

Saving the planet nudge by nudge: Using behavioural economics to create effective communications for a sustainable future

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ADMAP

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Looks into how behavioural economics can be used to create effective communications for a sustainable future.

- Brands are being held accountable for their attention to environmental and ethical practices, and aligning with relevant Sustainable Development Goals is not only environmentally beneficial, but will also positively impact the bottom line.
- Water use is often habitual and so we are not consciously aware of how much we are using, because water is relatively low cost in comparison to other utilities we anchor or compare our usage with other, bigger bills, making our water usage seem smaller.
- The intention-behaviour gap, where people intend to adjust their behaviour accordingly but never actually make a change, and the hot-cold empathy effect, the tendency to underestimate how our preferences will change when in either a 'hot' or 'cold' emotional state, pose two key challenges to marketers.
- Behavioural feedback, making it personal and giving people detailed and accurate information about their own performance, and goal setting key ways to encourage new behaviours over the long term and can be very motivating to actively improve undesired behaviours.

Sustainability: Opportunities and challenges for brands

This article is part of a series of articles on sustainability. [Read more](#).

Need to know

- Behavioural economics provides powerful tools for both understanding and changing behaviour, a critical element in our fight for a more sustainable world.
- Brands must be careful when launching purpose-driven and environmental campaigns. If the brand is not authentically aligned with the issues they are trying to address, consumers may view their attempts as forced or opportunistic.
- Understanding behavioural concepts such as anchoring bias, hot-cold empathy effect and intention-behaviour gap helps to inform communications to avoid common pitfalls in effective environmental or purpose-driven messaging.
- Using social norms to compare someone's behaviour to their peers or the community, is a powerful tool to prompt people to take action.
- Carefully considering how the information is framed – there is always more than one way to present the same information – can lead to radically different behavioural responses.

Pro-environmentalism, sustainable development, and sustainable consumption have risen to the top of the agenda in recent times. This explosion of interest is both completely understandable, and completely necessary; in less than nine months, we consume more resources than our planet produces in a year, and this rate of consumption continues to grow.

It is clear that this is not viable in the long term and solving the problem is vital to the future of our planet. As such, there is a need to develop strategies to separate economic growth and human wellbeing from the unsustainable use of natural resources. This critical aim was reaffirmed by the international community at the UN Sustainable Development Summit in 2015, with the adoption of Agenda 2030 for Sustainable Development.

At the heart of the UN agenda are 17 specific Sustainable Development Goals. Since 2018, these goals have also formed a [category at the Cannes Lions Festival](#), to encourage advertisers to address our global challenges. In this article we look at how some companies have responded to issues around three of the 17 Goals, and also provide related insights from behavioural economics that might be applied for a range of communications objectives.

Brands are being held accountable for their attention to environmental and ethical practices. Aligning with relevant Sustainable Development Goals is not only environmentally beneficial, but will also positively impact the bottom line as consumers start to vote with their wallets about the types of environmental and ethical business practices they wish to support.

UN Sustainable Development Goals



Source: United Nations in collaboration with Project Everyone

The value of behavioural economics in our fight for sustainable consumption

Many of the issues our environment faces are, in essence, about human behaviour and how we behave towards the planet. It is often assumed that humans make rational decisions, weighing up the pro's and con's of an action before moving forward. However, behavioural research has constantly shown that this is not the case. People tend to use mental shortcuts, or biases and heuristics, to make decisions quickly and easily, often not even understanding why they have decided to act in a certain way.

Behavioural economics provides a model of human behaviour which embraces and celebrates all the idiosyncrasies and biases that makes us human. It gives us concepts and frameworks to define the current behavioural blueprint and, via this understanding, ways to change it.

In this article we focus on a particular type of behaviours – behaviours that have an unintended negative impact on the environment but not as a result of conscious decisions by the individual performing them. The majority of people or brands do not set out to deplete the earth of its natural resources.

Against this behavioural typology, we have highlighted three of prominent sustainability challenges we face and show how behavioural economics and more broadly behavioural science can play a major role in helping address these challenges. We also look at how brands can respond to these issues to ensure ethical and responsible business practices, and encourage people to consume more consciously using the powerful tools of behavioural science.

When implementing such tools, brands must nevertheless be careful when launching purpose-driven and environmental campaigns. If the brand is not authentically aligned with the issues they are trying to address, consumers may view their attempts as forced or opportunistic. Far from having the desired effect, this could

drive people away, or at the least instil indifference and inaction.

There is a separate more general behavioural challenge we also need to be aware of which is that consumers rarely disagree with these ideas and campaigns, but often they then don't act. In behavioural economics, we call this issue the Intention Behaviour Gap, and we shall discuss this in greater depth later in the article.

Sustainability Challenge: Avoid wasting water

The sixth Sustainable Development Goal outlined by the UN focuses on 'Clean water and Sanitation'. The aim is to both ensure clean water is accessible to all, and to increase efficient use of water in countries where it is already readily available.

In 2014, the UN forecasted that two thirds of the world's population will be living in water stressed areas by 2025. As a result of climate change, and increasing demand, water is becoming an extremely precious and diminishing resource. A large focus of this goal is achieving affordable drinking water, and adequate and equitable sanitation and hygiene. However, in western societies where there is widespread indiscriminate use of water, we also have a responsibility to reduce water consumption where possible. There is pressure on water companies to **reduce per capita water consumption** and consumers need to be more aware of how their actions make a difference.

In this case behavioural research and behavioural economics has helped us understand current behaviour:

- Water use is often habitual and so we are not consciously aware of how much we are using.
- Water is relatively low cost in comparison to other utilities. We anchor or compare our usage with other, bigger bills, and therefore our water use may seem small compared to our use of gas or electricity.
- We might misperceive other people's water use [the injunctive social norm] and as a result believe that we consume less water than our neighbours.

Behavioural economics has also been used to act on this increased understanding. A few years ago ideas42, a behavioural science consultancy, partnered with the World Bank to tackle water shortages in Costa Rica. They developed stickers to attach to water bills that informed households how their water usage compared to either their neighbours, or their city. This idea simply leveraged the BE concept of social norms, prompting people to take action if their water consumption was higher than those around them. Households that received a water bill with a sticker attached typically cut their water consumption by between 3.7% and 5.6%.

Another good example is from Old Mutual, a finance company in Cape Town. It works out of the largest office building in the Southern Hemisphere. Unsurprisingly, they consume a lot of water. Since January 2017, they have been working with GreenCape to reduce their water consumption through increased efficiency and behaviour initiatives. They leveraged commitment bias by incorporating water targets into management performance targets, and coupled this with incentives and educational sessions. Since the project began, they have managed to reduce their water use by 35%, from 15,000 kilolitres to under 10,000 kl in one month, and as this project is ongoing, they hope to continue to lessen their consumption.

The Behavioural Architects have also worked on projects to help tackle water consumption and wasting water. In 2015, Sydney Water wanted to understand why 40% of people in Sydney would only drink bottled water and would not drink water from the tap. Bottled water is much more detrimental to the environment; it takes a quarter of a litre of fuel to produce one litre of bottled water, and nearly 400,000,000 plastic bottles end up in landfill or

in the ocean every year.

Behavioural economics provided the framework for understanding this unsustainable behaviour and developing simple BE driven mechanics to change it. By simply reframing tap water as environmentally friendly, as well as negatively anchoring the use of plastic bottles as environmentally unfriendly, we were able to integrate behavioural insights into strategic recommendations for communications development. Behavioural economics states how context is critical and it was also recommended that we increase number of water fountains and taps across cities to allow easy refill, playing to the important concept of availability bias.

Key behavioural insights

- **Social norms** – We have a tendency to adopt the opinions and follow the behaviours of the majority to feel safer, to avoid conflict or simply to be more cognitively efficient in our decision-making. Companies can leverage social norms to encourage people to change to a preferred behaviour by highlighting an in-group behaviour.
- **Framing** – Our decisions and preferences are affected by how information is presented. How something is framed, can make different features more or less prominent and alter decision-making and behaviour. This is true even if the information remains the same. This is a key way a small change in communications can have a huge impact on behaviour.
- **Anchoring** – Anchoring is our tendency to rely, or "anchor," on one trait or piece of information, often in the immediate context, when making decisions. For example, if a practice is clearly identified as environmentally unfriendly, similar or related behaviours will also be judged as un-environmental. This provides a springboard for encouraging more sustainable behaviours.
- **Commitment bias** – Commitment bias is the desire and tendency to be consistent with what we have already done or said before, especially if this is a public commitment. It can be useful for encouraging everyday environmentally behaviour.

Sustainability Challenge: Climate action

UN Sustainable Development Goal number 13 is 'Climate Action', to take urgent action to combat climate change and its impacts. Climate change is one of the most pressing issues currently facing society. According to the Intergovernmental Panel on Climate Change, we must reduce our greenhouse gas emissions to net zero before 2040 to have any chance of limiting global warming to 1.5C or less. Even then, warming of 1.5C could have severe consequences.

A significant part of our action to minimise climate change needs to come from reducing our individual carbon footprints. Research conducted in Sweden and Canada has identified which behaviours have the most impact, highlighting air and car travel as serious offenders.

How can behavioural economics help?

A great example of using feedback and goal setting to reduce carbon emissions comes from Virgin Atlantic. The airline worked with behavioural economists from the University of Chicago and the London School of Economics to design a set of nudges encouraging their pilots to use less fuel. Fuel is the largest single cost item for any airline, and also contributes hugely to global carbon emissions, so reductions would be beneficial for both the

company bottom line and sustainability goals.

After testing a number of different 'nudge' combinations, results showed that providing tailored feedback on their individual fuel consumption relative to peers and setting efficiency goals had the greatest impact on fuel consumption, improving efficiency measures by 9%, from 11% to 20%. Over the 8-month test period, carbon emissions were reduced by 21,500 tonnes of CO₂; this is equivalent to an Airbus A330 flying 170 times from London to New York!

Similar insights can be used to tackle the other serious offender in this space; transport by car. Although the ideal solution would be to instigate a modal shift to more sustainable forms of transport such as cycling or riding the train, for many people this is not practical. Instead, we need to change driving behaviours to encourage more economical driving, lessening fuel consumption and thus decreasing carbon emissions. Although this will become less of a concern as electric cars become increasingly mainstream, research suggests we still have a long way to go before even half the cars on the road are environmentally friendly.

Research by the University of California's Center for Environmental Research (CERT) found that presenting drivers with real-time behavioural feedback about their fuel economy can reduce fuel consumption by 6% on average. As a result, this insight is being incorporated into the dashboard design of many vehicles, with manufactures from Ford to BMW attempting to leverage personalised feedback into more fuel-efficient driving.

Key behavioural insights

- Behavioural feedback – making it personal and giving people detailed and accurate information about their own performance can be very motivating to actively improve undesired behaviours. Forward-looking automotive brands are supporting reduced fuel consumption through integrating feedback technology in new vehicles. Feedback is most effective when provided 'in situ', rather than after the behaviour has been completed.
- Goal setting – efficiency goals are a key way to encourage new behaviours over the long term. Such tools are already in use by insurance companies to promote safer and more economical driving practices. Habitual behaviours, like driving, are notoriously difficult to change because we are not always actively thinking about them. Goal setting can be a powerful method of overcoming these barriers to behaviour change, and will also help maintain the new behaviour.

Sustainability Challenge: Increasing recycling where possible

Sustainable Development Goal number 12 is 'Responsible consumption and production' with a focus on recycling paper, plastic, glass and aluminium. According to the UN, every year we dump over 1 billion tonnes of waste into landfill globally, and this is expected to rise to over 2.2 billion tonnes by 2025. By now, everyone knows they should recycle and yet even the most committed individuals can be inconsistent with their recycling behaviours.

A key issue affecting recycling behaviour [and other behaviours above] is the intention-behaviour gap. This gap exists when an individual fully intends to behave in a certain way, and yet for some reason does not. It is easy to assume that the intention-behaviour gap is the result of our intentions not being entirely honest. However, this does not seem to be the case. For the majority of people their intentions are genuine, but something else is affecting their ability to act.

Behavioural research and behavioural economics suggests a number of explanations:

- Firstly, what we tend to do often conflicts with what we feel like doing when the moment arises. This is an example of the hot-cold empathy effect.
- Another issue is that people are forgetful. Throughout the day, many stimuli compete for our attention, and if not prompted, we are likely to forget we intended to recycle.
- Finally, cognitive effort may not be sufficient to overcome our established habits – essentially, if something isn't easy, we just won't do it.

Again, this insight has also shown us how to act on this understanding.

In Toronto, the Ontario Behavioural Insights Unit investigated modifying bin labels to increase recycling in the Superior Court of Justice building. They ran an eight-week randomised control trial testing the performance of four different sets of bin labels, one of which was the control label set that had been in place before the trial.

They found that the most effective labels were different colours, clearly showing what could be included in the bin by using words and pictures, and they also posed a question to the reader: 'Does it belong in the Garbage?' or 'Does it belong with Organics?'



Figure 1: The most effective labels used clear visuals and posed a question

Source: Ontario Behavioural Insights Unit

The labels use insights from behavioural economics very successfully. They make the designation between different bins more salient, through the images/icons and text, increasing cognitive ease. They also build cognitive dissonance and make it harder for people to ignore incorrect behaviour.

Using this set of labels increased correct organics recycling by 82%, increased recycling of coffee cups by 55%, and increased accurate recycling of mixed containers by 32%, compared to the control labels.

Key behavioural insights

- **Intention-behaviour gap** – The intention-behaviour gap exists when people intend to act in a certain way but for one reason or another do not. It can also be observed when a new behaviour is started but not maintained, such as exercising. This is a key issue for purpose-led communications where people generally agree with the well-intentioned initiative, intend to adjust their behaviour accordingly, but never actually make a change.

- **Hot-cold empathy effect** – The hot-cold empathy gap is the tendency to underestimate how our preferences will change when in either a 'hot' or 'cold' emotional state:
 - A 'cold' state is where we are calm, collected, sensible and rational
 - A 'hot' state is where we are emotional, excited, angry, hungry, in pain or aroused in some way.
 As our state of mind changes, something we might previously have found unappealing might become irresistible, or vice versa. This can explain why going to the supermarket on an empty stomach (a hot state) may cause us to buy far too much. When planning communications consider emotional states involved as this can have a huge impact on people's response.
- **Saliency** – Saliency is the state or condition of being prominent. The saliency of an object is what makes it stand out relative to its neighbours.
- Cognitive ease – This is the ease with which we can process the information provided to us. For environment initiatives, clear visual cues have proved very powerful in affecting consumer behaviour.
- Cognitive dissonance – We experience cognitive dissonance when our behaviours and actions are inconsistent with our perceptions of ourselves. For example, if you believe that smoking is a bad habit, but you just can't quit, you may experience cognitive dissonance. This results in feelings of discomfort that can be resolved either by changing your behaviour (quitting smoking), or adjusting your beliefs (smoking isn't really that bad). If marketing initiatives can emphasise inconsistent behaviour while simultaneously offering a solution, this could have a strong, positive effect.

Saving the planet nudge by nudge

In conclusion, behavioural science and in particular behavioural economics can provide a set of scientific concepts and frameworks to help tackle the Sustainable Development Goals. For advertisers trying to navigate purpose-led campaigns and align their companies authentically with sustainable initiatives, these tools are also extremely relevant and useful.

Where previous interventions may have failed to be effective in light of our human irrationalities and lack of action, behavioural economics led understanding and interventions are designed to overcome our irrational behaviour and promote real changes in behaviour in the quest for sustainable consumption. The examples above also show how small and inexpensive actions can make a big difference.

We have the power to change behaviour and the responsibility to use it.

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