

Behavioural science

An introduction to behavioural design

February 2020

Agenda

- **Introduction to behavioural science**

What is behavioural science, and why is it important?

- **Phase 1: Define**

Setting a behavioural objective and defining the problem that you're hoping to solve

- **Phase 2: Diagnose**

Understanding the reasons why our customers behave the way they do and the context in which they make their decisions

- **Phase 3: Design**

Designing an intervention to try and nudge customers to change their behaviour

- **Phase 4: Test**

Testing your interventions to see whether they work and whether you should scale them to all of your customers

1. Introduction to behavioural science

What is behavioural science?

Behavioural science:

- The study of **human behaviour and actions**
- Includes a multitude of disciplines, including economics, sociology and psychology
- Core assumption: People behave **irrationally**, and this irrationality is **predictable**.
- Working to find out *when* and *why* these predictably irrational behaviours occur and *how* we can combat them or use them to help humans make better decisions.
- **Useful** because it helps us to design products, services and communications for the way that people **actually behave** and not only how we expect them to behave.

Behavioural science is useful for financial sector providers because:

- It can help to navigate the customer's decision-making biases and adapt the design of products and services to increase the uptake and usage of appropriate financial services.
- Integrating behavioural science principles into the design, delivery and marketing of financial products allows FSPs to solve a business problem while simultaneously helping their customers overcome their biases, meet their financial goals and promote long-term financial wellbeing.
- It can reduce the costs and barriers associated with delivering financial products in an inclusive and accessible way.
- It can help to reduce risks in insurance and credit by nudging for safer behaviour, on-time payments and accurate claims submissions.

Why is behavioural science important?

Examples of successful interventions:

- Sending a personalised text message to micro-lenders in the Philippines increased on-time payments by 37%.
- Paying Malawian farmers their harvest profits directly into a restricted-access bank account instead of the cash default increased savings by 6%.

Companies that use behavioural science	Examples of its uses
Discovery Bank	Uses behavioural insights to help clients save, reduce debt, make payments on time, eat healthily and drive more safely
Facebook	Uses behavioural science to reduce the spread of fake news, to increase usage of the app and to build networks and communities

A typical behavioural project

Phase 1: Define

Objective:

To narrowly and clearly define the behavioural challenge so that the project objectives are perfectly aligned with the relevant business and stakeholder objectives

Outcome:

A behavioural objective statement

Phase 2: Diagnose

Objective: To set up and conduct research and analyse the findings to develop both a broad and deep understanding of the challenge, as well as the root causes of the observed behaviour and the psychological factors that are producing it

Outcome: Identified root causes for the behaviour, as well as a prioritised shortlist of the root causes that should be targeted to create behaviour change

Phase 3: Design

Objective:

To use an understanding of the research findings to identify evidence-based interventions that are recommended remedies to the behavioural challenge

Outcome:

A limited set of prioritised interventions that are likely to effect the desired behavioural change

Phase 4: Test

Objective:

To understand the impact of interventions in the field using experimental techniques. Based on the outcome of these experiments, a confident decision can then be made about whether an intervention is worth scaling

Outcome:

A decision about whether the intervention should be scaled, scrapped or iterated on

Phase 1: Define



Define the behavioural objective

- Not all problems are behavioural in nature. Sometimes, there are structural or contextual constraints that behavioural science cannot solve.
- To effectively use behavioural science, it is important to ensure that you are defining your objective appropriately.
- The objective of the “define” phase is to ensure that we clearly understand all of our assumptions and that we have a precise, measurable objective to target.

Define the behavioural objective

- A good behavioural objective often follows a specific pattern:

(People) are **(doing X)**. We want them to **(do Y)** instead.

People: Who is your target group? Be specific and clear.

X: Ensure that this is something people are *currently doing*. It is important that this cannot be defined as something people are *not* doing – “People are leaving our webpage” is a behaviour we can target, “People are not clicking through to the next page” is not.

Y: As with X, this should be phrased as an action or behaviour that you want people to do and should be specific and precise.

Who are you targeting?

(**People**) are (doing X). We want them to (do Y) instead.

When trying to identify the people whose behaviour you are targeting, your goal is to be clear and specific about which users or customers you are targeting.

Some useful segments that you can use include:

- Demographic segments
- Purchasing behaviour segments
- Usage segments
- Benefit-seeking segments
- User journey stage
- Occasion or timing
- Customer loyalty
- User status

Understanding X and Y

(People) are (**doing X**). We want them to (**do Y**) instead.

Defining the action that we are targeting is where many beginner behavioural scientists make a mistake. Some key considerations are:

- *It needs to be directly observable or linked to an indicator that is directly observable.* This allows us to measure the behaviour and the effectiveness of the intervention that we develop.
- *It needs to be specific.* This allows us to target our intervention(s) to increase our likelihood of success.

Getting more specific

- The behavioural objectives that you've developed so far are great at ensuring that you are targeting *behaviours* instead of other types of problems, but there are still important considerations.
- For a behavioural design project to be considered successful, it is important to be able to measure the outcomes.
- We can ask ourselves a few more questions to get to a project objective that is measurable and clear:
 1. What type of action do you want people to do (start, stop, increase or decrease)?
 2. How long do you want people to do the action for (uptake or engagement)?
 3. How will you measure the behaviour?

How will you measure the behaviour?

When setting your behavioural objective, it is important to think about the data and the infrastructure that are available to you to measure the behaviour and the effectiveness of the intervention. Common measurement strategies include:

Credit

- Time spent on the website
- Time spent reading terms and conditions
- Repayment data
- Call centre data

Insurance

- Click-through data
- Sales data
- Time spent on the website
- Drop-off data
- Payments data
- Call centre data

Digital

- Click-through data
- Sales data
- Time spent on the website/app
- Drop-off data
- Usage data (time of day, month, etc.)

Retail

- Sales data
- Door scanners to measure customers walking through
- Payments data

Phase 2: Diagnose

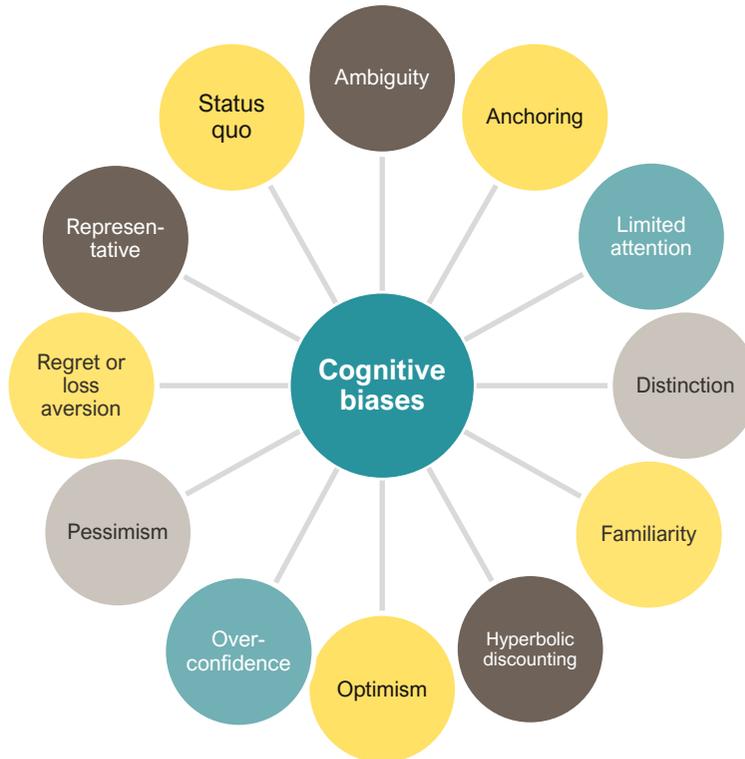


Diagnose root causes

- The purpose of this phase is to understand what is **driving the current behaviour (drivers)** and what is **stopping the desired behaviour (barriers)**.
- Our **overarching objective** is to **understand how people behave** and the **context in which they operate**.
- Because of this, it is usually a good idea to use a **multi-modal** approach and **triangulate** and **validate** findings across a number of research techniques.

Diagnose root causes

Because we are human too, those of us who are conducting the research are also likely to fall into the same traps and cognitive biases that we are investigating. **Confirmation bias**, **social desirability bias** and **the Hawthorne effect** are all examples of ways that we can accidentally skew the results.



Research methods

Tool	Insights
Journey mapping	Develop a step-by-step theoretical understanding of how customers interact with the product
Dogfooding	Going through a process yourself; Observing someone else going through the process
Administrative data review	Reviewing existing administrative data to find a descriptive history of the challenge, and demographic and behavioural characteristics of the target population
Client interviews	Either remote or face-to-face interviews with clients or potential clients to develop a better understanding of possible factors that influence the target behaviour in focus
Behavioural literature review	Reading through behavioural science and psychology literature on problems that are similar to the one that you are targeting.
Focus groups	Focus groups allow us to take a representative sample of existing clients (or external bankers) to get their thoughts on the challenge. Focus groups work best when we are looking to gain context through the use of open-ended questions.
Front-line staff interviews	There are often stakeholders within a business who have explored or given thought to the challenge in focus. This is especially true in the case of front-line staff (e.g. branch/call centre) who have to deal with a high frequency of relevant clients on a daily basis.
Mystery shopping	Using hired “shoppers” to observe a process or experience to understand how it occurs in reality. This allows you to examine things such as compliance, quality and customer experience.

Phase 3: Design



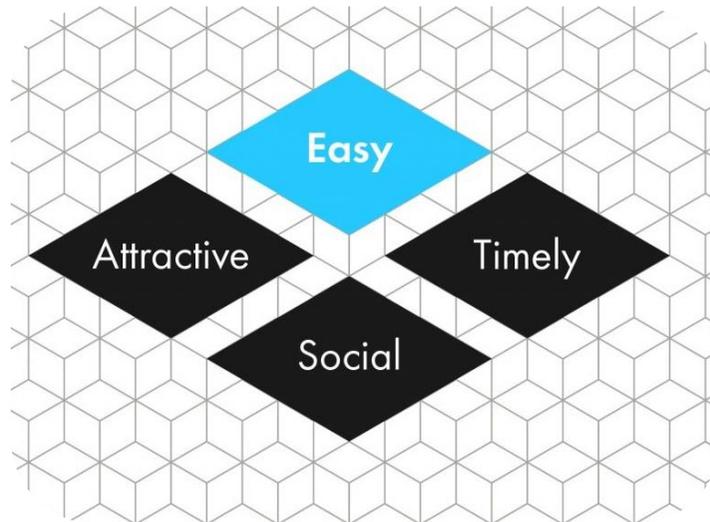
Where to start when designing your interventions?

- Now that you've identified the causes of the behaviour you are hoping to target, you need to work on finding a way to correct it. It can be difficult to know where to start or how to go about finding these solutions.
- A good first step is to divide your root causes from the previous phases into **barriers** and **drivers**.
- **Barriers** are things that prevent the desired behaviour from occurring, while **drivers** are things that encourage the desired behaviour.

Useful frameworks

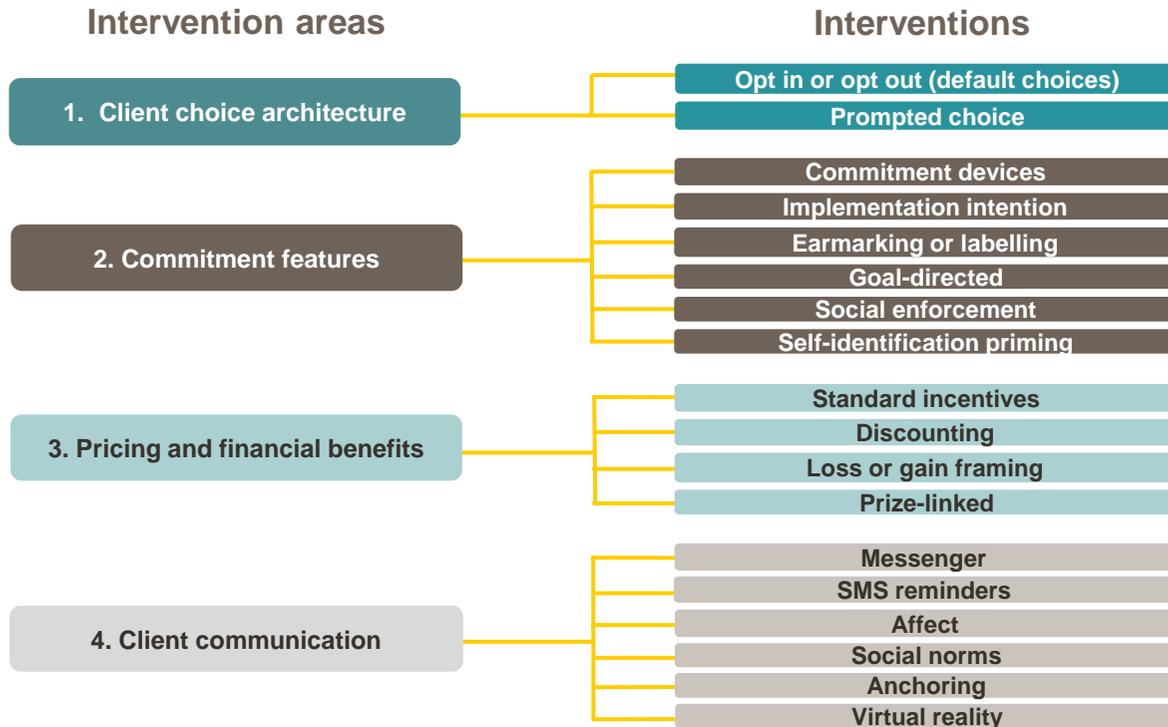
There are many ways to begin design ideation for interventions, and it can definitely seem like a daunting task! Fortunately, there are a number of behavioural science teams that have developed frameworks to help us to begin thinking through potential interventions.

One of these is the [EAST Framework](#).



Examples:

How can we design products for behavioural change?



The Database of Behavioural Interventions for Financial Services provides information on field-tested interventions that target savings, insurance and credit behaviours.

Phase 4: Test



Testing your intervention

- Perhaps the most important part of being a successful behavioural scientist is having an attitude of **experimentation**. Not every intervention will work, and the best way to find out what works is by measuring the changes you make.
- Testing allows us to sense-check our research and our designs. Because small changes can make a big difference, it's often valuable to iterate on our interventions to ensure that we've selected a design that does what we intend.
- In the long run, testing interventions can save an organisation money by ensuring solid design that brings about results. Even interventions that “fail” in the testing phase will teach your organisation more about their customers and what works and what doesn't.
- Although the validity of RCTs is unmatched, they are hard to run, can be expensive and can require a lot of coordination.
- The good news is that testing doesn't have to be expensive: Field testing has its place and often brings immense value; but, sometimes, a focus group is enough to test a concept.

Testing your intervention

- Although the validity of RCTs is unmatched, they are hard to run, can be expensive and can require a lot of coordination.
- The good news is that testing doesn't have to be expensive: Field testing has its place and often brings immense value; but, sometimes, a focus group is enough to test a concept.
- There are many experimentation methods that you can use, but the most important part for each of them is having clear ways to measure changes.

Tools for diagnosis

Tool	What is it/when to use	Pros	Cons
Field testing	Rapid tests that we can run with small sample sizes and short turnaround times Good for: when we have one intervention and we want to test iterations to perfect its design.	Less costly, fast turnaround time, real-world results	Less robust than larger experiments, can only test one component at a time
Rapid prototyping	Uses a smaller group, such as a focus group or series of interviews, to test a concept or a mock-up of a design Good for: when we have an idea or concept that is expensive to develop, and we want to sense-check the idea before beginning the development process.	Cheap, quick turnaround time, able to iterate quickly, easy to design	Requires building/designing each iteration, less robust than larger experiments
A/B testing	A simpler, faster variant of an RCT and tests only one change versus a control group, where RCTs usually test multiple interventions Good for: testing a single change to optimise a decision or system.	Robust results, quicker than RCTs	Can only test one intervention at a time
Lab testing	Set-up a decision similar to the real-world situation that you are researching. It then asks participants to complete the tasks or make a decision and observes differences between the control group and the treatment group/s Good for: when real-world testing is difficult or ethical concerns prevent us from randomly allocating treatment groups	Quick turnaround time, semi-robust	Contrived setup may reduce controls for contextual effects, expensive to set up a lab and bring participants there
Quasi-experimental testing	The variable of interest is measured over a set amount of time, a live change is made to the product, service or communication and the variable is measured again after the change was made to determine whether there are any differences in behaviour Good for: time-sensitive changes that are low-cost if they fail	Cheap, if the intervention works; then you've already started reaping the benefits	Takes time to see results, may be risky if the intervention doesn't work or has the opposite effect
Focus groups	Gather together a representative group of clients and discuss the proposed intervention, often with a mock-up of the changes Good for: when we are interested in more than just whether behaviour changed, such as how people feel or the welfare implications.	Quick, cheap, can ask detailed, nuanced questions	Not very robust, participants may be subject to social desirability bias

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