

# The DECAVI Letter 2020

## Insurance Trends in Europe

COMARCH AND DECAVI WHITE PAPER 2020



**COMARCH** HELD 2 CONFERENCES IN THE VERY HEART OF EUROPE – BRUSSELS AND LUXEMBOURG – TO ADDRESS THE ISSUES OF ARTIFICIAL INTELLIGENCE AND BIG DATA, AND THEIR RAMIFICATIONS IN TERMS OF INNOVATION IN THE INSURANCE INDUSTRY.



Comarch is a software and IT services provider. Specifically, it offers cross-industry applications, dedicated systems, and IT services to enterprises active in the finance sector. Examples of products offered by Comarch to the banking and insurance industries include customer service applications, sales platforms, and management systems.

With more than 20 years of experience in the sector, Comarch already has a number of major clients in its portfolio (including AXA, ING, Swiss Life, and more) – and it is expanding further in Europe, America and Asia, gaining more ground in the world of finance.

More information: [www.comarch.com/finance](http://www.comarch.com/finance)



DECAVI is a well-known insurance organization on the BeLux market since 1991. Its work is indispensable for insurance professionals, insurers, brokers, actuaries and all decision-makers needing to understand the industries latest developments. It organizes seminars, publishes reports and bulletins, and since 2000, has been organizing the famous DECAVI's Insurance Trophies Award Ceremony to highlight the industries best life and non-life products.

More information: [www.decavi.be](http://www.decavi.be)

These two conferences focused on how **innovation** in the insurance sector can produce an essential competitive advantage. The concepts of big data and artificial intelligence (AI) are an increasingly hot topic. And in fact, these two concepts are going to revolutionise the insurance industry.

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Here is a summary of insights provided by various speakers at the two conferences:



**GEOFFROY GAILLY**

PARTNER, NOVEO CONSEIL LUXEMBOURG

'HOW INNOVATION HELPS INSURERS REACT TO THE IMPACT OF FINTECH'



**DANIELE MAROTTA**

INSURANCE CONSULTANT, COMARCH

'BUILDING A FUTURE-PROOF FRAMEWORK FOR CONTINUOUS DIGITAL TRANSFORMATION'



**LAURENT PETITCOLAS**

DIRECTOR PROJECTS AND ORGANIZATION DEPARTMENT, FOYER

'TRANSFORMATION STRATEGY: FROM IDEA TO IMPLEMENTATION'



**BARTOSZ PAWLOWICZ**

MACHINE LEARNING ENGINEER, COMARCH

'COMPUTER VISION: APPLICATIONS AND FUTURE TRENDS'



**PIETER HERREMANS**

INSURANCE PRACTICE LEADER, KPMG BELGIUM

'HOW TO BECOME A CONNECTED INSURER'



**KAZIMIERZ CIECIAK**

CONSULTING DIRECTOR, COMARCH HEALTHCARE

'HOW INSURANCE COMPANIES CAN BENEFIT FROM E-HEALTH AND TELEMEDICINE SOLUTIONS IN THEIR OFFERS'



**KRISTOF BREESCH**

DIRECTOR TECHNOLOGY ADVISORY, KPMG BELGIUM

'A CHANGING PERSPECTIVE: HARVEY NASH / KPMG CIO SURVEY 2019'



## Big data and artificial intelligence

★The term **big data** refers to very large datasets that cannot be handled by any traditional database management or information processing tools.

Big data solutions enable **real-time access to large databases**. The data are distinguished by their **variety, but also by their volume that requires a considerable processing capacity**.

★**Artificial intelligence (AI)** is a tool allowing computers to mimic human behaviour. It comprises multiple innovations, some of which have already become widespread: e.g. *machine learning (ML)*. *Watson*, developed by IBM, and *AlphaGo*, implemented by Google, are among the most popular technologies. We often confuse simple automation with actual AI. The key difference is that machines endowed with artificial intelligence have the capacity to learn.

Automation typically refers to **Robotic Process Automation (RPA)**, a set of tools allowing for simple, repetitive tasks to be automated without the use of ML. In the insurance sector, RPA allows for reducing management costs and the operational risk associated with repetitive tasks. The latter can also include more complex activities.

**Artificial intelligence (AI) undoubtedly offers an innovative response to the demands present at all levels of the insurance value chain.**

It can act on multiple levels of the insurance value chain:

- a. **risk prediction and management:** the concept of *machine learning* can be used for more efficient trend analysis, new risk profile definition, and new insurance product creation;
- b. **pricing and offer personalisation;**
- c. **accelerating the sale of insurance products;**
- d. **improving interaction with customers.**

## International insurtech businesses: examples

While they may succeed in raising substantial funding, in general, the world's leading **insurtech** start-ups have yet to prove their capacity to become profitable. Here are some examples of the most talked about insurtechs:

★**Lemonade** is a start-up based in Tel Aviv and New York with ambitions to revolutionise home insurance. Customers can take out insurance online or in a dedicated mobile app by chatting with Maya, an intelligent virtual assistant. During a conversation using natural language, Maya draws up an optimized policy suited to the needs of her interlocutor. Once the new customer approves the conditions offered, they can pay the premium in seconds, using an integrated payment module.

Lemonade can also take care of **terminating a previous contract**: just provide your previous insurer's contact information and policy details, and sign (all in the application). Claims processing is also supposed to be simple: the conversational bot will establish the details of the incident, estimate the value of the benefits, and instantly proceed to settlement.

★**ZhongAn**, a Chinese online insurer, has created an ecosystem including car manufacturers, dealers, after-sales service providers, and lenders, incorporating big data and artificial intelligence, to win customers' loyalty.

ZhongAn offers a wide range of coverage (including delay compensation for airline passengers, shipping cost reimbursement for returns of products purchased online, etc.).

★**Oscar is a 100% digital insurer focusing on health** (it is 100% reinsured by Axa). With its mobile app, Oscar promises ready access to a network of select health professionals, or the option to get a free medical consultation in less than ten minutes, among other benefits.

★**Trov** offers a mobile app that allows you to insure any item (like a computer or a guitar) at any time. Its greatest strength lies in providing instant coverage.

Users have immediate access to actual market prices. For instance, if you want to insure your iPhone, you can take its picture and instantly discover its current value. This helps you select an insurance policy whose cost matches this value. The quick claims process is another advantage: Trov allows you to submit a claim in case of damage, loss, or theft, through its conversational bot. The bot can ask users to provide additional details, such as the type of claim or the date of the incident.

## Let's hear from the **speakers**

**'Insurers need to innovate in order to bridge the gap, offering solutions that bring them closer to customers, as this proximity is essential for building trust and securing a lasting relationship'.**



**GEOFFROY GAILLY**

PARTNER, NOVEO CONSEIL  
LUXEMBOURG

Innovation is not just something that large enterprises with huge budgets can do — it is also within the reach of the smallest local insurance companies. Today, you need to innovate in order to survive, but remember, this needs to be in keeping with your business strategy.

## Innovate to survive

Why do insurance companies need to innovate? Couldn't they just keep the B2B2C model they have used for decades? **In today's world, it is virtually impossible to imagine a company surviving without innovation**, for the following reasons:

- The traditional B2B2C model is outdated. Today, there is a growing number of actors coming between insurance companies and their customers: family offices, independent financial advisers (IFAs), and multiple members of the fintech ecosystem, such as aggregators, know-your-customer (KYC – a process for verifying the identity of customers) operators, robo-advisers... ;
- In wealth management or life insurance, the customer relationship is built on trust. To create that trust, service providers must be close to their customers;
- In the new landscape, as these new actors have insinuated themselves in the relationship between the insurer and their customer, the feeling of distance grows, and companies have an increasingly hard time maintaining a close relationship with customers;
- Insurers must act and innovate if they want to bridge the gap being created (for the most part) by fintechs. Nonetheless, some types of innovation, such as self-service platforms or white-label products, can be counterproductive, as they further weaken the insurer-customer relationship and limit human interaction (which drives trust) to the bare minimum.

**Insurance companies need to innovate in order to bridge the gap, offering solutions that bring them closer to customers**, as this proximity is essential for building trust and securing a lasting relationship.

## Innovation is not rocket science

It is true that players with large budgets can get very creative with innovative projects. However, one can look at innovation another way. It is actually possible to **combine existing ideas in a completely novel way, and on a small budget**.

For instance, before it became the media giant it is today, **MTV** started out by combining the simple concept of a TV channel with that of a music video. If we applied this thinking to the insurance sector, this would mean using the existing resources of the company or combining them so as to improve customer service or internal efficiency.

Still, **the innovative combinations must be driven by the company itself**, based on its own perception of how to best bridge the growing gap separating it from its customers. If you pay too much attention to what customers want, you will not be able to innovate. Henry Ford (who founded the Ford Motor Company in the early 20th century) famously said: 'If I had asked people what they wanted, they would have said faster horses'. The general public will always be wary of change. First of all, because this is the way they think, but most importantly, because they have no idea what possibilities future innovation can offer.

In reality, humans are naturally adaptable. This is after all the reason why we no longer live in caves, and most of the population in developed countries today use smartphones – a technology, remember, that was not around until less than twenty years ago (Blackberry: 2002, iPhone: 2007).

In conclusion, to effectively innovate and bridge the gap separating them from their customers, companies must focus on simple solutions (such as combining existing concepts) that address their need for

a closer relationship with customers, **without paying excessive attention to the wishes of the customers themselves**, as without being able to imagine the full scope of possibility, the latter cannot really know what they want.

## A cohesive whole

★ Innovation must focus on aspects that provide **added value to customers**, bringing them closer to the company, or ones that provide added operational value directly to the company.

If innovation is undertaken in isolation (in an *innovation lab*, disconnected from the company's reality), it will not solve any issue, becoming a pointless gadget instead.

★ To succeed in adding value to the company, **innovation must be aligned with the company's strategic plan**.



**‘Digital transformation is a process without an end, but with a considerable impact on all the aspects of an insurer’s business’.**



**DANIELE MAROTTA**

INSURANCE CONSULTANT,  
COMARCH

Digitalisation is essential to the insurance industry. You simply cannot go on without it... It is a whole new approach to the business of insurance.

## An ongoing process

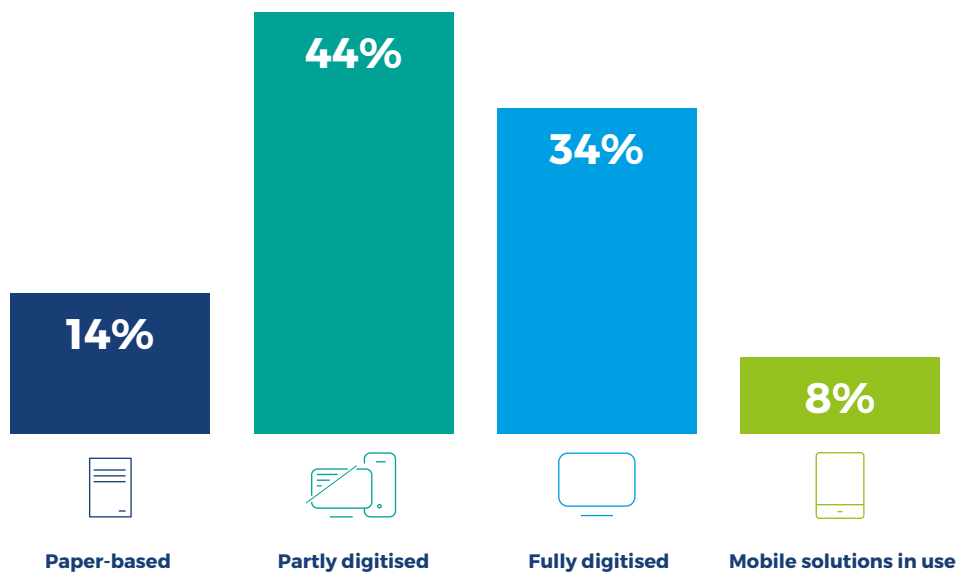
★ Digitalisation cannot be limited to just a single facet of an insurer's business: it is an **ongoing process** which evolves over time and manifests at different levels.

In this regard, **big data** offers a key to a better understanding of the insured. Here are some examples of real-world applications:

- Installation of intelligent sensors allows for monitoring water flow in the supply network and preventing losses caused by water main breaks. A similar technology could be used for monitoring other events such as fires, floods, or break-ins in residential or commercial buildings;
- Premium calculation based on the pay-as-you-go or pay-as-you-live model;
- Using drones in underwriting and claims adjustment processes;

- Using machine learning for improved fraud detection (approx. 10% of insurance claims are estimated to be fraudulent);
- Innovation leaders also recognize the potential to use biometric analysis and data collected from social media in premium calculation.

As shown by a recent study performed in cooperation with EFMA, an international organization of the banking sector, European insurers still have some way to go when it comes to digitisation: **significant improvements are expected, both in terms of processes and in terms of their core activity.**



SOURCE: 'INSURANCE IN THE MOBILE-FIRST ERA', EFMA, COMARCH

Insurers see digital tools as an essential factor in their pursuit of operational efficiency in all aspects of their business: from claims services, to policy sales and issuance, to product distribution.

## Omnichannel approach

★ Digital transformation will have an impact on multiple aspects of insurers' activity. One of those is certainly **a movement towards an omnichannel approach to distribution.**

About 80% of customers would rather use digital communication channels (online chat, email, mobile, etc.) than talk to an agent or a broker.

In the traditional multichannel approach, the customer can meet with an agent or broker in person. But customers' contact with the insurer is typically handled by a call centre. Meanwhile, video chatting is increasingly used for things like taking out a new policy, modifying an existing one, or submitting a claim.

This shows how the situation has evolved, as in the past, talking to the broker or agent was the only way the insured could communicate with the insurer.

With this evolution in mind, the **information provided by the insurer must be coherent across all the possible channels.**

★ **The modern consumer is already an omnichannel one,** searching for products online, surfing social networks, and signing insurance contracts via a mobile app.

An 'enhanced' omnichannel environment will also enable insurers to offer new products to prospective customers without a physical intermediary.

## Bespoke products

★ Another outcome of digitalisation is **the development of products better suited to the customer's needs** in terms of offered coverage, premium payment, contract duration, or level of compensation. This helps tailor your solutions to each customer's specific needs and preferences.

★ In this context, **insurers must rethink their customer journey** so that it serves the ultimate goal of better understanding the customers' key problems and finding ways to satisfy their requirements.

The customer journey comprises several stages:

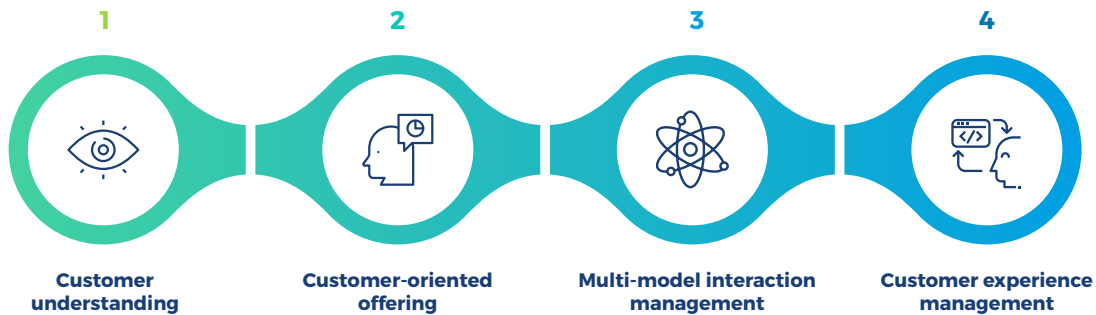
- First, the prospective customer looks for information to choose an insurer;
- Then, they contact the insurer to have any questions answered (their experience during this first interaction can determine whether the prospect will become a customer);
- The insurer answers the prospect's questions;
- An offer is drawn up;
- The final offer is accepted;
- During the policy lifecycle, there can be few interactions... until the insured event occurs;
- The insured event represents a turning point – the interaction between the insurer and the customer may lead to a conflict. In the best-case scenario, this is resolved quickly and amicably. In the opposite case, there will be many more interactions between the customer and the insurer;
- Over time, the customer is offered insurance renewals;
- And in the end, the contract may be terminated.

The goal is to redefine this customer journey so as to better prevent and mitigate any problems occurring at each of these stages. If the insurer is more customer-centric, they can offer their customers an innovative value proposition, all the while listening to their feedback in order to continuously improve the customer journey.

The below diagram shows some key elements that insurers need to consider as they redefine their customer journey (Accenture, The Digital Insurer; The Customer-Centric Insurer in the Digital Era).



## RETHINKING THE CUSTOMER JOURNEY



★ Once the customer journey has been redefined, you can proceed to **customer needs analysis**. This analysis allows an insurer to draw up an offer tailored to the customer's actual needs. Though digitalisation enables customers and insurers to interact in innovative ways, direct contact is not going away completely.

It is not enough to 'rethink' the customer journey: you also have to monitor the quality of service offered to customers (and of course, pay attention to their feedback) at all stages of this journey.

★ In conclusion, **digital transformation is a process without an end, but with a considerable impact on all the aspects of an insurer's business**. It is prerequisite for achieving operational excellence.



**'The capacity to adapt is the Darwinian logic of organisational transformation'.**



**LAURENT PETITCOLAS**

DIRECTOR PROJECTS AND  
ORGANIZATION DEPARTMENT,  
FOYER

For a number of years now, Foyer, one of the leaders of insurance in Luxembourg, has pursued an ambitious transformation strategy. The company is preparing for change that is certain to happen, but unpredictable in its outcomes. Faced with such uncertainty, the company must become more agile, responsive, and innovative.

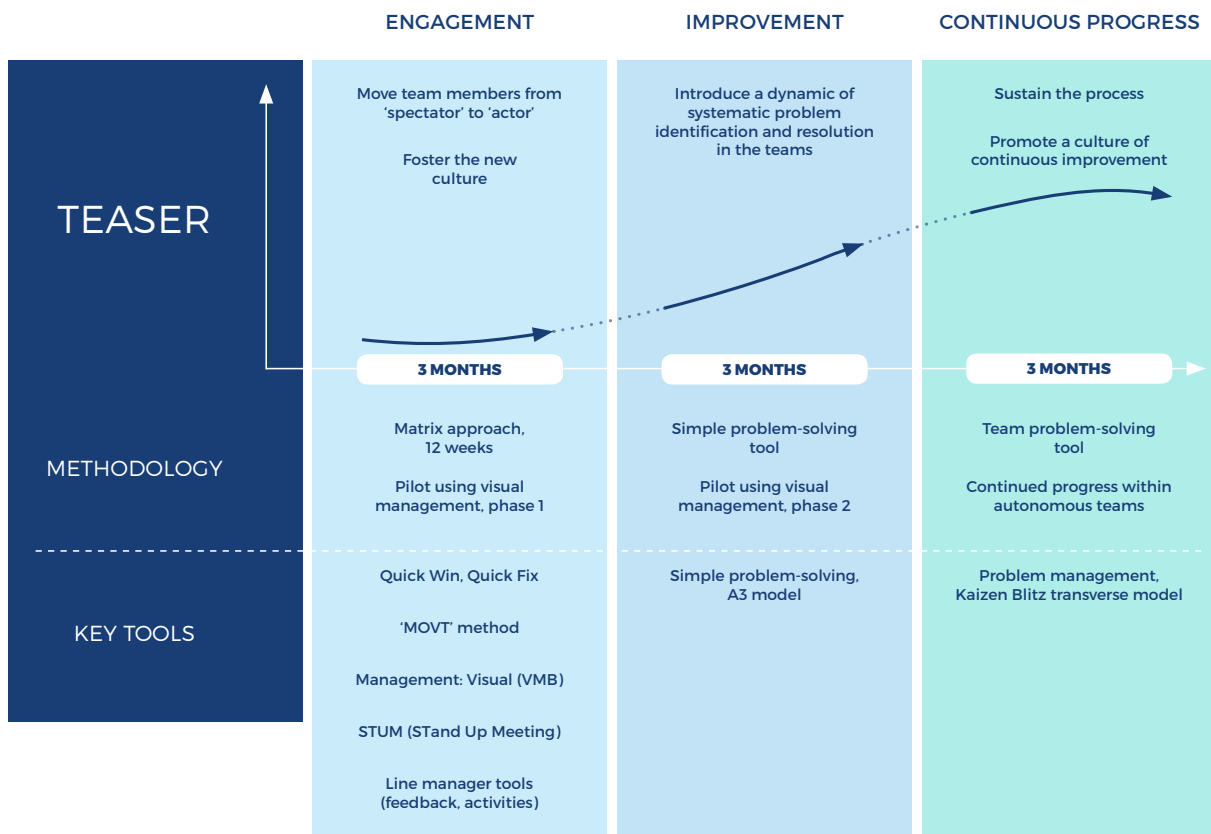
The capacity to adapt is the Darwinian logic of organisational transformation. In recent years, the following specific themes were developed based on our strategy:

- **cultural transformation,**
- **innovation,**
- **agility and customer centricity,**
- **data.**

## Cultural transformation

For the past two and a half years, Foyer has had a programme called ELAN, gradually rolled out over 9 months across the entire enterprise. The programme set 3 objectives: **to improve the quality of services offered to customers, the company's efficiency, and employees' satisfaction.**

### COMPONENTS OF THE **ELAN** PROGRAMME



★ We recruited and established an internal team of champions who co-created the methodology. These champions worked with other teams through the three stages of the process: engagement, improvement, and continuous progress. Now, all teams autonomously continue the work they began together.

Every week, each team has a stand-up meeting using a whiteboard broken down into 4 areas: the team (with indicators updated every 15 days showing stress levels, confidence, feedback, etc.), efficiency, quality, and improvement actions. All teams use problem-solving and continuous improvement tools and methods on an ongoing basis.

## Innovation Hub

★ Foyer has launched an open innovation platform called the **Innovation Hub**. Managed by the Innovation Coordination Officer (ICO), it is run by 6 *InnovExperts* who for their part lead the teams in four areas: connected world, user centricity, artificial intelligence, and disruptive technologies. Twice a month, 'brown bag sessions' (lunch & learn innovation meetings) are held. More than 35% of employees have already attended such events.

At a later stage of our innovation process, we held three internal hackathons and one external hackathon, producing a number of innovative ideas. As an active player in the innovation ecosystem, Foyer has also successfully carried out more than a dozen proofs of concept in cooperation with startups.

## Agility and customer centricity

Following the experiment stage, all projects are carried out in the *agile* or *hybrid agile* mode. New roles have been created, including in particular that of the Product Owner. The entire project portfolio is also managed in an agile mode, with three to four prioritization sessions per year, held together with the Executive Committee to ensure responsiveness and alignment.

Every week, there is a *Kanban Board* meeting. It brings together IT, business, and corporate representatives who work to ensure effective implementation of the project portfolio. The Kanban Board is a visual representation of all the projects at their different lifecycle stages, set up in a room.

At the same time, Foyer has developed a model of all its main customer journey paths. After each of those, customers are sent a satisfaction survey. The results of these surveys are fed into automatically generated dashboards. Every week, representatives of all the areas involved in the customer journey meet to outline further actions to improve the customer experience.

## Data

**Foyer has turned data into a strategic resource.** A new team called Data Studio has been created. This team implemented a "data lake" which allows them to make even better use of data, with three objectives in mind: to improve piloting tools, to enhance operational efficiency, and to identify and build upon new opportunities.



**'Most insurers are convinced they have no other option than to invest more in digital innovation in the coming years'.**



**PIETER HERREMANS**  
INSURANCE PRACTICE LEADER,  
KPMG BELGIUM

The insurance sector is at the brink of a revolutionary strategic change.

Undeniably, most industries are now undergoing a major transformation, perhaps more aptly termed 'disruption' — a complete break with the past, driven by two key factors that prompt rapid changes: **technology and customer behaviour.**

## Very promising innovation potential

★ A number of actors who have grown immensely in importance have already considerably changed the way of doing business in multiple areas, such as **retail (Amazon)**, **hospitality (Airbnb)**, **transportation (Lyft, Uber)**, and **media (Netflix)**, to name just a few. Some experts who participated in the 2019 World Economic Forum (international organization for public-private cooperation) claimed that the effects of this disruption, already seen in other sectors of the economy, are undoubtedly going to spread to the banking sector very soon.

**But it will most likely have the greatest impact on the insurance industry.** The CEOs of virtually all cloud solution providers (Amazon, Microsoft, and Google) believe that every company is bound to become a software company. So for insurers, the worst is yet to come...

This overall sentiment is validated by a number of large international surveys performed recently. In the KPMG CEO Survey 2019, nearly two-thirds of CEOs estimated that the pace of change in the 3 coming years will be faster than in the past 50 years.

★ As shown by the most recent quarterly report from GARTNER, the US advisory company, **executives in all sectors and regions are concerned about their enterprises' ability to keep up with the rapid changes occurring in this new business landscape.** The reason? The company's digital strategy is seen as incomplete and lagging.

## TOP 5 EMERGING RISKS IN FOUR LAST QUARTERS

	3Q 2019	4Q 2019	1Q 2019	CURRENT SITUATION 2Q 2019	
<b>1</b>	Accelerating privacy regulation	Talent shortage	Accelerating privacy regulation	Pace of change	Risk of being unable to <b>respond fast enough to fundamental changes</b> in the company's environment
<b>2</b>	Cloud Computing	Accelerating privacy regulation	Pace of change	Lagging digitalisation	Risk of <b>stagnating growth</b> or even decline due to delays in processes related to digital transformation in the company
<b>3</b>	Talent shortage	Pace of change	Talent shortage	Talent shortage	Risk of being unable to <b>find talents</b> required to achieve strategic objectives due to <b>current low unemployment rates</b>
<b>4</b>	Cybersecurity	Lagging digitalisation	Lagging digitalisation	Digitalisation misconceptions	Risk due to <b>business model</b> modifications and impact, associated with digitisation plans, being inadequately <b>understood or managed</b>
<b>5</b>	Gaps in artificial intelligence/automation expertise	Digitalisation misconceptions	Digitalisation misconceptions	Data localisation	Risks associated with <b>data localisation criteria</b> as new data protection laws <b>change the global approach</b> to data hosting

SOURCE: 'TOP 10 EMERGING RISKS OF 2Q19', GARTNER

According to KPMG, the innovation potential associated with new technologies is immense and very promising, which is actually good news for insurers. Some notable examples include the use of **drones, artificial intelligence, IoT platforms, virtual assistants, smart cities** (use of information and communications technology by city authorities to improve the quality of their services and reduce costs), or self-driving cars.

Thanks to the power of today's technology, new business models can be implemented in the short to medium term.

## The changing customer

★ Beside innovation associated with new technologies, **changes in customer behaviours** are another factor driving the revolutionary transformation now taking place.

What customers expect from their insurance is, actually, quite simple:

- they want the insurer to understand their specific needs and circumstances;  
▶ «know me»
- they want the insurer to provide the necessary expertise and advice  
(to protect the customer); ▶ «protect me»
- they want the insurer to make their life easier — customers want to spend their time doing other things, deemed more important than taking care of their insurance;  
▶ «make it easy for me»
- they want their requests to be handled well (real need for information)  
▶ «inform me».

In other sectors (e.g. e-commerce), such expectations on the part of customers are not a problem. So why is this an issue in the insurance sector?

★ **Anticipating customer needs is a priority**: this is costly to implement, as it requires a complete transformation of the company's economic model (offering new services, going beyond coverage; taking customer profile segmentation to the extreme; providing products via an 'omnichannel' distribution model; prioritizing access and 24/7 availability; digitising front-office — customer service, marketing, after-sales service — and back-office processes — contract management, payments, etc.).

Some successful insurers centred around digital solutions (ZhongAn, Seraphin, Trov, Lemonade, to name just a few — see box no. 2 for more on the subject) have already been on the market for several years, but they have not yet succeeded in replacing the big traditional players. The sector will only be truly shaken up by an actor capable of creating a novel insurance ecosystem, based on a completely new, integrated insurance concept.

## The connected enterprise

★ We live in a world where the customer is connected, but most service companies are not!

In a study by KPMG and Forrester (a research and consulting company), best-performing organisations that met the definition of a 'connected enterprise' in five areas (customers, employees, suppliers, partners, market dynamics) based on a variety of criteria were twice as likely as others to become globally successful.

**The connected enterprise is the solution of the future**, but it requires certain forward-looking reflection on the sector.



KPMG's 'Connected Enterprise' is the future of companies – motivated by a forward-looking reflection on the sector and the latest insights regarding the value chain and support functions.

## A CONNECTED **ENTERPRISE** MUST CONSIDERABLY MODIFY ITS WAY OF WORKING

### REALISATION

Make digital the new normal

- Introduce this new normal
- Carry out a variety of initiatives
- Measure the success of pilot implementations
- Evaluate each new development and keep the innovation process going
- Complete the propagation of digital solutions in the company

### DISCOVERY

Identify the meaning of 'digital' for your company

- Raise awareness of digital solutions among management
- Become an expert on new technologies and their impact on your business and management model
- Expand your knowledge of digital ecosystems

### LAUNCH

Start your process of implementing digital solutions

- Launch the program, the supervisory model, and project teams
- Name project leaders in the company
- Introduce a digital communication strategy
- Reach your first success

### RESISTANCE TEST

Understand your exposure to digital solutions

- Evaluate the current status of your project and strategy
- Evaluate your business and management model's strengths and vulnerabilities
- Evaluate current and future initiatives
- Identify weaknesses and opportunities for improvement

### PREPARATION

Perform a viability study, plan and organise

- Quantify value and design a viability study for the planned changes
- Develop a model for a pilot implementation of digital solutions
- Identify stakeholders and resources
- Create an operational model and a pilot

### GOALS

Define your digital ambitions

- Define the ambitions of your future digital enterprise
- Identify the required changes in terms of management, organisation, culture, and competence
- Draft a prioritised long list of possible ways to realize your ambitions

### OUTLINE

Elaborate on the various options available, develop prototype solutions, and start over

- Create design sprints and proofs of concept to develop and test the various options in an iterative manner
- Create a preliminary high level roadmap based on the various prioritized options
- Take the results and use them to create an updated profile of your future digital enterprise

The road to digital transformation requires multiple iterations on the concept

FOCUS ON THE



**This digital transformation (on the customer level) is still in its preliminary stages.** Most insurers know they have no other option than to invest more in digital innovation in the coming years. Consequently, a clear and targeted digital strategy will be more vital than ever.



**‘Telemedicine is undoubtedly arousing increasing interest in the insurance sector’.**



**KAZIMIERZ CIECIAK**

CONSULTING DIRECTOR,  
COMARCH HEALTHCARE

For a number of years, our health system has been evolving in a difficult context and undergoing a series of upheavals. Among the various transformations, there were also positive developments, resulting in improved health of individuals, or longer life expectancy. Still, even with the lightning-fast progress in these areas, having a tangible impact on societies, inequalities in terms of health and access to healthcare remain prevalent across the world.

In the domain of health, **telemedicine contributes to our response to the new needs** resulting from population ageing and new developments in medicine, among other things. This new form of medical practice offers benefits to insurers and to the insured alike, reducing both health risks and healthcare cost.

## Telemedicine — a serious challenge

★ Telemedicine can be defined as a range of health-related services (diagnostics, surgical treatment, monitoring, etc.) carried out remotely via a telecommunications network.

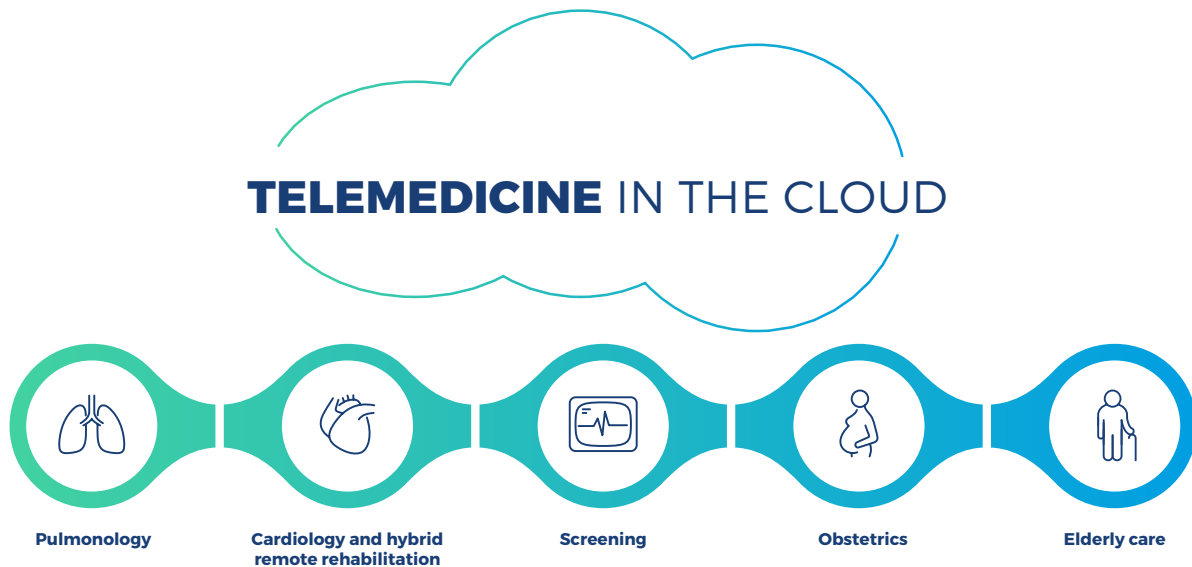
According to the speaker, solutions such as telemedicine, patient monitoring, and remote diagnostics, are undoubtedly arousing increasing interest in the insurance sector.

★ **The European Commission defines the term clearly:** telemedicine is ‘the provision of healthcare services, through the use of information and telecommunications technology, in situations where the health professional and the patient (or two health professionals) are not in the same location’.

Thus, four components are required:

- a competent health professional,
- a patient or another health professional,
- physical distance between the two parties,
- **use of technology such as mobile health applications, webcams, online chat, telephone, etc.**

★Telemedicine has a vast scope of applications. The below diagram shows a few examples:



## Benefits of artificial intelligence

Beside protecting the health and lives of patients, all these activities, along with e-health services, also enable the creation of positive long-term relationships, offering **considerable potential for the insurance industry**.

Comarch Healthcare offers comprehensive solutions going well beyond simple remote consultations. These solutions also enable a more in-depth understanding of a patient's health.

All this is supported by algorithms and artificial intelligence. The provided solutions have an impact on individuals' health and quality of life.



**"Neural network technology can be used in many scenarios relevant to the insurance market'.**



**BARTOSZ PAWŁOWICZ**  
MACHINE LEARNING ENGINEER,  
COMARCH

★From mobile phones to actual self-driving cars, the consumer economy has already started tapping into the potential of the so-called **deep neural networks** (or DNNs). It is the **foundational technology behind voice, text, and face recognition** functions used in mobile devices.

This technology has since been applied in numerous other areas, from medical diagnostics to Internet security, in order to predict trends and make crucial operational decisions:

- a) **Vehicle damage detection and appraisal – damage value can be estimated based on nothing more than a photo.** The proposed application identifies the damaged part of the vehicle (front bumper, left headlamp, etc.), type of damage (scratch, dent, etc.), and estimated cost;
- b) **Detection of home damage** – this works the same way as the vehicle damage detection solution (based on a photo). The technology allows for detecting damage in photo, localising it, and identifying its type, e.g. flooding or hail damage. This type of damage typically takes a lot of agents' time, while the work is actually repetitive;
- c) **Detection of symptoms or health conditions (e.g. pneumonia).** The technique allows for faster analysis while reducing the risk of error. It can also be used directly by the patient, e.g. in a mobile app for skin cancer detection (based on its photo taken with a smartphone). This could reduce the number of doctor's visits necessary and increase the confidence of insured customers;
- d) **Satellite image analysis** for land or buildings. This enables the identification of high risk areas, such as ones at risk of flooding or fire.

★ As you can see, deep neural network technology lends itself to a number of use cases. It is never going to replace human decision making, but it can save time while increasing efficiency and accuracy.

A company aspiring to the position of an innovation leader must cooperate with researchers and share massive amounts of data necessary to benefit from technical solutions based on deep neural networks.



**'The rise in cybercrime is a fact.  
But confidence in dealing with  
the threat appears to be improving'.**



**KRISTOF BREECH**

DIRECTOR TECHNOLOGY ADVISORY,  
KPMG BELGIUM

★ Now in its 21<sup>st</sup> year, **the Harvey Nash/KPMG CIO Survey 2019** is the largest IT leadership survey in the world, with over 3,600 responses from CIOs and technology executives across 108 countries.

The survey provides direct insight into the priorities, strategies and careers of senior technology leaders around the world. In our digital age, it is no surprise to find that more IT leaders are reporting **budget increases greater than at any other time in the last 15 years**. But what are they using these budgets for? How are they managing the balance between the huge opportunities that disruptive technologies such as artificial intelligence bring and the risks of cybersecurity, data privacy and new regulations?

There is a set of digital leaders differentiating themselves from the pack and delivering real business results in nearly every measure. On average, their time to market is better, their customer and employee experience is superior, and their operational efficiency is higher. As a result, both revenue growth and profitability are higher too.

Digital leaders work collaboratively with the business to put technology in the hands of value creators, clearly recognize the power of data, and have a relentless focus on speed and agility.

## Conclusion

★Other key findings from the survey include the following:

- Almost half (44%) of organizations expect to change their product/service offering or business model fundamentally in the next three years;
- More than 20% of current roles will be replaced with AI and/or automation within 5 years, but the majority (69%) believe new job roles will compensate for those lost;
- Skills shortages are at an all-time high with 67% struggling to find the right talent. The top three scarcest skills are: big data, cybersecurity and AI;
- Fewer CIOs now sit on the board — dropping from 71% to 58% in just 2 years — but their influence remains intact (66% see the role gaining influence, compared to 65% in 2018);
- The rise in cybercrime is a fact: 32% of leaders have experienced a major cyberattack in the last 2 years (33% last year). But confidence in dealing with the threat appears to be improving;
- Almost half (44%) have completed large-scale adoption of the cloud and at least one fifth have at least a small-scale implementation of IoT, on-demand platforms, RPA and AI.

SOURCE: "CIO SURVEY 2019", HARVEY NASH/KPMG





# Insurance Software at Comarch

**Comarch Digital Insurance is a software for insurance agents and their customers. It helps agents advise on and sell insurance products. At the same time, it allows individual customers to smoothly purchase a policy online and manage their insurance product portfolio.**

**Comarch provides sales automation, CRM and self-service software for insurers with great customer Experience design**



## **Omnichannel**

- One platform for all insurance products
- One business logic engine for all channels
- For both distributors and end-clients



## **Great UX**

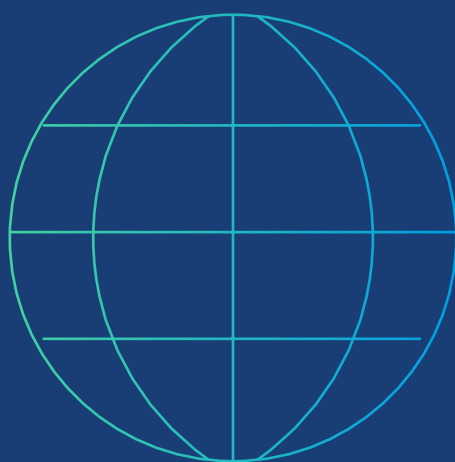
- Focused on customer-centric approach
- User friendly interface
- Designed for the insurance industry



## **Flexibility**

- Adjusted scope of license
- Integration via open API architecture
- Product parameter management

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