

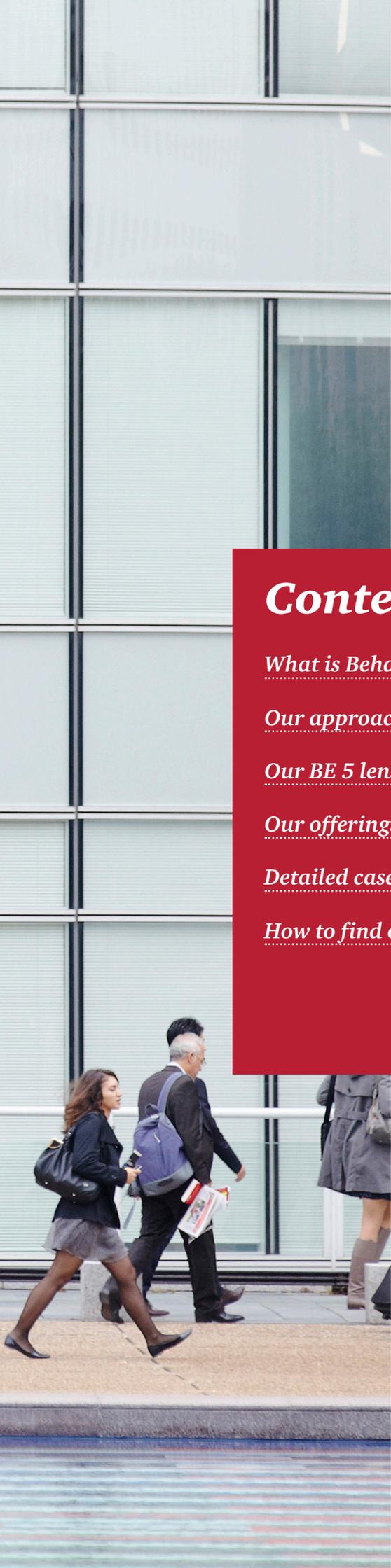
# *Behavioural Economics*

## Human-led design to improve your bottom line

April 2018







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# What is Behavioural Economics?

Behavioural Economics (BE) is the study of how mental shortcuts lead to biased, irrational, and most importantly, **predictable** patterns in decision making, judgements and behaviour.

*Much of the world is designed around the assumption that humans are perfectly rational, as opposed to people who make mistakes*



## Conventional Thinking

Assumes that humans are *robots* ...

- Driven by logic
- Make long term plans and commit to them
- Unlimited in time, attention and ability
- Care only for the facts
- Knows what he/she wants
- Only motivated by self-interest



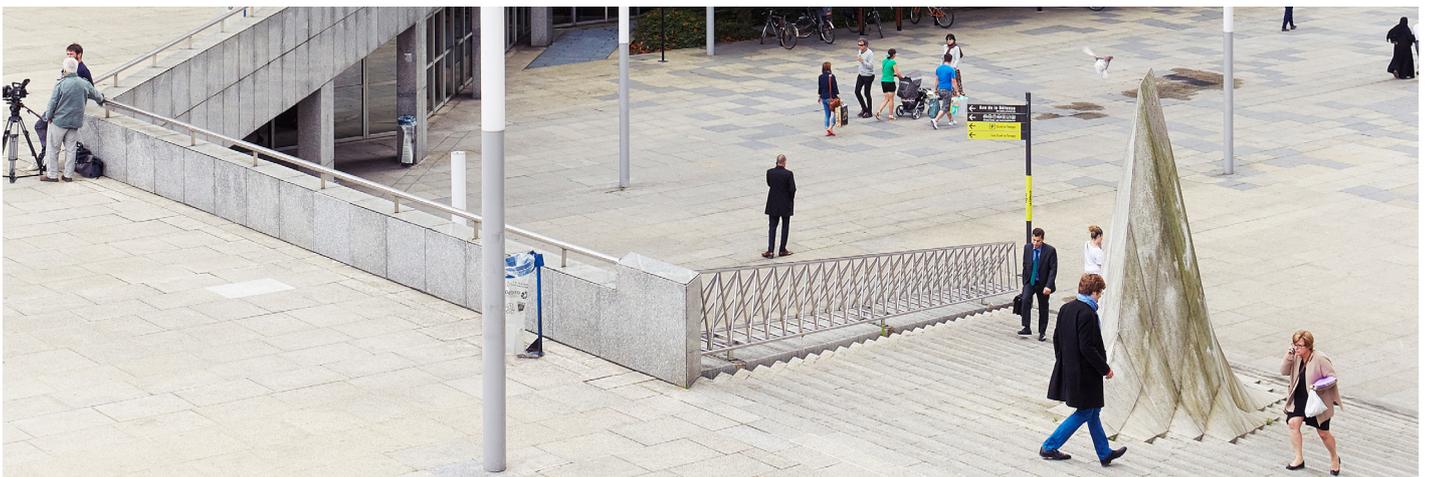
## Behavioural Economics

Assumes that humans are *human* ...

- Procrastinate
- Suffer chronic indecision
- Take uncalculated risks
- Give into cravings
- Have short attention spans
- Care about others, not just themselves

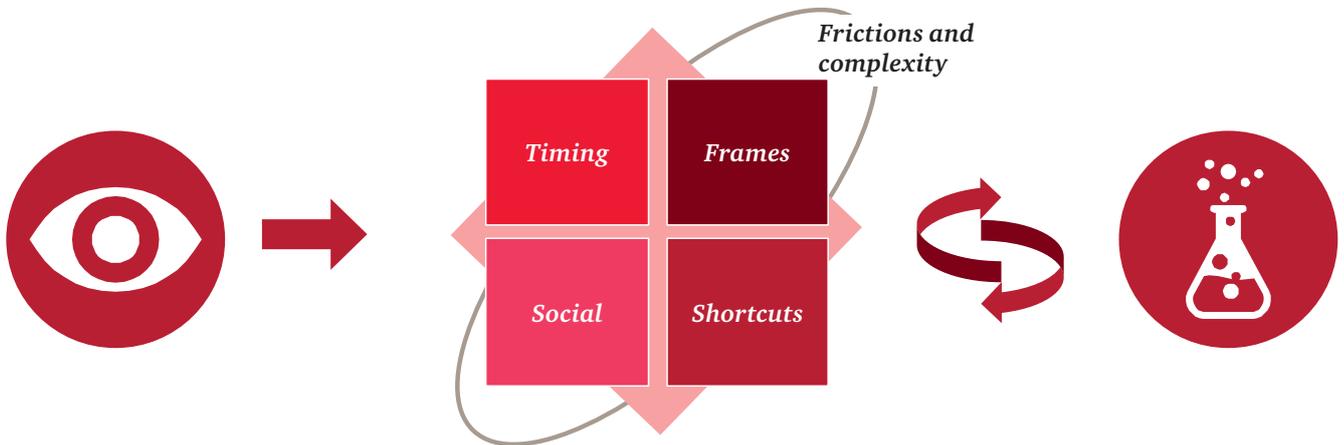
We all rely (knowingly or otherwise) on mental shortcuts to save us time and effort when making decisions. Sometimes the shortcuts work out well – saving us time, energy or even our lives. But mental shortcuts can lead us astray – leading us to make choices we later come to regret.

***This is why even the smartest of people can act irrationally at times, and why we need to design for humans.***



# Our approach

We have a structured approach when designing behavioural interventions to deliver the largest commercial benefit



## Understand and analyse

*Desktop research, analytics and observation*

A detailed understanding of the customer, citizen or employee decision environment and key decision points is established in this phase. This can include: a desktop review of all decision moments (web, letter etc.), analytics to understand important behavioural patterns, shadow shopping and ethnographic research in offices and call centres. Data analysis is also conducted to identify trends in current decision-making and assess the commercial opportunities from changing behaviours.

## Explain and design

*Behavioural insights and choice architecture*

A Choice-Architecture phase helps us to understand and explain influences on behaviours at key decision points. Using the PwC BE 5 lens methodology a series of tests are run to understand which seemingly unimportant changes to the decision environment could lead to significant behavioural change. Interventions are then developed and prioritised for launch or testing, with the aim being to use behavioural 'nudges' to encourage people towards desired outcomes.

## Intervene and test

*Statistically robust field trials with real people*

Prioritised interventions are applied to small (but statistically robust) treatment groups. Impacts are compared against a control (or 'do nothing') group to understand the true effects of the 'nudges' deployed. By conducting these field trials, we can minimise the risk of unexpected issues occurring when interventions are implemented, and we can identify those interventions which have the greatest measurable impact. The most successful interventions are then approved and rolled out at scale.

# Our BE 5 lens methodology

A key part of designing behavioural interventions involves using choice architecture techniques to design ‘nudges’. At PwC, we have developed our 5 lens methodology for this purpose. Underlying each lens is a series of tests, informed by behavioural economics evidence, to see what may be causing irrational behaviours or blocking more positive behaviours. This process informs the construction of interventions to alter the decision environment and help people overcome these behaviours. The five lenses, and some examples of how they apply in practice, are shown below

## 1 Millions of people don’t engage with important but complex financial decisions

People have limited attention, cognitive ability and time. Any unnecessary frictions and complexities can derail good behaviours and prompt unreliable short-cut decision making tendencies.

## 2 We are much more likely to save from a pay rise than from our regular wage

The timing and sequencing of gains and losses can impact decision making. Interventions which accommodate procrastination and lock in good intentions ahead of time have been shown to be highly effective.

## 3 People leave good products and turn down better offers if they perceive unfair actions

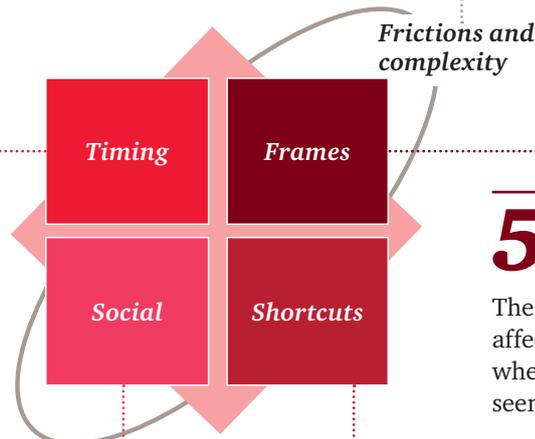
Beyond personal outcomes, the decision maker will look to understand the intentions behind each communication, and will also incorporate concerns of fairness and outcome determination in their decisions.

## 4 Only eat at busy restaurants – stick to the status-quo

Because of time and attention constraints, people rely on rules of thumb (heuristics) to make decisions. Understanding common rules of thumb can help us to design decision environments and moments that are more likely to cut-through the noise.

## 5 Would you buy 5% fat milk – or 95% fat free?

The framing of decisions can materially affect the way choices are made – even when this framing is superficial and seemingly inconsequential.



# Our offerings

We've developed a series of offerings that we routinely use to help solve our clients' challenges

<b>Revenue</b>	<b>Behaviourally targeted debt and tax collection strategies</b> Improving collection rates and encouraging prompt payment through targeted behavioural economics techniques along the collections lifecycle.	<b>Customer experience, loyalty and churn</b> Using behavioural techniques and data to target messages to specific customer segments and increase long term customer loyalty, sustaining revenue growth.	<b>Behaviourally optimised pricing strategy</b> Using our knowledge of customer response behaviour to design optimal pricing strategies which maximise clients' revenues.
<b>Cost</b>	<b>Channel shift through customer behaviour change</b> Using behavioural 'techniques' to help companies change the way that customers interact with them, by 'nudging' customers to use the channels most suited to the clients' needs.	<b>Streamlining customer interaction to reduce operational costs</b> Promoting customer self-service and reducing inbound queries through clearer communications and timely behavioural prompts to customers.	<b>Managing costs of insurance claims through behavioural engagement</b> Using behavioural techniques to simplify the claimant journey and forge a stronger relationship with claimants, leading to a mutually beneficial outcome for claimants and insurance providers.
<b>Customer</b>	<b>Improving transparency of financial communications</b> Communicating financial information in an accessible and engaging way to customers, therefore increasing customer engagement and the likelihood of prompt action.	<b>Using machine learning to improve the effectiveness of targeted 'nudges'</b> Using machine learning algorithms to better predict current behaviour, then nudging people to change outcomes/ behaviours.	<b>Improving service consumption efficiency</b> Promoting positive consumption habits through timely and behaviourally informed prompts, helping customers manage their own usage more effectively.
<b>Employee</b>	<b>Getting sick employees back to work faster and sustainably</b> Re-designing return-to-work processes to support sick employees in transitioning smoothly back into employment, using 'nudges' to increase motivation, emphasise workplace support and anchor recovery speed to a quicker rate.	<b>Increasing pension saving and financial sustainability</b> Using behavioural insights to assess peoples' attitudes to pension saving and improve saving behaviour through encouraging immediate and effective action.	<b>Boosting employee engagement and satisfaction</b> Improving employee satisfaction through 'nudges' and better targeted management techniques, helping to increase employee well-being and therefore reduce attrition.

# Detailed case studies

## Improving payment rates and reducing bad debt

# Q

**How can improving the design of collection letters halve the number of non-paying customers?**

### Issue

A utilities company enlisted PwC's help to get customers more engaged and pay their bills on time. Through improving customer responsiveness to communications about their payment schedules, this company aimed to reduce the number of customers who struggle to pay for their bills, thereby boosting revenues and reducing financial uncertainty.

### Approach

We worked with the client to re-design their key communications around collection letters, using behavioural techniques and leveraging rational and emotional biases to increase the likelihood of payment. We then ran field trials with several thousand real customers, measuring payment rates at different stages of the collections journey against those of control groups exposed to the client's previous letter designs.

Examples of focus areas when redesigning collection letters included:

- Changing the tone from transactional language to more emotive language which creates a relationship of goodwill with the customer.
- Simplifying presentation and distilling processes into clear step-by-step procedures.
- Using 'nudges' to shift payment channels towards automated payment, reducing the need for customers to remember payment deadlines.

### Outcomes

The trial demonstrated an:

- Increase in Payment rates: The best performing letters **increased payment rates by 11-16%** over the original versions, which marked a **relative 35-38% improvement**.

- Reduction of accounts that go to Debt Collection Agency (DCA): When the effects of all letters are combined, the number of customers sent to DCAs was forecasted to **reduce by 50%**.
- No significant effect on complaints: The new letters managed to increase payments with **no noticeable effect on complaint volumes**.

These interventions were shown to

**reduce non-paying customers by 52%.**

With added benefits of:

- £16m one-off working capital improvement.
- £700k annual P&L improvement.
- Regulatory kudos from management demonstrating they've done everything possible to change customer behaviour.

## Changing return to work outcomes

# Q

**What types of interventions are required to prompt and support improved return to work outcomes?**

### Issue

Our client, a governmental agency that's responsible for getting workers to recover from injury and return to work, was searching for opportunities to improve the efficiency and effectiveness of their claimant interactions. In particular, they were interested in understanding and improving the customer experience with call centre and claims management teams. Their hope was that improving the claimant interaction process would lead to workers returning to work in a faster, safe and streamlined manner.

The client requested a behavioural economics review of early claimant communications and interactions, to develop interventions which would improve claimant behavioural outcomes.

These interventions also had to be specific enough so that they could be targeted and monitored when used in a regional claims centre, which was intended as a self-contained pilot for 'nudges' and interventions.

### Approach

PwC applied a three stage approach to this project:

- 1. Developed early observations:** the team undertook workshops with client staff, individual interviews and document and website reviews to develop initial insights. Through these insights, the team suggested specific priority areas for potential intervention.

- 2. Developed interventions to be tested:** the team developed a list of interventions to be tested based on the insights provided in the early observations stage and relevant evidence and theory from the field of applied behavioural economics.

- 3. Developed an implementation plan for interventions:** a workplan to prepare and support the client in implementing, tracking and evaluating the impact of a set of behavioural economics interventions to improve claimant outcomes was developed.

### Outcomes

Results were very successful with **workers returning to full capacity 27% faster** than control groups.

## Going paperless and adopting online billing

Q

*How can utility providers leverage behavioural economics to systematically target and convert consumers to paperless, online billing?*

### Issue

A utility company was looking to reduce costs associated with providing paper bills whilst also looking to reduce its environmental footprint. With this in mind, the client looked to PwC to help encourage customers switch to paperless billing using behavioural techniques.

### Approach

Through customer segmentation on online billing behaviour, the PwC team identified nearly 2 Million digitally savvy utility consumers to target with behavioural strategies to go paperless and adopt e-billing. PwC designed targeted 'nudges', specifically for the digitally inclined, that leverage the moments that matter across communication channels and turn them into conversion events.

This approach comprised four key stages:

- Using **customer segmentation analytics** to define 5 customer groups, which have different propensities for conversion to paperless billing. We targeted 'savvy' customers, who are digitally inclined but hadn't actively chosen paperless billing.
- **Mapping customer journeys** to identify key pain points and their underlying behavioural causes.
- Designing a set of **targeted 'nudges'** to incite digital adoption, which were embedded across communication channels.
- **Implementing interventions** across channels and measuring their impact.

### Outcomes

The interventions resulted in **100,000 conversions to online billing within the first three months.**

**66%** of consumers indicated that an alert with a bill due date would increase online bill use.

Reminding consumers of the time they lose if they do not renew online increased online renewal rates by **13.3%**.

Nearly **25%** of consumers turn to a utility company's web site when they need to make a last minute payment.

## Boosting product sales effectiveness

Q

*How can behavioural economics help banks boost their customer engagement with product sales campaigns?*

### Issue

Based on a behavioural mapping exercise, **two decision parameters** were developed to assess participation in the campaign, which was then translated into **four behavioural segments** and a **Campaign Action framework** – based on levers that can be pulled per segment – to drive recommendations for the client.

Behavioural techniques used to encourage campaign participation included:

- Indicating the number of individuals already participating in the campaign to encourage other customers to get involved.
- Using visually appealing images to indicate various options for customers, rather than heavy text.

- Providing clear step-by-step instructions for how to redeem campaign awards.
- Prioritising the campaign's benefits, rather than the bank's brand, in customers' minds.

### Approach

Based on a behavioural mapping exercise, two decision parameters were developed to assess participation in the campaign, which was then translated into four behavioural segments and a Campaign Action framework – based on levers that can be pulled per segment – to drive recommendations for the client.

### Outcomes

The application of recommended behavioural solutions **boosted customer engagement and action by 26%.**

# How to find out more



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