Swiss Re Institute

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To BE or not to BE

The ethical application of behavioural economics in insurance

Executive summary

The application of behavioural economics (BE) in insurance is expanding and gaining traction. As part of our in-house research, we have found that more than 52 organisations in the insurance industry globally have today already implemented BE practices in some of their processes, and that number is growing. Some firms have gone as far as hiring their own experts. BE studies how people truly behave, with the insights used to design products and services that go with the grain of human nature. Its implementation in insurance thus affects the behaviour of many policyholders and insurance professionals.

As application of BE in insurance becomes increasingly more commonplace, regulations on fair applications of BE are also rapidly taking shape. This paper provides an overview of the latest developments in the regulatory environment. Though the field is fast evolving, not all insurers are applying BE as effectively and fairly as they could. For example, we assessed a sample of UK life insurers and found that in 40% of cases, the average required reading age for their products' specifications is a university-level education. Ensuring clarity of their disclosures is just one way in which insurers can treat their customers fairly.

We believe the time is ripe to share some best practices on how to apply BE in the insurance sector to achieve greater fairness, which in turn will help to build more trust in the industry. Good ethics is good business. Several studies indicate the existence of a so-called "ethics premium", whereby ethical business practice has created economic value. Along similar lines, a research exercise we have conducted with a representative sample of insurance customers in Australia shows that informing the messages used in an online journey to purchase insurance with behavioural science can improve both customer outcomes and profitability. We share further findings from this and cases studies of ethical implementations of BE in the insurance industry in the third chapter of this paper.

Our wish with this report is to inspire more industry professionals to ethically use BE to inform the design of insurance offerings, using some of the tools and tips we provide. Throughout the paper, we highlight 10 takeaways across associated themes, including:

- **A BE ethics checklist is a good way to ensure ethics principles translate into actions:** we provide three criteria to develop an effective checklist, and share some publicly available examples of best-practice checklists, including the one in use at Swiss Re.
- **Test, test, test:** it is key that insurers evaluate any touchpoint they have with their customers. Increasingly, digital technologies are providing new and cost-efficient ways to not only test whether these communications increase click rates and conversions, but also if they improve customer outcomes.
- **Tapping into the expertise from academia and signing up to voluntary quality standards can be very helpful:** we encourage insurers and other stakeholders to engage in dialogue and exchange. We ourselves benefitted hugely on the topic of ethics from our partnership with Behavioural Economics in Action at Rotman (BEAR), at the University of Toronto. Swiss Re has also recently joined the Global Association of Applied Behavioural Scientists, and we organise and participate in seminars and other exchange forums on the topic of BE.

Figure 1
How to apply BE ethically in insurance

Introduction

The rise of behavioural economics

Behavioural economics (BE) is the academic study of economic decision-making to understand how and why people make certain choices, beyond the axioms of rationality imposed by traditional economics. In their seminal work *Nudge: Improving Decisions About Health, Wealth and Happiness*, Richard Thaler and Cass Sunstein make a distinction between two kinds of entities.[1] "Econs" are forward looking, can absorb and act on large amounts of information, are not dazzled by large choice, have infinite amounts of patience and are unemotional. "Humans" on the other hand, are impulsive, myopic, cognitively constrained, emotional and – often – averse to dealing with too much information.

Choice architecture

The design of different ways in which choices can be presented to consumers, and the impact of that presentation on consumer decision-making.

Choice architecture and nudging

BE considers the "Humans" angle, in particular how psychology impacts people's decision-making processes. It shows how choices are context dependent, with supposedly irrelevant factors that we should not expect to affect decision-making actually doing so. These factors might include how choices and information are presented, the presence of others in the environment, or even the time of day or day of the week when choices are made. Knowing that context affects choice, design and presentation of information can be positioned to steer people towards certain choices. This approach is known as choice architecture: it can be used to nudge people in a certain direction without the need for stronger measures like mandates, bans or significant economic incentives.

Nudge

Any aspect of the choice architecture that alters people's behaviour in a predictable way without forbidding any options or significantly changing their economic incentives.

Today many companies have teams dedicated to the applied behavioural sciences, and some governments have created units focused on bringing BE into public policy. In the insurance sector, as part of our research we have encountered 52 organisations that have invested in BE applications, with the discipline having been deployed in each stage of the insurance value chain. For example in sales, policyholder communications can be rephrased to increase clarity and take-up rates. We found that in underwriting, BE has been used to increase honesty on self-reported data, which in turn has led to improved pricing and reduced claims disputes. In claims, BE has been used to increase accuracy and speed of processes, such as pay-outs to policyholders and return to work, and has also been used to combat fraud. In client retention, it has targeted customer loyalty by ensuring the right/client relevant product was sold in the first place.

Regulatory landscape

Sludge and dark patterns

Processes and communications designed to be beneficial to the organisation at the expense of the consumer.

Given the rise in the popularity of applied behavioural economics, it is important to consider the ethics of choice architecture and specifically, instances when interventions designed to influence the decision-making process are harmful to the consumer. Just as people can be nudged into making good choices, so too they can be led to making bad decisions, by so-called sludge and dark patterns. These are processes and communications that present choices in such a way that promote the interests of a service provider at the expense of the consumer.

[1] R. Thaler, C. Sunstein, *Nudge: Improving Decisions About Health, Wealth and Happiness*, Penguin, 2009.

Regulators have become more sensitive to such practices in recent years. For example, in 2013 the UK's Financial Conduct Authority (FCA) set out a framework looking at how behavioural biases affect decision-making around the purchase of financial products.[2] More recently, it has published further insights into sludge and dark patterns.[3] In November 2020, the European Commission announced plans to tackle dark patterns as part of its New Consumer Agenda.[4] Specifically, the Commission said it would prioritise tackling online commercial practices that disregard consumers' rights to make an informed choice, abuse their behavioural biases or distort their decision-making processes. And in March this year, the US state of California, in an update to state privacy laws, banned the use of dark patterns altogether.[5] The legislation includes an attempt to make a legal definition of sludge stating that: "The business's process for submitting a request to opt-out cannot require more steps than the business's process for a consumer to opt-in to the sale of personal information after having previously opted out".

These are the first attempts to regulate the BE landscape and many more will likely follow. Swiss Re is keen to play a proactive role in future debate and to contribute to regulatory discussions such as, for example, in the context of the European Insurance and Occupational Pension Authority's (EIOPA) advice to the European Commission on the topic of disclosures.

The business case for ethical BE

Anchoring effect

A process whereby people are overly influenced by specific information given before making a decision.

Profits and ethics are often perceived to be negatively correlated. Nudges that encourage people to sign up for a membership combined with sludge that prevent those same clients from cancelling subscriptions can generate profits in the short term. Avoiding these interventions is ethically correct, but can it also be financially beneficial? According to Ethisphere, a global leader in defining and advancing the standards of ethical business practices, there is such a thing as an ethics premium. For instance, it finds that the most ethical public companies have outperformed their peers in terms of the said premium by more than 7 percentage points over the past five years.[6] These conclusions are supported by Dectech, a BE consultancy, which calculates that an ethics premium could be worth as much as £82 billion "in value" a year to UK companies.[7]

A recent study by analysts at Harvard Business School found compelling evidence to suggest that customers respond positively to greater transparency.[8] In the study, Commonwealth Bank of Australia increased transparency in marketing its credit card products. Its website not only highlighted the pros of each product, but also its downsides. Despite fears that this ethical approach might hamper new customer acquisition, the bank found it was rewarded with greater customer retention and loyalty.

In other industries, such as retail consumer goods, trends towards ethical practices are also evolving. An example is Apple, which now gives customers more control over their data by changing the default to opt-in data sharing, rather than opt-out, and adding the Screen Time function to limit usage of the device. The move appears designed to strengthen the trust between consumer and manufacturer, and could lead to reputational gains. In the insurance market, brand and reputation are also key to retaining long-term customers. Additionally, having a strong reputation will attract employees who share the same values, creating a virtuous cycle.

[2] *Applying Behavioural Economics at the Financial Conduct Authority*, FCA, April 2013.
[3] See, for example, *Relending by high-cost lenders*, FCA, 6 August 2020.
[4] See *New Consumer Agenda*, European Commission.
[5] A. Akhtar, "California is banning companies from using "dark patterns", a sneaky website design that makes things like cancelling a subscription frustratingly difficult", *INSIDER*, 16 March 2021,
[6] See "World's most ethical companies: beyond value recognition", *ethisphere.com*
[7] *Green New Deals: Can ethical products bear fruit for brands and consumers alike*" Dectec, 2020.
[8] T. McIlroy, "Why Banks Should Explain the Fine Print on Credit Cards", *AFR*, 19 August, 2019.


Good ethics is
good business.

By aligning the interests of companies with their customers, ethical BE supports a sustainable and profitable business model, but ultimately, being ethical is just that: ethical. It is the right thing to do. As professor Andrew Stark puts it: "business is not just a profession. It is also a system in which everyone must live".[9]

The status quo: what is the insurance industry doing?

To analyse how ethical insurers are in application of BE practices, we performed a "sludge audit" on five UK life insurers. Our goal was to gauge the extent to which the industry as a whole is adopting ethically sound BE principles. Our findings reveal that certain measures have high variance in terms of application across the market: product specifications have different readability levels, customer journeys are sometimes very quick and sometimes less so, and insurers show different levels of adoption of behavioural levers such as the anchoring effect (a process whereby people's decisions are influenced by specific information provided). The sample we reviewed performed similarly across other measures, including the terms of cancellations that were constant (this was mostly due to existing regulations). The details of this analysis are provided in the next chapter.

A recipe for action

Given this lack of conformity and the likelihood of greater regulatory scrutiny, Swiss Re is seeking to bring together relevant professionals and academics to set an agenda for future discussion. Last June, we organised an event with the University of Toronto-based research centre Behavioural Economics in Action at Rotman (BEAR) and participants in the insurance industry to highlight ethical issues facing insurers as they adopt BE principles in their business models.[10] As a result of that initiative, we publish this paper with co-authors from BEAR, incorporating also input from Affective Advisory, AIA Australia (AAIA), Allianz, Insurance Australia Group (IAG), Dectech, ReAssure and Swiss Re's own iptiQ division to provide further insights into the ethical hurdles facing the sector.

It is important to remember that insurers have been practising BE for less than 10 years and that each company is at a different stage in the implementation process. Some are just setting up a first project around tentative BE principles, others boast a fully-fledged division. This paper is for all insurance BE professionals. We provide a menu of advice options as a guide for the purpose of ethical implementation of BE. The industry is still learning: we hope our insights will help guide stakeholders across the sector into using BE in an informed and ethical way.

[9] A. Stark, "What's the Matter with Business Ethics?", *Harvard Business Review*, May-June 1993.
[10] *Ethical behavioural science: what can insurers learn from snow shovel sellers?,* Swiss Re, 13 July 2021.

Lessons from academia

The theory

This and the subsequent chapter of this paper state 10 takeaways from our personal experience and collaboration with academics and BE professionals. Academics have long debated the ethics and rules surrounding nudges. In the applied behavioural sciences, there are three levels at which ethics should be discussed:

- **Ethics codes.** The written expression of an organisation's social norms and values in the form of codes of conduct. These provide guidance as to whether a particular course of action should be taken.
- **Outcomes** of a behavioural intervention, and whether the intervention promotes consumer welfare.
- **Activities** and specific ways in which behavioural science is deployed, such as the ethical conduct of experimentation.

Ethics codes
A written expression of a company's ethical norms and values.

Ethics codes
Codes of conduct in business deal with problems such as whether a certain advertising campaign or selling technique is considered ethical. Most insurers will have established codes and we argue these should be extended to cover BE practices. Our partners at BEAR are working on a systematic review of ethics codes on four main attributes:

- **Type of code** (recommendations, scorecard, checklist, rule-based)
- **Motivation of ethical principles** (does the code specify outcomes and goals connected to the values? does the code address the risks if an action is ignored?)
- **Ethical themes** (honesty, responsibility, fairness, respect, transparency, and citizenship)
- **Implementation and communication** (examples/guidance for decision-making, periodic review of code, and coordination with other guidance tools).

  Building on an ethics code is the BE ethics checklist. This is a list of things to be done and points to be considered before proceeding with a BE project. A checklist ensures that all ethical considerations are covered before practicing BE and it accounts for the limits of human behaviour, such as lack of knowledge, forgetting, or willingly ignoring an ethical point. BEAR has identified three components for an effective ethics checklist:

  – concrete and visible actions that are as judgment-independent as possible;
  – situation specific guidelines; and
  – neutral oversight.

Examples of excellent BE ethics checklists include the *FORGOOD framework*, and *BVA Nudge Unit's Five-item list*.

Implicitly, these codes of conduct compare a world with and without a particular technique. BE, however, has a different problem: with choice architecture, it is nearly impossible to create a choice without a context. In building his argument in defence of nudges, Sunstein cites a tale from novelist David Foster Wallace: "There are these two young fish swimming along and they happen to meet an older fish swimming the other way, who nods at them and says "Morning, boys. How's the water?" And the two young fish swim on for a bit, and then eventually one of them looks over at the other and goes "What the hell is water?"[11]

[11] R. Thaler, C. Sunstein, op. cit.

Choice architecture is the equivalent of water. There is always going to be an order in which choices are presented and there is always going to be a default option. This is conceptually and philosophically important. Unlike discussion of the ethics of other persuasion tactics (eg, advertising in general or incentivising physicians with gifts and vacations) in which we can imagine a counterfactual world without these tactics, discussion on the ethics of choice architecture is different because there can exist no world without any choice architecture.

For example, as soon as a company enters the insurance business, it will inevitably implement some form of choice architecture. For instance, the insurer will set prices for policies, and it will phrase the descriptions of the policies. But how can it set out to implement a choice architecture and nudges that help its consumers, as well as complement and enhance any regulatory requirement such as the *Product Intervention and Product Governance Sourcebook (PROD)* in the UK?

Takeaway 1

There are three components for an effective BE ethics checklist: (1) concrete and visible actions that are as judgment-independent as possible; (2) situation specific guidelines; (3) neutral oversight.

Outcomes

A recent paper by BEAR provides a useful organising framework to consider the benefits and harm arising from behavioural interventions. It analyses behavioural interventions on two dimensions: first, the outcomes, or how much they help the consumer; and second, whether the outcomes facilitate or impede decision-making. While intuitively it is easier to understand that insurers should try and make things as easy as possible for their customers (as in area 1 in Figure 2), sometimes impeding decision-making can also be useful (area 3). For example, a cooling-off period can help a consumer avoid making emotional and impulsive decisions that may later be a source of regret (eg, cancellation notices, mandatory in the UK). Inversely, facilitating or impeding decision making can be unethical, if done to lure people into buying policies that are not relevant to them or they do not need (areas 2, 4).

Figure 2
The BEAR Nudge and Sludge Framework

	Facilitate Decision Making	**Impede decision-making**
Helps consumers	Nudge: making things easy for end users 1	Decision points or cooling-off periods that prompt vigilance and thoughtfulness 3
Harms consumers	Nudge-for bad or dark patterns: making it easy to choose welfare-reducing options (subscription traps, default add-on purchases) 2	Sludge: making it difficult to cancel subscriptions, to return products, to change privacy settings, etc. 4

Source: BEAR

Takeaway 2

Simple processes and clear communications are key in insurance. However, sometimes slowing down customers' decision-making can also be valuable (eg, cooling-off periods that give customers time to test the insurance they bought).

Libertarian paternalism

The idea that it is possible and desirable to both affect behaviour while maintaining freedom of choice.

Another concept addressing the morality of nudging is **libertarian paternalism.** Coined in 2003 by Thaler and Sunstein, it argues that it is possible and desirable to both influence behaviour and maintain freedom of choice.[12] These influences should be chosen with the unambiguous goal of improving the welfare of persons affected by them.

Think of the "Save More Tomorrow" programme in the US, which nudges people to commit in advance to allocating a portion of their future salary increases toward retirement savings.[13] The intervention consists of three central components: people freely decide for themselves if they want to join the programme, deciding now to save for the future and avoiding present bias. Second, planned increases in savings rates are linked to future pay raises. This minimises the influence of loss aversion, since take-home pay never decreases. Third, employees remain in the programme unless they opt out, taking advantage of inertia. Overall, people maintain freedom of choice, no options are taken away from them, and the benefits of saving more are shared by virtually anyone. The programme was so successful that in 2006 it was turned into law as part of the Pension Protection Act.

Activities

Ethics ought to be discussed also around the activities an organisation conducts to evaluate the effectiveness of interventions. For example, does the organisation conduct experiments? Are those experiments overseen by appropriate ethics boards? Do certain people get disadvantaged by those experiments?

It is standard for academic research involving humans or animals to be subject to the oversight of an ethics committee. The *Ethics Checklist from Behavioural Scientist* provides guidance on how organisations can best conduct programme evaluations effectively. Swiss Re's Behavioural Research Unit recently became a certified member of the Global Association of Applied Behavioural Scientists (GAABS), an organisation aimed at maintaining the highest standards of technical skills, knowledge, ethical conduct and practice. Joining such a body means respecting a minimum code of conduct and facilitates open and honest debate on ethics, learning and teaching with players in the behavioural science field.

Furthermore, in early 2020 Swiss Re partnered with BEAR, with the goal of having the centre's researchers provide professional and unbiased input on how to further improve our ethical practices. Figure 3 presents the results of this collaboration. We are also happy to share our complete ethics checklist with anyone who wants to reach out.

[12] R. Thaler and C. Sunstei, "Libertarian Paternalism", *American Economic Review*, vol 9, no.2, 2003.
[13] R. Thaler and S. Benartzi, "Save More Tomorrow™: Using Behavioural Economics to Increase Employee Saving", *Journal of Political Economy*, vol 112, 2004.

Figure 3
Swiss Re's Behavioural Research Ethical Guidelines

Behavioural research ethical guidelines

The practice of behavioural economics allows us to gain an understanding of the ways in which consumers might be biased when making decisions within a particular context and how they might be influenced by irrelevant factors. Behavioural science shows us that there is no "neutral" way to frame choices and as such, if we do not take a test-and-learn approach, we may be unknowingly exposing consumers to adverse biases. Financial regulators encourage the use of BE as an ethical way of making information clear and understandable to consumers, and to facilitate choices. We align with the financial regulators' position on BE and have aligned our ethical standards with those of others in the BE space. These show below in "Standard on the use of BE recommendations". In addition, when setting up a new trial, we complete the ethics checklist below to ensure we are mindful of ethical considerations.

Standard on use of behavioural economics recommendations

Key principle

We seek to treat customers fairly at all points in the consumer lifecycle. Our strategy, culture and behaviours put customers at the heart of everything we do.

We will ensure that our recommendations are targeted at influencing behaviour in a way that is likely to be in the best interests of the reasonable average consumer in the targeted group, in line with the customer strategy of our client/partner. We will also consider vulnerable groups, such as those with health impairments (mental or physical), with low capabilities (financial or literacy), or in a vulnerable situation.

There are some trials we will refuse to run for ethical considerations, specifically, we will not push people towards one very prominent option or mislead a consumer.

Responding to customer learnings

We will demonstrate that any learnings from the behavioural trials (whether demonstrating improved customer outcomes or not) are fed back to management, and appropriate action taken. For example, this could mean rolling out the new, improved customer communication, or withdrawing/halting a detrimental customer approach.

Caveat

Swiss Re's Behavioural Research Unit makes recommendations we believe are likely to be in the best interests of the consumer, based on the information provided to us by our clients/partner. However, the recommendations should be reviewed and assessed by the client's/partner's own legal/regulatory/technical/compliance teams).

Ethics checklist

- ✓ Is the desired behaviour change in the best interest of the consumer?
- ✓ Are you considering vulnerable consumers? (health impairment, low capabilities, or unstable situation)
- ✓ Does this trial maintain all choice options for the consumer?
- ✓ Is this trial (the information and/or messaging) clear, fair and not misleading?
- ✓ Are you using a data model to drive success of behavioural economics? Could there be negative legal and/or ethical considerations because of that?
- ✓ Are the interests, costs and benefits aligned between Swiss Re, the client, and the average consumer?
- ✓ Who is receiving the benefits of this trial? Who is paying the costs?
- ✓ Would you be able to support this trial externally if the results became publicly available?

It is possible and desirable to both influence behaviour and maintain freedom of choice.

These influences should be chosen with the unambiguous goal of improving the welfare of those persons affected by them.

Sludge audit

As with any good governance framework, we believe monitoring and oversight are key. We argue that insurers should assess their practices by auditing their internal processes for the presence of sludge and dark patterns, and ensure their ethical checklists are appropriate. There is value in carrying out a self-assessment and also working with an external/independent reviewer. An external audit has the benefit of making it easier to spot problems and overcome internal bias, while an internal audit can make it easier to implement the changes.

Takeaway 3

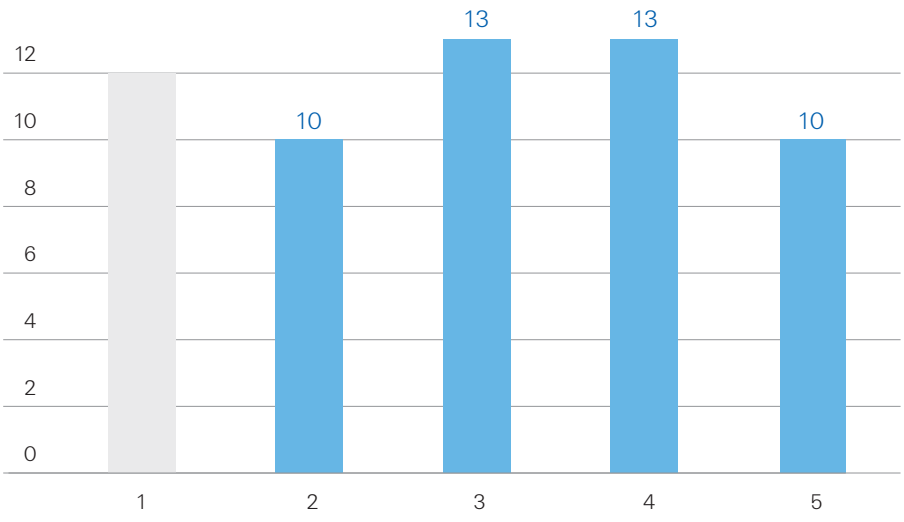
Insurers will gain from assessing their processes and communications for the presence of *sludge* and *dark patterns* (eg, are these benefitting the company at the expense of the consumer).

As an illustrative example, we provide insights from a small-scale sludge audit that we conducted in 2021. Based on publicly available material, we assessed five major insurers in the UK, focusing on their life insurance online customer journey. We looked at a set of criteria that would represent sludge or dark patterns. The main difficulty was to define the measurement criteria. For example, a long contract with complicated language might be the result of a company trying to persuade a consumer into sub-optimal decision-making, but it might also be necessary to comply with legislation set with good intention to fully inform and protect consumers. For this reason, our focus was not on identifying the optimal value for each measure, but rather to address variance in the industry. The mere existence of variance indicates opportunities for companies to change and improve.

Figure 4
The reading age (grade level) for policies of life insurance companies

Reading age
How old would someone need to be to understand the content.

Grade level scale (US)
1–5: elementary school
6–8: middle school
9–12: high school
13–16: university



Source: Swiss Re

The first measure we used to assess sludge is the reading age, represented by the minimum number of years of education needed for someone to understand the content of a policy booklet or any other print information. We assessed the life insurance policy booklets available on the companies' websites by running the text through a readability tool, which combines various readability indices and text statistics to generate an aggregate reading age score. The balance here is between having a policy booklet that is easy to understand, and one that gives complete and accurate information.

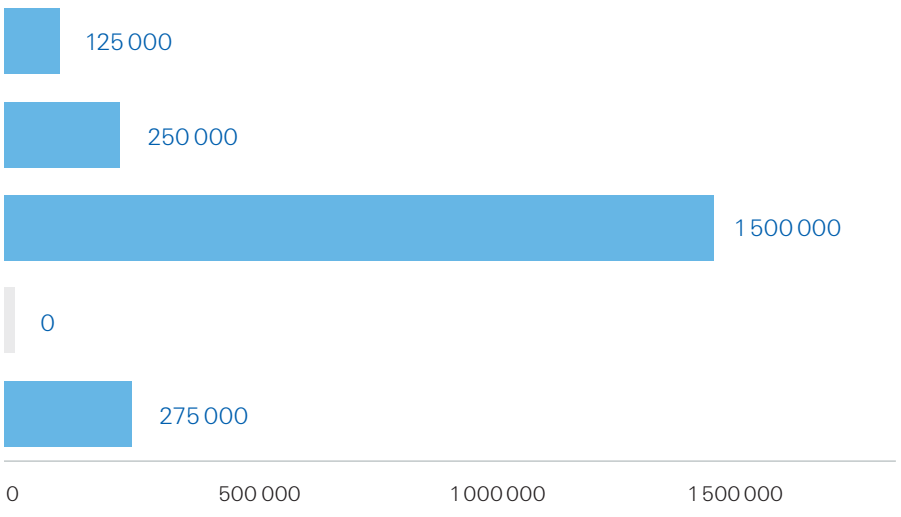
Research on health-related content shows that an optimal reading age for websites is 6th grade (the first year of middle school), for landing pages and 8th grade (the last year of middle school) for other pages.[14] Instead, in our sludge audit we find that two out of five policies require some university education to be fully understood, and all policies analysed could use more simple language, also to better meet the needs of vulnerable customers, as defined by the FCA.[15] For one company it was not possible to calculate the score since the copy function was disabled in the policy document.

Takeaway 4

Insurance communications tend to be too complicated, requiring up to some level of university education to be understood. It's important to simplify them as much as possible.

When signing up for a policy (online), customers are asked about the level of life cover desired. In our sludge audit exercise, we found that different insurers suggested different amounts. For example, one made no suggestion at all, which we indicate with the value 0 (see Figure 5). Another suggested the maximum amount of coverage available. This is linked to the anchoring effect: a process whereby people are influenced by specific information given before a judgment.[16] Using this mechanism is not negative per se. Insurers can use this mechanism to guide consumers towards getting a level of coverage that is appropriate for them. However, the high variance we found suggests this is not always the case.

Figure 5
Anchoring effect: the amount of cover suggested by the five insurers when customers sign up for life cover online

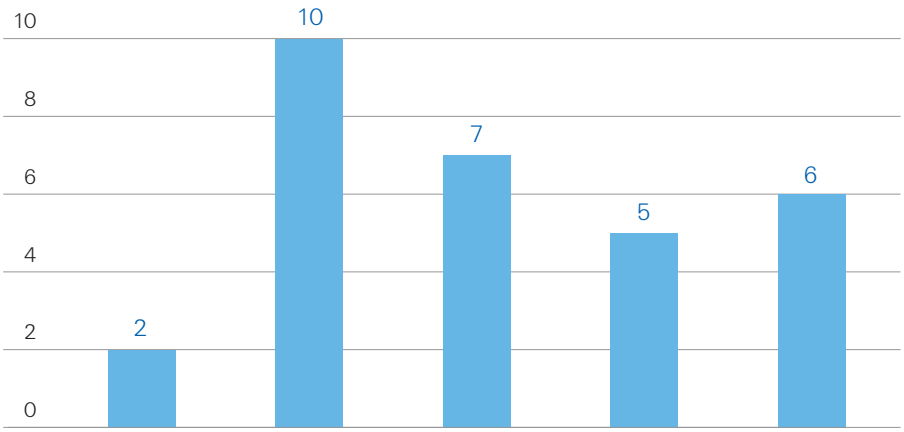


Source: Swiss Re

[14] *Lower-Literacy Users: Writing for a Broad Consumer Audience*, Nielson Norman Group, 13 March 2005.
[15] *Guidance For Firms on the Fair Treatment of Vulnerable Customers*, FCA, February 2021.
[16] A. Furnham et al "A literature review of the anchoring effect." *The Journal of Socio-economics*, vol. 40, 2011.

Finally, we looked at the number of steps required to sign up for insurance through the online application process on the companies websites (see Figure 6). For example, all insurers have a health and lifestyle underwriting questionnaire. However, they differ on the amount of information they ask for on other behaviours such as travelling and leisure activities, with branches of questions going as deep as asking the exact number of metres a person usually climbs to.

Figure 6
Number of steps required to sign up for life cover online at the five insurers



Source: Swiss Re

For this measure, the relationship between steps to sign up and sludge is not obvious. Rather, it is a conscious decision on how much information companies want to ask. For the insurer, knowing more about a consumer makes it easier to assess the risk and price the policy, but asking too much may result in customers not completing the form. For the consumer, it becomes a question of how much information they prefer to disclose in return for an appropriate policy.

Other criteria we looked at did not differ significantly between companies. The cancellation policies are all the same: there is a 30-day cancellation period after signing the contract; and cancellation can be done by phone or by writing a letter. The 30-day period is due to legislators writing rules that protect consumers and to put all insurers on an equal playing field. The method of cancellation, instead, is more likely a deliberate decision by companies to ensure the client cannot cancel the policy without talking to a trained employee. Other criteria to measure sludge is harder to access. For example, it would be interesting to assess a calling score based on waiting time, number of transfers, and how much pressure an agent puts on a customer wanting to cancel an insurance policy. To obtain a fair measure would require a statistically valid amount of calls at different times of the day. At this stage, we can only recommend companies to be aware of the sludge potential and internally review the available data or allow external auditors to access it.

Organisations can benefit from increased institutional trust by taking an empirical approach to measuring the ethics of their communications and processes.

Test, test, and test

We believe that BE professionals should approach the challenges and opportunities around ethics like any other topic: through an empirical approach. For example, Nobel prize winners Daniel Kahneman and Richard Thaler studied how vendors and consumers in several markets would perceive the ethics of price gauging (increasing prices due to a spike in demand). By surveying them via telephone, they revealed a moral discrepancy.[17]

Another popular framework is the trolley problem, a thought experiment in which a person is asked to imagine a runaway trolley on course to crash and kill a small number of people. The person has the opportunity to pull a lever and divert the trolley to collapse with only one person killed. While the story has existed for a long time, it was first formulated as a way to infer general principles in 1967 by philosopher Philippa Foot[18], and has since then been tweaked in many variants to study a wide range of behaviours surrounding morality and ethics.[19] Both examples are more than relevant today, with masks and hand sanitisers spiking in price during the pandemic, and self-driving cars having to make important decisions right before an accident is bound to happen.

Another example is given by Sunstein who conducted a number of surveys across five countries. These found that people generally approve of nudges and that this approval increases as institutional trust increases.[20] Organisations can benefit from increased institutional trust by taking an empirical approach to measuring the ethics of their interventions. To this end, the insurance industry could benefit from an ethics scorecard on how they apply the behavioural sciences.

At Swiss Re, we have conducted over 150 projects related to BE in partnership with primary insurers, in more than 30 countries. We recently introduced a mandatory step in our BE preparatory documents to make more explicit the evaluation of how a BE intervention impacts consumer outcomes. In specific cases, the outcome we work toward optimising is undoubtedly improving customer outcomes (eg, decreasing the waiting times for a pay-out on health insurance). In others, when this is not immediate, we now explicitly try and find a way to measure customer outcomes. A good example of this is provided below, as part of the research study we conducted with AIAA and Dectech as described in the next chapter.

[17] D. Kahneman, J. L. Knetsch and R. Thaler. "Fairness as a constraint on profit seeking: Entitlements in the market." *The American economic review*,1986.
[18] P. Foot, "The problem of abortion and the doctrine of the double effect." *Oxford Review*, vol 5, 1967.
[19] See, for example, J. J. Thomson, "Turning the trolley", *Philosophy & Public Affairs*, vol 36, 2008.
[20] C. Sunstein, L. A. Reisch, M. Kaiser, "Trusting Nudges? Lessons From an International Survey", *Journal of European Public Policy*, vol 26, no.10, 2019.

Industry applications

Case studies

We sought input on a voluntary basis from our partners and clients, and in this chapter provide the use cases they shared with us. The use cases are illustrative of the three levels of ethics: code, outcomes, activities.

AIA Australia, Dectech, and Swiss Re (ethics level: activities)
Swiss Re partnered with AAIA and Dectech to understand how to optimally design the online journey of some of AIAA's life and health insurance offerings. We posed the following questions: 1) How could we measure a customer's perception and understanding of a digital insurance customer journey? 2) Is there a trade-off between commercial outcomes and customer outcomes, or is there a customer journey that would optimise both? and 3) is it possible to get answers to the questions in a couple of weeks, and can solutions be rolled out in practice?

To answer the questions, we carried out an online behavioural simulation with a sample of 3509 respondents in Australia, representative of a target group for insurers. These are the key lessons we learned:

- All behaviourally informed tweaks improved perceived customer outcomes around: fairness, comprehension, relevance, and a few related metrics.
- We found a positive relationship between sales rates and comprehension of the products bought.

This is good news, as good ethics is good business! Specifically, describing what other customers tend to purchase (ie, communicating the social norm) and giving reassurance (ie, in the form of a free limited trial) would increase both customer outcomes and the intention to buy. In addition all of these results hold true for Australians with a health or financial vulnerability.

Takeaway 5
In one study, we found that feeling reassured about the insurance one has bought and knowing how many others have purchased it increases both one's intention to buy and perceived fairness of the purchasing process.

We learned that it is possible to measure perceived fairness through online behavioural simulations. A study like this would take three weeks to run: one to design and code, one to collect data, and one to analyse the results. It is then important to consider how to implement these findings and test the impact they have in the real customer journey. AIAA is already working toward this.

At the end of the study, all partners felt confident that is something worth doing before launching any new customer journey. Furthermore, this evidence gives the company positive material to present to regulators, namely that the buying process can work for consumers and not confuse or mislead them.

iptiQ (ethics level: activities)
Swiss Re's primary insurer iptiQ's in-house Behavioural Insights Group is often asked for customer insights when designing new products, customer journeys or even campaigns. Many of the questions are about customers' preferences, attitudes and expectations. For example: does it feel reasonable to be asked some health questions when buying life insurance? And does it feel fair that with these health questions, a small proportion of people will therefore not be eligible for the cover?

To help with this, and to build products and customer journeys in line with customers' expectations, iptiQ has partnered with third-party provider of a customer insight and feedback tool. With this online tool, it runs a survey every three days on consumers behaviours, providing useful insights into what customers perceive as fair and easy to comprehend.

For example, to make sure they are speaking the same language as their customers and avoiding any confusion, the iptiQ team presented survey respondents with a high-level description of certain insurance concepts and asked them what they would call this. When asked what they would call "the amount of money your loved ones would receive if you passed away", they discovered that the term "payout" was the go-to expression that customers use, rather than "cover amount" or "benefit amount", the terms that insurers typically use. Identifying this gap between the terms insurers use and what customers find more natural helps iptiQ design the customer experience to be as user-friendly as possible.

Takeaway 6
Regular feedback surveys facilitate improved understanding of what consumers perceive as fair and what language they find easy to comprehend.

Surveys can help when consumer insights are hard to monetise directly. For example, iptiQ was exploring whether to go ahead with an add-on service to include with their life insurance policies. However, the survey testing revealed there was not enough customer interest, and iptiQ decided not to proceed, saving significant costs. In most cases the surveys have a real, concrete impact. ipitQ's tracking of its survey outcomes show that in 10% of cases, the insights derived lead to an initiative being stopped altogether, in another 10% to the start of a project, and in 40% of cases the survey results shaped ongoing projects.

iptiQ recognises that the insights gained from these surveys are only one "lens" on customer behaviour, and that it cannot be a replacement for other forms of testing such as A/B test or Randomised Control Trials. Rather, the surveys are a quick and efficient way to test a product or customer journey at its early stage to make sure it resonates with customers. This reduces the likelihood of investing significant resources into ideas that will lack customer buy-in.

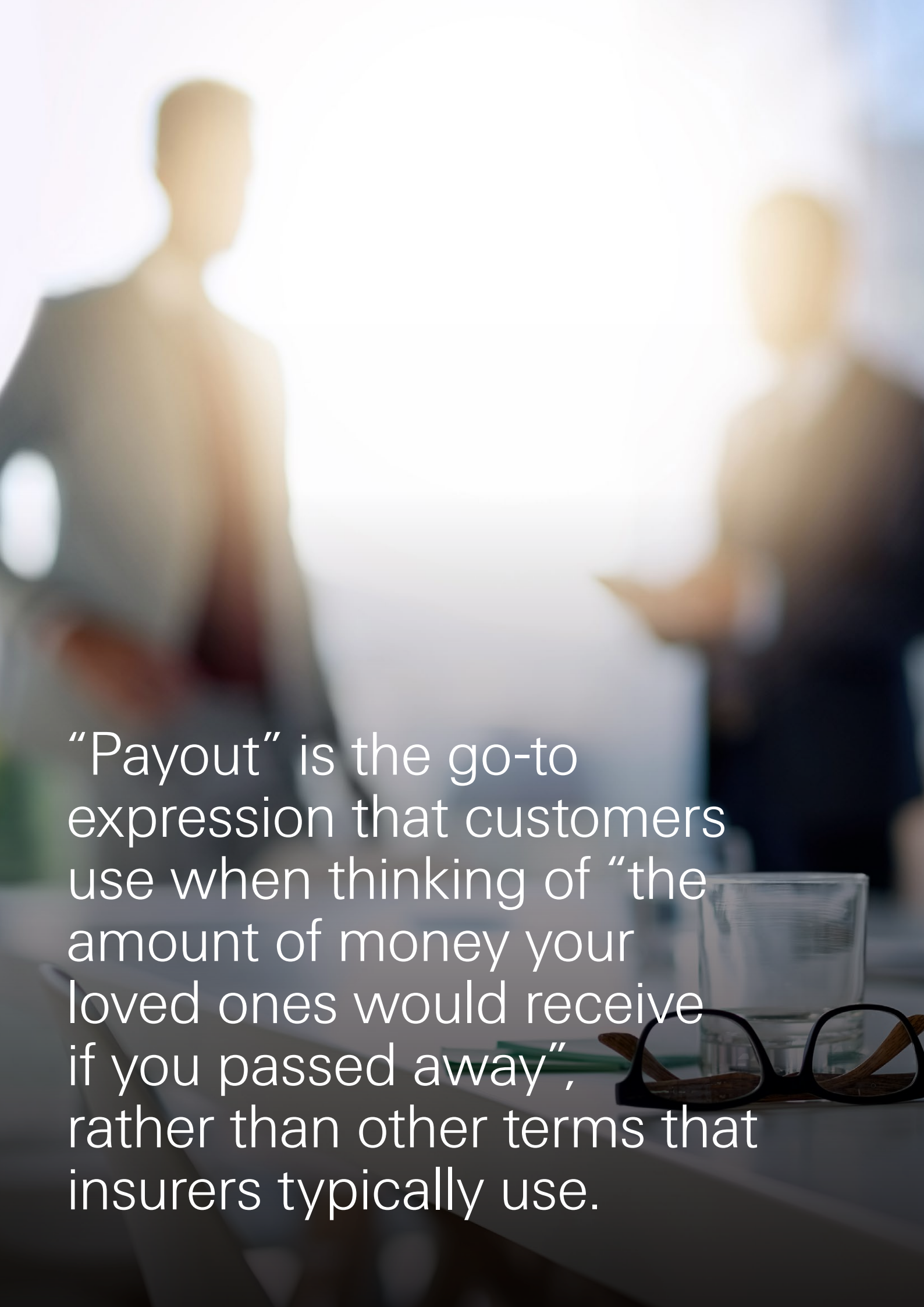
Insurance Australia Group (ethics level: outcomes)
An example of a win-win situation for IAG between its business goals and policyholder outcomes is the use of Artificial Intelligence (AI) to predict total loss claims in motor insurance and provide an early warning alert to customers. Severe car accidents can be particularly challenging. IAG has developed a total loss "early warning" message to customers by combining AI with business process automation with the goal of reducing emotional trauma. It is not always immediately clear whether a car will be able to be repaired or declared a total loss, and the process can take up to two weeks. When the information about a car accident looks reasonably likely to result in a total loss, customers received a text message informing them of the likely outcome and the claim process.

Importantly, the team behind this work assessed the new AI against ethical principles, and identified the potential harm to customers that could result from errors in the algorithm. This is how IAG addressed some of the ethical considerations arising from the project. An important step in early development is to test potential designs at a small scale. This means any unintended harms can be addressed before a solution scales up. The system was designed to have limited power over outcomes, in that it makes no final choices that materially affects people. It merely offers targeted information to assist customers.

The early warning prediction uses data that the customer provides directly at the point of claim and at policy inception. This customer data is subject to IAG's privacy and security controls. The prediction does not currently draw on external data. IAG considered that its practices are aligned with customers' reasonable expectations that claims would be assessed to the best of the company's ability using data customers provide. When IAG's developers had to make trade-offs, they documented and presented them to system owners for a clear decision. After initial launch, automatic monitoring picked up a degradation in system performance. This allowed IAG to adjust the decision threshold to preserve system accuracy. Without automatic monitoring, the degradation may not have been noticed for some time.

IAG measured the impact on their consumers using their established Net Promoter Score survey system. It observed a large uplift in survey scores from the intervention. To date, there has been no observable negative impact on customers from the system. At the same time, IAG measured a reduced need for customer contact, an additional benefit for insured and insurer. The team will continue to monitor the potential for this intervention as more customers are affected.

Takeaway 7
Continuous monitoring of customers' reactions to their touch points with insurers is key to measure potential shifts in preferences. Adjusting to these is also important.



“Payout” is the go-to expression that customers use when thinking of “the amount of money your loved ones would receive if you passed away”, rather than other terms that insurers typically use.

Affective Advisory (ethics level: code)
Together with the behavioural science teams of two leading FTSE100 companies, BE consultancy Affective Advisory applied behavioural science insights to develop the Global Codes of Ethics — policies for good business conduct — for the two said companies, that are more accessible, practical and effective. Working with data-based and science-backed insights from academic and contextual research on how humans make decisions under uncertainty, Affective Advisory designed tools and guidelines for more effective ethical and compliant organisational behaviour.

The advanced combination of rule-based and principle-based approaches was a key component in the collaboration. While rule-based approaches can be very effective in guiding decision-making, they are often limited in that they cannot account for every business eventuality and are often buried in obscure legal documents. Principle-based approaches, on the other hand, provide more generic guidance for daily decision-making, but are often easier to comprehend and generally implementable. In this partnership, a carefully designed combination of both approaches, informed and supported by behavioural insights to develop and evaluate policies, proved most effective in supporting employees in making ethical decisions.

Takeaway 8
To act ethically, employees need both principle- and rule-based approaches (eg, moral guidance as well as situation-specific rules).

Acknowledging that most employees want to take the right decisions, but for contextual reasons may sometimes fail to do so, the intervention that resulted from the partnership between Affective Advisory and the two FTSE-100 companies shifted the approach from rules and punishment to good business principles and supporting features. During the development process of the code and the associated digital tools, employees were invited to provide feedback, share experiences, and commit to a joint advancement of an ethical and compliant corporate culture. This supportive climate set strong groundwork for effective future strategies and behavioural science initiatives to build on.

ReAssure (ethics level: outcomes)
Customer services were dealing with high call demands during the pandemic, which led to longer call waiting times for customers. To improve the customer experience, the ReAssure's Behavioural Science Team assessed the Interactive Voice Recording (IVR). The team concluded that:

- Utilising the online services incurred shorter response times and increased the efficiency of the phone system for other customers.
- Utilising the online service could provide customers with a contact free route when dealing with sensitive topics, such as bereavement calls.
- The present choice architecture could be optimised – the online path was not salient, and the costs of the phone call was not evident.

This resulted in two interventions:

Friction	**Acceleration**
ReAssure highlighted to customers the waiting times of staying on the call	ReAssure highlighted the efficiency of the online service by providing an input at a timely manner (at the point of call)

Depending on the time of day and the day of the week, customers were presented with the additional option of ending their call and going online. A significant number of customers chose the online option when this was presented, demonstrating a clear preference for this channel.

These two interventions take a symmetrical approach: on one hand they introduce a friction (deterring uptake of sub-optimal option). On the other hand, they present an accelerator (boosting uptake of the optimal option), shaping the choice architecture to nudge for good, while leaving all options available. These interventions demonstrated the importance of challenging our understanding of "choice" and working towards creating choices for Humans, not Econs.

Takeaway 9
Ensuring all options remain available for the eligible insurance customers is a powerful safeguard for ethics, when designing a change in an existing process or communication.

Allianz (ethics level: outcomes)
Referral schemes are nothing new: invite someone to become a client and for each person that joins you receive a reward. Allianz decided to try to tweak this system by shifting the reward. Rather than giving the money to the person who refers, the insurer tried giving it to the person that gets referred, when they buy insurance.

There are two lessons from this. The net social benefit remains unchanged, as the same amount of money is simply given from one person to another. At the same time, the incentives shifts to align the interest of the insured with that of insurer. The referrer has no conflict of interest in persuading someone to become a new Allianz customer. Rather, the referral will arise from genuine interest, and the person who joins will have additional benefits for doing so.

Takeaway 10
Achieving aligned incentives between the insurer and the policy holder is an effective way to ensure ethical outcomes.

This case study is interesting in that it further affirms the power of BE. Classical economics theory would conclude that the two incentives frames are identical. The person referring and the person referred will in both scenarios negotiate how to split the money, reaching an equilibrium. BE research, however, indicates that people do not always behave in such rational way, and this opens up scope for choice interventions.

Conclusion

Applied BE in insurance is a young and fast developing field. It has permeated our industry by providing powerful tools to shape human behaviour, but its ethics standards are not yet fully defined. Swiss Re has been taking action to attempt to fill this gap through seminars and publications and collaborations with clients and academic partners. This paper is placed within that effort.

We hope the takeaways recommended in this document will encourage more players in the insurance industry to undertake the journey towards the ethical application of behavioural sciences and that more discussions might spark as a result. We look forward to continuing this discussion. You can find out more about our work on BE at www.swissre.com or contact the authors directly.

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