In association with

Institute of Insurance Economics
University of St.Gallen

Data: gold or kryptonite?

An insurer's guide to the resource of the future

IBM Institute for Business Value

How IBM can help

Maturing markets, tight capital, increasing risk and technologically sophisticated customers are just some of the pressures the insurance industry faces today. As a result, insurers will have to work faster, more efficiently and, above all, smarter. Those that do will thrive; those that don't will fail. Insurers need to be more nimble, innovative and connected with their customers. The IBM Global Insurance team has reinvented itself to provide solutions to help clients meet the demands of today's insurance business. From enhanced customer service to greater efficiency in the back office and improved risk management, there's a smarter solution for you. For more information about IBM Insurance solutions, visit **ibm.com**/insurance.

Data is the premiere resource

Data is at the heart of an interconnected world. One of the major reasons intermediaries are still the most powerful insurance distribution channel is that they are the gatekeepers of information: They generally know their customers best, better than the insurer itself. But the traditional insurance agent is slowly disappearing. In a digital world, insurers need to collect data themselves, which means their customers must be willing to share this valuable resource. How can insurers make this happen? Data from a recent IBM Institute for Business Value global survey of consumers points the way: Insurers need to increase trust, create benefits and make sharing easy.

Technology is fundamentally changing everyday life – how people work, shop, date and play, among many other things. Businesses, governments and individuals are increasingly interconnected, and their interactions increasingly digitized.

These changes are profoundly altering business economics. Traditional value chains are fragmenting as technology decomposes industry structures and processes into ever-smaller slices. Industries are converging as new entrants begin to compete within specific functions across industries. New types of business environments – business ecosystems – have emerged and are displacing traditional industry paradigms by underpinning formation of new business models that can support seamless, sophisticated customer experiences.[1]

For insurers, the underlying technologies span the entire value chain, from marketing and product development, through underwriting, and all the way to claims and customer service. They include artificial intelligence (AI) and cognitive computing, cloud, mobile technologies, social tools and networks, the Internet of Things (IoT) and many others. Each of these technologies induces change – micro-disruptions, as we called them in a recent IBM Institute for Business Value (IBV) report – with the sum leading to larger industry disruption in the mid to long term.[2]

Data is at the heart of all these digital changes. Data is the resource insurers need to digitally reinvent their organizations and the industry. Data opens the door to numerous opportunities, including:

- New products. Using data to measure individual risk can lead to various types of usage-based insurance for car, home or even health-related endeavors. Using analytics to further understand risk can allow insurers to move away from coverage-based products – which are threatened by commoditization – to risk mitigation and prevention products.

68% of insurance executives surveyed expect that acceptance of data and information sharing will increase over the next ten years[3]

Only 21% of insurance customers surveyed are willing to share their social media profiles with their insurers

47% of insurance customers surveyed expect personalized and tailored services

- New services. Digitized data can improve the speed of customer-facing processes, such as rating, underwriting and claims, by allowing automation of decision making. In addition, it can help increase customer satisfaction by enabling personalization of services.
- New business models. A whole new group of companies are focused on leveraging data and technological innovation to transform the industry. Dubbed insurtechs, these companies range from pure online insurers and brokers to providers within parts of the insurance value chain, such as analytics and insurance software providers.

In client conversations over the past few years, executives of traditional insurers often told us they are not interested in individualized risk calculation; instead, they maintain that their classical mandate as insurers is to provide balance across the community of policyholders, with better risks automatically subsidizing worse ones. Yet even if that stayed the case, whether because of regulation or customer preference, insurers will still need to collect individualized data. Customers are becoming used to personalized and tailored service across industries and will expect the same from their insurers.

This creates a dilemma for insurers. To expand operations to include the previously mentioned new products, services and business models, insurers need customers to share the necessary data. Yet overall, customers seem unwilling to do so.

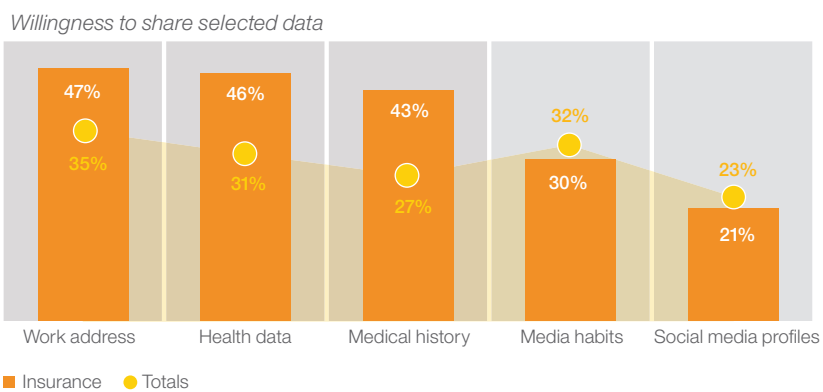
To learn more about consumers' data sharing inclinations and motivations, we conducted the 2017 IBV Data Sharing Survey. (For more information, see the *Study approach and methodology* section.) Close to 16,000 survey participants were divided into four groups, with each group answering questions about one of four industries: insurance, automotive, consumer electronics or retail.

According to survey results, 46 percent of respondents answering insurance questions stated they were willing to share their health data with their insurer; however, only 21 percent were willing to share information from their social media profiles (see Figure 1). Yet data like the latter is necessary for timely personalization of products and services – for example, in response to customer life events.

What can insurers do to convince customers to share? Our research points to three important dimensions of data sharing: the trust customers have in their insurance providers; the benefits customers perceive from sharing their data; and the costs for customers in terms of time, effort, privacy and other criteria.

Figure 1

Customers are less than willing to share data with their insurers



Source: 2017 IBM Institute for Business Value Data Sharing Survey.

Trust is key

Insurance is a product based on trust. When customers buy a traditional insurance coverage policy, they buy a promise, a promise that when the negative event they insured against happens, their provider will replace the loss. When there is a trust or expectation gap – when in the moment of truth, the provider delivers less than the customer desired or expected – satisfaction and trust erode.

We have researched the impact of trust on a variety of insurance industry outcomes in the past ten years. Starting in 2008 with the "Trust, transparency and technology" report, we revealed that trust in the industry overall was low, with less than half of consumers surveyed indicating they trusted the industry.[4] Unfortunately, this has not changed over the past decade. Indeed, our 2017 Data Sharing Survey shows that customers even have limited trust in their own insurer: Only 56 percent state that they trust their provider.

The survey data shows that trust tends to correlate with customer loyalty across industries. More important in the context of our current discussion, increased customer trust will likely also translate into customers being more willing to share more data with their insurers, as shown in Figure 2.

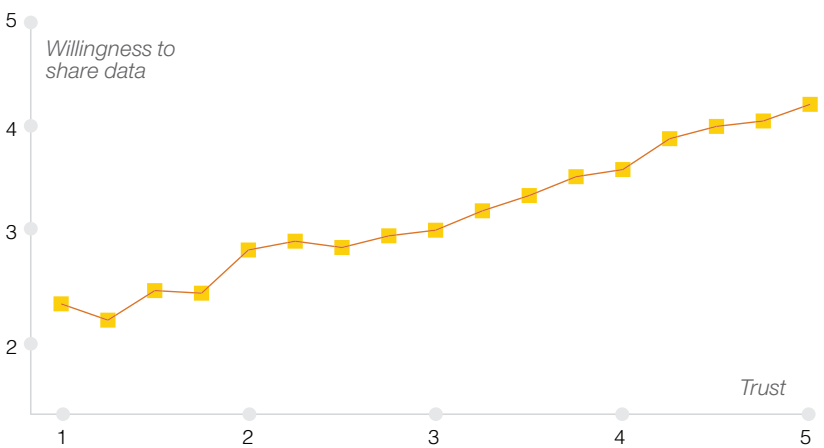
What can insurers do to increase trust? A 2015 IBV study identified emotional customer engagement as a necessary first step to increase customer retention.[5] Our current study data shows this is also true of trust and willingness to share data. Respondents scoring high on a satisfaction-related emotional index, which includes variables such as personal attention, perceived expertise, claims responsiveness and personal relationship, also scored higher on trust and willingness to share data. While the causality from satisfaction to trust is hard to prove, steps to improve the individual measures are relatively simple for insurers to implement (improving systems and processes that touch on customer-facing issues to increase speed and reliability, for example).

One of the keys to raising satisfaction, and thus trust and loyalty, is personalization.[6] Insurers traditionally use their intermediaries to achieve this, and in many cases, this will still work. But as more and more customers expect omni-channel experiences from their insurance providers, personalization cannot stop with the personal contact of an intermediary or call-center agent; any and all interaction points need to present a similar degree of personalization. But as long as willingness to share data remains low, insurers have to start with the data they have.

In the 2008 study mentioned earlier, we recommended insurers improve transparency to help close the trust gap.[7] Today, this recommendation still resonates. In the context of data sharing, this means customers need to create and publicize a customer data policy that specifies how and when gathered data will be used and how customers will benefit.

Figure 2

Increasing consumer trust will help insurers net more data they can use



Source: 2017 IBM Institute for Business Value Data Sharing Survey.

Recommendations to increase trust

- Improve *personalization* of customer interaction across all touchpoints
- Increase *satisfaction* by accelerating processes and improving employee skills
- Raise *transparency* on data sharing with a publicized customer data policy

Customers need value

Another recurring theme in our insurance studies over the past decade is customer value, not in the traditional meaning of customer equity, but rather in the value that the insurer delivers to its customers. In a previous study, we showed that providing customer value through the ability to know current needs and anticipate future needs generates loyalty and regains customer trust.[8]

When customers consider sharing data with their providers, customer value is also one of the main considerations, and the higher the perceived benefits of sharing, the higher the willingness to share. For example, 47 percent of insurance respondents expect personalized services tailored to their specific activity context. Activity context can be general life events, such as marriage or childbirth, or more specific events, such as a vacation or an accident. In addition, 37 percent expect higher quality interactions with fewer errors if sharing data.

Potential benefits for customers who share data are numerous, giving insurers (and their clients) a wide range of options:

Financial. Within traditional insurance, or coverage products, the financial benefit can be in the form of lower premiums or higher payouts. The most common example of the former is in usage-based offerings such as pay as you drive or pay how you drive. While the concept is that drivers pay premiums based on their actual driving risks – meaning that high-risk drivers would pay more than in "normal" contracts – in practice, the incentive for customers to switch to usage-based coverage is lower premiums, either because they actually drive less, they drive in safer areas or they are – or believe themselves to be – better than average drivers.

The financial motivation for sharing data (beyond usage-based products) is currently not very strong – only 28 percent of insurance respondents believe they have access to savings and discounts through data sharing, and even less – 20 percent – see a monetary compensation.

Convenience and better service. Knowledge about a customer's past actions and behaviors allows a provider to offer future services that are better aligned with that customer's wants and needs. As an example, consider online retailers, such as Amazon, that recommend products based on past purchases or browsing history. Indeed, 43 percent of our retail respondents indicated that sharing data with retailers helps them more quickly find the right products or services. In contrast, only 33 percent of respondents felt that way about sharing information with insurers. Providers could certainly offer features such as this, but would need access to a wider range of data about customer activity.

Security. The right product or service for a customer might not be traditional insurance coverage but rather mitigation or prevention services. While many insurers make their brand about safety or the helping hand, their products still revolve around unpleasant incidents such as accidents, death or illness. Turning this around to prevent these incidents – at the price of sharing data that can help with this prevention – could not only open new markets, but also go a long way toward changing the image of the insurance industry.

Third-party care. Worry about elderly relatives or dependents is a strong motivator for allowing insurers to collect data. Thirty-eight percent of insurance respondents would be willing to share data of their family or relatives if it served their best interests, with only 22 percent disagreeing. Smart home concepts that have access to health data could be useful in elderly care environments, either in an individual's home or managed care facility.

Recommendations to improve customer value

- Take *customer needs* seriously – value is not in money only
- Consider *risk mitigation or prevention* services to raise insurer image and open new markets
- Recognize that *third-party care* can be another benefit beyond classical insurance

With developing technologies such as cognitive computing and the proliferation of smart connected devices, the potential benefits of sharing data with and through these devices become almost endless. In a recent IBV study, "Insurance 2025," we portray a few of these scenarios, from smart kitchens that order autonomously and cook via household robot, to a gamified household where real energy savings are incentivized in levels and achievements.[9]

Realizing most of the described benefits, however, requires connected technology, which we discuss in the next section.

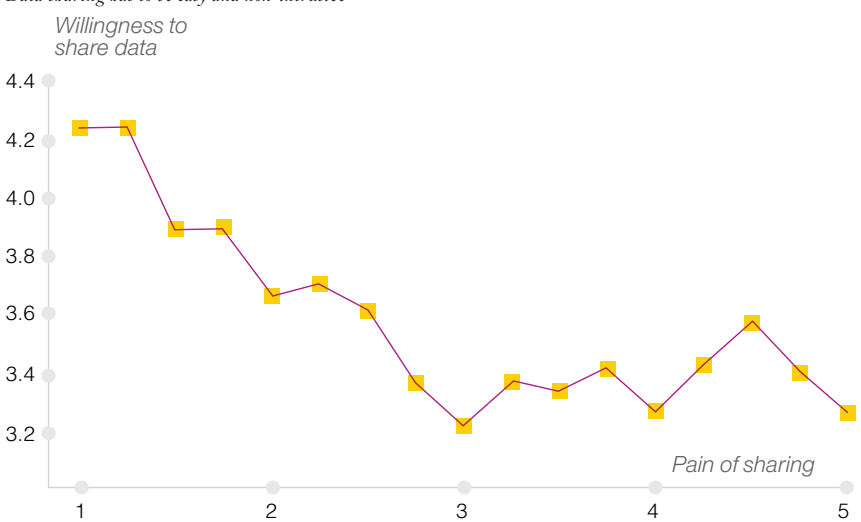
Less pain, more gain

As social animals, humans generally love to communicate and share information with others. But for sharing, as for most things in life, they can tabulate a kind of mental "balance sheet" – comparing the benefits and the costs and then deciding whether to share their information.

As with benefits, costs come in a variety of flavors, such as emotional costs, time spent, physical effort, loss of privacy or loss of control. The underlying tendency is clear from our data: If customers feel that sharing data is a bother, they are less likely to do it (see Figure 3).

Figure 3

Data sharing has to be easy and non-intrusive



Source: 2017 IBM Institute for Business Value Data Sharing Survey.

Data collection – and with it the hassle of providing data – comes mainly in two parts of the insurance value chain: in underwriting (when the customer is trying to get a policy) and in service when the customer is either making a change or a claim. In both areas, technology can greatly reduce the pain of sharing.

"Applying for insurance" – the hassle is already implicit in the term used to describe the process of signing the contract with the insurer. Depending on the line of business, in the case of most insurers, prospects need to fill out a series of lengthy forms, often still on paper, stating the exact insured objects, prior conditions and other circumstances. The reasoning behind this is that the process provides details necessary to allow insurers to calculate risk and thus premiums more accurately, and it serves as one protection against fraud. The down side is that it also contributes to the bad reputation of the industry: Customer errors in the application form often lead to denied claims, even without the intention of fraud.

Customers would love to get rid of the hassle of application. And in some cases, insurers are already following suit. In the Netherlands, for example, health insurance is mandatory, but individuals still need to buy through a system of private insurance companies.[10] To compensate, signing up for basic health insurance is very simple; customers just need to provide basic information, including date of birth, gender, name and contact data, and proof of residency and identification.[11]

In property and casualty lines, other insurers have also adopted customer-friendly application approaches with low data-input requirements. These insurers, such as Netherlands-based Interpolis, tend to have a high-trust business model, which is based on the principle that the customer is to be trusted ex ante (sometimes with hidden fraud checks in the background in case of a claim).[12]

Interconnected technology, such as smart devices in the IoT, can take this a step further. In the simplest usage-based models for auto insurance, customers only need to sign up and download a telematics app onto their smartphones. As long as this app is turned on when a customer is on the road, the insurer knows where, when and how the customer is driving and can calculate risk and premiums accordingly – and in real time. If the coverage does not include theft of the vehicle or own damages, even vehicle make and model are irrelevant information, as the risk depends entirely on the measurable driving behavior of the customer.

Going a step further, telematics technology can also alleviate data input in claims situations. Sensors in the phone (in the case of an app) or car can detect crash situations, know the current location and speed, and use this data to infer external information such as weather and traffic conditions. As more cars include telematics technology, cars and thus their insurers can be connected, completely eliminating the need for customer intervention in case of an incident. For this all to happen, of course, customers must be willing to allow their cars to share the data.

Recommendations to reduce cost of sharing

- Take advantage of *interconnected technologies* such as the IoT
- Use tools and devices with *added benefits*, such as fitness trackers
- Proactively and transparently implement best-in-class *data protection regulation*

Other costs of data sharing include perceived loss of privacy and control. Both are emotional factors; however, they play an important role in establishing trust and should not be discounted. When people feel in control of the data they want or need to share, they are almost three times more willing to do so: Of those respondents who felt they had control over their data, 65 percent were willing to share, compared to only 11 percent who felt they had little or no control. We find similar results when asking about information ownership (customers are much less willing to share when they feel they give up ownership of their data) and various privacy concerns.

Since these concerns are ultimately trust issues, the recommendation for insurers remains the same: Be transparent about what and why data is collected, and give customers as much control over their data as possible. In the European Union, regulation will force increased transparency when the General Data Protection Regulation (GDPR) is enforced in May 2018.[13]

The goal of the GDPR is to increase data privacy and control for EU citizens. For example, for customer consent to data collection, "companies will no longer be able to use long illegible terms and conditions full of legalese.... Consent must be…provided in an intelligible and easily accessible form, using clear and plain language. It must be as easy to withdraw consent as it is to give it."[14]

The GDPR also includes strict new rules for any company that collects or processes personal data. Companies that breach the regulation could be fined up to 4 percent of their global annual revenue.[15] Other regulations, such as the U.S. Health Insurance Portability and Accountability Act (HIPAA), partially protect consumers in single lines of business or only protect certain data.[16] For insurers, any of these regulations might be worth emulating in a customer data policy.

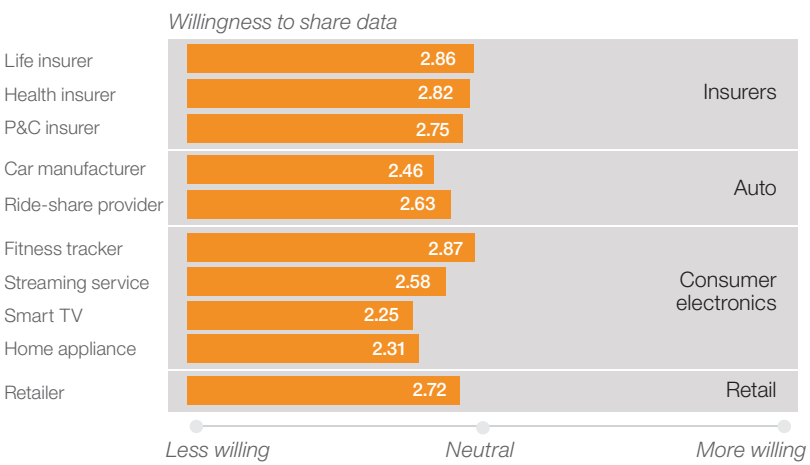
A way forward

To be successful in the digital economy, insurers need to be on par with providers from other industries, offering customers individualized products and services that are available 24/7. Overall, insurers are optimistic about the opportunity. According to a 2016 IBV survey, 68 percent of insurance executives stated they believe the acceptance of data and information sharing will increase over the next ten years. For insurers that are outperforming their peers on growth and efficiency, the percentage goes up to 90.[17]

Until then, companies still have progress to make. Respondents from our recent survey indicated a disinclination to share information beyond the contractually necessary, such as name, age and contact information. On the positive side, insurers are slightly better positioned compared to other industries (see Figure 4).

Figure 4

To gain access to enough customer data, insurers should consider partnering



Source: 2017 IBM Institute for Business Value Data Sharing Survey.

Still, no industry is particularly strong on its own. This points to an opportunity for insurers to join other “data collectors” in partnerships to expand their ecosystems. Indeed, 67 percent of outperforming insurers surveyed in 2016 plan to partner extensively outside the insurance industry over the next ten years.[18] Such partnerships can allow insurers access to data without actually collecting or owning it themselves. Of course, customers still need to consent to their data being shared with the insurers as a third party, leading back to the issues of trust, benefit and cost.

Another underlying issue relates to data security. Based on our analysis, security concerns did not strongly influence respondents’ willingness to share data; however, a major data breach could well change both public perception and regulatory pressure. Insurance executives are well aware of this issue: Sixty-two percent surveyed in 2016 expect the severity of cyberrisk incidents to increase to some degree, and 27 percent expect it to significantly increase.[19] According to another recent IBV report, executives in charge of security across industries see three gaps regarding cybersecurity: the intelligence gap in threat research, the speed gap in response time, and the accuracy gap (with too many false positive alerts).[20]

To stay ahead of data security, insurers need to make it part of their overall security framework, including people, data, applications and infrastructure. Again, advanced technology can assist. Cognitive security solutions, for example, can analyze security trends and compile available security knowledge. These solutions, combined with other data security technologies, techniques and processes, can help effectively address the gaps identified above.[21]

In the digital age, data is the essential resource for insurers to successfully serve the changing needs of their customers. We believe – together with a strong majority of outperforming insurers – that data can indeed be gold.[22] On the other hand, if insurers cannot convince their customers to share more, by increasing trust, providing and demonstrating benefits of sharing, and mitigating costs of sharing, the resource could become the industry’s kryptonite.

Is data your gold or kryptonite?

- How are you engaging with customers directly, beyond agents and brokers?
- Which new offerings beyond traditional insurance coverage are you considering?
- What tactics are you using to foster customer trust and what new methods could further deepen trust? What benefits do customers get from sharing data? How does your organization benefit? How do you make sure both sides see data sharing as a win-win situation?
- What technologies are you using to lower the hassle of information sharing?

Study approach and methodology

In cooperation with the Institute for Insurance Economics St. Gallen, Switzerland, the IBM Institute for Business Value surveyed 15,838 consumers in 24 countries globally in June and July 2017. Participants were asked a series of questions around their willingness to share data with providers or organizations in one of four industries: insurance, automotive, consumer electronics or retail. They were also asked about the factors that might influence their willingness to share data. Of the 15,838 respondents, 4,867 answered questions about the insurance industry, 4,853 about automotive, 3,695 about consumer electronics and 2,423 about retail.

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