UBIRCH

SECURE IOT DATA: THE FUTURE OF INSURANCE 4.0

IOT-BASED
CLAIMS MANAGEMENT
& PARAMETRIC
INSURANCE

Figures and data are the basis of the insurance industry's success. They enable the calculation of risk margins as well as the settlement of claims. This is what makes a promise of protection possible in the first place. Today, thanks to innovations and technical progress, the insurance industry has access to a rapidly growing amount of data to make both areas even more effective and efficient.

Sensor technology and IoT Data can help to improve risk management and reduce the frequency and amount of claims. Especially in the area of parametric insurance, sensor data offer promising opportunities for making insurance products more situation-specific, risk-specific, and transparent.

Transactions become faster, more transparent and more secure.
Therefore reliability of sensor data is crucial. This is exactly where UBIRCH comes in. Together with international cooperation partners, UBIRCH's cybersecurity specialists have developed a Blockchain-based solution for the insurance industry, which has the potential to fundamentally change the market.
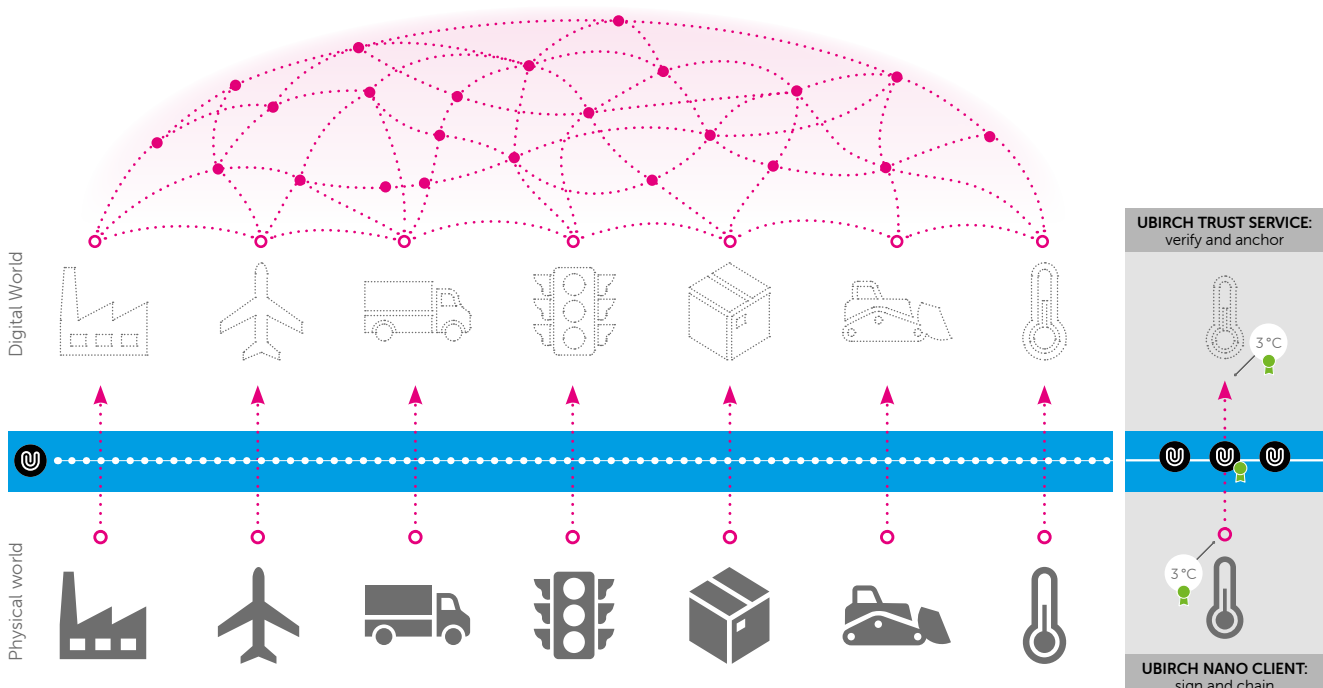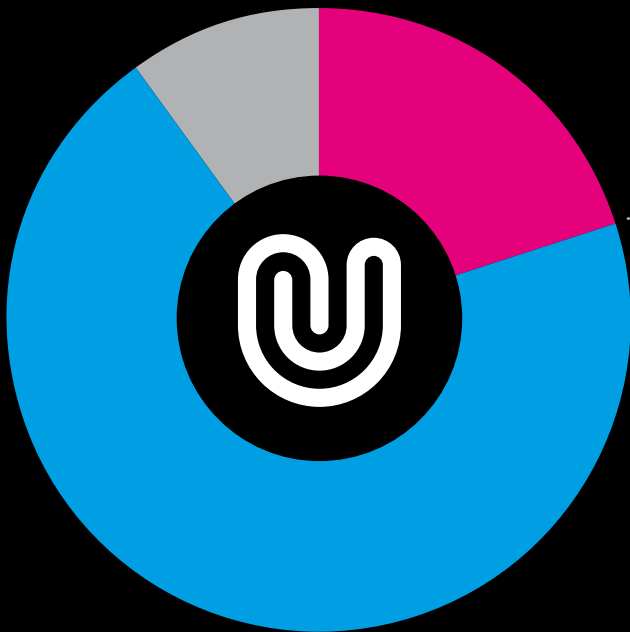
Our strategic partners:

AON

Meyerthole
Siems
Kohlruss

funk

Avenga

and many more

THE UBIRCH
BLOCKCHAIN SOLUTION

Data security and transparency are essential for trust between all contractual partners. With the help of robust cryptography and innovative Blockchain technology, UBIRCH ensures precisely that. The UBIRCH solution seals data exactly at the time of its measurement and ensures that it cannot be changed on its way to the receiver. Insurers can therefore verify the received data across system boundaries - even if it is not directly connected to the IT of the insured object or if the sealed data reaches the IT of the insurer indirectly and via insecure channels.

Insurance companies can easily connect their existing systems to UBIRCH's cybersecurity Blockchain technology and offer their customers a range of new insurance products on that basis.

Digital World

Physical world

UBIRCH TRUST SERVICE:
verify and anchor

3 °C

3 °C

UBIRCH NANO CLIENT:
sign and chain

MORE EFFICIENT
CLAIMS AND
RISK MANAGEMENT

The use of IoT and sensor technology provides insurers with a wide range of
new possibilities. In addition to the early detection of damage, in selected
areas it would be possible to quantify loss amounts more precisely, reduce
loss ratios for customers and insurers and improve risk management.

Especially in the area of water pipe originating damages and in tracking and
tracing, there is enormous potential for more efficiency in the insurance
industry due to damage data stored in the Blockchain and sensor-based
warning messages for limiting the extent of damage.

EARLY DETECTION OF PIPE WATER DAMAGES

According to the German Association of Insurers the expenses for water pipe originating damages have increased by one third in the period from 2011 to 2018 alone. This is due to the annually increasing number of damages and the rising costs per claim. In 2017, they caused 53% of all damage in the building sector, amounting to approximately EUR 2.7 billion. The result of a current Allianz analysis of over 470,000 claims is similar: Although major claims dominate the damage amounts, they account for just 1% of all claims. In more than 90% of the damages, the damage sum remains below 50,000€ and here water damages are in third place of the causes.

Water Leakage Detection
Automated processes using sensor technology can intervene early and efficiently in the event of water pipe originating damage. They significantly reduce the time between the damage event and the notification of a claim, thereby lowering the costs of repair and processing. For insurers, this means being able to actively manage processes to reduce losses. Water Leakage Detection is already used in the private sector. According to a recent study by Accenture, 70% of insurance customers would be interested in receiving automated warnings from home sensors. This could also be transferred to small businesses such as dental practices.

BETTER TRACKING OF DEMANDING SUPPLY CHAINS

When, where, how. Reliable logistics scenarios can rely on the transmission of real-time data with the help of IoT applications. With non-repudiable, verifiable sensor data, the logistics and insurance industries can retrieve improved information on values such as humidity and temperature, storage processes or the transmission of insured risks. Simply put: The best conditions for a quicker understanding of when and where damage has occurred. UBIRCH ensures the trustworthiness of the data and thus enables efficient, Blockchain-based claims management.

Connected Claims Process
In a Connected Claims process, a lengthy claims settlement can be shortened and the customer can be given new options for action. If, for example, a total loss of a transported cargo is determined at an earlier point through the use of sensor technology, replacement deliveries initiated as quickly as possible strengthen the customer relationship and minimize expensive interruption losses. In precisely defined areas, partial automation of small and frequency claims can even be considered. Incoterms may even provide initial approaches here. With the UBIRCH solution, all parties involved in the process can rely on the data securely anchored in the Blockchain and verifiable at any time.

NEW POSSIBILITIES
FOR PARAMETRIC INSURANCE

Parameters are the deciding factor. Not only in the coverage of weather-related risks, but thanks to the growing availability of relevant data, especially in the implementation of customer-specific parametric insurance concepts. Through the use of innovative sensor solutions, parametric insurances can be customized for policyholders, e.g. by precisely defining thresholds for individual machines or machine parks.

Payouts from these kind of policies depend directly on those kinds of parameters. To ensure that all involved parties can fully trust the core data, UBIRCH enables the digital sealing of sensor data using robust cryptography and innovative Blockchain technology.

Since UBIRCH technology is also available on SIM cards, which can be used to securely connect sensors in containers, machines or vehicles to the Internet, a wide range of innovative parametric coverage concepts are possible.

Advantages for the insurance industry

» Optimization of risk know-how through inclusion of sensor data
» Advanced Analytics for a new type of risk transfer
» Objective and efficient risk transfer
» Cost and efficiency optimization thanks to reliable sensor data
» Swifter payout of sum insured
» More opportunities for alternative risk trasfer
» Reduction of transaction costs

Insurer

IoT Partner   **Client**
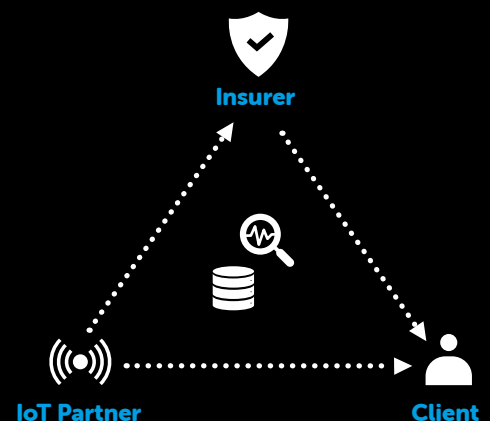
» Parametric insurance solutions will become increasingly important in the future – but we also need solutions to obtain reliable IoT sensor data. UBIRCH uses the intelligent application of Blockchain technology to provide an exciting solution. «

Dr. Matthias Maslaton, Director Sales/Product/Innovation, ARAG SE

IOT

ALTERNATIVE RISK TRANSFER

The use of IoT and Smart Analytics makes it possible: insurance companies can quantify potentially realizable savings and promise them to their customers as a guarantee. If these savings are not realized through the use of IoT & Smart Services, an insurance solution can act as a stop loss cover - e.g. a guaranteed energy saving of 5% or full utilization of governmental guaranteed compensations. Companies could even offer their products and services including this insurance solution and thereby expand their product portfolio.

PARAMETRIC INSURANCE FOR AGRICULTURE

Climate change is leading to an increase in extreme weather events and risks. Parametric insurances are a transparent hedging instrument to protect against weather-related losses of income and earnings. The data from the nearest weather station are already used in the agricultural sector for parametric coverages Sensors and smart harvesting machines could bring these types of coverage to a next level by providing very individual data from each and every policyholder.

Reliable measurement data directly from the field
Sensors and "smart" harvesters can send real-time data on, for example, humidity, temperature or solar radiation. With the UBIRCH solution, the data is secured directly at the sensor and the information is anchored in the Blockchain. In this way, the integrity of the data can be verified throughout the entire value chain by participating stakeholders. Risk assessment and contracts can thus be made more customer-specific. In addition, objectively determined coverage triggers offer enormous potential for optimizing claims processing - with advantages for insurers as well as for end customers

NEW OPPORTUNITIES FOR SITUATIONAL INSURANCE

Smart insurance protection: Situational insurance products are typically drawn shortly before the actual occurrence or in the event of increased risk. In this context, IoT data not only offers opportunities for better claims settlement and new parametric insurance approaches, it also generates new smart services. These are often not covered by conventional insurance products. Situational insurance solutions designed specifically for smart services open up additional revenue potential for insurance companies.

Digital gates and door locks
One area of application for situational insurance concepts can be, for example, the automated opening of doors in coordination with a logistics company at a specific time to facilitate the delivery of products. In this case the situational insurance solution would cover the risk of burglary. In the private customer sector, for example, smart digital door locks can be insured. With the UBIRCH technology, it is possible to anchor every action of opening or closing as a digital fingerprint in a Blockchain and to verify it easily via QR code. Efficient, transparent and absolutely trustworthy for insurers and policyholders.

ABOUT UBIRCH!

UBIRCH guarantees the trustworthiness of data and thus accelerates the marketability of data-driven business models in the insurance industry.
UBIRCH's plug-and-play solution seals data at the time of measurement and anchors them into multiple Blockchains. Once ubirched, data created by any physical asset becomes immutable, non-repudiable, and verifiable beyond system boundaries. This offers completely new opportunities for insurers, particularly in the area of claims management and parametric insurance.

UBIRCH is the specialist for Blockchain-based cybersecurity technology with locations in Cologne, Berlin, Munich, Tel Aviv, and Dubai. The team consists of experienced specialists for cryptography, Blockchain and data driven business models. With robust cryptography and innovative Blockchain technology, UBIRCH makes data trustworthy and shortens the time to market of data-driven business models.

UBIRCH technology – deployable as software or on SIM-cards – primarily aims at customers in the manufacturing industry, smart cities, insurance, energy supply, healthcare and logistics segments.

BECOME CURIOUS? CONTACT US!

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