

# CONNECTED INSURANCE

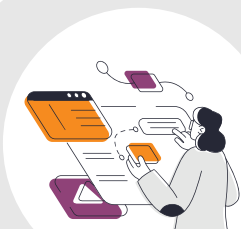
FROM INSURER TO PARTNER



## **Sensors and other smart connected devices can generate previously hard-to-imagine visibility into risk and create opportunities for insurers to partner with clients to prevent claims**

Today's insurance industry operates in a world that's increasingly complex and unpredictable. As insurers navigate economic, environmental, and social challenges, access to quality, trusted data has the potential to create new opportunities. Connected technologies – sensors and other devices that capture and share data in real time – can provide insurers with fresh insights into risk. For the insurer, this data can mitigate exposure, increase pricing accuracy, and foster revenue growth. It can even transform the insurer from a company that collects premiums and pays claims into a trusted partner that helps clients prevent accidents, damage, and losses before they occur.

**But to take full advantage, companies must:**



**More completely understand the benefits of connected technologies and the issues that must be overcome to accelerate adoption**



**Develop a business strategy driven by desired outcomes**



**Approach technology deployment not as an end in itself but as part of a broader initiative that includes business-process transformation**



**Identify the right strategic technology partner – one able to help identify use cases, supply and support solutions, and assist with management of the business transformation**

This paper identifies some of the primary challenges facing the industry and explores how connected technologies are transforming insurance. It provides insight into how connected devices can help insurance companies counter cost pressures. And it offers recommendations for insurance companies looking to leverage connected technologies to further their business goals.



# THE CHALLENGES: MULTIPLE, SERIOUS, AND GLOBAL



The insurance sector today faces several challenges.

Inflationary pressures are reshaping insurance products and reinsurance costs. In [The Return Of Inflation: What It Means For Insurance](#), the Geneva Association cites several causes for this – from COVID to structural changes associated with deglobalization and decarbonization. The association expects inflation to ease in 2023 but warns it's unlikely to return to pre-COVID lows.

Meantime, extreme weather events are more frequent and more severe. At a [United Nations Conference in Qatar in March, 2023](#), UN Secretary General António Guterres warned the economic impact of climate change is so severe a new Bretton Woods moment is needed to reform the global financial system – including “expanding contingency financing and integrating disaster and pandemic clauses into debt instruments.”

These and other factors are forcing insurers to explore innovative approaches to pricing and managing risk, as well as consider how to most effectively collaborate with policyholders to mitigate risk. As executives strive to meet customer needs while protecting the health of their enterprises, connected-insurance technologies are emerging as a key tool to help realize these objectives.



## THE WORLD IS INCREASINGLY CONNECTED

Connected insurance requires ready access to high-quality, low-cost data. The good news is that smarter, cheaper connected devices – along with emerging wireless technologies and standards such as 5G are making it easier than ever to obtain that data.

What's more, people are becoming more comfortable with sharing this information with trusted brands, provided the value proposition is clear and compelling. For example, in the 2022 edition of [What matters to today's consumer](#) – the Capgemini Research Institute's annual report on the consumer products and retail industries – 54 percent of those surveyed said a combination of offers, deals, and discounts would make them more likely to share data directly with brands.

As people welcome more smart devices into their personal and business lives, this is creating a wide variety of potential connections and data sources for insurance companies to leverage. People engage with smart, connected devices on a daily basis.

Consider these examples.



### On the person:

The smart watch market has grown considerably over the past few years – driven primarily by the ability of these devices to monitor various health data such as heart rate and overall physical activity levels. This has made them popular both with fitness enthusiasts and those who have medical conditions they want to track. Smart watches and other wearables are natural points of contact for insurers to develop offers powered by personalized insights. What's more, these personal wearable devices offer highly contextualized data, using smartphones and apps to interact with other connected devices in the home, on the road, and at work.



### In the home:

In the report [Time to Talk](#), Capgemini noted consumers embraced smart speakers – such as Amazon's Alexa, Apple's HomePod, and Google's Nest – at a rate that's an order of magnitude faster than they adopted smartphones. But these speakers are not the only smart, connected devices in today's homes. Other examples include security systems, furnaces, water heaters, and appliances. Where once insurers were limited to rare in-home visits, these smart, connected devices can provide companies with real-time data on risks in the household. Insurers can use this data to better price evolving risk into their premiums and encourage clients to embrace less risky behaviors. In its role as a partner, the insurer can even take preventative actions – such as alerting the homeowner or emergency services of an issue, or automatically shutting off power, water, or gas services when a problem is detected. This could reduce damage – and the size of a claim.



### On the road:

Every major automaker now builds a bundle of IoT-enabled services into its vehicles. Connected vehicles can monitor their own mechanical systems to alert the owner when the vehicle needs servicing. Such vehicles can also monitor how they are being driven – for example, a vehicle can identify when it's traveling at excessive speed for the road and weather conditions. Connected vehicles create a significant opportunity for auto insurers to engage with a client on a regular basis – rather than once a year on the policy renewal date. Data from vehicles can be used to promote safer driving and identify potential mechanical issues before they result in an accident – mitigating risk and reducing claims.



### At work:

Companies in all sectors are embracing IoT-enabled solutions. In its 2021 publication [Conversations for Tomorrow 3 – Intelligent Industry: The Next Era of Transformation](#), the Capgemini Research Institute noted 68 percent of organizations planned to boost their investment in their digital-transformation process – including investments in connected devices and services. Applications for smart, connected solutions include monitoring equipment performance to enhance predictive maintenance, and improving training and workplace safety. These can identify issues before they become major problems, helping companies reduce downtime while helping insurers avoid costs associated with workplace injury or the interruption of a company's business.



## WHY NOW?

Several trends are driving change in a connected world and make now the right time for insurance companies to embrace connected devices and the wealth of information they can provide.



### ● **The marriage of digital and physical experiences:**

Increasingly, consumers are embracing digital experiences. This represents an opportunity for insurance companies to differentiate their core products through insights derived from better data – provided by connected devices and other technologies that bridge the digital and physical realms.

### ● **Personalization:**

Capgemini research has found 60 percent of consumers are more likely to become repeat buyers based on positive, personalized experiences. Increasingly, customers will look beyond a limited choice of coverage options to demand a product that best suits their individual situation. Related to this, customers who are good risks will no longer agree to pay more to cover bad risks. In order to offer personalized pricing, insurers will require greater detail about each customer. Connected devices can help source that data – both when the contract is signed and through ongoing active monitoring for the duration of the contract.

### ● Adoption:

Even in the relatively mature space of personal auto telematics, it's been difficult to scale solutions based on connected devices. Amongst consumers, there remains a general lack of awareness about these solutions. At the same time, discounts for using such devices to date have proven to be weak incentives for adoption. While a generally low adoption rate may seem like a challenge, it's also an opportunity since the market remains largely untapped. The carriers that, so far, have been most successful in encouraging take-up are the ones that have struck a balance between the value they receive and the value provided to policyholders.

### ● Intelligent ecosystems:

The world is increasingly connected and insurance companies that orchestrate intelligent ecosystems will have more capacity to innovate across their networks. This will enable insurers to identify and capitalize on opportunities to provide customers with products and services they would not otherwise be able to deliver.

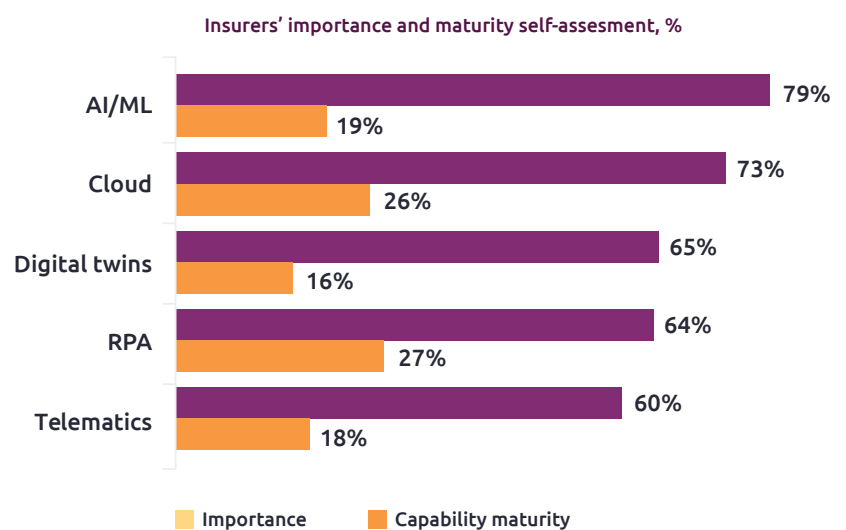
### ● Cost pressures:

The [cost of claims](#) is rising across the board and insurers have been forced to deal with unprecedented losses in recent years due to catastrophic events. Carriers can use the data from connected devices to minimize costs by reducing claims through better risk selection and through encouraging their policyholders to adopt healthier or less risky behaviors.

### ● Technology integration:

Innovations like digital twins and telematics promise a bright future for connected insurance offerings. Infrastructure like cloud and telematics are the foundation for artificial intelligence and machine learning to create unique customer insights, unlock dynamic pricing, optimize the claims experience, and develop personalized value-added services. Insurers understand the critical technologies required to power innovation, but are finding their capabilities severely limited – (according to, 60 percent of insurers list telematics as an important piece of their innovation strategy but only 18 percent report) that their current capabilities are at the required maturity stage.

Read more about technology trends and how digital transformation is shaping the evolution of transportation and the increasing array of mobility solutions in Capgemini's [World Property & Casualty Insurance Report 2023](#)



Sources: Capgemini Research Institute for Financial Services Analysis, 2023; World Property and Casualty Insurance Report 2023 Executive interviews



# BETTER RISK TRANSPARENCY ENABLES A BETTER BUSINESS MODEL



Ubiquitous devices and more consumer comfort with data sharing now make it possible for insurers to consider a business model in which they take advantage of digital technology, physical infrastructure, and cross-industry collaboration to realize greater risk transparency, bring risk closer to capital, and make possible an improved customer experience by weaving services into core insurance solutions.

The result will be fundamental improvements across the value chain – from better risk selection and pricing to a better claims experience. For example, in a traditional insurance model based on risk transfer, connected devices can provide data to enable the insurance provider to better establish a suitable, informed fee in exchange for bearing a financial risk for a person or a business.

Furthermore, insurers can use data from connected devices to generate actionable insights. This makes it possible to better predict incidents and claims – or even prevent them, by encouraging their clients to embrace less risky behaviors. This transforms the insurer from a payer of claims into a trusted partner in prevention. This is a significant change in how insurers engage with their customers – one that will create opportunities for insurers to redefine their business models and achieve greater levels of customer trust and loyalty.





# THREE THINGS EVERY INSURER CAN DO TO GET READY FOR CONNECTED INSURANCE



Companies in the insurance sector typically do not have the structure or resources in place to conduct the research and development required to build the technology-driven solutions connected insurance requires. However, there are steps organizations can take to prepare for this promising business model.



## Define outcomes and leadership:

It's easy to become too focused on the technology, but connected devices and the data they generate are only valuable if they solve business challenges or create new opportunities. Identifying and prioritizing desired outcomes is an excellent place for insurance organizations to start. As well, a transformation of this magnitude will disrupt the traditional way of doing things, so it will require champions in the C-suite.



## Embrace the ecosystem:

It's important to recognize the scope of the transformation that connected insurance represents. A company's ability to orchestrate this transformation across its ecosystem will be paramount to creating a sustainable business model that unlocks the full power of connected devices. Organizations that treat this from the outset as a holistic business evolution as opposed to an ad-hoc project have a greater chance of success.



## Plan for proof of value and scaling:

Some quick wins to confirm the value of connected insurance can encourage buy-in across the enterprise. Working with existing and potential clients to craft compelling services that offer real value in exchange for access to their data will drive adoption. It's also important to plan for scaling from the start – for example, by ensuring the transformation strategy addresses technology procurements to ensure collected data can be used for multiple applications, and that successful solutions can be deployed across the enterprise.



## CASE STUDY: CONNECTED INSURANCE IN THE HOME



In collaboration with Google and other companies, Capgemini is currently developing a solution that uses sensors to help insurers become partners with homeowners to proactively manage risk within the property. This program deploys sensors in the home to identify and prevent issues from occurring, or mitigate the risk of loss. For example, a sensor could notify the homeowner of a leak under the washing machine, enabling the issue to be addressed before the floorboards rot.

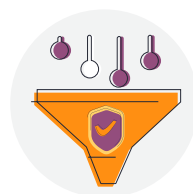
Such a solution would provide several direct benefits. For example:



**It would reduce damage to the property.**



**Since not all costs may be covered by insurance, early identification of a problem would help the homeowner avoid certain expenses.**



**It could limit the damage that is covered by insurance, which in turn would reduce the insurer's payout.**

In addition to direct benefits, insurers can leverage data collected from this program to gain a deeper understanding of risks within homes. If deployed at scale, across many properties, the data collected would enable insurers to more effectively set prices for coverage.

The connected insurance model could also enable insurers to develop new products to address the most pressing needs of homeowners – for example, a solution to automatically connect homeowners with appropriate repair services if a problem occurs.

# CASE STUDY: CONNECTED INSURANCE ON THE FARM



Farmers require several types of insurance. All farmers must carry liability insurance, plus damage/loss coverage for homes, barns, outbuildings, and other structures, along with farm machinery, equipment, and tools. Depending on the nature of its operation and where it's located, a farm may also require insurance to cover livestock and feed, fertilizer, grain, and produce, insurance against specific extreme weather events or natural disasters, pollution cleanup expenses, and so on.

Various IoT-powered solutions can help insurers provide better services to farmers. For example:



**Drone image recognition can assist planting and pricing analysis for maximum yield to improve profitability and minimize losses.**



**Satellite imagery can supply data useful for fire and flood prevention and mitigation, thus reducing claim payouts.**



**Fleet telematics can help farmers monitor and manage their logistics operations while assisting insurers in determining more accurate pricing.**



**Water quality sensors can provide early detection of pollution from farm operations to minimize cleanup costs.**



**Sensors can monitor stored feed to alert the farmer to excess moisture levels, which can cause mold, spoilage, and sick animals – and result in higher claims.**



**Sensors can also monitor silos to alert farmers to potential fire conditions.**



**Smart wearable devices can supply ergonomic data from all farm workers, to improve barn and workspace design or provide guidance to improve posture and reduce strain – contributing to a healthier working environment and helping to prevent health or workers-compensation claims.**

With a holistic set of offers, carriers can leverage connected devices to deliver a differentiated, personalized insurance experience – building lifetime loyalty and reducing costs.



# THE CAPGEMINI INSURANCE ADVANTAGE

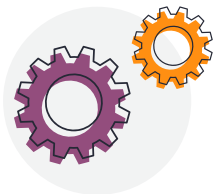
To fully realize the opportunities presented by connected devices, it's vital to engage with the right strategic partner. This partner must be accomplished in several roles – including technology supplier, innovator, and guide to business transformation.

Capgemini's insurance practice is ready to accelerate the connected-device journey. Capgemini helps firms look beyond traditional risks to address today's challenges – including cyber crime, climate change, and natural disasters – as well as identify and capitalize on emerging opportunities such as those powered by the Internet of Things.

Capgemini works with property and casualty companies, life and annuities enterprises, and reinsurers. Clients rely upon Capgemini to:



**Help build sustainable business models.**



**Leverage new technologies.**



**Reinvent the customer and agent experience across the insurance value chain – from sales, to servicing, to claims.**

For more information, visit: [www.capgemini.com/insurance](http://www.capgemini.com/insurance)

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Capgemini Invent is an integral part of Capgemini, a global leader in partnering with companies to transform and manage their business by harnessing the power of technology. The Group is guided everyday by its purpose of unleashing human energy through technology for an inclusive and sustainable future. It is a responsible and diverse organization of over 360,000 team members in more than 50 countries. With its strong 55-year heritage and deep industry expertise, Capgemini is trusted by its clients to address the entire breadth of their business needs, from strategy and design to operations, fueled by the fast evolving and innovative world of cloud, data, AI, connectivity, software, digital engineering and platforms. The Group reported in 2022 global revenues of €22 billion.

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