●●●● | ●●●●● | ●●○○○ | 63% |
| International 2017 | ●●●○○ | ●●●●● | ●●○○○ | ●●●○○ | ●●●●● | ●●●○○ | ●●○○○ | ●●○○○ | 42% |
| **Strategic Assessment** | | | | | | | | | |
| Market Potential | ●●●○○ | ●●●●○ | ●●○○○ | ●●●●○ | ●●●○○ | ●●●○○ | ●●●●○ | N/A | |
| Chances of Success | ●●◐○○ | ●●●●○ | ●●●●○ | ●●●●● | ●●○○○ | ●●●○○ | ●●●●○ | N/A | |
| **Total** | ●●●○○ | ●●●◐○ | ●●●○○ | ●●●●○ | ●●◐○○ | ●●●○○ | ●●●●○ | N/A | |
| **Likely Winners** | Agile Insurers/ InsurTechs | Tech-Generalists | InsurTechs | InsurTechs | Agile Brokers/ InsurTechs | Agile Brokers/ InsurTechs | Banks/FinTechs | N/A | |

| | |
|---|---|
| High | ●●●●● |
| | ●●●●○ |
| Medium | ●●●○○ |
| | ●●○○○ |
| Low | ●○○○○ |

### CONCLUSION

All in all, with the exception of new "D2C" offers, "B2B Online Brokers" and "Corporate Platforms", there were very few innovative InsurTechs in the Insurance Distribution segment in 2017. Several players did, however, drop out of the market or pivot their offering into the other two segments. On the one hand, this is due to the high number of InsurTechs already launched in this area. Another complicating factor: the often limited strategic potential represents a considerable obstacle to successfully positioning new InsurTechs on the market.

# DIGITIZATION OF OPERATIONS

More and more InsurTechs want to find new ways to optimize business processes and methods in the insurance industry. While in 2016 the segment was clearly underrepresented with only 21 percent of the InsurTechs, the level of activity is **now approaching the international average of nearly 37 percent.** However, the area of digitizing operations is heavily skewed in Germany, as the business model "Digital Sales Enabling" is particularly dominant. We differentiate between **five business model categories:**

1

## DIGITAL SALES ENABLING

### WE DIGITALLY ENABLE YOUR SALES FORCE

This **business model dominated the German InsurTech scene in 2017**. Even measured against the large number of international players in this field, this business model category now appears to be fairly crowded in Germany. A questionable issue is the target groups' willingness and ability to pay: while insurers are investing large sums in the digitization of their captive sales channels, things are a lot more low-key in other areas. Digital attackers from other industries looking for further components for their sales platforms can, of course, also be considered solvent potential customers. When it comes to the many small and medium-sized insurance distributors and brokers, however, doubts arise. How quickly will they increase their IT investments to be able to compete in the digital world? And: are they even able to do so? The market potential in the "Digital Sales Enabling" category depends heavily on these questions.

2

## UNDERWRITING

### WE OPTIMIZE YOUR RISK ASSESSMENT AND UNDERWRITING DECISIONS

Start-ups focusing on the assessment of risks or on creating a foundation for new insurance products or optimizing pricing often position themselves through the use of new technologies. It is therefore no coincidence that the existing players are mainly trying to grow their business with the help of artificial intelligence. The new entrants in 2017 – Keysurance and Etherisc – take a different approach to be the first German InsurTechs to use blockchain technology in an insurance context. However, **activity levels remain fairly low** compared to both international activities and the strategic potential of this category. There is still plenty of room for innovation. Tasks range from risk underwriting decisions to components for new products, including e.g. the "Internet of Things" (IOT), pricing, placement on comparison websites and the management of discounts.

3

## SERVICE AND ADMINISTRATION

### WE OPTIMIZE YOUR SERVICE AND ADMINISTRATION PROCESSES

The "Service and Administration" category was added in 2017. However, it continues to show **little activity in Germany.** This applies both in international comparison and in terms of its strategic potential. Furthermore, German InsurTechs in this category tend to focus on niche topics. There is still plenty of room for innovation here over the coming years.

4

## CLAIMS

### WE OPTIMIZE YOUR CLAIMS PROCESSING AND DECISION MAKING

We also see a gap in the "Claims" category. Internationally, there is significantly more activity in the digitization of claims adjustment space – and for good reason. "Claims" is the **most attractive category** in the Insurance Operations segment, as it can deliver significant savings or materially improve the customer experience at the moment of truth for insurers: the claims event. Accordingly, it has considerable strategic potential. An indication of this: in mid-2017, the financial investor General Atlantic acquired a majority stake in Langenfeld-based Control Expert – a company for optimized claims processes in the area of motor insurance, which due to its size and maturity, however, is no longer an InsurTech according to our definition. In the "Claims" category, there are still a number of issues that can be successfully addressed by innovative start-ups.

5

## BALANCE SHEET AND FINANCIAL RESOURCE MANAGEMENT

### WE OPTIMIZE INVESTMENT DECISIONS AND FINANCIAL PROCESSES

In this category, **there is not a single German InsurTech player**. Internationally, there are good examples of second-wave InsurTechs attacking this area with a very experienced te am of founders. One example would be the start-up Extraordinary Re, which operates a platform for the transfer of insurance risks via the capital markets.

## OPERATIONS - COMPARISON OF INSURTECH ACTIVITIES AND STRATEGIC POTENTIAL

**1 Digital Sales Enabling**

- 1blick
- BANKSapi
- bisure
- b2b Protect
- Covomo
- Dionera/simplr
- easy insurance
- expertenhomepage/ DIGiDOR
- Flexperto
- Gewerbever- sicherung24
- KASKO
- maklerhomepage
- massUp
- Mobilversichert
- diVersO (myDiverso)
- Nect
- Personal Business Machine
- ProFair24
- Rasa
- relayr
- Riopo
- Shore
- sum.cumo
- Terminpilot
- ThinxNet
- Virado
- wefox
- xbAV

**2 Underwriting**

- AdaEngine
- Etherisc
- insurers.ai
- KeySurance

**3 Service and Administration**

- Alyne
- IDnow
- Reportix

**4 Claims**

- Cognotekt
- mbafleet
- MotionsCloud
- SchadenLaden
- Unfallfuchs
- unfallhilfe24

**5 Balance Sheet and Financial Resource Management**

N/A

| | 1 Digital Sales Enabling | 2 Underwriting | 3 Service and Administration | 4 Claims | 5 Balance Sheet and Financial Resource Management | Level of Activity |
|---|---|---|---|---|---|---|
| **Level of Activity** | | | | | | |
| Germany 2017 | ●●●●● | ●●○○○ | ●●○○○ | ●●●●○ | ●○○○○ | 37% |
| Germany 2016 | ●●●●○ | ●○○○○ | N/A | ●●●○○ | ●○○○○ | 21% |
| | | | | | | + 16% |
| International 2017 | ●●●●● | ●●●●○ | ●●●●○ | ●●●●● | ●●○○○ | 39% |
| **Strategic Assessment** | | | | | | |
| Market Potential | ●●●●○ | ●●●●○ | ●●●●○ | ●●●●● | ●●●○○ | |
| Chances of Success | ●●●●○ | ●●●●● | ●●●○○ | ●●●●● | ●●○○○ | |
| **Total** | ●●●●○ | ●●●●◐ | ●●●◐○ | ●●●●● | ●●◐○○ | |
| **Likely Winners** | InsurTechs | Reinsurers/InsurTechs | Tech-Generalists | InsurTechs | InsurTechs | |

High ●●●●●
●●●●○
Medium ●●●○○
●●○○○
Low ●○○○○

### CONCLUSION

In summary, it should be noted that the German InsurTech scene is facing an imbalance in the area of Operations, with a strong tilt towards the "Digital Sales Enabling" business model. All other business models remain underrepresented, both in international comparison and in terms of their strategic potential. There is clear potential here for start-ups aiming to bring innovative technologies into the insurance industry. However, this would require a combination of technological expertise and extensive insurance knowledge, which might prove difficult in Germany. For many people, a job in the conservative insurance sector is still associated with the silent hope of lifelong employment. Joining start-up is therefore not everyone's cup of tea.

# INSURTECH FINANCING IN GERMANY: WHAT ARE THE FOUNDER SAYING?

Founders from all industries know this barrier only too well: in order to be successful, start-ups need sufficient financial resources – not only in the seed phase, but also for subsequent growth. But what is the current situation regarding start-up financing, in particular with regard to InsurTechs? In order to gain more clarity, we carried out an online survey among InsurTech founders in Germany.

## SURVEY DESIGN

The survey targeted InsurTech founders in Germany and was conducted between August and September 2017. A total of 36 InsurTechs participated in the online survey. Most of the insurance startups had between 10 and 25 employees and were founded on average 2.5 years ago. More than 90% of them currently focus on the German speaking area.

## SEARCHING FOR INVESTORS IS TIME-CONSUMING

Money is a critical issue: more than 70 percent of the InsurTechs surveyed are looking for financing, either very urgently, or they are preparing their next financing round. Our survey shows just how much effort is to be needed: preparing and carrying out financing rounds ties up a great deal of capacity, especially among key personnel. On average, the InsurTech founders calculate almost **six months between the initial contact to an investor and closing**. In order to avoid unpleasant surprises, the time required must be taken into account during cash flow planning.

## MOST VALUATIONS ARE RISING

The issue of valuation tends to be positive from the InsurTechs' point of view. Almost half of the surveyed founders stated that **market valuations had risen over the past 12 months**. This is confirmed by talks with venture capital investors (VC) and industry insiders. However, just over one third of the InsurTechs saw stagnating market valuations, and just under one-fifth concluded that valuations had decreased over the observation period. It remains to be seen whether the declines are due to the respective business models, reflect a negative disposition if the company's own financing is not going as smoothly as planned, or indicate a general trend reversal in InsurTech valuations.

## CLEAR DEFICITS IN EXISTING FINANCING OPTIONS

Overall, the total financing volume for InsurTechs in Germany increased significantly: according to research carried out by Policen Direkt, the segment received inflows of more than 100 million euros in 2016. In 2017, this amount had already been exceeded during the course of the year. A number of InsurTechs was able to close major financing rounds during the past 18 months – including Clark, Coya, Element, Friendsurance, Neodigital, Ottonova, Relayr, Simplesurance and Wefox. But are these successes also indicative for the overall market in Germany?

The clear answer is no. Individual deals distort the overall picture. **Only one-third of InsurTechs consider the financing possibilities offered by investors from Germany to be sufficient**, and half do not want to comment on this issue (see exhibit 1). The picture becomes even clearer when you look at governmental programs. Here, the verdict is devastating. Approximately 70 percent of InsurTech founders do not consider governmental support for start-ups in Germany to be sufficient.

Exhibit 1: Financing Options for InsurTechs

SUFFICIENT FUNDING OPTIONS FROM INVESTORS IN GERMANY (IN %)

GOVERNMENT FUNDING PROGRAMS ARE SUFFICIENT IN GERMANY (IN %)

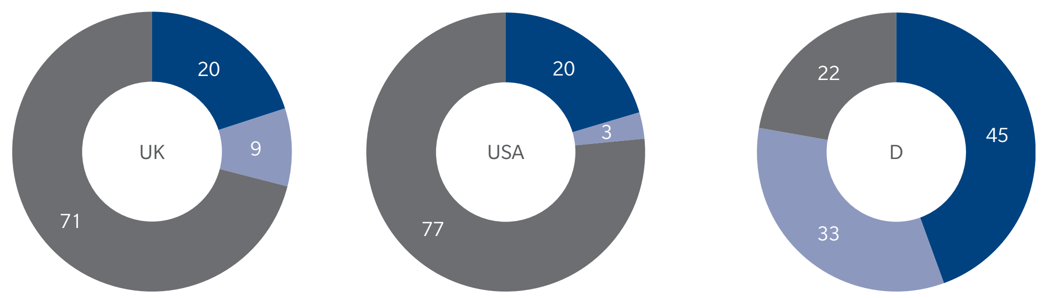

■ Fully agree/agree ■ Undecided ■ Disagree/fully disagree

In the opinion of the founders surveyed, Germany is at risk of falling behind in this matter. According to the respondents, in an international comparison, InsurTechs are worse off in Germany than in hotspots such as the UK and the US (see exhibit 2). Almost three-quarters of those surveyed consider the financing situation in Germany to be worse or even much worse than in the UK. While respondents have been noticing a trend towards improvement over the past twelve months, the initial level was low. Future expectations are not very euphoric: only one third believe that the financing issue will ease within a year.

Exhibit 2: Development of Funding Situation

COMPARED TO THE ... THE FUNDING SITUATION OF INSURETECHS IN GERMANY IS ... (IN %)

FUNDING SITUATION FOR INSURTECHS IN GERMANY IN THE LAST 12 MONTHS HAS... (IN %)




■ Much better/better ■ About the same ■ Worse/much worse

■ Strongly improved/improved
■ Remained unchanged
■ Worsened/strongly worsened

## PROBLEMS ARISE WHEN IT COMES TO LARGER FOLLOW-UP FINANCING

Many InsurTechs in Germany have been in existence for more than two years, even though the phenomenon itself is still young. The financing needs vary considerably, depending on the phase a company is in. A general rule is: **the larger the financing round, the more difficult it is**. Only about one in four respondents sees problems if less than 250,000 euros are needed (see exhibit 3). Almost half of the InsurTechs also consider financing rounds of up to 500,000 euros as easy or even very easy – only around a quarter disagree. Financing needs involving sums of two million euros or more, however, are seen as difficult or very difficult by two thirds of the respondents.

Here, a structural problem emerges: while the financing options available in Germany are usually sufficient for initial funding, there is a **lack of capital supply for the growth phase.** These statements are in line with the observed doubling in the number of InsurTechs in Germany since 2016 – because seed money is quick to be found. Large financing rounds, on the other hand, which are to be used for international expansion or a stronger market penetration, are currently difficult to obtain in Germany. One possible reason: start-ups are only rarely headed by experienced founders. These might find it easier to secure larger sums in a shorter period of time.

## FOREIGN INVESTORS AND INSURERS AS NEW SOURCES OF FUNDING

Which sources of capital will German InsurTechs be able to tap in the future? Expectations towards business angels are rising slightly: 37 percent of those surveyed expect them to invest more money in the future (see exhibit 4). The majority, however, expects a stable contribution by business angels. Regarding government subsidy programs – whether national or international (e.g. at the EU level) – disillusion prevails. More than 86 percent of those surveyed do not expect any positive change in this respect.

InsurTech founders expect growth from foreign venture capital funds (66 percent). **Corporate venture capital programs (CVC) of insurers from Germany (71 percent) and abroad (82 percent) will become even more important**. These views are in line with the increased efforts established insurers have been making in the field of digitization. In addition to the relaunch of investment pools, establishment initiatives such as incubators, hackathons and garage events have raised expectations among InsurTech founders regarding sustained growth in the provision of capital.

## DOUBTS ABOUT CVC PROGRAMS OF PRIMARY INSURERS

A quandary arises when founders are asked what they think about the expected increase in commitment by traditional insurers. Not as much as possibly expected, as the survey shows. **InsurTechs do not necessarily see rosy prospects for corporate venture capital programs launched by insurance companies.** The founders are clearly skeptical about the prospects of success of the investment programs initiated by primary insurers: not even one in five believes they will be successful. 28 percent even predict poor to very poor prospects (see exhibit 5). The forecast for committed reinsurers, however, is far better: here, more than 60 percent of the founders believe that their CVC programs offer good or very good opportunities.

Exhibit 3: Financing Rounds by Size

A FINANCING ROUND WITH A VOLUME OF ... IS CONSIDERED TO BE...
(IN %)

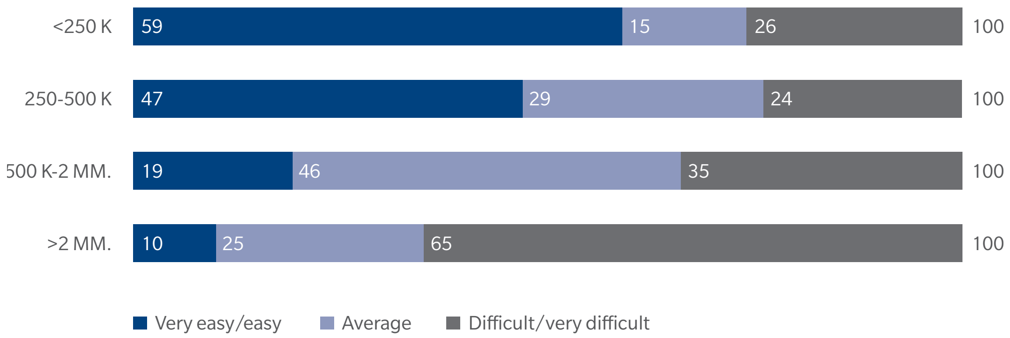
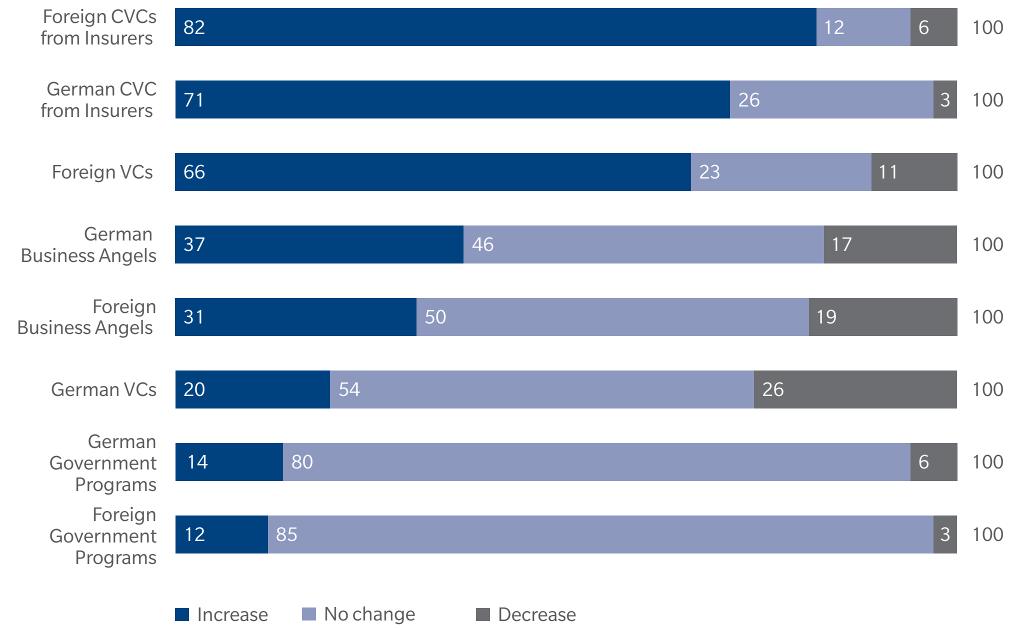





Exhibit 4: Future Funding Sources

EXPECTATIONS ON DEVELOPMENT OF DIFFERENT FUNDING SOURCED IN THE NEXT 12 MONTHS
(IN %)




This view of the probability of success of CVC programs is also reflected in the assessment of insurers as investors. The question is: what are the consequences of an insurer's involvement for subsequent financing rounds with other investors? Once again, we can observe a clear differentiation between primary insurers and reinsurers. While 66 percent of the InsurTechs see a reinsurer's involvement in follow-up financing as helpful or very helpful, only 31 percent share this view when it comes to primary insurers (see exhibit 6). An interesting fact: almost half of the InsurTechs believe that the involvement of primary insurers is actually harmful or at least not helpful with regard to further financing rounds.

## REINSURERS ENJOY A STRONG VOTE OF CONFIDENCE

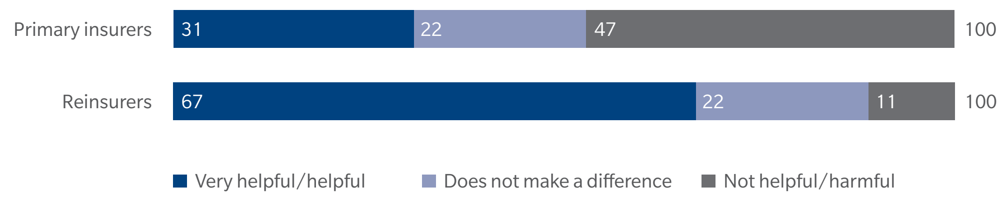
It is therefore not surprising that the overall verdict is cautious: 75 percent of the respondents consider the participation of a

Exhibit 5: Likelihood of Success of Insurer CVC Programs

EXPECTATION ON LIKELIHOOD OF SUCCESS OF CVC PROGRAMS OF PRIMARY INSURERS VS. REINSURERS
(IN %)

Exhibit 6: Consequences for Future Funding Rounds

AN INVESTMENT OF A … IN A STARTUP HAS THE FOLLOWING CONSEQUENCE FOR FUTURE FUNDING ROUNDS…
(IN %)




primary insurer in their own start-up company to be rather negative (see exhibit 7). Of these skeptics, 28 percent categorically reject any such involvement. Only 14 percent take an opposing view and would welcome the involvement of a primary insurer with their own company. In contrast, InsurTech founders are much more likely to welcome reinsurers as investors in their own start-ups: **two-thirds would see such an investment as either positive (44 percent) or even optimal (22 percent)**. Only three percent of the respondents answered with a categorical "no".

## INSURERS' INTERESTS

The question arises: why is this? An important reason for this dichotomy seems to relate to the underlying strategic interests of primary insurers – irrespective of whether or not these are realized in practice. There is concern, for example, that an InsurTech **customer** – be it an end customer or another insurance company in the case of partnership models – **might consider such closeness to an insurer problematic.** Since the establishment of long-term customer relationships is an important success factor, most prefer not to run this risk. Founders are also afraid of losing entrepreneurial freedom and agility by having a primary insurer on board. The situation is different when it comes to reinsurers: here, respondents see a greater distance to an InsurTech's operating business.

In our experience, venture capital investors take a very similar view. There is hardly anyone among their ranks who has not had negative experiences with strategic investors in their own investments. Start-ups with a primary insurer in a significant shareholding role are therefore considered to be difficult or even impossible to finance by venture capital investors. Word has spread among founders, as the survey shows.

## PROFESSIONAL INVESTORS LACK INSURANCE KNOW-HOW

The situation is therefore very tricky. After all, insurers could offer InsurTechs considerable benefits thanks to their know-how and network. These important features are weak spots among venture capital investors: only about one-sixth (17 percent) of the InsurTechs surveyed believe that VCs in Germany have the necessary insurance know-how (see exhibit 8). **Almost half (47 percent) seriously doubt that professional investors have any relevant insurance-specific knowledge at all**. When it comes to business angels, the situation is not much better.

If you take a closer look at the venture capital scene in Germany, you will not be too surprised by the founders' assessment. There are only very few investors truly focusing on the FinTech and InsurTech arena. In particular insurance expertise remains scarce. While it is customary for decision-makers in venture capital firms to be former e-commerce entrepreneurs, consultants or investment bankers, you will be hard-pressed to find former executives or employees of insurance companies. This at the same time reduces the comfort with the more complex business of insurance and consequently the willingness to become more involved in the still young area of InsurTech. The above-mentioned structural problems regarding larger growth financing cannot be solved in this way. Action is required.

Exhibit 7: View on Insurer Investment in Own Startup

I CONSIDER AN INVESTMENT OF … IN MY STARTUP AS …
(IN %)

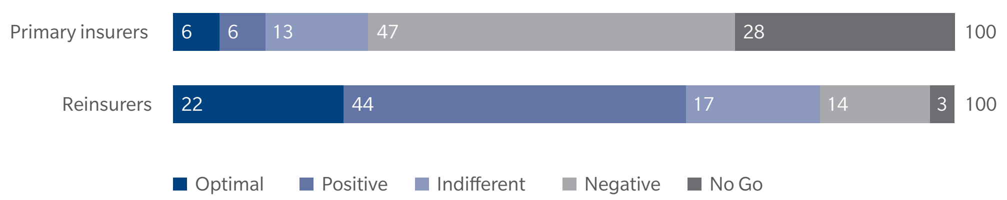
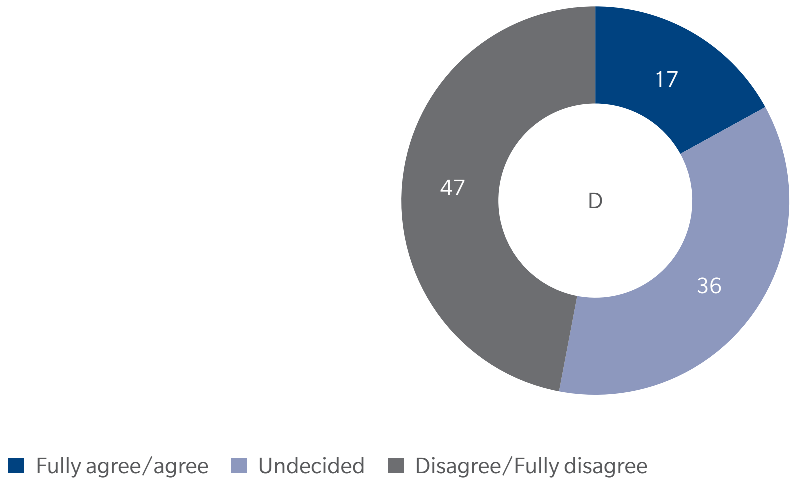



Exhibit 8: Know-how of VCs

VCS IN GERMANY ARE SUFFICIENTLY KNOWLEDGEABLE ABOUT INSURANCE AND INSURTECH
(IN %)



# CONCLUSION AND OUTLOOK

The InsurTech scene has evolved a lot over the past 18 months. The founders in Germany have learned much – one could speak of increasing maturity. Whereas in 2016 business models based on e-commerce success patterns dominated, it was precisely in these areas that developments subsequently stagnated. In 2017, new entrepreneurial spirit was found mainly in areas requiring greater knowledge of the insurance industry. **The second wave of InsurTechs we had foreseen is starting to swell.**

However, some of the most innovative categories are still underrepresented in Germany. This includes business models with potentially disruptive power (e.g. "From Insured to Protected", "Risk Partners" or "Digital Risks"), as well as a push into the core functions of insurance companies through new technologies. As market entries of foreign InsurTechs have ebbed off recently, courageous founders will find plenty of opportunities in these segments. The start-up boom in Germany will continue along these lines.

With a view of the next 18 months, we take some risk ourselves and dare to make the following forecasts:

1. **The business model categories favored in 2017 will – at best – stagnate:**
   In 2017, the two segments "Low Cost" and "Digital Sales Enabling" achieved the strongest growth. We therefore consider both categories to be well represented, to say the least. Even if some interesting niches remain, everything seems to be pointing to stagnation. Some market participants will disappear or shift their business model to more promising areas.

2. **Who wins the upper hand as a "Financial Partner"? The course will be set in 2018:**
   More and more established companies are pushing their way into the role of financial partners – first and foremost major banks and insurers. By entering the arena and competing with InsurTechs, they are increasing competition significantly. Whether it will be start-ups or traditional companies that come out on top in the "Financial Partner" category – the course will be set in 2018. If established players succeed in transferring their existing business relationships to this model, things will get very tight for InsurTechs.

3. **Technology-driven business models with a lot of potential are also being ramped up in Germany:**
   While in 2016 the InsurTech scene was still heavily influenced by sales-oriented models, a reorientation process set in during the course of 2017. Exciting new start-ups were established, and the mix has become more balanced. However, innovations in the more complex business models categories and in the core areas of insurance, i.e. "Risk Partner", "From Insured to Protected", "Underwriting", "Service and Administration" and "Claims", remain scarce. Here, we expect to see more start-ups with a stronger focus on technology-driven innovations. The prerequisite for this, however, is the establishment of founding teams which combine two crucial factors: in-depth insurance knowledge, as well as technological know-how.

4. **Lack of growth financing is becoming a problem:**
   The survey among German InsurTechs has clearly shown: there is a lack of capital, especially when it comes to large follow-up financing. The potential offered by the current investor landscape is not sufficient. There is also too little governmental support, as a comparison with other countries shows. In this area, there is a very clear need for action.

5. **Primary insurers willing to provide capital will be disappointed**:
   In terms of investment, a gap is opening up: on the one hand, more and more financing vehicles are being provided by primary insurers. On the other hand, however, InsurTechs are becoming increasingly uncomfortable about accessing this very capital. This discrepancy between willingness and rejection will lead to disappointments. While we do not expect primary insurers to reduce their appetite for financing in the short term, we believe that in five to ten years only very few primary insurers will still be offering their own financing vehicles

Our research clearly shows that Germany is most certainly home to very innovative InsurTechs. Even if we have not explicitly included it here as a trend – the **market shakeout will continue in 2018**, and some start-ups that are active today will disappear. A look at Germany's relative market size in an international context also reveals a fundamental problem: the market potential is limited. In terms of its international relevance, the InsurTech scene in the US and the UK is clearly ahead of Germany. Recently, there have also been several major InsurTech investments in China. On their own, the new InsurTech hubs in Cologne and Munich will not be enough. Without targeted funding programs for innovative technologies in the InsurTech arena, the gap will continue to widen.

# APPENDIX 1: DEFINITION OF INSURTECH BUSINESS MODEL CATEGORIES

The InsurTech Radar on Germany introduced in 2016 is based on a systematic classification of market activities into 19 separate business models. They logically follow the three stages of the insurance industry's **value chain: Proposition, Distribution and Operations**. In this latest update of the study, we have retained this tried-and-tested principle, but included a few further detailed developments.

**Four of the previous categories** were **eliminated**: "Internet of Things" (IOT), "Specialist Comparison Websites", "Generalist Comparison Websites" and "Cross-Sectional Technologies". The "Internet of Things" category, which is also frequently used in other studies, proved to be too unspecific, as IOT is used in various and significantly different InsurTech business models. It is more of a basic technology, like artificial intelligence or blockchain. Similarly, the distinction between specialist and generalist comparison websites turned out to cumbersome in practice, as it offered little differentiation. We therefore decided to combine them to a common category "Price Comparison Websites" (PCW). The "Cross-Sectional Technologies" segment was increasingly populated by domain specialists who did not really fit our definition of "InsurTech".

In return, we have **identified three new business models** – the "Risk Partner", the "Corporate Platform" and "Service and Administration" – so that the total number is once again 19 categories.

The business model categories are defined on the next pages.

## DIGITAL INSURANCE PROPOSITIONS

Digitization offers opportunities for innovation on several levels. Classic insurance products can be enhanced digitally. Moreover, completely new propositions are being created that target risks in different life situations.

In the area of digital insurance propositions, we have identified **six business model categories**:

1

**LOW-COST**

WE ARE THE PRICE/COST LEADER FOR OUR TARGET CUSTOMERS

With fully digital platforms, digital "full stack carriers" in the "Low Cost" business model aim for price leadership, focusing primarily on agility advantages. Without the burden of legacy IT systems which the established insurers are forced to deal with, the low-cost providers achieve high cost advantages through utmost automation and digitization of all processes. Digital interaction models with customers also aim at improving service quality and thereby customer satisfaction. Thanks to a very flexible IT platform, providers are agile and can quickly bring new products to market. The ability to determine the scope of coverage in terms of time and content on a granular level forms the basis for many of the expected business model and product innovations. A special type of dynamic arises when digitization triggers behavioral changes among customer groups – as can be seen, for example, in the British market for motor vehicle insurance. Insurers who thanks to digital operating models are able to react more quickly to such changes in behavior than their competitors and adapt their own products are able to skim the cream in pricing and, ultimately, offer lower price points to the risks they want.

2

**SITUATIONAL**

WE PROVIDE PERFECTLY CUSTOMIZED SHORT-TERM RISK COVERAGE

These products cover temporary risks such as travel abroad, ski excursions or temporary suspensions of the age limit in motor insurance when you let your child borrow the car for the weekend. Dynamic adaptation is achieved either via an app or – if possible – through a digital connection to the insured object, such as the vehicle.

3

**COMMUNITY-BASED**

WE USE SOCIAL MECHANISMS TO LOWER DISTRIBUTION COSTS OR THE COST OF CARRYING RISKS

Peer-to-peer approaches aim at using digital technologies to create a specific risk collective, which based on group dynamics, is expected to suffer fewer damages. In addition, the community concept is also used in sales in various ways: it starts with digital recommendation marketing and ranges from laser-sharp digital targeting of specific interest groups to types of proposals that are tailored precisely to specific niches.

### 4

**FROM INSURED TO PROTECTEDT**

WE NOT ONLY PAY IN THE EVENT OF DAMAGE, BUT ALSO PROTECT YOU

This business model reflects a new basic conception of the provider: Instead of being just a stopgap in the event of damage, the provider comprehensively addresses the customer's need for protection. In short: the service provider delivers "experienced safety", usually as a bundle of services, software and hardware components, as well as insurance coverage. The individual insurance policy takes a back seat, and accordingly the providers here are usually not established insurance companies.

### 5

**RISK PARTNER**

WE OFFER YOU CUSTOMIZED RISK COVERAGE FOR ANY SITUATION IN LIFE

Allianz One from Italy has been a pioneer in the market for the "Risk Partner" business model since 2014. At the heart of this concept is the customer receiving dynamically adaptable coverage for his or her variable risk. It is based on a foundation of granular, individually selectable insurance components. This offers the mass market the kind of flexibility which providers otherwise would only offer individually to large corporations. The marketing logic of the "segment of one", where each customer is addressed separately, is applied to insurance topics. The scope and duration of insurance coverage are no longer rigid, which places high demands on the actuarial models and their technological implementation. In Germany, there are a few initial approaches in this business model category, such as the ones provided by Inxure.me or Getsurance. Complete service offerings are, however, not yet available.

### 6

**DIGITAL RISKS**

WE PROTECT YOU FROM THE PITFALLS OF DIGITIZATION

The more digitization determines our lives, the more we are exposed to the new risks it creates. Cyber risk is undoubtedly the best known – not least due to incidents such as the WannaCry attack or the data breach suffered by financial services provider Equifax. In the same way, new risks arise from digital business models such as the Sharing Economy, the interaction with other people, some of whom we know only through digital channels. Increasingly, there is also a need for coverage related to products resulting from technological innovations being combined with digital applications. Examples include drones or products that make independent decisions via artificial intelligence and thereby trigger certain actions.

## DISTRIBUTION OF INSURANCE PRODUCTS

Digitization creates new ways to interact with potential customers and sell insurance solutions.

In the area of digital insurance distribution, we see **eight business model categories:**

### 1

**D2C (DIGITAL TO CUSTOMER)**

WE SUBSTITUTE THE MIDDLEMAN WITH DIGITAL TECHNOLOGY

Digitally selling insurance products directly to end customers without the involvement of any intermediaries.

### 2

**PRICE COMPARISON WEBSITES (PCW)**

WE FIND THE CHEAPEST INSURANCE FOR YOU

"Price Comparison Websites" create transparency by comparing the prices and possibly also high-level proposition features of different providers for a desired coverage.

### 3

**AFFILIATE INTEGRATION**

WE SUPPLEMENT OUR PARTNERS' OFFERINGS WITH RISK COVERAGE

By "Affiliate Integration", we mean the embedding of insurance offers into digital partner offerings. The most common practice today is to embed insurance policies in the digital conclusion process for the sale of products and services. Here, insurance is merely an "appendage" to a main product that the customer had actively been looking for. A well-known example is an extended warranty when purchasing an electrical appliance. Partners are not only used for the digital sales process, but also for other processes that allow for an "opt-in". Partner processes may furthermore be used to generate leads.

### 4

**CORPORATE PLATFORM**

WE INSURE YOUR EMPLOYEES

"Corporate platforms" are widely used on an international level. They are considered a promising sales model. On such a "Corporate Platform", employees are offered discounts and other benefits, including insurance and retirement products. In some cases, the employer may also participate directly in premium and contribution payments. For employers, the platforms usually offer HR and/or accounting software or solutions. InsurTechs usually contribute value through three levers: they increase the participation rate, sell additional employee-financed voluntary covers or conduct workplace marketing of personnel line policies and benefits, sometimes within a preferential group contract or discount agreement. Employees may further also receive benefits such as discounts on sports and leisure activities. This business model is particularly popular in the US and Asia. In Germany, Münster-based Beeline Solutions/Onnest, Berlin-based start-up HeavenHR (so far, however, without offering insurance policies) and Penseo from Hamburg, founded in 2017, are active in this area.

### 5

**B2C ONLINE BROKERS**

WE OPTIMIZE YOUR PERSONAL INSURANCE PORTFOLIO

"B2C Online Brokers" are the digital version of a classic insurance broker for private customers. In addition to a digital insurance portfolio, they offer a needs analysis as well as an optimization of the existing insurance portfolio, frequently on the basis of artificial intelligence.

### 6

**B2B ONLINE BROKERS**

WE OPTIMIZE YOUR CORPORATE INSURANCE PORTFOLIO

Similar to "B2C Online Brokers", "B2B Online Brokers" are the digital version of an insurance broker with a focus on commercial and corporate clients. Service elements usually include a needs analysis with comparative calculations, a digital insurance portfolio and – for more complex issues – tendering platforms. Bionic solutions (combination of man and machine) are used where purely digital approaches cannot be implemented.

### 7

**FINANCIAL PARTNER**

WE OPTIMIZE YOUR FINANCES AND INSURANCES

"Financial Partners" are digital versions of advisors catering to both financial and insurance needs. A truly independent 360-degree financial advisory service is labor-intensive and therefore expensive. Today, it is therefore almost exclusively offered by private banks catering exclusively to (ultra) high net worth individuals. Analogous to the "Risk Partner" model, the use of digital technology allows for cost-efficient and effective processes, so that high-quality advisory services can now also be made available to a broader audience. A positive side-effect: in certain life situations, insurance needs often change hand in hand with to financial requirements, be it when starting a career, upon the birth of a child, or when building a house or buying a car. Financial partners optimize all of financial aspects of these life events holistically. As a "life coach", they can furthermore derive dynamic recommendations, for example, by analyzing spending behaviors or by helping to achieve defined savings targets.

8

### LIFE DIGITIZER

WE MANAGE YOUR DOCUMENTS – AND OFFER RECOMMENDATIONS UPON REQUEST

Essentially, these models are offers to digitize documents from all areas of life and to manage them in a digital and user-friendly way. Already today, algorithms are helping to categorize and search the documents. Technically, it would be possible to analyze and understand the contents of the documents with the help of linguistic technologies and artificial intelligence. From this, recommendations could then be derived, such as a suggestion for a cheaper insurance provider with equivalent coverage. As with "Financial Partners", situational recommendations offered from a "life coach" perspective are also possible in this area and would in this case even be corroborated by a broader data basis. However, the complexity of such models is very high, so that they are still in their infancy today. And whether or not customers really want such insights also remains to be seen.

## DIGITIZATION OF OPERATIONS

At their core, insurance companies are information-processing companies that produce virtual products. This is precisely why digitization creates so many opportunities within this industry. Every element of the services provided by an insurer can be revisited and reconsidered. Successful InsurTechs become equipment suppliers to the insurance industry.

In the area of digital insurance operations, we distinguish between **five business model categories:**

1

### DIGITAL SALES ENABLING

WE DIGITALLY ENABLE YOUR SALES FORCE

InsurTechs with this focus create digital tools to improve the sale of insurance products – either by digitally supporting personal sales activities or by allowing for direct digital distribution.

2

### UNDERWRITING

WE OPTIMIZE YOUR RISK ASSESSMENT AND UNDERWRITING DECISIONS

Which risks should be underwritten and if so, at what price? These are the key questions that insurers ask themselves on a daily basis. InsurTechs can provide support in various ways: in the acceptance process, risk assessment can be optimized, for example, by using more data or better analyses to assess a risk more precisely or to clarify open issues with less effort. Data providers include the Internet of Things (IOT) as well as other innovations, such as drones. In some cases, new technologies can also be used to create completely new propositions, such as telematics rates. Technologies for optimizing pricing also fall into this category. They range from rebate management to customer segmentation, from the correct positioning on comparison websites to so-called yield management. The latter is also used in travel and tourism to simultaneously optimize prices, lead costs and customer value.

3

### SERVICE AND ADMINISTRATION

WE OPTIMIZE YOUR SERVICE AND ADMINISTRATION PROCESSES

The "Service and Administration" business model comprises InsurTechs or other tech companies that digitize internal administrative processes. This affects not only the core systems of insurers and other market participants, but also insurance-specific standard components such as data analysis.

4

### CLAIMS

WE OPTIMIZE YOUR CLAIMS PROCESSING AND DECISION MAKING

InsurTechs offer leaner and more customer-friendly claims processes and better claims adjustment decisions. A new type of customer interaction, such as the use of photos for damage assessment, can already be very helpful in many cases. In addition, there is the digitization of the supply chain, the digital management of partner networks, the evaluation of external data sources and the detection and fight against fraud. In order to assess damage, the Internet of Things or e.g. images taken by drones can provide new data. Much can also be improved with regard to customer interaction: in the case of so-called digital restitution in kind, for example, the insurer promises a claimant real compensation rather than payment of money. The person concerned can select a replacement product in a shop, which is then delivered and installed.

5

### BALANCE SHEET AND FINANCIAL RESOURCE MANAGEMENT

WE OPTIMIZE INVESTMENT DECISIONS AND FINANCIAL PROCESSES

The financial processes of insurance companies primarily focus on greater efficiency and effectiveness. Affected areas include governance processes such as controlling, accounting or risk management at the corporate level. The focus is also on faster and more informed strategic decision-making processes, such as asset liability management (optimization of financial assets against the background of possible future claims and benefit obligations), investment management or strategic corporate planning. In addition, digitization can also, for example through the use of blockchain technology, create new opportunities in reinsurance or facilitate the procurement of risk capital (transfer of insurance risks via digital platforms to the capital markets).

# APPENDIX 2: LOGIC FOR THE ASSESSMENT OF THE BUSINESS MODELS

In order to strategically evaluate the identified business model categories, we developed our own systematic approach. For one, we evaluate a business model's **market potential**. In addition to this, we estimate its **chances of success**. Both assessments are then combined to determine the **strategic potential**. We introduced this logic in 2016 with the first edition of the German InsurTech Radar. As it has proven its worth in a countless discussions, we continue to use it. The following describes the underlying assessment logic in more detail. The classification of business model categories can be found in the main part.

## MARKET POTENTIAL

The market potential of an InsurTech business model is determined by the **addressable premium pool** and the **addressable section of the value chain**.

- **The addressable premium pool** is derived from the types of insurance and the associated premium amounts which an InsurTech's business model is targeting. The logic is quantitative and simple: the larger the premium pool, the higher the possible revenue potential and thus the economic attractiveness of a business model. For example, a niche comparison portal for funeral benefit insurance addresses a considerably smaller premium pool than an online broker advising on entire insurance portfolios.

- **The addressable section of the value chain** describes the share of the insurance value chain that an InsurTech's business model is targeting. Here, too, the rule applies: the greater portion of the chain that is addressed, the higher the revenue potential of an InsurTech. In property insurance, for example, the value added generated by sales amounts to only approximately 15 percent of the total premium (idealized), while losses including loss adjustment expenses account for around 60 percent. If an InsurTech with a new business model succeeds in reducing the losses, even small changes can have strong leverage on profitability. The distribution of value add of the individual steps of the insurance value chain varies by insurance product. For some property insurance policies, for example, the distribution costs can be well over 15 percent.

## CHANCES OF SUCCESS

We operationalize the assessment of the chances of success of an InsurTech business model using two dimensions: **consistency** and **differentiation**. The chances of success determine whether an InsurTech could actually succeed in exploiting the market potential with a convincing business model.

- In order to assess a business model's **consistency**, we determine whether a business models mirrors the actual behavior of all involved parties. Is it aligned with the preferences of customers, distributors or other partners? An important aspect is whether it is a so-called "pull" or "push" product. In the case of compulsory insurance such as motor vehicle insurance, for example, private customers actively search the Internet for attractive offers ("pull effect"). For many other insurance products, however, reality looks somewhat different. So far, customers have rarely actively demanded more complex or niche-oriented insurance products. These products require an active sales process ("push"). An InsurTech business model that ignores these basic facts is doomed to fail.

- When assessing a business model's **differentiation**, we determine whether there is the possibility to erect effective market entry barriers. If, for example, an InsurTech is able to build up the largest proprietary database on a specific issue in the market and derive analyses and processes from it, it is harder to copy that business model than if it were based solely on a better customer experience. Only if a business model is able to permanently differentiate itself from the competition with the products and services offered will it have sufficient time to grow and achieve adequate margins.

The core of our InsurTech Radar is our proprietary database. We have, to date, identified about 1,300 InsurTechs and related FinTechs worldwide. Of these, 110 are active in Germany.

# APPENDIX 3: LIST OF INSURTECHS IN GERMANY

| COMPANY NAME | SEGMENT | BUSINESS MODEL | URL | HQ | SHORT DESCRIPTION |
|---|---|---|---|---|---|
| **1blick** | Operations | Digital Sales Enabling | www.1blick.de | Heidelberg | • Assessment, optimization, and management of insurance contracts, photo upload possible<br>• White label solution |
| **AdaEngine** | Operations | Underwriting | www.adaengine.com | Munich | • Big Data and AI solutions for insurance |
| **Adam Riese** | Proposition | Low-Cost | www.adam-riese.de | Stuttgart | • Digital full stack carrier<br>• Focus on private customers<br>• Subsidiary of W&W |
| **allesmeins** | Distribution | B2C-Online Broker | www.allesmeins.de | Wiesbaden | • Online insurance manager by Jung, DMS & Cie. AG<br>• In-house deployment but platform and app also offered to brokers |
| **Alyne** | Operations | Service and Administration | www.alyne.com/de | Munich | • SaaS for compliance and risk management |
| **AstraDirect Versicherung** | Distribution | D2C | www.astradirect-versicherung.de | Mannheim | • Online distribution of supplementary insurance |
| **asuro** | Distribution | B2C-Online Broker | www.asuro.de | Frankfurt | • Online insurance manager by Hoesch & Partner<br>• In-house deployment plus white label solutions |
| **autoversicherung.de** | Distribution | PCW | www.autoversicherung.de | Düsseldorf | • Price Comparison website for motor insurance |
| **b2b Protect** | Operations | Digital Sales Enabling | www.b2bprotect.de | Hildesheim | • Develops insurance products with (re-) insurers against weather damages (WetterProtect)<br>• Consulting for insurance and renewable energies (KlimaProtect) |
| **BANKSapi** | Operations | Digital Sales Enabling | www.banksapi.de | Munich | • PSD2 interface for financial service providers, e.g. to give customers an overview of all their contracts and accounts |
| **bisure** | Operations | Digital Sales Enabling | www.bisure.de | Münster | • Digital platform for SME Insurances (needs analysis, proposition comparison, placement, advice, submission)<br>• Subsidiary of broker pool blau direkt |
| **BRIX (fka lifeXycle)** | Distribution | D2C | www.brixpension.com | Berlin | • Peer to peer approach for flexible digital retirement plan<br>• Focus on millenials |
| **BrokingX** | Distribution | B2B-Online Broker | www.brokingx.de | Troisdorf | • Online tender platform for brokers<br>• Full processing including broker´s commission billing<br>• Rating engine for SME insurance |
| **beeline solutions/ onnest** | Distribution | Corporate Platform | www.beeline-solutions.de / www.onnest.de | Münster | • Employee benefit solution including non-insurance benefits<br>• Focus tax advantaged vouchers<br>• Onnest as EB pension offering |

| COMPANY NAME | SEGMENT | BUSINESS MODEL | URL | HQ | SHORT DESCRIPTION |
|---|---|---|---|---|---|
| **BuddyGuard** | Proposition | From Insured to Protected | www.buddyguard.io | Berlin | • Makes your home safer through a smart monitoring device<br>• Uses AI for user recognition |
| **Bürgschaft24** | Distribution | PCW | www.buergschaft24.de | Münster | • Specialized comparison website for bond and security insurance |
| **Clark** | Distribution | B2C-Online Broker | www.clark.de | Frankfurt | • Insurance folder app<br>• Optimization of individual policies<br>• Based on broker mandate |
| **Cognotekt** | Operations | Claims | www.cognotekt.com | Cologne | • Optimization of business processes through AI<br>• Focus on claims but also general service processes |
| **Community Life** | Proposition | Community-based | www.communitylife.de | Kelkheim | • Life and disability offering<br>• Swiss Re as risk carrier (via iptiQ) |
| **Compaio** | Distribution | Financial Partner | www.compaio.de | Berlin | • Managing all bank accounts and insurance contracts in a single app<br>• Gives recommendations for how to reach personal financial goals |
| **Covomo** | Operations | Digital Sales Enabling | www.covomo.de | Frankfurt | • Platform-as-a-Service (PaaS) solution for annex insurances; brokers as target clients<br>• Self-developed rating engine<br>• Managing general agent |
| **Coya** | Proposition | Low-Cost | www.coya.com | Berlin | • Digital full stack carrier for P&C<br>• Currently in BaFin licensing process<br>• Launch planned for 2018 |
| **crowdheroes** | Proposition | Community-based | www.crowdheroes.de | Berlin | • Using Community effects to have more power in negotiations with insurers/brokers<br>• Live insurance auctions |
| **CyberDirekt** | Proposition | Digital Risk | www.cyberdirekt.de | Berlin | • Security awareness training, technical protection and cyber insurance for SME<br>• Managing general agent |
| **Cyber-insurance 24** | Distribution | PCW | www.cyberinsurance24.de | Munich | • Online distribution of cyber insurances for commercial and private customers |
| **Dionera/simplr** | Operations | Digital Sales Enabling | www.dionera.com | Berlin | • Customer and broker app for digital insurance distribution<br>• Automated document digitalization (BiPRO-Blitz) |
| **diVersO/ myDiverso** | Operations | Digital Sales Enabling | www.mydiverso.de | Griesheim | • Digital customer files as white label solution for brokers |
| **easy insurance** | Operations | Digital Sales Enabling | www.easy.eu | Frankfurt | • Product development and distribution solutions for annex insurances<br>• Phone, bike, and travel insurance |
| **EINFACH-SPAREN24** | Distribution | PCW | www.einfachsparen24.de | Bremen | • General price comparison portal covering insurance, electricity, gas, flights, etc. |

| COMPANY NAME | SEGMENT | BUSINESS MODEL | URL | HQ | SHORT DESCRIPTION |
|---|---|---|---|---|---|
| **ELEMENT** | Proposition | Low-Cost | www.element.in | Berlin | • Digital full stack carrier for P&C<br>• B2B2C distribution model (insurers, distributors, insurtechs) |
| **Etherisc** | Operations | Underwriting | www.etherisc.com | Icking | • Development of open source blockchain platform for insurance solutions<br>• First products for flight delay, social and crop insurance |
| **experten-homepage/ DIGiDOR** | Operations | Digital Sales Enabling | www.expertenhome-page.de | Berlin | • Digital distribution presence<br>• Enterprise tools for e.g. management of social media campaigns for insurance companies |
| **fairr.de** | Distribution | D2C | www.fairr.de | Berlin | • Online distribution of ETF based retirement plans<br>• Focus on Riester and Rürup |
| **feelix** | Distribution | Financial Partner | myfeelix.de | Berlin | • App based financial management portal including insurances<br>• Offers app as white label solution<br>• Based on broker mandate |
| **FIBUR** | Distribution | D2C | www.fibur.de | Münster | • Online distribution of ethical/ ecological harmless retirement plans and disability insurances |
| **Fidor Bank** | Distribution | Financial Partner | www.fidor.de | Munich | • Online bank<br>• Insurances currently as peripheral activity<br>• Acquired by Groupe BPCE in 2016 |
| **fileee** | Distribution | Life Digitizers | www.fileee.com | Münster | • Digital online document management<br>• Categorizes contracts using AI and finds important content automatically |
| **Finanzchecks** | Distribution | B2B-Online Broker | www.finanzchecks.de | Berlin | • Insurance comparison portal for companies |
| **Finanzchef24** | Distribution | B2B-Online Broker | www.finanzchef24.de | Munich | • Online insurance broker for SME clients with digital insurance document folder<br>• Solution also offered as white label service for distributo rs<br>• Proprietary rating engine |
| **FinanzRitter** | Distribution | B2C-Online Broker | www.finanzritter.com | Dortmund | • Online insurance broker by Assekuranz Kümper |
| **finatra** | Distribution | Financial Partner | www.finatra.de | Passau | • Needs analysis for financial and pension products |
| **FINLEX** | Distribution | B2B-Online Broker | www.finlex.de | Frankfurt | • Tender platform and digital solutions for financial lines<br>• Digital advice solutions for brokers and corporations<br>• Bionic approach |
| **Fintiba** | Distribution | D2C | www.fintiba.com | Frankfurt | • App to organize your stay in Germany as immigrant or international student<br>• Sells health insurance (partnering with DAK) |

| COMPANY NAME | SEGMENT | BUSINESS MODEL | URL | HQ | SHORT DESCRIPTION |
|---|---|---|---|---|---|
| **Flexperto** | Operations | Digital Sales Enabling | www.flexperto.com | Berlin | • Digital interactions platform for distributors and carriers with their clients and partners<br>• Focus on video communication and verification |
| **flypper** | Proposition | Low-Cost | www.flypper.com | Hannover | • Digital insurer with focus on P&C<br>• Reinsurance broker Guy Carpenter as first strategic partner<br>• Launch planned for 2018, no BaFin license yet |
| **FRIDAY** | Proposition | Low-Cost | www.friday.de | Berlin | • Digital insurer<br>• Sells online motor insurance<br>• Subsidiary of Baloise |
| **Friendsurance** | Proposition | Low-Cost | www.friendsurance.de | Berlin | • Peer to peer (P2P) insurances<br>• Recent pivot now focusing on promise to safe for existing insurance covers<br>• Next to P2P other services like digital insurance folder or advise |
| **GetSafe** | Distribution | B2C-Online Broker | www.getsafe.de | Heidelberg | • Transition from insurance manager to insurance provider (managing general agent)<br>• Liability insurance as their first product<br>• Partners with Munich Re<br>• Recently announced pivot towards becoming a risk partner |
| **Getsurance** | Proposition | Risk Partner | www.getsurance.de | Berlin | • Digital solution to protect ability to work<br>• Digital advise process with scalable products<br>• Managing general agent agent with SquareLife and RGA |
| **Gewerbever-sicherung24** | Operations | Digital Sales Enabling | www.gewerbe-versicherung.de | Frankfurt | • PaaS-provider for distributors with focus on SME clients<br>• Proprietary rating engine |
| **Gini** | Distribution | Life Digitizers | www.gini.net | Munich | • Tech company focused on AI-based information extraction |
| **gonetto** | Distribution | B2C-Online Broker | www.gonetto.de | Bensheim | • Online insurance comparison with net price comparison after comissions<br>• Commissions refunded to policyholder<br>• Revenues through user fee per month and per contract |
| **grün versichert** | Distribution | D2C | www.gruen-versichert.de | Hamm | • Online distribution of ethical/ecological insurance<br>• 75% of the profits to be donated for charitable purposes<br>• Co-development of ethical/ecological propositions with carriers |
| **Haftpflicht-helden** | Proposition | Community-based | www.haftpflichthelden.de | Hamburg | • Offers personal liability insurance<br>• Fair, transparent, „anti-establishment" branding<br>• Niche marketing<br>• Incentives for digital recommendation marketing |



| COMPANY NAME | SEGMENT | BUSINESS MODEL | URL | HQ | SHORT DESCRIPTION |
|---|---|---|---|---|---|
| **HeavenHR** | Distribution | Corporate Platform | www.heavenhr.com | Berlin | • Platform for managing HR tasks<br>• Distribution of employee benefits through platform |
| **hepster** | Proposition | Situational | www.hepster.de | Rostock | • Situational coverage for activities and equipment, e.g. golf, outdoor, diving |
| **IDnow** | Operations | Service and Administration | www.idnow.de | Munich | • Digital customer identification and digitsl signature |
| **i-finance** | Distribution | PCW | www.vorsorge-kampagne.de/ www.besserberater.de | Munich | • Online comparison portal for retirement plans net of commissions (Vorsorgekampagne)<br>• Price and value comparison plus digital insurance folder (BesserBerater) |
| **insurers.ai** | Operations | Underwriting | www.insurers.ai | Cologne | • AI and big data solutions for insurance industry |
| **inxure.me** | Proposition | Risk Partner | www.inxure.me | Munich | • Offers household, accident, and liability insurance as a bundle<br>• Covers major losses only<br>• Positioning as cost effective carefree package<br>• Managing general agent |
| **JimDrive** | Proposition | From Insured to Protected | www.jimdrive.com | Stuttgart | • ADAC-like model for generation internet |
| **Karlsson** | Proposition | Low-Cost | www.getkarlsson.com | Munich | • Digital insurer with focus on health insurance |
| **KASKO** | Operations | Digital Sales Enabling | www.kasko.io | Hamburg | • Supports insurers and brokers in bringing new products faster to market through a digital platform |
| **kawadu (fka Coverdoo)** | Distribution | D2C | www.kawadu.de | Munich | • Liability and surgery insurance for dogs |
| **KeySurance** | Operations | Underwriting | www.keysurance.de | Munich | • Digital driver´s logbook based on blockchain<br>• Safe money on personal car insurance by taking driven kilometers from car sharing, rental and company cars into account |
| **Knip** | Distribution | B2C-Online Broker | www.knip.de | Berlin/Zurich | • App based digital insurance manager<br>• Based on broker mandate<br>• Originally a Swiss start-up that expanded to Germany<br>• Acquired by Dutch software firm komparu and now part of "Digital Insurance Group" |
| **L'AMIE direkt** | Distribution | D2C | www.lamie-direkt.at | Linz (Austria) | • Digital direct marketing insurer from Austria<br>• Offers household and homeowner insurance (and others) also offers rain insurance for events in Germany since 2017 |
| **Liimex** | Distribution | B2B-Online Broker | www.liimex.com | Hamburg | • Online insurance broker for SME customers<br>• Uses AI for risk analysis and quote generation<br>• Online insurance folder |

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|---|---|---|---|---|---|
| **Maklerhome-page.net** | Operations | Digital Sales Enabling | www.maklerhomepage.net | Husum | • Tool to create your own broker homepage |
| **massUp** | Operations | Digital Sales Enabling | www.massup.de | Mainz | • Product development and distribution solutions for annex insurances |
| **mbafleet** | Operations | Claims | www.mbafleet.de | Frankfurt | • Claims and fleet management for corporate clients<br>• Claim notification and settlement through an app |
| **Mobilversichert** | Operations | Digital Sales Enabling | www.mobilversichert.de | Munich | • Technology solutions provider for insurance distributors and policyholders<br>• End customer proposition competes with insurance folder of B2C Online Broker |
| **moneymeets** | Distribution | Financial Partner | www.moneymeets.com | Cologne | • Digital finance manager for accounts, depots, and insurances<br>• Based on broker mandate |
| **MotionsCloud** | Operations | Claims | www.motionscloud.com | Mannheim | • Automatic adjustment in case of damages and automated settlement of P&C contracts using AI |
| **myPension** | Distribution | D2C | www.mypension.de | Frankfurt | • Online distribution of ETF-based retirement plans |
| **Nect** | Operations | Digital Sales Enabling | www.nect.com | Hamburg | • Digital identity verification, authentication, data protection<br>• Simplified contract conclusion in order to generate trust from (potential) customers |
| **Neodigital** | Proposition | Low-Cost | www.neodigital.de | Neunkirchen | • Digital "full stack carrier"<br>• Distribution through independent distributors<br>• In BaFin licensing process |
| **nexible** | Proposition | Low-Cost | www.nexible.de | Düsseldorf | • Direct digital motor carrier of ERGO<br>• Launched by the end of 2017 |
| **ONE** | Proposition | Low-Cost | www.one-insurance.eu | Berlin/Vaduz (Lichten-stein) | • Digital "full stack carrier"<br>• "Money-back guarantee" in case of no damage<br>• Acquired in early stage by Wefox<br>• Launch in 2017<br>• Uses Lichtenstein license |
| **Online-Versicherung.de** | Distribution | D2C | www.online-versicherung.de | Hannover | • Online distribution of insurances for electrical devices and bikes |
| **Optisure** | Distribution | B2B-Online Broker | www.optisure.de | Karlsruhe | • SME offering starting with professional liability offering for IT freelancers<br>• Fast and paperless conclusion of contract through OptiBot-algorithm |
| **ottonova** | Proposition | From Insured to Protected | www.ottonova.de | Munich | • Digital "full stack carrier" focused on private health insurance in Germany<br>• Especially for digital top earners with age 25 to 40<br>• Offers 24/7 concierge service, advisory for choice of doctor, and supposed to develop towards health management<br>• BaFin-lincensed |



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|---|---|---|---|---|---|
| **passt24** | Distribution | PCW | www.passt24.de | Cologne | • Online comparison portal for insurances (P&C, precaution, health ...) |
| **Penseo** | Distribution | Corporate Platform | www.penseo.de | Hamburg | • Digital pension PaaS solution |
| **Perseus** | Proposition | From Insured to Protected | www.perseus.de | Berlin | • Offers cyber insurances and services particularly for SME´s (managing general agent)<br>• Employee training and incident management<br>• Finleap and Hannover Re as investors |
| **Personal Business Machine** | Operations | Digital Sales Enabling | www.personal-business-machine.com | Cologne | • Personalized and automated mass communication SaaS solution |
| **ProFair24** | Operations | Digital Sales Enabling | www.profair24.de | Witten | • Tender platform<br>• Digital insurance folde |
| **Rasa** | Operations | Digital Sales Enabling | www.rasa.ai | Berlin | • Develops chat bots via AI |
| **relayr** | Operations | Digital Sales Enabling | www.relayr.io | Berlin | • Develops IoT-products for industrial sector<br>• Partnership with Munich Re |
| **Rentablo** | Distribution | Financial Partner | www.rentablo.de | Berlin | • App and online portal-based finance manager for private investors<br>• Digital insurance folder<br>• Advice for a fee |
| **Reportix** | Operations | Service and Administration | www.reportix.com | Mannheim | • Data management solutions for financial and contractual processes through blockchain |
| **Riopo** | Operations | Digital Sales Enabling | www.riopo.de | Röthlein | • Online quote and offline advise and buy<br>• Intermediary between customers and brokers |
| **Schadenengel** | Proposition | From Insured to Protected | www.schadenengel.de | Cologne | • Coverage for water damages<br>• Service orchestrator |
| **SchadenLaden** | Operations | Claims | www.schadenladen.de | Düsseldorf | • Online comparison of car repair service for customers<br>• Claims management for car leasing and rental companies |
| **Shore** | Operations | Digital Sales Enabling | www.shore.com | Munich | • Solutions for customer relationship management, online appointments, client's data base and others for many industries |
| **simplesurance** | Distribution | Affiliate Integration | www.simplesurance-group.com | Berlin | • Online distribution of annex insurances (Schutzklick)<br>• White label product with fully digital customer journey<br>• Operates internationally<br>• Managing general agent |
| **SituatiVe/ AppSichern** | Proposition | Situational | www.situative.com | Düsseldorf | • Coverage for situational risks, like test drives (car) or (business) trips<br>• Distribution through app (Appsichern)<br>• White label solution for distributors and insurers |

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|---|---|---|---|---|---|
| **Snapsure** | Proposition | Situational | www.snapsure.de | Munich | • Platform analyzes pictures of items that should be insured to generate insurance offer using AI<br>• White label solution for insurers |
| **sum.cumo** | Operations | Digital Sales Enabling | www.sumcumo.com | Hamburg | • Software and online marketing solutions for insurance and lottery industry<br>• Acquired by Die Bayerische in 2016 |
| **TED** | Distribution | B2C-Online Broker | www.ted-versicherung.de | Munich | • App-based digital insurance manager<br>• Digital frontend of classic broker |
| **Terminpilot** | Operations | Digital Sales Enabling | www.terminpilot.de | Münster | • Online appointment scheduling for consultants and service providers |
| **ThinxNet** | Operations | Digital Sales Enabling | www.thinxnet.com | Munich | • IoT-solutions for automotive sector<br>• B2C-app (TankTaler) analyzes car and driving behavior |
| **treefin** | Distribution | Financial Partner | www.treefin.com | Munich | • App and online portal-based finance and insurance manager for consumers<br>• Digital insurance folder<br>• Majority acquired by Wüstenrot & Württembergische (W & W) in 2017 |
| **Unfallfuchs** | Operations | Claims | www.unfallfuchs.com | Saarbrücken | • Offers to manage settlement of car accidents for private customers digitally or through a hotline<br>• Focus on "user experience" of claimant |
| **unfallhilfe24** | Operations | Claims | www.unfallhilfe24.org | Leipzig | • Offers to manage settlement of car accidents for private customers digitally or through a hotline<br>• Focus on "user experience" of claimant |
| **Versicherungs-akte** | Distribution | B2C-Online Broker | www.versicherungsakte.de | Nidda | • App-based digital insurance manager<br>• Based on broker mandate<br>• Offers app as white label solution to traditional brokers |
| **Virado** | Operations | Digital Sales Enabling | www.virado.de | Cologne | • Software solution for annex insurance distribution for brokers<br>• Consulting services for online distribution and social media<br>• Stopped Scan2Insure-app in 2016 |
| **wefox** | Operations | Digital Sales Enabling | www.wefox.de | Berlin/Zürich (Schweiz) | • PaaS-solution for distributors<br>• Broker management for insurance companies<br>• Acquired digital insurer One in 2017<br>• Operates internationally |
| **xbAV** | Operations | Service and Administration | www.xbav.de | Munich | • SaaS to digitize employee benefits |
| **Zahnarzt-Preis-vergleich.com** | Distribution | PCW | www.zahnarzt-preisvergleich.com | Dresden | • Online comparison portal for costs of dental services |

## ABOUT OLIVER WYMAN

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## ABOUT POLICEN DIREKT

The Policen Direkt Group was founded more than ten years ago as a start-up in the insurance industry. With its novel business model, it has grown to become the leader in the secondary market for life insurance policies. To this day, the company has remained true to its mission to be a disruptive force in the market. In its role as an incubator and investor, it is actively shaping the future of the insurance industry.

Over the past years, the Policen Direkt Group has successfully launched its own InsurTechs in the areas of commercial and supplementary insurance (Covomo, Gewerbeversicherung24), invested in young companies and serves as a sparring partner for founders and investors in the FinTech and InsurTech sector. Since the end of 2015, the Policen Direkt Group has been acquiring established insurance brokers in succession situations in order to systematically align them with the digital future of insurance sales.

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