

Insurance in the 2020s

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Disclaimer

The information in this presentation is intended to facilitate a structured discussion on the potential evolution of the European insurance industry. Whenever possible, information has been attributed to the original source. In all cases, the information is presented on a “best efforts” basis; the presenter assumes no responsibility for the factual correctness or completeness of the information presented or for decisions taken based on this document.

Snapshot of the European Insurance Industry

The European Insurance Industry accounts for 30% of the global insurance market. Asia accounts for 33% and North-America 31%.¹

European premiums²:

Life
Insurance

€710bn

P&C
Insurance

€371bn

Health
Insurance

€132bn

Total Investment Portfolio²:

France,
Germany,
Italy and
the UK
accounts
for **80%** of
the total



Life
insurers
account for
75% of the
total

€10trn

Distribution



Investments



Underwriting



Products

Inside-out vs.
outside-in



Sources: ¹Swiss Re Sigma No.3 /2018: "World insurance in 2017" – Note: "Europe" covers western, central and eastern Europe, including Russia and Ukraine (which together account for about 1% of global premiums); ² Insurance Europe – European Insurance Key facts October 2018.

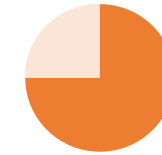
<https://www.insuranceeurope.eu/sites/default/files/attachments/European%20insurance%20-%20Key%20facts%20-%20October%202018.pdf>

Innovations already in play today



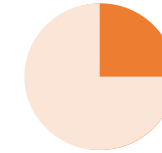
Connected car

“...expected to become standard in automobiles by 2020, at the latest.”¹



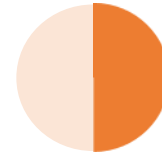
Smart Meters and Housing

“There is no place like (a connected) home.”²



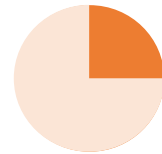
Connected Health

“Ageing well in a digital world”



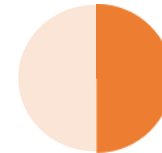
Commercial lines

“Insurwave - the world’s first blockchain-enabled insurance platform.”³



Artificial Intelligence

“Machine learning propensity models for cross-selling”⁴



TrueMotion

[intact]
INSURANCE

Panasonic

Allianz

ERNST & YOUNG

guardtime

Discovery

Vitality **NN**

Sources: ¹McKinsey&Company: *Shifting gears: Insurers adjust for connected-car ecosystems*; ² https://www.mckinsey.com/spContent/connected_homes/index.html; ³ <https://insurwave.com/>

⁴ NN Group.

Product and “front-end” innovation is leading the charge...

End-to-end digital	Life & Health	P&C	Innovative verticals
Companies that operates as a fully digital insurance company and/or innovates products in different verticals	Life & Health products innovation	Life & Health products innovation	All in one mobile & AI solution to reduce insurance claim cost and claim cycle time for days to hours
           	             	               	           

Sources: Mundi Ventures based on Global Insurance Insights, Cbinsights , and own research, 2018

...but every component of the value chain is being disrupted

Marketing & Distribution	Underwriting / Pricing	Servicing & Operations	Risk & Finance	Claims management
 <p>AL to customize insurance requirements according to customer's lifestyle, needs and choices (Israel)</p>	 <p>Uses Big Data/AI for underwriting liability for self employed individuals (US)</p>	 <p>Uses Robotics to automate parts of the processes in divorce handling, value transfer, pay-out decease and pay-out start pension (NL)</p>	 <p>Helps companies manage the risks associated with their third-party relationships (US)</p>	 <p>Digital claims process, mobile based, uses ML to calculate cost of damage and settle cast majority of claims, increasing productivity and freeing claims handlers to focus on complex cases (US)</p>
 <p>Uses data analytics to identify insurance gap at SMEs and provides that intelligence to brokers, effectively creating warm leads (UK)</p>	 <p>Uses ML to identify claims fraud, SaaS, enabling insurers to automate fraud detection processes (France)</p>	 <p>Uses Robotics in the collection process of required data, to reduce the preparation time for insurance advisory interviews, amongst others (NL)</p>	 <p>Connects asset managers and insurers through a fund data utility in a secure and controlled environment (UK)</p>	 <p>Digital claims process, mobile based using ML, enables the customer and the claims handler to share visual information in real-time, expediting claims settlement (UK)</p>
 <p>Digital platform made available to insurers for products requiring on-demand coverage. Fully digital. Started with contents coverage for shared homes</p>	 <p>Developing AI for underwriting across all lines, starting with drone insurance. Currently provides usage based insurance coverage to drone operators (US)</p>	 <p>Within several areas the use of automation and Robotics drives efficiency, opportunities and process acceleration (NL)</p>	 <p>Provides modern and compliant background checks for global enterprises and startups</p>	 <p>All in one mobile & AI solution to reduce insurance claim cost and claim cycle time for days to hours (DE)</p>



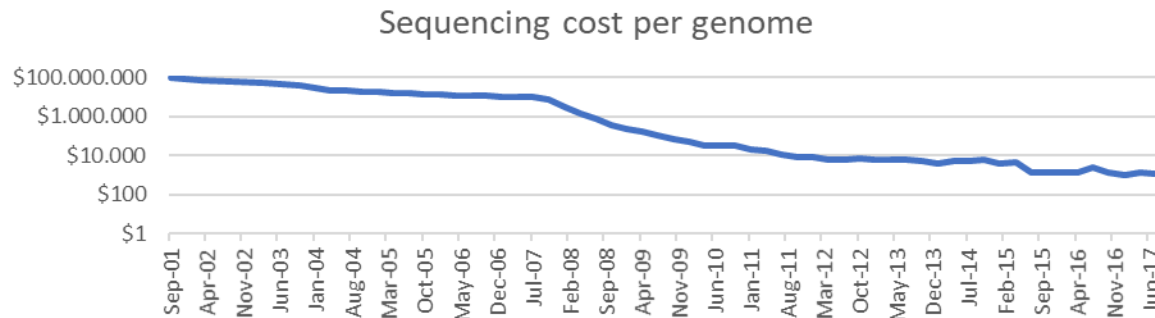
▶ what could 2029 look like?



What do we know about genetic testing?

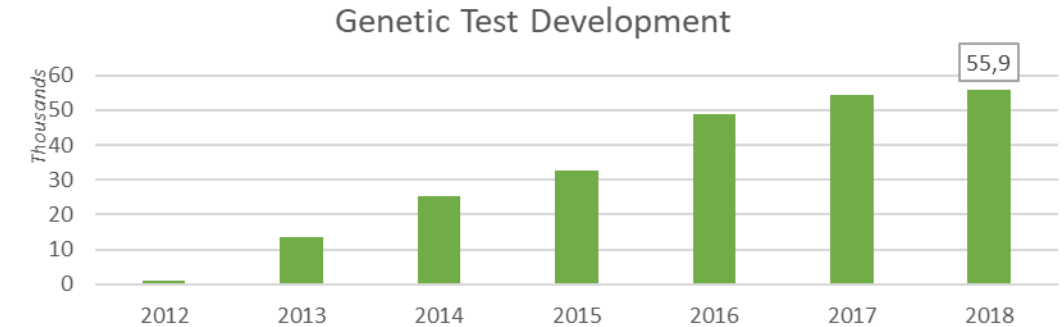
Underwriting / Pricing

Genome-sequencing costs have decreased dramatically



Source: National Human Genome Research Institute
<https://www.genome.gov/sequencingcostsdata/>

The number of genetic tests are growing rapidly



Source: Genetic Testing Registry <https://www.ncbi.nlm.nih.gov/gtr/>

Some countries have taken action to regulate insurers' access and use of genetic data

- No/Self-regulation
- Limitations law/moratorium
- Legal ban



¹ Legislation varies at state level.

² Only for list of approved tests.

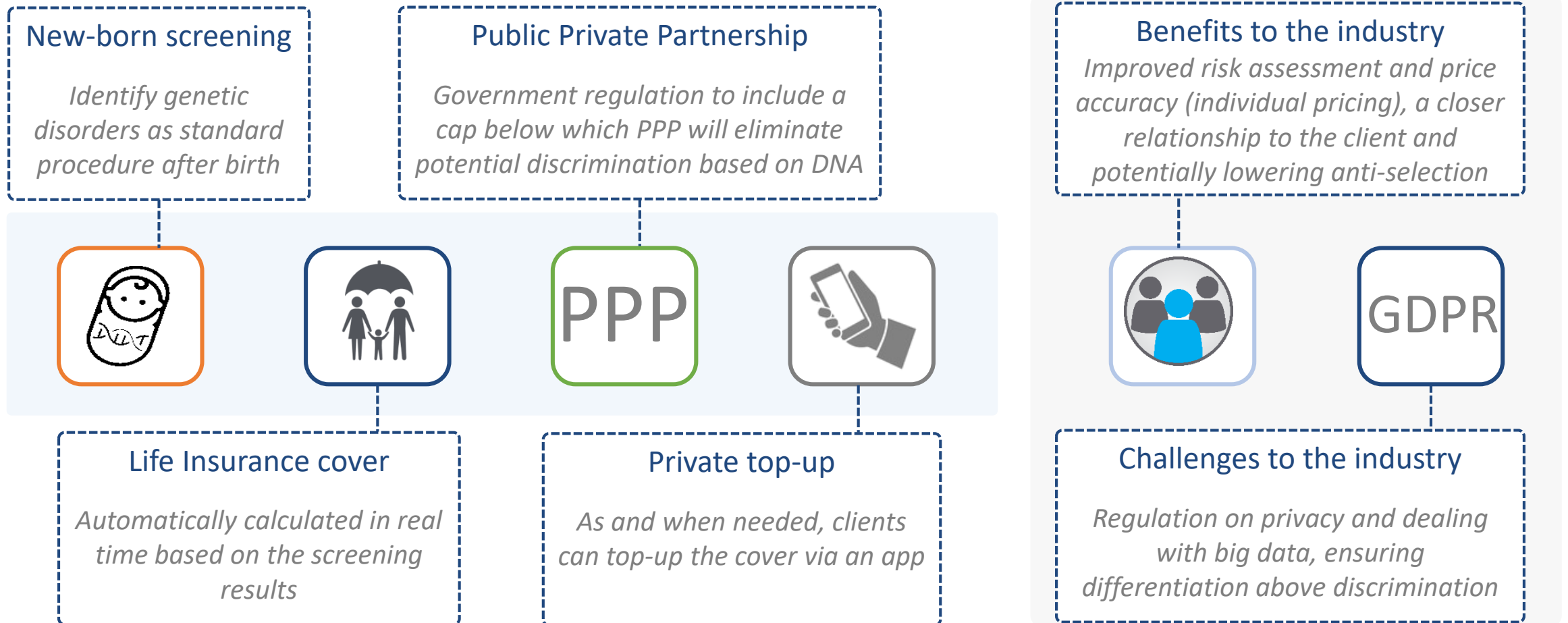
³ Human rights legislation.

Direct-to-consumer (DTC) genetic testing is booming – Easy to use, affordable and widely available



Genetic testing for everyone?

Underwriting / Pricing



Data privacy, discrimination and differentiation will probably be key challenges

Automated “risk free” claims handling

Claims management



David: loses control of his car and hits a lamppost.

The roads are wet and David’s car suggests to let it drive. Stubborn David knows best and decides to stay in control...

Conditions are tricky and David aquaplanes into a lamppost. His car immediately checks if he’s ok and then notifies his insurer

David’s claim is analysed, fraud-checked and identified as a minor damage claim. He’s asked to send a short video of the damage.

David’s damage is automatically calculated based on the short video he takes and shares with his insurer

David is offered a cash settlement via a push message. He accepts and within minutes receives he money in his favourite “money” app



Digital claims prevention



Digital first notification of loss



Automated claims management



Digital loss assessment and repair



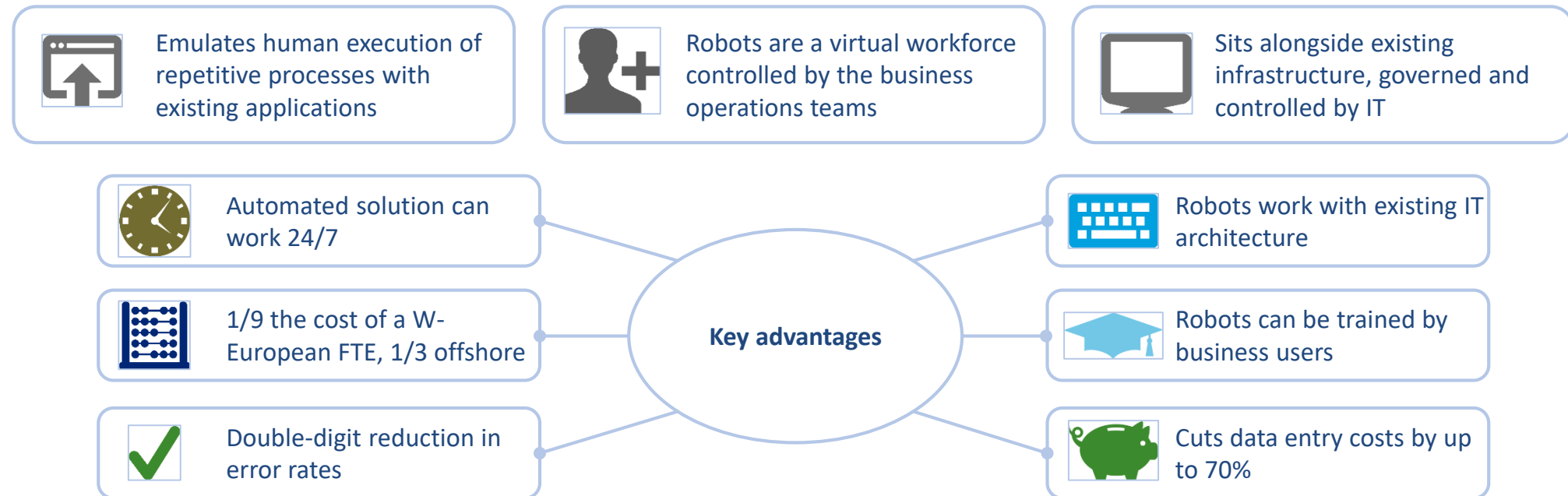
Digital loss assessment and repair

What percentage of claims could be settled error free, fraud free and without human intervention by 2029?

Automated everything else?

Servicing & operations

Robotics process automation (RPA) can support financial services organisations by ensuring quality and cost efficiencies, by using robotics for automation of repetitive, manual, error-prone tasks



A few financial services organisations using robotics

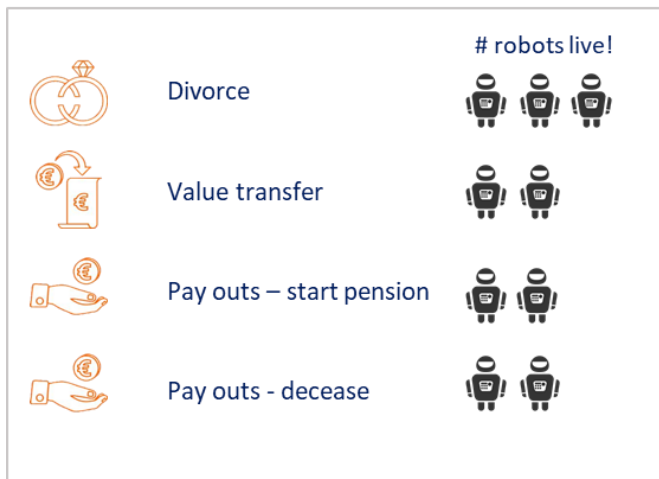


Worked example: Current status of Robo for Life within NN in the Netherlands

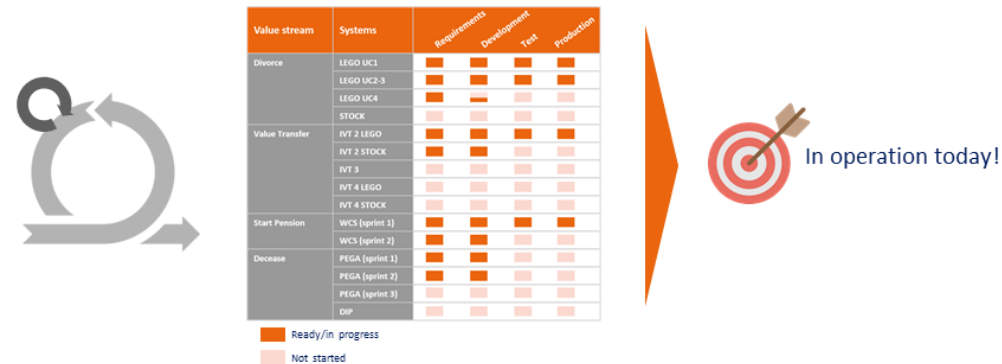
Servicing & operations

- The scope of the program consist of 4 value streams: Divorce, Value Transfer, Pay Outs and Deceased;
- Based on an in-depth assessment and approved business case;
- The development of the robots is done in parallel to realise the benefits as quickly as possible.

Scope and status of the program



17 development sprints are planned for the next period



How many of our existing processes can be standardised and “robotised” by 2029?

The battle for the customer is already here

Marketing & distribution

In 2030, millennials and post millennials (those born after 1997) will make up nearly half of the adult population². These digital natives will expect seamless, omnichannel, real-time interactions integrated with the platforms they already use frequently – along with some we can't imagine today.

Strong customer relationships directly contribute to the user experience and in addition also provide access to customer information.

Insurers potentially have a competitive advantage due to their experience with regulatory balance sheets, capital requirements and a regulated operating environment.

Seven of the ten largest companies by market capitalization are ecosystem players¹



Sources: ¹ Michael Dimock, "Defining generations: Where millennials end and generation Z begins." ²McKensey&Company Insurance beyond digital: The rise of ecosystems and platforms

Alibaba platform

Alibaba hit the headlines with the world's biggest IPO in September 2014. Today, the company has a market cap among the global top 10, has surpassed Walmart in global sales, and has expanded into all the major markets in the world. ¹



Sources: ¹Harvard Business Review: Alibaba and the future of business (October 2018) <https://hbr.org/2018/09/alibaba-and-the-future-of-business>

The key to Ant's growth lies in its platform business model

Marketing & distribution



Ant, an affiliate of Alibaba Group, is now 50% bigger than Goldman Sachs. Ant's most recent valuation came in at \$150 billion¹

Sources: Platform innovation blog: How Ant Financial became the largest Fintech in the world (March 2019) <https://www.applicoinc.com/blog/ant-financial-services-platform-largest-fintech-in-world/>

Unless action is taken, insurers may become “balance sheet and regulatory managers” only

Capital, Risk and ALM



Ecosystem providers

- Ecosystems “own” the customer front end and originate the majority of customer interactions
- The customer is already there so insurance could be “sold” (and is not often bought!)



Customers

- Customers may prefer “easy to access” one stop portals that already have their data to engaging directly with insurers







Traditional players (potential scenario)

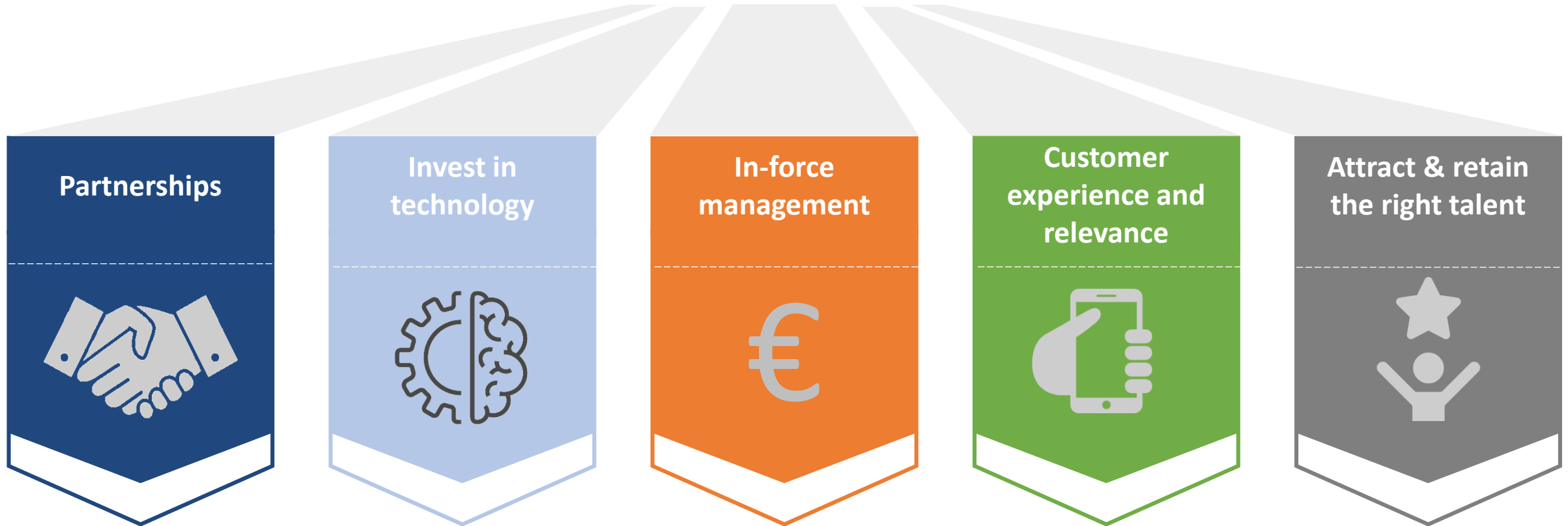
- Limited direct customer access
- Limited access to customer data...
- ...resulting in limited customer insights
- Which in turn results in a price and margin war to provide a regulated insurance balance sheet to the front end

- Actuarial and risk management skills will remain a core part of the insurance value chain
- As disruption happens, insurers need to work hard to ensure ongoing relevance to end customers

Customers and society as a whole benefit from insurance

-  1 The more things change, the more they stay the same: there will always be demand to help manage the volatility and randomness in everyday life
-  2 Every part of the traditional insurance value chain is being disrupted and there are many partnership opportunities but also threats from new entrants
-  3 Insurers need to invest in sustaining existing competitive advantages such as risk management, ALM, actuarial skills and regulatory interaction
-  4 Insurers need to change their traditional inside-out approach to product development, marketing and distribution to an outside-in approach to further build customer relationships by meeting customer's needs

Potential response playbook



Selected recent CRO Forum publications

<https://www.thecroforum.org/>



Supporting on-going capture and sharing of digital event data
Achieving a common language to enable understanding of and communicate digital risk/events



Big data & Privacy: unlocking value for customers
CROs in a changing environment



The heat is on
Insurability and resilience in a changing climate



Autonomous machines
Emerging risk initiative



Understanding and managing the IT risk landscape
A practitioner's guide

