

Eckstein | Liebetrau | Nolte (Hrsg.)



# 2021 Insurance & Innovation

Ideen und Erfolgskonzepte  
von Experten aus der Praxis

Eckstein | Liebetrau | Nolte (Hrsg.)

Insurance & Innovation 2021

Ideen und Erfolgskonzepte von Experten aus der Praxis



Eckstein | Liebetrau | Nolte (Hrsg.)

# Insurance & Innovation 2021

Ideen und Erfolgskonzepte  
von Experten aus der Praxis

## **Bibliografische Information der Deutschen Nationalbibliothek**

Die Deutsche Nationalbibliothek verzeichnet diese Publikation in der Deutschen Nationalbibliografie; detaillierte bibliografische Daten sind im Internet über <http://dnb.d-nb.de> abrufbar.

© 2021 VVW GmbH, Karlsruhe

Das Werk einschließlich aller seiner Teile ist urheberrechtlich geschützt.  
Jede Verwertung, die nicht ausdrücklich vom Urhebergesetz zugelassen ist, bedarf der vorherigen Zustimmung der VVW GmbH, Karlsruhe.  
Jegliche unzulässige Nutzung des Werkes berechtigt die VVW GmbH zum Schadenersatz gegen den oder die jeweiligen Nutzer.

Bei jeder autorisierten Nutzung des Werkes ist die folgende Quellenangabe an branchenüblicher Stelle vorzunehmen:

© 2021 VVW GmbH, Karlsruhe

Jegliche Nutzung ohne die Quellenangabe in der vorstehenden Form berechtigt die VVW GmbH zum Schadenersatz gegen den oder die jeweiligen Nutzer.



Beachten Sie bitte stets unseren Aktualisierungsservice auf unserer Homepage unter:  
**[vvw.de](http://vvw.de) → Service → Ergänzungen/Aktualisierungen**  
Dort halten wir für Sie wichtige und relevante Änderungen und Ergänzungen zum Download bereit.

### **Gleichstellungshinweis**

Zur besseren Lesbarkeit wird auf geschlechtsspezifische Doppelennungen verzichtet.

ISBN 978-3-96329-369-6

## Vorwort

Mit der Ausgabe 2021 erscheint nunmehr die 11. Auflage des Buches *Insurance & Innovation*. Als vtmw AG ist es uns eine besondere Freude, diese Buchreihe erstmalig mit herausgeben zu dürfen. Nach dem Jahr 2020, in dem sich die Wichtigkeit von ganzheitlicher Digitalisierung durch COVID-19 stärker als je zuvor gezeigt hat, wird die Relevanz dieses Buches, welches Jahr um Jahr innovative Konzepte und praxisnahe Beispiele aus der Versicherungswelt vereint, umso deutlicher.

Innovation und Versicherungen erscheinen vielen Praktikern noch heute wie ein Gegensatz, da diese primär in den USA und Hot-Spots wie dem Silicon Valley und durch Technologie- bzw. Datengetriebene Unternehmen vorangetrieben wird. Das dies nicht immer der Fall sein muss, zeigen viele der aktuellen Beiträge. Die Versicherungswelt befindet sich auch in der D-A-CH-Region im Umbruch. Welche Unternehmen dabei am Ende zu den Gewinnern zählen werden, die sich auf den immer stärker auf den „Winner-takes-it-all“-Märkten positionieren können, hängt nicht zuletzt davon ab, wie umfassend sich mit Digitalisierung und Innovationen und den begleitenden Themen auseinandergesetzt wird.

Genau an diesem Punkt setzt *Insurance & Innovation* an. Die Verknüpfung von für die Versicherungswelt in Europa zunehmend relevanten Themen, wie Plattformökonomie, internationales Wachstum oder parametrische Versicherungen, mit weichen Faktoren, wie der Bedeutung von Vertrauen im Versicherungsgeschäft, zeigt den Facettenreichtum der Digitalisierung. Die sowohl theoretisch fundierten Betrachtungen als auch der Umgang mit praktischen Erfahrungswerten machen dieses Buch zu etwas Besonderem, da es ermöglicht, vollständig in die Themenvielfalt einzutauchen. Um diese Vielfalt zu gewährleisten, ist ein bunter Blumenstrauß, vergleichbar mit einem diversifizierten Portfolio, an Forschungen verschiedener Hochschul-Standorte sowie Praxis aus sowohl etablierten Versicherern als auch aus Start-Ups bzw. InsurTechs vertreten.

Unser herzlichster Dank gebührt allen beitragenden Autoren, die ihr Wissen offenherzig teilen und dadurch einen wichtigen Beitrag zur Evolution der Branche als Ganzes leisten. Ebenfalls einen herzlichen

## Vorwort

---

Dank an Axel Liebetrau und Dr. Andreas Eckstein, deren Engagement und branchenübergreifendes Know-how wie in jedem der davorliegenden Jahre dafür sorgen, dass dieses Buch eine Institution auf dem deutschsprachigen Versicherungsmarkt darstellt.

Eine inspirierende Lektüre, neue Ideen und praktische Lösungsansätze wünschen

*Thilo Pfeil*

Vorstand  
vtmw AG

*Lukas Nolte*

Leiter Projektmanagement und Personalentwicklung  
vtmw AG

# Inhaltsverzeichnis

Vorwort .....	V
Der Trend 2021 im Versicherungsvertrieb – Video-E-Mail-Marketing boomt .....	1
<i>Axel Liebetrau</i>	
Bancassurance 2.0: Eine echte Chance für kundenzentrierte und zukunftsfähige Angebote .....	5
<i>Ivan Büchi/Roman H. Schmid</i>	
Dezentralisierter Risikotransfer auf Blockchain-Basis.....	15
<i>Dr. Alexander Braun/Niklas Häusle</i>	
Do-It-Yourself: Low-Code- und No-Code-Plattformen in der Versicherungsbranche.....	25
<i>Maria-Helena Hansen</i>	
Maschinelles Lernen: Wie Künstliche Intelligenz das Assetmanagement verändert .....	33
<i>Christoph Peter</i>	
Aligned and empowered workforce – Vom Umgang mit Unsicherheit als Treiber innovativer Prozesse .....	41
<i>Roger Cericius/Hendrik Schwedt</i>	
Moderne Führung, sich selbst organisierende Teams und Innovation: Wirkzusammenhänge und Synergien.....	51
<i>Nils Laue/Philipp Schwab</i>	
Was wir von der Quantenmechanik über Digitalisierung lernen können.....	57
<i>Lukas Nolte</i>	
Internationalization of German Insurance Companies – why they should take a close look at the US .....	65
<i>Dr. Andreas Eckstein/Aryan Zandieh</i>	

## Inhaltsverzeichnis

---

Antifragilität als Königsdisziplin der Agilität .....	73
<i>Prof. Dr. Erik Wollenweber</i>	
Digital oder tot – wie Versicherer ihr Überleben sichern .....	85
<i>Oliver Lang</i>	
Trends, Themen und Technologien der Versicherungswirtschaft: Zwischen Künstlicher und emotionaler Intelligenz.....	91
<i>Marcus Rex</i>	
Vertrieb in Zeiten von Corona – Erfahrungen und Folgen für Versicherungen.....	99
<i>Lars Georg Volkmann</i>	
Protecting Intangible Assets in a VUCA World – Parametric Solutions to secure the Company's Crown Jewels .....	107
<i>Dr. Marcus Schmalbach/Prof. Dr. Annette Hofmann</i>	
Safer Drivers Are More Willing to Share Information.....	121
<i>Dr. Carlo Pugnetti/Sandro Graf</i>	
Die Ressource der Zukunft – Wie Vertrauen in stürmischen Zeiten aufgebaut werden kann und welche psychologischen Fallstricke dabei lauern .....	129
<i>Dr. Frank Hagenow</i>	
Outsourcing as innovation channel in the Swiss insurance sector .....	135
<i>Fabrice Hiltbrunner</i>	
Empirische Analyse der Technologieakzeptanz von mobilen Ambient-Assisted-Living-Applikationen.....	141
<i>Oliver Werth/Jörn Eggers</i>	
Autorenverzeichnis .....	149

# **Safer Drivers Are More Willing to Share Information**

Dr. Carlo Pugnetti/Sandro Graf

## **1 Introduction**

Customer and consumer data are becoming increasingly central in today's digitalized world. Entire business ecosystems are based on companies that collect, process and store customer data through various channels. As insurance companies continue to expand their product offering, they are increasingly facing the challenge of accessing and processing additional customer information in time.

The evolution has been ongoing, from the early success in using credit scoring for underwriting decisions in the 1990s, through the growth of services in the 2000s, to the increasing current options for Pay-As-You-Drive models. These changes offer the opportunity for improved risk pricing and risk mitigation, more frequent contacts with the customers, and more flexibility and transparency for customers. The type of information, its volume, and timeliness are all also changing towards behavioral, real-time information rather than demographic time-delayed information. In addition, the new business models enabled by these changes are of strategic importance for insurers, as data-driven models open the door for technology-savvy third parties to become credible providers of insurance services (Cather, 2018). To further advance their business models, insurance companies need to understand under which conditions customers are willing to share data.

Additionally, new data privacy regulations such as the General Data Protection Regulation (GDPR) in the European Union and the European Economic Area give individuals more control over their data. The GDPR, for example, requires explicit consent from the customer to collect and store their personal information. Therefore, successfully requesting and processing customer information is important for the long-term, strategic development of insurance companies.

## 2 Willingness to Share Information

But what data are consumers willing to share, and under what circumstances? In recent years, there have been various developments that attracted much media attention and have led to consumers becoming more aware of how their data is used, and possibly misused, commercially. Customers are growing increasingly suspicious of companies requesting their information. In a survey, 55 % of respondents indicated that their willingness to share data with companies would decrease in the future (Ernst & Young, 2014).

Other studies, such as the 2015 conducted survey of EU citizens (European Commission, 2015)) show that more than two-thirds of respondents see that providing personal information is an increasing part of modern life. However, explicitly and clearly communicated procedural fairness and providing customers with a voice and control over the outcomes is a prerequisite to mitigate privacy concerns.

Some general principles have been investigated and analyzed in other industries. Customers are more willing to share when (a) the information is collected in the context of an existing relationship; (b) they can control the future use of the information; (c) the information is relevant to the transaction and (d) the information can be used to draw reliable and valid inferences (Stone and Stone, 1990). Trust, driven by past experience and perceived dependability of the company, also significantly impacts the willingness to share information (Schoenbachler and Gordon, 2002). However, for all the importance placed on privacy, consumers often show a remarkable lack of activity in protecting their personal data. This discrepancy gives rise to the privacy paradox and the associated operational challenges such as the widespread use of mobile devices (Barth and de Jong, 2017).

In insurance, the research about customer information has concentrated on underwriting and sales impact rather than on insurers' ability to access information. Digital interactions can open windows into customers' life events and open opportunities for sales or offer behavioral insights that allow for more precise risk pricing. A broad network of providers can offer access to the data and building a broad network of diverse partners across owned, paid, earned, and social touchpoints will be critical. Better customer information will enable insurers to provide additional services (Swiss Re, 2020).

### 3 Survey and Methodology

Sales and underwriting intentions, however, will not materialize if customers do not agree to share their information with insurers for this purpose. Our research group, focusing on customer behavior in insurance, surveyed approximately 900 Swiss customers regarding their willingness to share information with their automotive insurers (Pugnetti and Elmer, 2020). In addition to demographic information, we investigated willingness to share information based on the type of information requested and the benefits offered in exchange. Furthermore, we linked the willingness to share information to the respondents' self-assessment of their driving style according to the Multi-Dimensional Driving Style Inventory (MDSI). MDSI is an instrument developed to self-report driving style. It has been shown to be consistent in the scoring of individual drivers, and its results correlate with involvement in car accidents, the commission of driving offenses, and observed risky driving behavior. It avoids the issue of overestimating one's abilities by asking for behavior rather than skill, and scores drivers on eight factors: Dissociative, Anxious, Risky, Angry, High-Velocity, Distress Reduction, Patient, and Careful. It avoids the issue of overestimating one's abilities by asking for behavior rather than skill (Taubman-Ben-Ari et al., 2004).

### 4 Results

The results of the survey are summarized in Figure 1. The type of information is significant, but the range of impact is relatively small, and claims data is more easily obtainable than time and location of travel current location, with behavioral driving data between the two extremes. The type of benefit offered has a much higher impact on the willingness to share information, with a premium refund the preferred option and no benefit the least preferred. Services of all types raise the willingness to share information significantly. Women are more likely to share information than men. This result is not in line with other studies and needs further investigation. Younger customers are more likely to share information. This result is consistent with other studies. Finally, and also consistent with other studies, higher trust drives a higher willingness to share.

## Safer Drivers Are More Willing to Share Information

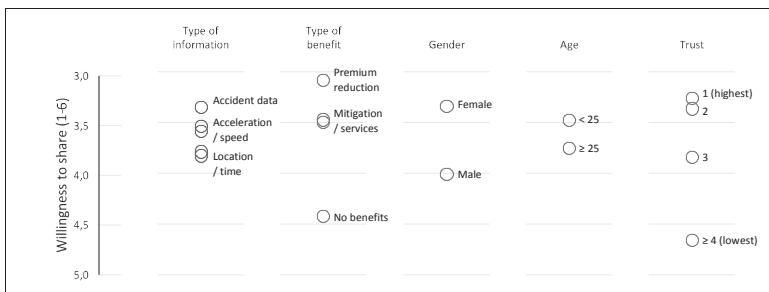


Abb. 1 Impact on the willingness to share information

Respondents also ranked themselves along with the eight driving styles following the MDSI questionnaire. Responses tended to cluster towards riskier/less risky behaviors so that scores for Anxious, Patient, and Careful are positively correlated with each other and negatively correlated with Risky, Angry, and High-Velocity.

The willingness to share information for the top and bottom quintile for each driving style is shown in Figure 2, drawn to the same scale as Figure 1 for comparison purposes. For most of the driving styles, the impact is significant, approximately on the same scale as the type of information requested, with safer drivers more willing to share information than risky drivers. This insight is relevant for data-driven insurance business models, as the new customer portfolios will tend to be less risky.

The impact of the different factors on the willingness to share information with an insurance company is indicated by the difference between the lowest and highest value for each category in the figures above. The results are tabulated in Figure 3 and indexed to the impact of the type of benefit offered for comparison purposes. We see that offering a benefit in kind in the form of a service brings some 70 % of premium refunds and that the type of information and age of the respondent has a smaller impact. Trust, even if limited to positive responses, has a significant impact. How respondents evaluate their driving style is also a strong influence on the willingness to share information.

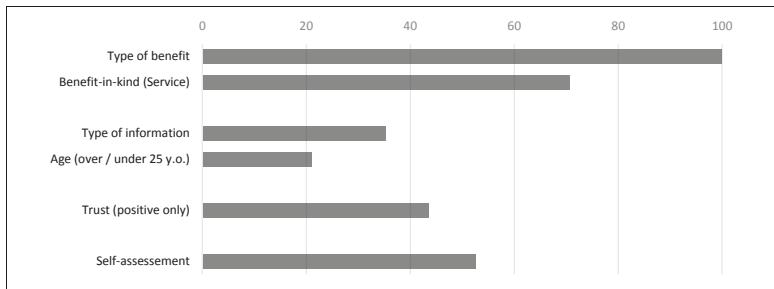


Abb. 2 *Relative impact on willingness to share information (Type of Benefit = 100)*

## 5 Relevance for new insurance business models

The results' implication allows insurance companies to understand better which drivers are willing to share information and win customers for data-driven insurance schemes.

### **Telematics business models do not necessarily mean premium rebates**

While customers prefer direct financial incentives, offering services for the information received generates close to three-quarters of the effect of premium refunds. Not offering any benefit for the additional information provided, on the other hand, is clearly disliked by customers. Thus, communicating benefits-in-kind should be a viable market strategy.

### **The type of information is important**

While customers prefer direct financial incentives, offering services for the information received generates close to three-quarters of the effect of premium refunds. Not offering any benefit for the additional information provided, on the other hand, is clearly disliked by customers. Thus, communicating benefits-in-kind should be a viable market strategy.

### **Younger customers are more open to sharing information**

The impact is significant but smaller than other factors at approximately one-fifth of the impact of the benefits. Thus, new models

should become progressively more appealing but can already find customers across a wide range of age cohorts.

### **Trust remains key**

Customers unsurprisingly prefer to share information with a trusted partner, and insurance is not an exception to this rule. The impact across all levels of trust is equivalent to the benefits offered. Even for values on the positive half of the trust scale, the impact remains slightly less than half. Investment in long-term relationships and reputation across several dimensions, therefore, remain essential for insurers.

### **Safer customers are more open to sharing**

Customers who self-assess as less risky drivers share information more readily with their insurers. The impact is approximately one-third of that of the type of benefit offered. This is a significant result, on par with the impact of the type of information requested. Also, this indicates the potential to establish a relationship with better risks, contributing potentially to earlier profitability for new data-driven business models.

## **6 Implications**

A viable strategy should aim at combining several of these elements to identify and motivate potential early adopters. Targeting customer segments that are more likely to share data is a key challenge for companies, but when done successfully, it translates into substantial gains in the perceived value by customers and value creation for the company (Rüeger et al., 2018). For example, communicating in-kind benefits to self-identifying safer drivers with whom insurers have a long-term, trusted relationship, and incrementally targeting specific information needed to provide the service would create an interesting core of profitable and communicating customers on which to grow the product and service offering.

Clearly communicating the purpose of the information requested and the value delivered to customers and requesting customer permission to access the information directly rather than through third parties will address two main issues. First, it will, over time, build trust from customers that insurance companies are working above-board. This is

critical to the long-term success of any insurance business model. Second, it will defuse the risk of non-insurance providers disintermediating the insurance relationship. If a third party owns the information relevant for risk assessment, they could, over time, force insurers to become commoditized risk capital providers. Investment in the digitized customer relationship will also allow insurers to leverage the relationship between risk behavior and willingness to share information.

## 7 References

- Barth S. and de Jong M.D.T. (2017). The Privacy Paradox—Investigating Discrepancies Between Expressed Privacy Concerns and Actual Online Behavior- A Systematic Literature Review. *Telematics and Informatics* 34: 1038–58.
- Cather, David A. (2018). Cream Skimming: Innovations in Insurance Risk Classification and Adverse Selection. *Risk Management and Insurance Review* 21: 335–66. doi:10.1111/rmir.12102.
- Culnan, M.J. and Armstrong P.K. (1999). Information Privacy Concerns, Procedural Fairness, and Impersonal Trust: An Empirical Investigation. *Organization Science* 10: 104–15.
- European Commission (2015). Data Protection. Special Eurobarometer 431. Doi: 10.2838/552336
- Ernst & Young (2014). The big data backlash. London, UK.
- Pugnetti C. and Elmer S. (2020). Self-Assessment of Driving Style and the Willingness to Share Personal Information. *Journal of Risk and Financial Management*, 2020, 13, 53. doi:10.3390/jrfm13030053.
- Rüeger, B., Gehring, B., Ackermann, K. A. and Miesler, L. (2018). Willing to share? When it comes to data, who will share what and why? Research Features. 125, S. 98-101. <https://cdn2.researchfeatures.com/wp-content/uploads/2018/03/Willing-to-share.-When-it-comes-to-data-who-will-share-what-and-why.pdf>
- Schoenbachler D.D. and Gordon G.L. (2002). Trust and Customer Willingness to Provide Information in Database-Driven Relationship Marketing. *Journal of Interactive Marketing* 16. doi:10.1002/dir.10033.

Stone, E.F. and Stone D.L. (1990). Privacy in Organizations: Theoretical Issues, Research Findings, and Protection Mechanisms. *Research in Personnel and Human Resources Management* 8: 349–411.

Swiss Re (2020). Data-Driven Insurance: Ready for the Next Frontier? *Sigma* 1/2020.

Taubman-Ben-Ari O., Mikulincer M. and Gillath O. (2004). The Multidimensional Driving Style Inventory - Scale Construct and Validation. *Accident Analysis and Prevention* 36: 323–32.

Die Herausforderungen in der Versicherungsbranche werden nicht weniger: Mit der Pandemie, der fortschreitenden Digitalisierung, der anhaltenden Regulierung und den niedrigen Zinsen tun sich die Versicherungsunternehmen zum großen Teil weiterhin schwer. Radikale Innovationen, konsequente Kundenorientierung, neue Technologie bieten Chancen sich zu erneuern und sich zukunftsfit zu machen. In dieser dynamischen und überaus spannenden Zeit bietet dieses Buch eine Auswahl an Praxisbeispielen verschiedenster Versicherungen. Sie zeigen detailliert und nachvollziehbar auf, wie mit Innovationen den aktuellen Herausforderungen begegnet werden kann. Das Buch möchte inspirieren und dazu ermutigen, neue Wege zu gehen. Gerade Führungskräfte und Entscheider in Versicherungen, die kreativ und strategisch handeln, erhalten hier Ideen für die eigenen Innovationsprojekte, praktische Anregungen und methodische Tipps.



Dr. Andreas Eckstein



Axel Liebetrau



Lukas Nolte

A standard one-dimensional barcode is positioned vertically. Below it, the numbers "9 783963 293696" are printed in a small, sans-serif font.

(D) 03600

[www.de](http://www.de)