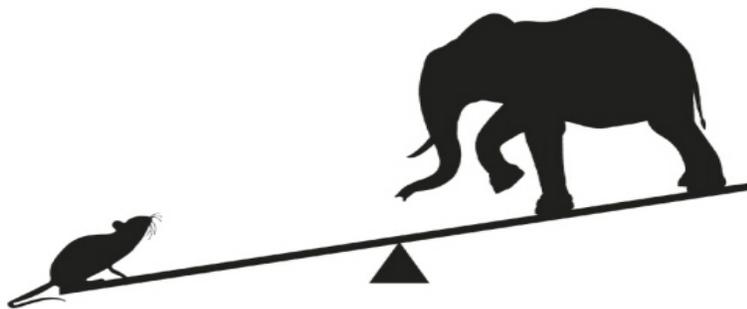


'A new way of thinking' *Telegraph*

# INSIDE THE NUDGE UNIT



HOW SMALL CHANGES  
CAN MAKE A BIG DIFFERENCE

**DAVID HALPERN**

Foreword by Richard H Thaler co-author of *Nudge*

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## About the Book

This is the story of an experiment. The Behavioural Insights Team, or 'Nudge Unit' as it came to be called, was set up in Downing Street in 2010 by Prime Minister David Cameron. The team's objectives read like a mission impossible: to transform the approach of at least two major departments; to inject a new and more realistic understanding of human behaviour across UK government; and to deliver a 10-fold return on its cost. If it failed, it was to be shut down on its two-year anniversary - with enough time for voters to forget the whole embarrassing experiment before the next election.

Over its first two years, the Behavioural Insights Team (BIT) conducted dozens of experiments across healthcare, tax, energy conservation, crime reduction, employment and even economic growth. And much to everyone's surprise, it worked. BIT's experiments showed that seemingly small changes could have big effects and most of the interventions cost virtually nothing.

At end of two years, the results were unambiguous. Designing policy around behavioural insights led to better outcomes, easier services for the public to use, and saved money.

This is a book about the application of psychology to the challenges we face in the world today, told through the experiences of a small team in the heart of British Government.

## About the Author

Dr David Halpern is currently Chief Executive of the Behavioural Insights Team (BIT) and the UK's National Adviser on What Works. Prior to this, David was Chief Analyst in the Prime Minister's Strategy Unit (2001-2007), and has held academic positions at the Universities of Cambridge, Oxford and Harvard.

# INSIDE THE NUDGE UNIT



HOW SMALL CHANGES  
CAN MAKE A BIG DIFFERENCE

**DAVID HALPERN**

With Owain Service and the Behavioural Insights Team

Foreword by Richard Thaler

WH  
ALLEN

*To the elected*

# FOREWORD

ONE OF THE most powerful and pernicious of the many cognitive biases that have been uncovered by behavioural scientists is 'hindsight bias', first investigated by Baruch Fischhoff when he was a graduate student studying at the Hebrew University with Daniel Kahneman and Amos Tversky. Simply put, hindsight bias is the phenomenon that after the fact, we think we knew it all along. Would America elect an African-American as President before a woman? Sure, we all thought that could happen. Did we think in 2000 that fifteen years later most of us would be carrying powerful computers in our pockets that could keep us up-to-date with email, answer nearly any factual question just by speaking to it, and get us anywhere without getting lost? Hardly. But we take our smart phones for granted now.

By a similar process, it is easy to become blasé about the story David Halpern tells in this remarkable book. For example, in 2004, just eleven years ago, I organised a session at the American Economics Association annual meeting that had the cheeky title: 'Memos to the Council of Behavioral Economic Advisers'. None of the participants, including me, ever thought we would see the day that any government institution vaguely resembling such an entity would exist.

Nothing about this forecast changed when Cass Sunstein and I published our book *Nudge*, in 2008. The idea of the book was that it might be possible to use the findings of the behavioural and social sciences to help people achieve their goals, and to improve the effectiveness and efficiency of government policies, without requiring anyone to do

anything. We called our philosophy libertarian (or liberal in the UK) paternalism. Perhaps because of the presence of that phrase, commercial publishers shunned the book so we went with an academic press and hoped that a few of our colleagues might read it and continue to push the intellectual agenda. Never in our wildest dreams did we consider the possibility that just seven years later, countries all over the world would be creating new government departments to incorporate behavioural science principles into the design of policies. How did this happen?

The behavioural policy agenda got a jumpstart when one of Cass's former colleagues at the University of Chicago Law School got himself elected president of the United States, and appointed Cass to be the Administrator of the White House Office of Information and Regulatory Affairs. This position was created by President Ronald Reagan and its primary function is to assure that government regulations do more good than harm. During his tenure, Cass was able to use his knowledge of social science, and of nudging, to require many agencies issuing new regulations to incorporate the tools of behavioural science into the design of their policies. In fact, the Obama administration used those tools in a wide range of areas, from health care and financial reform, to healthy eating and energy efficiency. In some cases, binding documents issued by both President Obama and the Office of Information and Regulatory Affairs made sure that behavioural insights were hardwired into the work of numerous government agencies.

The next big breakthrough came when the coalition government of the United Kingdom led by David Cameron announced their intention to create a small team tasked with the job of improving the workings of government using behavioural and social science research.

Having met some of Cameron's team a year earlier, I was asked to come to London for a few days and help get things started. It was on this trip that I first met David Halpern who was then being wooed to take on the job of leading the new team. David and I joined two of Cameron's 'senior advisers' - Steve Hilton and Rohan Silva - (I use the scare quotes because Rohan was not yet thirty) on a one-day trip to Paris to compare notes with some folks in the Sarkozy government who were contemplating a similar endeavour. Nothing came of the French effort aside from an excellent lunch, but we made good use of our time together on the Eurostar to think about what the team might do and other important matters, including deciding what it should be called. We eventually settled on the Behavioural Insights Team, though Rohan prophetically predicted that the formal name of the team would be irrelevant since everyone would just call it the 'Nudge Unit'.

Now, five years later, it is hard to imagine what would have become of the effort had Rohan not convinced David Halpern to come back from the comfortable, good life working at the UK's Institute for Government and as an academic at Cambridge, to resume a full-time role in government. David had a unique background that made him the ideal person to lead this new effort. Not only was he a first-rate academic psychologist with a thorough understanding of modern behavioural science research, but crucially he had also worked in the Strategy Unit at 10 Downing Street in Tony Blair's administration, so knew the workings of Whitehall intimately. He had even written a report urging the application of behavioural science to public policy. I am quite sure there was no one else in the UK better suited to take on this job that was still to be defined.

David quickly formed a small team with a mix of complementary skills. No member of that team was more important than Owain Service, who quickly emerged as the

de facto chief operating officer. (Hint: if you put an academic in charge of something, make sure there is someone on the team who is in charge of making sure things run smoothly.) Through some combination of creating a healthy work environment, good judgment in selecting candidates, and a bit of luck, many other early members of the team are still in place and are now serving in leadership roles.

But even once David was convinced to lead it, and his initial team was formed, few people expected the BIT to be a success. Indeed, on both sides of the Atlantic, the media were pretty sure the nudge agenda was destined to fail. In America the harshest criticism came from the political right, who viewed 'nudging' as some kind of pernicious form of meddling. One particularly nutty talk show host kept referring to Cass as the 'most dangerous man in America'. In Britain the press were of two minds. One was that the idea was just plain silly. References to the famous Monty Python routine using the phrase 'nudge nudge, wink wink' were a common source of put downs. Another came from the most famous example from our book - an image of a housefly etched near the drain in the urinals at Amsterdam's Schipol airport which reportedly reduced 'spillage' by 80 percent - this was considered to be as good as it would get when it came to nudging. The other main criticism came from the political left, who worried that the Tories would use nudging as an excuse for avoiding tougher, presumably more effective policies. Fortunately, neither of these criticisms turned out to be well-founded.

A good example of the potential power of a gentle nudge is the pension reforms that in 2010 were being prepared for a roll-out in Britain under a plan devised by Lord Adair Turner. Under the plan, employers were required to automatically enrol workers into the plan, but employees were free to opt out if they wished to do so. Left-leaning sceptics thought that participation should be mandatory,

and that the mere nudge provided by automatic enrolment would not suffice. These fears turned out to be misplaced. At this point, three years into the roll-out, the opt-out rate has been less than one in ten. But these results were not known in 2010, and I think it was fair to say that most observers did not give either the Nudge Unit or its general approach much chance of succeeding.

Of course, some scepticism was warranted. No one had ever tried before to create a special unit of government devoted to implementing behaviourally informed policies, and even those of us involved knew enough about cognitive biases to be wary of overconfidence. Thus one of the team's first decisions was to plan its own demise if things did not work out. Well aware that many new government initiatives fail but yet linger indefinitely, the team built in a sunset clause. After two years, the BIT would be evaluated by the Cabinet Office and unless it could present solid evidence that it could produce results and save the British taxpayers money, it would be dissolved. Practice what you preach is a good philosophy, but the pressure was on!

The initial team had only seven members, a modest budget, and a bit of office space tucked away in the Admiralty Arch. David had no readymade roadmap or obvious role models, but had to show results in two years. Excited, intrigued, and eager to see the process unfold up close, I started including an annual week of teaching in London in the executive MBA programme that the Chicago Booth School of Business offers so I could regularly spend some time hanging out with the team when I wasn't in the classroom, helping when I could. It has been an exciting experience for me, and I am thrilled that David has written this book to let others learn from this experiment.

Now for the spoiler alert. The BIT has been a big success. There are now over 60 employees and the team has been lifted out of UK government and organized as a social purpose company with a mission to help public service

organisations across the world. It is currently working with governments across five continents. Furthermore, similar efforts are being undertaken by governments globally, including my home town of Chicago! This book is the story of how that happened.

Of course the team has had its share of good and bad luck, plus plenty of frustration. The insistence that every new idea be tested, whenever possible using randomised control trials, meant that results would come in slowly, and the fine details of every initiative would inevitably be handled by whichever government department held jurisdiction. Needless to say, these sorts of experiments are more difficult to conduct than those run in a laboratory. Still, in spite of these difficulties, much has been learned about specific policy ideas and, just as importantly, how to create an organisation that can investigate the use of behavioural insights to solve real world problems. This first-hand account should be of interest to anyone curious about finding new ways to solve problems in any domain, from the public sector to the private sector to our own lives.

As you read the pages that follow, my only request is the one that I write every time someone asks me to sign a copy of *Nudge*. 'Nudge for good.' Please.

Richard Thaler, July 2015

# PREFACE

IT IS TWENTY months into the new government, elected in 2010. The Cabinet Secretary, Britain's most senior civil servant, has gathered together the heads of the government departments. Between them, they are responsible for the collection and spending of more than half a trillion pounds and employ more than five million public sector workers.

There are too many to fit comfortably around the table of the Cabinet Secretary's wood-panelled room. Such larger meetings tend to happen in the adjacent room in the old Cabinet Office building of 70 Whitehall, with its roped-off gilded chair in case the reigning monarch dropped by and wanted to look on (not that this had happened in living memory). But on this occasion, they sat around a light and bright room in the recently refurbished 22 Whitehall. It's a minute away on foot, but 400 years away in its history and architecture: a new space for new thoughts. As they gather, the mandarins quietly compare notes, discuss the issues of the day, gossip about who's up and who's down, and deals are quietly done.

The new Cabinet Secretary, Sir Jeremy Heywood, calls the meeting to order. He is, in every sense the Prime Minister's right-hand man: not just the Country's top mandarin, but literally the one to sit beside the Prime Minister in Cabinet to document its decisions and to make sure they happen. The Heads of Departments, or Permanent Secretaries as they are officially called, are curious to see how Sir Jeremy operates and what he cares about. Most know him from his previous roles, but it is still

early days for him in the top seat. He is known to be close to, and trusted by, the new Prime Minister David Cameron, but his reputation goes way back. He was Tony Blair's highly regarded Principal Private Secretary, and later returned to No. 10 to be Gordon Brown's Head of Government Policy, a specially created Permanent Secretary role for him. Heywood is the ultimate 'policy wonk', with mastery of detail and strategy across departments; a man whom successive Prime Ministers found indispensable.

On the agenda today is a ten-minute presentation and discussion of government's Behavioural Insights Team, or, as the press and most of Whitehall jokingly call it, the Nudge Unit. For most of those gathered around the table it is the first time they have seen any results from the team. It will, at least, be a fun item to lighten their week. They are old hands. They know the ways of newly elected governments, with their bright new advisers in No. 10. New governments like to talk about new approaches, but many of these approaches are quietly forgotten after a year or two, and with them the advisers that made them fashionable. Ultimately, the challenges and tools of governments don't change much over time.

The Perm Secs, as they are often called, chat, laugh and quietly trade as they settle down. Heywood gets straight down to business, outlining some of the issues that he sees the Government wrestling with in ongoing Parliament. After a brief discussion, he moves the meeting on. 'Today we are going to hear some early results from the Behavioural Insights Team, or Nudge Unit. As you know, the Prime Minister is quite interested in this new approach.' He looks to his left, to the end of the table where I'm sitting with my deputy, Owain Service. 'Most of you will know David already,' he adds, and nods for me to begin.

I have little time so I immediately outline the nature of the approach: it is about introducing a more realistic model of human behaviour into policymaking. The idea is to use this approach to identify low-cost and unobtrusive ways of 'nudging' behaviour. A recently appointed Perm Sec, with whom we have already been working, nods sagely. Several of the Perm Secs are looking at their papers for the day, and one or two surreptitiously check their government-issue BlackBerries under the table. I move to four early results: a slide for each. The Perm Secs have the slides in front of them.

The first is a result from the tax department. The relevant Perm Sec catches my eye as he looks over slightly warily. I explain how we worked with the department to send out different versions of letters to people who owed tax to test systematically if changing the wording based on the behavioural literature would make a difference. We tested whether adding a single sentence such as 'most people pay their tax on time' would boost repayment rates. It did - and by several percentage points, enough to bring forward tens of millions of pounds. The Perm Sec smiles and nods. Though we had spoken to him along the way, it was difficult to be sure if he was fully aware of this trial conducted in his vast department, but he seemed pleased.

The second result is from a trial we had run to encourage people to insulate their lofts or attics. The numbers were small, but the results elegant. The environment department had been asking for money for larger subsidies on insulation, but we had concluded that for many people the biggest issue was hassle rather than cost. With this in mind, we used a leaflet study to compare the effectiveness of offering extra discounts with an alternative one offering an 'attic-clearance service' but that homeowners had to pay for. The attic clearance scheme, despite its extra cost to householders, was more than three times more popular.

The Perm Secs chuckle. They see the point. Removing hassle could be more effective than bigger discounts.

The third result is about motoring fines. It shows that adding an image of the owner's car, captured by roadside camera, made the owner significantly more likely to pay unpaid car tax. I mention that the French had tried a similar approach for speeding offences, but had stopped it on account of the marital strife caused by spouses being able to see who else was in the car. Now they just sent them a letter, I explain, threatening to send the photograph if the driver doesn't pay. This causes much amusement - rivalry with our continental cousins runs deep.<sup>1</sup>

The fourth result is from a trial with the Courts Service. We had texted the mobiles of people who owed fines informing them that bailiffs were due to collect in the next ten days. The graph showed how the texts more than doubled payment rates, saving the courts' time and the debtors' money and hassle from bailiffs, and boosting revenue in the process.

One after another, the slides show how small changes in processes, or even just the wording of letters, led to significant shifts in outcomes. More tax collected; more homes insulated; and more fines paid. And the cost? Almost nothing. The Perm Secs aren't laughing now. You don't get to be the head of a department with tens thousands of staff, and budgets the size of small countries', without being able to recognise the political and administrative significance of what they had just seen. Britain, like many other countries, was in the grip of austerity. Most departments faced major cuts, ranging from 10 to 30 per cent. At the same time, the new government was pushing them to deregulate, cut red tape and avoid legislation. In effect, the two main tools that most departments had relied on for the past 50 years - spending money and legislation - had been put in a box labelled 'do not touch' by the new Coalition Government.

Here in front of them was a tool they could use. And if the numbers were right, it was a tool that might actually work.

One of the Perm Secs raises his hand. His expression inscrutable, he asks if his Minister had been informed about the trial that had been conducted in his department. For a second my heart sinks. In this particular case, I am not at all confident that the Minister does know, and I'm pretty sure we hadn't discussed it with the Perm Sec. We had gone, guerrilla-style, to the head of one of his regional services to run the trial, worried that otherwise we would be bogged down in paperwork for months. I fear we are about to be ripped apart for failing to get proper permission from his department, and perhaps, more fundamentally, about the principles of conducting trials at all. It will derail the whole meeting. Instead he grins warmly, and asks for more details to be sent over so that he can brief his Minister, who he thinks will be very impressed.

It is a key turning point. Department heads who walked in as sceptics that spring morning in 2012 walked out, if not as converts, then at least open to the possibility that 'nudging' was worth taking seriously. The ten-minute item took almost the whole hour's meeting. It was the day nudging went mainstream.

## **A different view on people and government**

Human beings are extraordinary. We have evolved to cope with the vast complexity of the world in the blink of an eye. Every day you make tens of thousands of judgements. Your senses and brain are perpetually interpreting the world. Virtually everything you see and hear is ambiguous – the table in front of you could be square, or it could be an odd-shaped trapezoid viewed from a particular angle; and the sound in the corner could be a creaking pipe or a lurking attacker.

We make endless decisions, many so quickly that we barely register them as such. When to stop, or go, at a junction. What to eat and what to wear. Which route to take across a crowded room. And, remarkably, nearly all the time we get it right. We correctly figure out what people mean, and what things surround us. We don't crash into others when we cross a room, or smash our car on the commute to work.

Behind the shroud of our consciousness, a myriad processes race to work out what is going on in the world around us, and how we should respond. From the 'simple' act of seeing a line or edge, to sensing that a friend is angry or sad, our brains ceaselessly infer, overlay and interpret new information and memories. It's an incredible performance.

Because so much of what we see and do is based on inference - or 'fast thinking' - we occasionally get our inferences wrong. We jump at a bursting balloon, or brake sharply at a shadow on the road. Psychologists, and artists, have long studied these 'errors' through illusions and experiments. In everyday life we experience them through jokes or story twists where we suddenly realise our hidden assumptions are wrong.

Some experts and commentators have used the term 'irrational' to characterise the mental shortcuts we use to get through the day. It's not a word I much care for: it fails to capture the remarkable performance of people nearly all of the time. It's also an uncomfortable contrast with the 'rational' but unrealistic models of classical economics, with their assumptions of perfect information and single-dimension comparisons.

Your view of people also shapes your view of government, business and society. If you work on the basis that people are the 'rational utility maximisers' of classical economics, you design tax, legal and welfare systems on that basis, and business models, too. You think that if the benefits of

cheating on taxes exceed the likely costs, factoring in fines and the probability of being caught, then people will cheat. You'll think that competitive markets will squeeze out bad providers, and the best will expand to the benefit of all. And you will think that, provided there is information available, people will figure out how best to save, what's healthy to eat, whether to smoke, or do drugs.

The limits of human cognitive capacities, and the naivety and failures of classical economic models, create a powerful case for more regulation and a more active state according to some. Such critics argue that our brains, remarkable though they are, were not made for the modern world. The tastes and surplus of modern food mislead us, with rising obesity across the industrialised nations. Our excessive discounting of the future pulls us headlong towards global warming and destruction. Similarly, it is not difficult to conclude that our brains weren't made for the day-to-day financial judgements that are the foundation of modern economies: from mortgages, to pensions, to the best buy in a supermarket.

Yet classic economic and regulatory models are themselves based on mental shortcuts, or naive models of humanity that do not ring true. They're like ill-fitting suits, because the model on which they are based is a simplistic mental mannequin. In their book *Nudge*, Richard Thaler and Cass Sunstein describe these simplified creatures as 'econs'. These econs consider and weigh up all the options, coolly and accurately, like the Vulcan Mr Spock from *Star Trek*, or the legendary Deep Blue that finally defeated the great chess champion Garry Kasparov (or at least how people *think* it 'thought'). In contrast, 'humans' can't consider 200 million options a second, and our thinking and decisions are fused with emotion. As Dr Spock remarks, our conclusions are - at least to him - frequently 'illogical, captain'.

What would a world look like, and the actions of governments, businesses and communities, if based on a more realistic model of people? *Nudge* popularised and gave a glimpse into a world where governments might use subtler approaches to influence behaviour. It set out a theory; an idea. In contrast, this book tells the story of moving from theory to practice.

A practical approach to government, or business, based on a realistic model of people would be messier than that of traditional economics or law. It would need to reflect the complexity of the human mind – what we do well, and what we don't. It would imply thinking of cognitive capacities as wonderful, but precious resources. When we design services and products, we would need to be respectful of this reality, and remember that people have generally got better things to do than wade through bureaucracy or the puzzling 'rationality' of the state or big business. We would have to design everything we do around people, not expect people to have to redesign their lives around us.

We are perpetually bombarded by subtle influences and cues, and nearly all of us – whether we like it or not – are at least 'accidental nudgers' of a sort. The way a shop is laid out; how an offer is presented; how a form is written – all will have some kind of influence on behaviour. In this sense, the world of nudging is all around us. The question is, do we stumble on blindly, or seek to understand these influences and choices?

## **An experiment in government**

At the heart of this book is the story of an experiment: the Behavioural Insights Team, or the 10 Downing Street Nudge Unit as it came to be called. Set up in 2010 by the new British Prime Minister, David Cameron, it was initially the subject of amusement among the British and

international media, and deep scepticism by the mandarins of Whitehall.

The team's objectives read like a mission impossible: to transform the approach of at least two major departments; to inject a new and more realistic understanding of human behaviour across UK government; and to deliver at least a tenfold return on its cost. If it failed, it was to be shut down on its second anniversary - leaving enough time for voters to forget the whole embarrassing episode before the next election.

Over its first two years, the Behavioural Insights Team (BIT) conducted dozens of experiments - 'randomised controlled trials' - across such subjects as healthcare, tax, energy conservation, crime reduction, employment and even economic growth. Much to everyone's surprise, it worked.

BIT's experiments showed that seemingly small changes could have big effects. The team found that adding a simple (and true) statement on tax reminders that 'most people pay their tax on time' encouraged far more people to do so. Such changes, based on social norms and other effects, were shown to bring forward hundreds of millions of pounds of revenue in a year and helped change the way that the Revenue Service operated. Getting the unemployed to think about what they could do in the next two weeks, instead of asking them what they had done in the *previous* two weeks, significantly increased the numbers off benefits at three months, getting tens of thousands back to work faster and trimming millions of days off benefits. Getting rid of a form that employees had to sign to join their pension scheme, but still leaving them the choice of opting out, led to more than five million (and still rising) new savers. Other experiments showed how simple 'nudges' could reduce carbon emissions, increase organ donation, increase quit rates of smoking, reduce missed medical appointments, help students finish their

courses, reduce discrimination and boost recruitment. And most of the interventions cost virtually nothing.

It was not all easy. Even with the personal backing of the Prime Minister and Deputy Prime Minister, and a Downing Street base, many inside government remained deeply sceptical. Civil servants and administrators often declared that proposed experiments could not be done or were even illegal. Some of the interventions did not work, and others worked in ways that were not expected.

At the end of two years, however, the results were unambiguous. Designing policy, and the nuts and bolts of public services, around behavioural insights and empirical methods led to better outcomes, easier services for the public to use, and saved money. After a century in the wings, behavioural science had finally moved out of the laboratory and into mainstream government policy.

## **A short road map to the book**

This book is about the application of psychology to the challenges we face in the world today. It explores the results of a small team at the heart of British government which was given the task of translating psychological theory and an experimental approach into action and everyday policy. It also documents some of the trials and tribulations along the way, including the struggles to get mainstream policymakers to take a behavioural approach seriously, and the race to get results before time and political capital ran out.

The Behavioural Insights Team, despite its nickname, actually explored a much broader application of psychology to policy than that described in the original American publication *Nudge*. It sought to apply a more sophisticated model of human behaviour across the whole range of what government does. This story is told in four sections.

The first section provides a short history of ‘nudging’. It explores the early academic foundations on which the approach was built, and how they continue to influence it today. It looks at how governments, communities and leaders have – alongside laws, fines and force – sometimes used more subtle ways of shaping human behaviour, but also how early forays into more overtly behavioural approaches ran into difficulties. In the second chapter, a short history explains how in the USA nudge approaches began to be used by President Obama’s White House, and how the Behavioural Insights Team came to be founded by Prime Minister David Cameron in 2010. Along the way, we will meet some of the characters who helped make it happen.

The second section of the book looks at how behavioural insights are being applied to the ‘nuts and bolts’ activities of governments, from persuading people to pay their taxes to encouraging the insulation of homes. Each of the four chapters in this section introduces one of the central approaches used by the Nudge Unit captured in a simple mnemonic – EAST: Easy, Attractive, Social and Timely. We will see how, with minimal cost, the application of behavioural insights and experimental methods are leading to dramatically improved results, and get a sense of why these approaches are being adopted by governments and businesses across the world.

The third section of the book explores the more advanced applications of behavioural science. This steps up from refinements of letters and processes to how behavioural insights can radically reshape the way we think about the world, and with it policy and practice. It opens by exploring how consumer information and behavioural science are combining to transform how markets work. It moves on to examples of how behavioural thinking led to radically different policy decisions, from the regulation of markets, to getting people back to work faster and helping reboot a

faltering economy. For some people, behavioural science goes even further, challenging the fundamental objectives of policy by revealing the foundations of well-being itself. The last chapter in this section explores the impact of the experimental methods that behavioural science has brought in its wake, and that may yet prove to be its greatest and most disruptive legacy.

The final section explores the risks and limits of the rapidly spreading embrace of behavioural science across the world. It examines the practical and political limits of the approach, and why all of us as citizens need to know something about how it is being used. For some critics, nudging by governments is sinister; for others, it is seen as an excuse for governments to stand back from tougher action on important problems. Either way, the argument is made that governments and businesses need to up their game in getting public permission for how they use these approaches. The final, concluding chapter looks at what the future holds for 'nudging' and the application of behavioural insights. It considers whether behavioural insights have anything to add to the deepest and most daunting challenges that face us today, including how we get along with our fellow humans – challenges and frontiers that 'nudgers' are starting to explore.

Suffice it to say that when the time came for the two-year sunset review of BIT, far from shutting the team down the Prime Minister decided to expand it. The Nobel Laureate Daniel Kahneman, whose research has led the field, commended the team's work. The press, civil service and political parties turned – for the most part – from sceptics to supporters.

Love it, or hate it, nudging is here to stay. The history and remarkable results of the 10 Downing Street Behavioural Insights Team have led governments across the world to adopt similar approaches, many advised by the Behavioural Insights Team itself. We are all going to see more use of

behavioural insights by governments, businesses, and others in the coming years. Chances are you have already been nudged. It has been a remarkable success, but its very success has raised concerns, too. Like all knowledge, the use of behavioural insights can be a force for good or bad. How we use it is something we must all decide.

## SECTION 1

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# A SHORT HISTORY OF NUDGING

People have been ‘nudging’ each other for as long as mankind has existed. We are always busy persuading and encouraging those around us to do one thing or another. Indeed, many biologists think that much of human development, and our unusually large brains, was powered by the complex patterns of influence that characterised early human, and hominoid, social groups.

Yet when it comes to governments and businesses, many have turned their backs on the messy skills of softer persuasion. Instead, they have packed their toolkits with more recent and fashionable tools, shaped by the modern and ‘rational’ disciplines of economics and law.

In recent years governments and businesses have started rediscovering this wider set of influences on human behaviour. Partly they have done so out of surprise and desperation when conventional policy tools based on economics and law have failed, but also because of an increasingly nuanced understanding of the human behaviour born of the ‘soft’ sciences, and psychology in particular.

It has been a fascinating rediscovery.

## CHAPTER 1

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### **EARLY STEPS**

(Part 1 - theory: 1700-2007)

***The greatest and noblest pleasure which we have in this world is to discover new truths, and the next is to shake off old prejudices.***

FREDERICK THE GREAT

In the 1700s European leaders and administrators were worried. Their populations were growing, but their diet was relatively restricted. Famine was a constant danger, provoking not only mass starvation, but wars and revolutions. An over-reliance on wheat, or any single crop, presented a particular danger. If the crop failed, disaster would follow.

Against this background, the introduction of the humble potato to Europe had a deep political and strategic importance. But there was a major problem. For those not accustomed to the potato, it was a very strange and rather unappealing foodstuff. It had a taste that was unfamiliar and bland.<sup>1</sup> The way it grew was no less unfamiliar - tubers producing a crop underground, not like the graceful and familiar sweep of wheat and corn springing up out of the earth. It was even shunned by the Church on the basis that the Bible made no mention of the potato, while wheat, in the form of bread, came to represent the body of Christ.

European leaders used a variety of ways to encourage reluctant populations to adopt the potato, some even passing laws requiring their cultivation. Frederick the

Great of Prussia took a particular interest in the potato, believing it could lower the price of bread and greatly reduce shortages of cereals in times of crisis.<sup>2</sup> In 1744 he introduced the potato into the diet of the army, and through his reign passed no fewer than 15 orders aimed at driving its adoption and cultivation. But even then resistance to the potato ran deep.

During a famine in 1774, Frederick ordered a national cultivation programme. In a response typical of many towns, the people of Kolberg declared: 'The things have neither smell nor taste, not even the dogs will eat them, so what use are they to us?'<sup>3</sup>

Frederick's initial response was more a violent 'shove' than a nudge - he threatened to cut the noses and ears off any peasant who did not plant potatoes. However, he soon changed tack. In modern parlance we'd say that he used a bit of 'psychology'.

Legend has it that instead of issuing further threats, Frederick ordered his soldiers to establish a heavy and visible guard around the local royal potato fields, yet also instructed them to be deliberately lax in protecting them. At the same time, the local peasants noticed their king's conspicuous admiration of potato flowers as well as the tubers themselves, and sneaked in to steal and plant the 'royal crop'. Within a short time, many potatoes were stolen and soon being widely grown and eaten.

Frederick's interventions provide a striking example of the limits of passing laws and sanctions, and of the power of a more subtle approach to behaviour change. And it paid off. In the years of war that followed, unlike many rival nations the Prussians did not starve or see their population fall. While passing armies could readily raid granaries, potatoes in the ground were much less likely to be taken. The adoption of the potato saved the lives of many, and

incidentally helped leave Prussia the dominant power in the region.

## **The art of persuasion**

Frederick was not the only leader to turn to the art of persuasion as a subtler alternative to force. Since ancient times, leaders have sought to impress their followers through statues and monuments that convey power, wisdom and other attributes that they wish to project. Henry VIII lined his palace at Hampton Court with exquisite tapestries to convey not only his wealth and power but also, in the depiction of the story of Abraham, to create a parallel to Henry's own sense of destiny and that of his fledgling but 'special' nation. Similarly, the portraits he commissioned, and the image of power and wealth they project, still influence us today. To many people, the image of Henry VIII is the very personification of a king.

Sometimes leaders have deliberately used their power and influence to alter fashion and behaviour, and religious and cultural practices in societies have often picked up heavily on the behaviour of leaders and the fashions of their courts. Leaders have often intuitively understood this, and through making their behaviour more conspicuous have sought deliberately to change the behaviour of their people.

This has extended beyond religious practice or what names are fashionable for your children. For example, a major turning point in the use of anaesthetics occurred when Queen Victoria elected to use chloroform to ease the birth of her eighth child in 1853. In the medical establishment of the time the use of chloroform was extremely controversial, with the *Lancet* writing that same year that 'in no case could it be justifiable to administer chloroform in perfectly ordinary labour'. But the Queen's use of anaesthesia was a more powerful message than even

the medical establishment could resist. When she also used it for the birth of her last child in 1857, the use of anaesthesia to ease the pain of childbirth became widespread, at least among those who could afford it. <sup>4</sup>

Governments, too, at both national and local level, have sometimes turned to more subtle forms of persuasion to influence behaviour.

Between 1910 and the early 1920s, the number of cars on the road in Britain, the USA and elsewhere increased almost tenfold. The rising numbers and greater speed brought with them a new problem - the car crash. In Britain in 1921, following a spate of accidents at Maney Corner, in Sutton Coldfield, outside Birmingham, someone had an idea. They noticed that many of the accidents were caused by the rising tide of ever faster cars cutting the corner and hitting cars coming the other way. The idea? To paint a white line in the centre of the road. It proved highly effective, and within a few years white lines were being painted on roads around the country.

The white line is a wonderful everyday example of a 'nudge', as are many of the prompts that guide our driving every day. Rumble strips alongside the edges of motorways alert us that we are drifting off the road or into the central reservation. Catseyes indicate the separation between lanes, with different colours to highlight turn-offs from the main road. More recently, in many countries speed signs and 'slow down' signs flash back warnings to drivers, the numbers turning to flashing red when the speed exceeds the limit.

Though now mostly forgotten, a similar set of nudges evolved during the time of horse-drawn carriages - nudges designed not just for humans but for horses, too. Today's drivers cutting through the Rotherhithe Tunnel, the oldest road tunnel under the River Thames, are sometimes struck by the sharp zigzags along the route. Part of the reason for