

Analytics in Insurance: Balancing Innovation and Customers' Trust



Patrick Mäder

The challenge of technological advances as well as new business and operating models in the insurance industry is an ongoing topic in professional discussions and publications. But how can incumbent insurers, which are accustomed to evolutionary change rather than rapid transformation, keep pace? PwC sees a promising opportunity in making analytics the foundation of the business model and subsequently improving operational excellence (PwC, 2016a, 2017a, 2018b). With this in mind, we present exemplary connections for analytics along the insurance value chain and discuss the topic of trust in a digital world. Why? The customer is either willing or unwilling to share data and place trust – the number-one success factor in the digital age – in a company.



Christian B. Westermann



Karin Tremp

Are the insurers up to speed?

According to PwC's recent survey among 1 293 CEOs in 85 countries, insurance leaders continually report operating in one of the most disrupted sectors at the moment (PwC, 2018a). However, their outlook seems increasingly positive: among the many reasons for insurers' optimism is that the anticipated disruption from new entrants (e.g. Insurtechs) has not materialised to the extent that was expected (PwC, 2017a). In addition, risk mitigation opportunities, such as sensors and telematics, are emerging. But having possibly overestimated the impact of outside threats and short-term disruption in the past, insurers may now underestimate the need to become digitally-enabled and customer-focused organisations with flexible business and operating models (PwC, 2018a).

Insurance companies tackle transformational changes by attempting to rethink «proven» solutions, challenging industry mindsets and «dominant logics» (Bettis

and Prahalad, 1995), and actively collaborating with Insurtechs. However, the industry's strong culture of self-reliance and stability is a major hurdle for putting innovation at the heart of an organisation. Our research suggests that the key to overcome such impediments lies as much in the culture as it lies in the operations itself. Indeed, technology alone will not enable insurers to capitalise on unfolding opportunities. We assume that investments will go to waste unless there is a genuine, entrepreneurial readiness to embrace change and bring (technological and analytical) innovation into the heart of the business – without losing credibility from the customers' perspective (PwC, 2018a).

According to a representative PwC insurance study across 16 countries (9 281 respondents), only 36 percent of insurance customers still prefer direct interactions with insurance agents or brokers (PwC, 2014). This leads to the challenge of synchronising different off- and online customer interaction points. However, the insurance industry has not historically emerged as an innovation driver for optimising and digitising internal and front-end processes (Figure 1). Thus, more than four out of five insurance CEOs (85 percent) are concerned about the pace of technological change insurers should adapt to – more leaders than in almost any other industry (PwC, 2018a).

This is where analytics comes in: we see analytics as the foundation of an insurer's business model, as a possible starting point to embrace the shift in customer preferences – and to subsequently improve operational excellence and initiate cultural change. By analysing customer data, existing business models and ways of working can be challenged and «unlearned» (i.e., adapted) – so that new business models can be developed. In ad-

The authors

Patrick Mäder, Partner, Financial Services Leader, PwC Switzerland.

Dr. Christian B. Westermann, Partner, Data & Analytics Leader, PwC Switzerland.

Dr. Karin Tremp, Manager, Advisory Financial Services, PwC Switzerland.

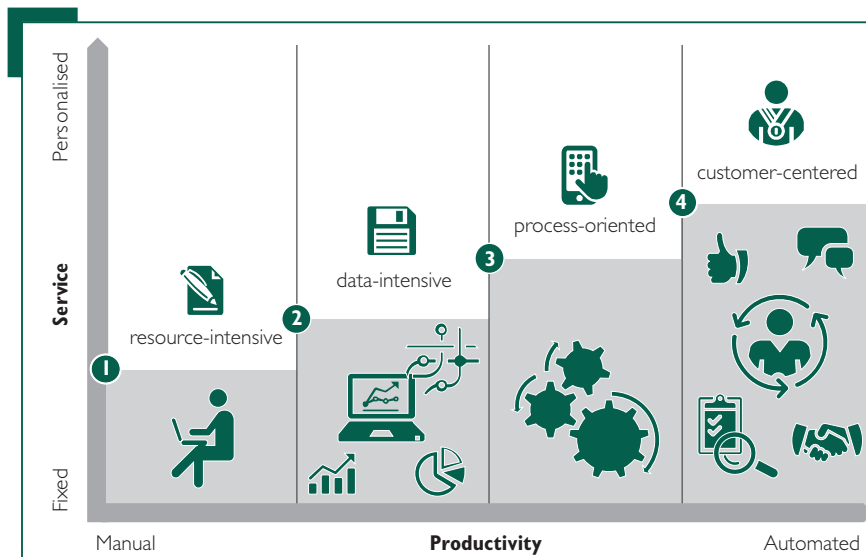


Figure 1: Evolution of insurers' business model regarding service and productivity

(Source: PwC, 2016a)

dition, efficiency can be boosted, costs reduced, and customised solutions improved. Data analytics likewise enable largely automated work processes within a company (PwC, 2016b).

Potential approaches of analytics for insurers

Digitisation opens up a range of new opportunities, such as the potential for automated processes, continuous evaluation of data accomplished by digital working processes, and access to new sources of information (e.g., customers' transaction data and behaviour) thanks to intelligent technology in physical products. So, where should incumbents start? We have summarised exemplary connections for analytics along the insurance value chain (Figure 2).

For insurers, the systematic collection and analysis of data creates the opportunity to predict customer's needs, behaviours and points of contact. Social listening¹ and consumer panels allow market researchers to identify new trends and the needs of (potential) customers. Apart from these fields of application, chatbots², as disrupting forms of customer engagement, could be implemented to effectively meet customers' needs for en-

hanced user experience through artificial intelligence. Moreover, analytics could

- identify characteristics and determinants for potential risk groups, leading to more accurate claims predictions and risk assessments (pricing)
- provide underwriting data to identify available opportunities for claims regulation
- open up starting points for fraud detection and automated compliance checks
- enable real-time exchange of information and decisions as an improvement of the customer journey, creating increased conversion rates
- create real-time steering opportunities (e.g., MIS dashboards for sales force or financial staff) as well as business process auto- and optimisations (PwC, 2016a).

While opportunities do exist, hurdles to capitalise on them have not disappeared. We assume that the answer is scalability and robotic process automation (RPA)³: very few insurance companies have all the required resources to become truly cutting-edge businesses. The challenges include a sustained reliance on legacy systems and difficulties moving old books over to new adaptable platforms. Thus, it is important for insurance com-

panies to look for opportunities to simplify, selectively decommission, and shift legacy systems (e.g., to the cloud) to be able to manage core processes in an integrated end-to-end manner. In addition, more than nine out of ten insurance CEOs express extreme or at least moderate concerns regarding over-regulation (95 percent) and cyber threats (93 percent) (PwC, 2018a). However, the key prerequisite for tackling these challenges are defined by both the insurers' internal capabilities and readiness – and their customers' trust.

«Path to trust»: giving customers control and providing transparency

How concerned are customers about privacy risks? Do they believe companies are doing enough to protect their personal data? For the most part, customers have accepted the fact that companies collect and use their personal information. Nevertheless, new regulations such as EU GDPR or also the image of GAFA (Google, Apple, Facebook and Amazon) impact on how the use of data might change society's perception. Today's customers increasingly want companies to deliver personalised services and are basically willing to share personal information to receive it. But getting consumers to be willing to share more in-depth personal information, such as access to their mobile data, behaviours or media content, requires offering something in return. Customers expect benefits in exchange for their personal data, such as getting discounts (e.g., on services or goods) or even non-monetary incentives (e.g., not having to watch ads, getting exclusive updates) (Figure 3). Above all, customers want companies to be transparent about what information they collect and how it will be used: they want to be in control of their personal information, meaning having to «opt out» or turn off the flow of marketing information from companies (PwC, 2014).

For insurers, this willingness to share information represents opportunities to reach customers and connect with them in new, exciting ways. Companies can

encourage consumers to share data by educating them about the benefits, being transparent about their practices, and marketing to specific communities (e.g., younger demographics) which are more willing to interact with companies and reveal personal data (PwC, 2014).

As a result of frequently media-reported events on data exploitation (e.g., Google, Cambridge Analytica), consumers are aware of the commercial use and the possible misuse of their personal data. In fact, a representative Europe-wide survey carried out in the 28 member states of the European Union (27 980 respondents) has shown that roughly seven out of ten people expressed concern about their information being used for a different purpose as the one it was collected for (European Commission, 2015). A nationally representative PwC survey of 2 000 Americans showed similar results: just 25 percent of respondents believe most companies handle their sensitive personal data responsibly. Even fewer

(only 15 percent of respondents) think companies will use that data to improve customers' lives (PwC, 2017d). This is where the data protection legislation comes in, intending to bring order to data processing and impose certain limits (PwC, 2017c).

Customers share data – and trust

Due to an increasing consumer awareness and new legal frameworks which will provide consumers with more control over their personal data (e.g. opt-in regulation), consumer data evaluations will become more delicate. Indeed, in a future in which customer data will be a growing source of competitive advantage, gaining and maintaining customers' confidence will be key – companies will heavily rely on having their customers' explicit approval for their data use (Miesler and Bearth, 2016). The good news for insurance companies, according to our research, is that

- 50 percent of respondents would already be willing to share additional data with their insurance company regarding personal or lifestyle information if they received a better offer
- 67 percent of respondents would be willing to install a sensor in their car or home in order to lower their insurance premiums (PwC, 2014).

On the contrary, a study surveying 900 people in the United States, United Kingdom, Germany, China, and India from 2014 showed that «[w]hile most people are broadly aware that companies collect data on them, they are surprisingly uninformed about the specific type of data they give up when they go online» (Morey et al., 2015: n.s.; see Figure 4). Thus, consumers clearly worry about their personal data, but seem not to know exactly what they are disclosing.

This so-called «privacy paradox» describes a seemingly contradictory circumstance in the territory of personal data:

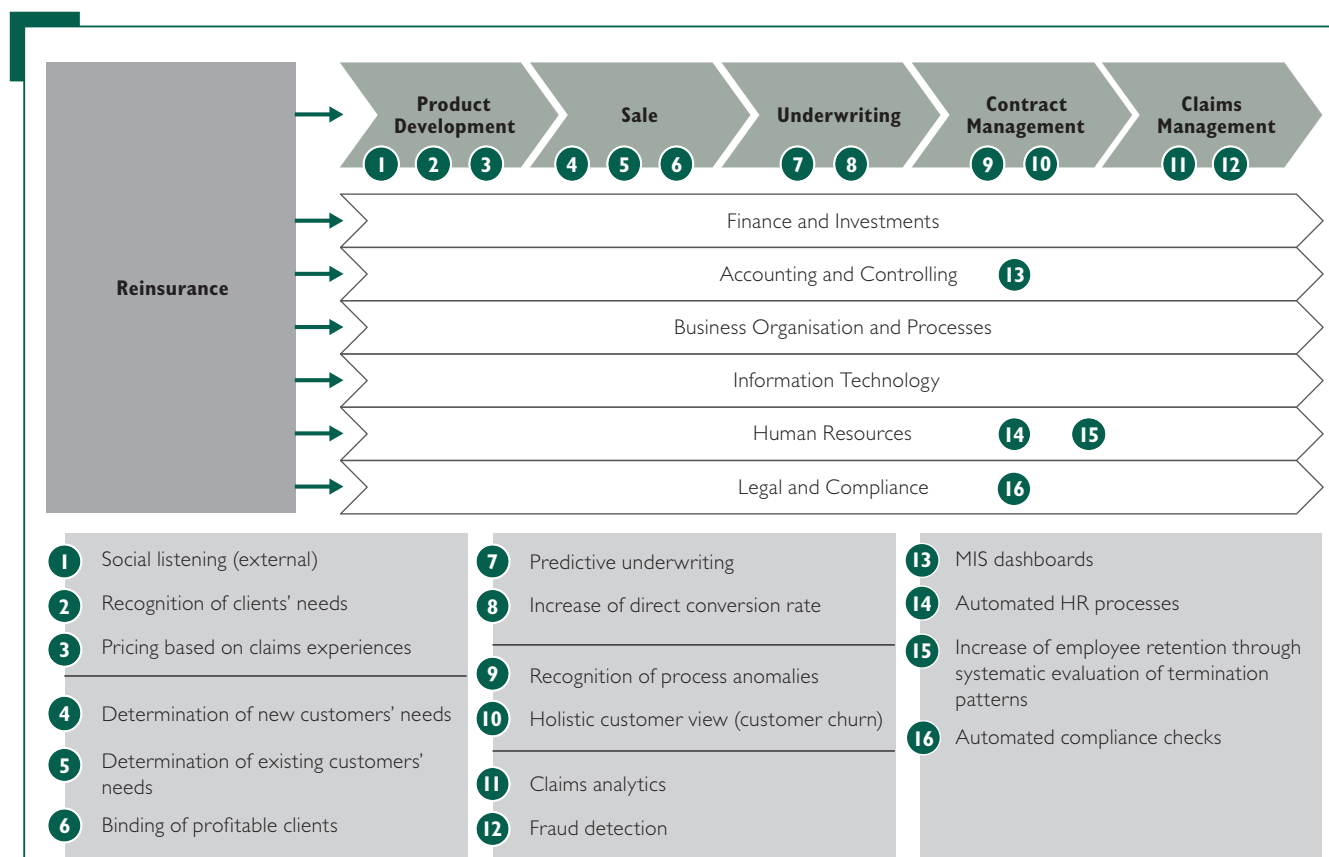


Figure 2: Potential for analytics along the value chain (Source: PwC, 2016a)

85 %

of consumers **will not do business with a company** if they have concerns about its security practices

92 % Say they should be able to control the information available about them on the internet

91 % Say companies should notify consumers about all data breaches

88 % Say the amount of data they share with a company depends on how much they trust it

87 % Want the ability to remove their personal data from the internet if it hurts their reputation

85 % Say cybersecurity and privacy risks are among the biggest risk facing society

71 % Find companies' privacy rules difficult to understand

Figure 3: Customers demand for control and transparency (Source: PwC, 2012)

the fact that customers have great concerns about data privacy but at the same time are heady when it comes to sharing sensitive personal data (e.g., credit card numbers, private photos, location details). This gap between people's mindset and their actual (convenient) behaviour in the digital world is having consequences that remain unresolved: data protection rules cannot protect consumers from themselves – they can only delineate a rational way of behaving (PwC, 2017c).

The privacy paradox triggers two important aspects for data analytics in insurance:

- Simply providing disclosures in an end-user licensing agreement or presenting terms and conditions of data use at sign-up is important, but not sufficient. Businesses must also take the lead in educating consumers about their personal data and build credibility in a way that goes beyond a compliance «checklist» approach (Morey et al., 2015; PwC, 2017d).
- A company that is considered untrustworthy will find it difficult or impossible to collect certain types of data, regardless of the value offered in exchange. On the other hand, firms with a higher level of credibility will find customers more willing to share data – because customers are satisfied with past benefits received and are confi-

dent the company will guard their data properly (Morey et al., 2015).

To sum up: trust is regarded as the non plus ultra of any interpersonal relationship. We are convinced that, in the digital age, trust is the number-one success factor – in every respect (PwC, 2017b).

Concluding thoughts

The insurance industry is accustomed to «big»: big decisions, big system implementations, and big product launches. Yet by the time traditional decision making and implementation cycles have run their course, the market will have moved on. Thus, contrary to the established industry mindset, innovation requires lots of small decisions and a genuine willingness to learn from them; an entrepreneurial readiness to experiment and even fail (PwC, 2018a). Analytics could support shifting companies' cultural mindsets, systematically improving operational excellence and bringing innovation. But the core issue will be the customers (and regulators), who set the pace regarding willingness and allowance to share personal data. Insurers can support their customers by being transparent about their own practices and investing in trustworthy relationships. In short: insurers should reflect on their traditional roots and strength.

References

- Bettis, R. A. and Prahalad, C. K. (1995). The Dominant Logic: Retrospective and Extension, *Strategic Management Journal*, 16(1), p. 5–14.
- European Commission (2015). Special Eurobarometer 431: Data Protection.
- Miesler, L. and Bearth, A. (2016). «Willingness to Share» im Kontext Big Data: Wie entscheiden Kunden, ob sie ihre persönlichen Daten mit Unternehmen teilen? *Dialogmarketing Perspektiven 2015/2016*, p. 49–66.
- Morey, T. F. and Schoop, A. (2015). *Harvard Business Review* (online), Customer Data: Designing for Transparency and Trust.
- PwC (2012). PwC, Consumer Privacy: What Are Consumers Willing to Share? The Speed of Life: Consumer Intelligence Series.
- PwC (2014). PwC Insurance 2020: The Digital Prize – Taking Customer Connection to a New Level.
- PwC (2016a). PwC, Der Insurance Monitor: Operational Excellence – Analytics als Grundlage für ein digitales Geschäftsmodell.
- PwC (2016b). PwC, Opinion Paper: Megatrend Financial Center – Insurer 4.0: Turning Change into an Opportunity.
- PwC (2017a). *InsurTech: The New Normal for (Re) Insurance*, PwC InsurTech Report.
- PwC (2017b). PwC, CEO – The Magazine for Decision Makers: Trust in the Digital Age.
- PwC (2017c). PwC, Disclosed – PwC's Online Magazine – In the Spotlight: Data Protection, Issue 2.
- PwC (2017d). PwC, Consumer Intelligence Series: Protect.me.
- PwC (2017e). PwC, The Future of Finance: Robotics – the New «Digital Workforce».
- PwC (2018a). PwC, 21st CEO Survey: Maintaining Optimism while Grappling with Transformational Changes – Key Findings from the Insurance Industry.
- PwC (2018b). PwC, The Digital Insurer – Five Propositions for the Future of the Industry.

Notes

- 1 Social listening is the process of monitoring digital conversations to understand what customers are expressing about a brand, service or industry online.
- 2 Chatbots are digital programs that conduct conversations via auditory or textual methods.
- 3 Robotic process automation (RPA) refers to software and algorithms that enable repetitive, rule-based processes and activities to be automated with ease in order to boost productivity and improve quality within a very short space of time (PwC, 2017e).

27 %

Social network friends' list

25 %

Location

23 %

Web searches

18 %

Communication history

17 %

IP addresses

14 %

Web-surfing history

Figure 4: Percentages of people realising what data they are sharing online

(Source: Morey et al., 2015)