

## STEP ONE

# Get to Grips with a World in Hyper-Drive

*It's Monday morning.*

*In Washington, the President of the United States is sitting in the Oval Office assessing whether or not to order a military strike on Iran.*

*In Idaho, Warren Buffett is deciding whether to sell his Coca-Cola shares or buy more.*

*In Madrid, Maria Gonzalez, a mother, is trying to work out whether to let her baby continue crying until he falls asleep, or pick him up and soothe him.*

*I am sitting by my father's bedside in hospital, trying to decide whether I should let the doctor operate, or wait another twenty-four hours.*

We face momentous decisions with important consequences throughout our lives. Difficult and challenging problems that we are given the sole responsibility to solve.

On top of this, we have to make up to 10,000 trivial decisions every single day,<sup>1</sup> 227 just about food.<sup>2</sup> Caffeinated or decaf? Small, medium, large or extra large? Colombian,

Ecuadorian, Ethiopian? Hazelnut, vanilla or unflavoured? Cream or milk? Brown sugar or sweetener?

If you make the wrong choice when it comes to your coffee, it doesn't matter very much. You make a face and move on.

But make the wrong choice when it comes to your finances, your health or your work, and you could end up sicker or poorer, or lose your job. And if your decisions relate to others – your parents, your children, your country or your staff – the choices you make can irreversibly impact the direction *their* lives will take too. Not only today, but in the months and years ahead.

Errors in decision-making lead young people to under-save for retirement, doctors to miss tumours, CEOs to make catastrophic investments, governments to engage in needless wars, and parents to irreversibly traumatise their children.

This book is about how to make better choices and smarter decisions when the stakes are high and the outcome really matters – whether you are a politician, a businessperson, a professional or a parent.

## **Think Yourself Smarter**

It's actually very surprising how little we think about the quality of our decision-making and how we could improve it. How absent decision-making classes are from educational curricula.

*How little we think about how it is we think.*

Ask most people why they came to a certain decision, and watch them stumble. How we come to our own assessments, how we arrive at our predictions and choices, are things we seldom scrutinise.

For the sake of our health, our wealth and our future security, we must take it upon ourselves to challenge the way we make our decisions. It's a matter of self-empowerment.

If we do not want to be victims of a future that others dictate to us, we need to get better at making choices with our eyes wide open, our brains switched on.

This means getting better at collecting, filtering and processing information, getting smarter at establishing who to trust and whose recommendations to take on board, getting more adept at analysing different options and weighing up divergent opinions. It also demands that we forge a clearer sense of how it is we come to make decisions – that we understand how our emotions, feelings, moods and memories affect our choices. And that we better know and understand our environment, so that we can master its particular challenges as well.

More specifically, we need to come to terms with three powerful ways in which the environment we now live in can inhibit our ability to think smartly and choose wisely.

## **Drowning in the Deluge**

For this is the age of data deluge.

An age in which advertisers, marketers and media outlets tweet us, text us, and follow us online. An age of Facebook News Feeds and Amazon Recommends. An age in which we are overwhelmed with information, increasingly to breaking point.

A *New York Times* Weekly Edition contains more information than the average person in the seventeenth century was likely to come across *in their entire lifetime*.<sup>3</sup> In 2008 we were consuming three times as much information as we were in 1960.<sup>4</sup> By 2020 we'll be generating forty-four times more data than we are producing today.<sup>5</sup>

Our stone-age bodies can't cope with this modern-day deluge. Evolution is slow; the deluge has come fast. Confronted

with data – some dodgy, some not – our hearts beat faster, our breath becomes more shallow, we sweat: the deluge makes our body shift into crisis mode.<sup>6</sup>

Studies reveal that we can't hold more than seven separate pieces of information in our minds at once.<sup>7</sup> Yet when I enter 'Qualities to look for in a surgeon?' into Google, four million hits come up. The sheer abundance overwhelms us. That's why most of us end up looking at just the first few links on the first page of Google's search results.<sup>8</sup> The best answer to our query might not be there, but we can't cope with more.

How can we find the space to think clearly, with all of this data raining down on us? How can we discern intelligence from all this noise?

For there is intelligence amidst the cacophony. In fact, the data deluge has a notable upside: we can now get our information raw, unedited, uncurated. We can now imbibe information direct from source, without the traditional gatekeepers.

This offers a huge opportunity to us as decision-makers. But the question of what, among all the data swirling around the digital landscape, we should give credence to is not straightforward to answer.

In London in August 2011, huge numbers of people rioted, and parts of the city went up in flames. Shops were emptied of expensive trainers and wide-screen TVs. The police looked on powerlessly.

It wasn't that there was no information. Tuned in to social media, police command centres were overwhelmed by the 2.6 million riot-related tweets that circulated during the five days of rioting.<sup>9</sup>

The tales circulating the Twittersphere were plentiful and varied – from the political to something more akin to a child's picture-book: rioters breaking into a branch of McDonald's to cook their own food, the London Eye being set on fire, a tiger being set free from London Zoo.

The problem was, in the face of so much information, how could the police work out which stories to trust and which to reject? Which leads should manpower be assigned to investigate? Which should be ignored?

All of those tweets mentioned above turned out to be false, by the way.

In the age of data deluge, with information so fractured and diffuse, and arising from so many disparate sources, how do we know what to believe and what to reject, so we are able to benefit from the digital dividend? That is a challenge that this book will address.

## **Drip, Drip, Drip, Ping, Ding, Ring**

Add to the barrage of data another twenty-first-century form of Chinese water torture – the drip, drip, drip of ‘Continuous Disruption’ – and you’ll be better able to understand the demanding context within which we make our decisions.

In this regard, email is Mental Enemy No. 1. The constant pinging, window signalling or green light blinking, depending which medium it finds you on.

Some saw it coming, saw the inherent problem of a medium which could so easily get out of control.

In 1984, just as email was beginning to enter the mainstream, Jacob Palme, a computer scientist from the QZ Computer Centre at the University of Stockholm with a side-line in writing crime novels, warned that ‘electronic mail system, if used by many people, causes severe information overload problems’.

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*The cause of this problem [Palme wrote] is that it is so easy to send a message to a large number of people, and that systems are often designed to give the sender too much control of the communication process, and the receiver too little control ... In the future, when we get larger and larger message systems, and these systems get more and more interconnected, this will be a problem for almost all users of these systems.<sup>10</sup>*

And so it was that Palme's prophecy came to be. This is an age of cc and bcc. With the click of a mouse you can send an email to everyone you know. Time and again we find ourselves giving people information they really don't need. In 2012, more than 204 million emails were sent every minute of every day.<sup>11</sup>

How many emails do you receive each day? What are all these messages doing to your ability to concentrate, to think, to plan, to decide?

And that's just emails. Add to this the constant droning background noise of open-plan offices, the rat-a-tat-tat of mobile phones, texts, instant messages, Skype calls, phone calls, the lure of websites demanding your attention, and you'll start to get the picture. These days, we spend three-quarters of our waking lives receiving information.<sup>12</sup> Henry Kissinger built a soundproof office above his garage in which to work, banning his wife or children from entering while he was thinking.<sup>13</sup> But most of us can't physically absent ourselves when we've got decisions to make. Instead we have to operate in a state of nothing less than continuous and relentless interruption.

On average, computer users change windows, and check email or another program, thirty-seven times an hour.<sup>14</sup> Forty-three per cent of college students say they are interrupted by social media three or more times an hour while they are working.<sup>15</sup> And when someone's trying to reach us nowadays, not only will they email us – they'll text us, tweet us, phone and voicemail us too. Often it can feel that there is no escape.<sup>16</sup>

The relentlessness of this bombardment has an impact. A Microsoft Research study which tracked over two thousand hours of employee computer activity found that once distracted by an email alert, computer users take an average of twenty-two minutes to return to the suspended task with the same level of focus.<sup>17</sup> In 27 per cent of cases, it took them more than two hours to return to the task they were doing in the first place.<sup>18</sup> More recent studies have revealed that tasks take a third longer when interrupted by email.<sup>19</sup> Whilst a study of employees at the communications firm Porter-Novelli suggested that the combined effect of incessant phone calls and emails can lead to a temporary drop in our IQ of an extraordinary and disturbing ten points.<sup>20</sup>

As for open-plan offices, the constant background buzz of other colleagues and office equipment makes us 66 per cent less productive.<sup>21</sup> Phones ringing on desks, the background hum of conversations we are not part of, and the chime of emails arriving in our inbox distract and demotivate us at work.<sup>22</sup>

The drip, drip, drip doesn't just make us less able to think, it's also exhausting us. We are spent. Unable to sleep, headaches ever looming, always tired; our bodies cope with these new demands by keeping us, as we will learn, in a constant state of hormone-induced stress.<sup>23</sup>

Yet we crave these interruptions like catnip. Despite their pernicious impact, we actively seek them out. Forty per cent of people continue to check their work email after hours or while they are on holiday.<sup>24</sup> Eighty-six per cent of us use our mobiles while watching TV (this figure rises to 92 per cent for the 13-to-24 age group<sup>25</sup>). An informal poll of friends reveals a geneticist who checks news sites every five minutes while at work, a TV executive who catches up on his emails on the phone while he's on the stationary bike at the gym, an art dealer who logs on to the *Daily Mail* website sixty times a day.

We are addicted,<sup>26</sup> stressed and overwhelmed, and it's often while we are in this state that big as well as small decisions have to be made.

Whether we can be switched on if we remain switched on is a question I will return to.

## **The Age of Disorder**

Alongside the constant distraction and the drip, drip, drip of the deluge, the third defining characteristic of our times, the triple of the triple whammy, is disorder – a combination of the breakdown of old, established orders and the extremely unpredictable nature of our age.

For this is an age in which accepted wisdoms have been dramatically overturned. An era in which Lehman Brothers – a bank that was 'too big to fail' – proved to be expendable. A time when, rather than preventing women from getting sick, it turns out that regular screening for breast cancer may actually make them sicker.<sup>27</sup>

An era when certainties can no longer be presumed certain.

Who would have thought, ten years ago, that serious conversations would be taking place about the Chinese yuan replacing the US dollar as the world's main reserve currency? That a Eurozone country – Cyprus – would impose draconian capital controls? Or that, closer to home, we might no longer be able to trust in the safety of investing in bricks and mortar?

Things we thought we could rely upon now seem ever more vulnerable and chimerical.

Moreover, those who we depended upon to translate and curate the old world order for us have, in just a few years, lost their monopoly of knowledge. Librarians are being usurped by Google, travel agents by TripAdvisor reviewers. Doctors are being challenged by the shared experiences of patients. Grey-



haired newspaper proprietors by twenty-something social-media moguls.

Established orders are collapsing all around us.

This isn't necessarily a bad thing. In an age in which our most famous economics sages failed to predict the financial crisis, in which our intelligence services failed to predict the Arab Spring, in which Facebook groups can prove to be better diagnosticians than medical experts (more on this in Step Six), and in which the tabloidisation of the broadsheet press makes us unable to blindly trust even supposedly respectable papers' claims, the increasingly competitive information landscape is in many ways positive.

But that is not to say that this trend is categorically good. What are the agendas of these new curators? How trustworthy are they? Which is more likely to steer me to the right hotel – Joe from Idaho's TripAdvisor testimony, or the advice of my long-trusted travel agent? And while it's true that Wikipedia is in some subjects now as reliable as the *Encyclopaedia Britannica*,<sup>28</sup> will the 'crowd' always have my best interests at heart?

In a time of disorder, the past can no longer be assumed to be the lodestar for the future, the future cannot easily be foreseen, and accepted truths and conventional curators of information cannot be unquestioningly relied upon.

Disorder can bring about positive change and innovation, but it can also leave us feeling compass-less and uncertain.

*It's really hard to know who to believe. Who to trust. And who to rely on to help us work out what the future will hold.*

## **Get with the Programme – How to Be an Empowered Decision-Maker**

OK. You've got the picture now. The context in which we have to make decisions is, to say the least, challenging.

And yet, of course, we still have to make choices. I still have to decide which doctor's advice to follow. The President of the United States still needs to decide whether to strike Iran. The mother hearing her baby cry still needs to decide whether to pick him up or to leave him to cry through the night alone. You still need to decide who to hire for your business, or where to put your retirement funds. We still have to make decisions, important, life-changing decisions, regardless of how distracted we are, how much data swirls around us, how unpredictable and uncertain our world now is. Regardless of how exhausted we feel.

Over time, we've developed ways to do just that, developed short cuts and coping strategies – some conscious, some not – for navigating this difficult terrain. Strategies for gathering information and then processing it in ways that fit with the realities of our distracted, deluged, disordered lives.

We must ask ourselves though how good these strategies really are. Most of us are going through life without interrogating whether our decision-making processes are fit for purpose. And that's something we need to change – especially when the stakes are high and the decisions are of real import.

We need to take more control of our decisions and how we make them. We need to become empowered thinkers.

Without quality information we can trust and effective methods for interrogating it, our decisions are bound to be at best sub-optimal, and at worst very damaging to our needs and interests. So in the coming Steps I'll be expanding on our

information-gathering blind spots, and showing how we can do better.

How attuned are you to the most common flaws in experts' thinking? How good are you at spotting statistical cons? How quickly are you able to identify a suspect 'fact'? Is the information you are focusing on the right information to be basing your decision upon? What might be worth considering instead? Which unusual suspects might you turn to for advice?

I'll be looking into whether you have dug deep enough to establish the truth of your sources. Do you know how to interrogate new sources of digital information? Or how to evaluate the 'answers' churned out by computers? Do you know who to trust? And why? I'll also look in detail at the way our decision-making is being transformed by new online friends and foes, and point out the pitfalls as well as the quick wins.

In an era of disinformation and misinformation, an era of Photoshop, Fox News, personalised search and ever more spin, I will help you discover how best to interrogate your sources and assess the quality of information you are presented with. And how to widen your net in the first place.

I'll also be investigating the surprising role that we ourselves play in the choices we make, by looking at what's going on, at a conscious and subconscious level, during the decision-making process.

For we are not the robotic, emotionless, experience-less, rational decision-makers of economic theory. A whole host of visceral processes take place within us – neurons fire, memories swirl, emotions feel – at the same time as the analytical part of our brain churns out its computations. As we will see, this dance between subconscious and conscious, intellect and intuition, profoundly affects the risks we take, the futures we contemplate, the forecasts we make. As does the environment in which we operate. Colour, smell, touch – all impact upon

the choices we make, as does the language used. What this means is that our immediate response will often need challenging, however natural or intuitive it may feel.

Given how fast-changing our world is, I'll also be exploring whether the models and mental maps we currently use remain appropriate. How is the past affecting your current decisions? Is it locking you into particular patterns or behaviours? Is it leading you to make linear predictions? Or are you able to break free from the past when need be, and envisage a very different sort of future?

And have you assembled the right team around you to help you make the toughest decisions? In an age of dispersed knowledge, are you 'crowd-sourcing' your information-gathering? Who is in your inner circle? Yes-men or nay-sayers? Who is acting as your 'challenger' or your 'translator'? Are you taking sufficient responsibility for your decisions? Or are you attempting to pass the buck to others?

Throughout the book, I'll be combining the latest insights from academia – from psychology, behavioral economics, neuroscience, sociology, anthropology and information science – with first-hand insights from a wide range of people who have to make high-stakes decisions on a regular basis – hedge-fund managers and judges, CEOs and politicians, intelligence officers and fighter pilots, doctors and movie producers. By learning from decision-makers who've sometimes got things right and sometimes got things very wrong, we will get a better sense of those traits and strategies that can help us be good decision-makers, as well as the moves that can serve us ill.

With some traits, this is not obvious.

Take those super-confident forecasters, the ones who are given inordinate airtime. It turns out that the more confident a forecaster is in his predictions, the worse those forecasts prove to be.<sup>29</sup> It's the same with doctors. You know those overly self-

assured ones? I've certainly come across some in my time. A number of studies now reveal that the ones who are dead certain in their diagnoses are all too often wrong.<sup>30</sup>

Sometimes the strategies that work are incredibly simple.

We'll learn how a board's decisions can be transformed if the directors are asked to change where they sit.<sup>31</sup> We'll discover how much easier it is to make the right choice when you ask for information to be presented in black and white rather than in colour.<sup>32</sup> We'll learn how we make better decisions if we've had a sandwich.<sup>33</sup>

Winning strategies can be somewhat counter-intuitive. Did you know that you can at times get better advice on how to deal with your illness from a patient than from a doctor? That if you want your team to make smart decisions, you'd do better to make sure they're at odds with each other for a fair proportion of the time, rather than always be of the same mindset? That rather than listening to your boss, you might be better off rebelling? Or that you might want to wait to empty your bladder until you've made your decision?<sup>34</sup>

What it is impossible to do in this book, however, is give you one over-arching, catch-all strategy to follow. This isn't about 'Blinking', or 'Nudging', or trusting 'the Wisdom of Crowds', and leaving it at that.<sup>35</sup> I don't believe there is a one-size-fits-all decision-making template that can work for all of us, at all times. Human life is too complex for that, especially nowadays.

Instead, what I hope to deliver is a 'decision-making tool kit'. A kit that will enable you to interrogate your own decision-making habits and investigate the information you are given. A kit with the tools that will empower you to make decisions in radically different ways from how you may have been making them until now.

*Because ultimately, this book is about empowering you.*

Empowering you so that you are able to get past the spin and evaluate the underlying substance. Empowering you so

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that you can challenge conventional wisdoms and determine what to replace them with. Empowering you so that you are not cowed by authority figures or over-confident experts, and are able to assess their opinions as you would the opinions of any others.

Empowering you so that you're not ashamed to ask for help when you need to, but have the skills to be able to identify who best to get this help from, and how. Empowering you to be able to look into your own psyche, so that you can identify ways in which you may be sabotaging your own decision-making.

The goal of this book is to empower all of us to become more confident, more independent and wiser thinkers and decision-makers. To become people who neither blindly accept the dictates of others nor unquestioningly follow our own initial instincts or analysis – people able to face the world with eyes wide open, and make smart choices and decisions for ourselves.