Tricks of the trade

How online customer journeys create consumer harm and what to do about it

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Foreword

James Plunkett, Citizens Advice

Consumer rip-offs are as old as the hills. In the 18th century bakers fluffed up bread with alum, an aluminium compound, before food standard laws cracked down. From doorstep pressure-selling to aggressive and anonymous cold calling, we’ve long known that sometimes the state has to step in, blunting the sharpest sales tactics. Within the bounds of banned behaviour, however, a basic model has held firm. Consumer choice in competitive markets drives innovation in products and services, making our lives better over time.

In recent years, we’ve seen troubling signs that this model is breaking down. As our lives as consumers, from buying to borrowing to betting, have migrated online, our old paradigm of consumer protection has lost its grip. The oil that’s slicking its grip, as pervasive as it is subtle, is the invidious game known as online choice architecture: the way firms redesign the choices we make online to manipulate the outcome.

Like many of the trickiest public policy problems, online manipulation is a spectrum, from tactics that are acceptable, if often annoying - tailored ads, or timely notifications - through to tactics that are plain wrong and often already illegal, like lying or hiding fees. In between is the tough stuff, the terrain on which regulators can stumble unless they’re paying close attention. They’re tactics that architect choices to exploit our biases, which are then tested and refined to scientific precision, to leave us making decisions we wouldn’t in good faith have made.

At their worst these tactics are so powerful they make a mockery of that most critical idea: consumer choice. Are you really choosing to buy insurance if you did so only because it was a pre-selected default? Are you choosing a recurring purchase of toilet rolls if the button to turn off the subscription was so small it passed you by?
The examples sound small, almost trivial, yet their effects, in aggregate, are profound. Put aside the direct costs (the combined cost of unintended choices and subscriptions now runs into billions). The bigger issue is systemic; what happens to the magic of markets when firms compete not on their ability to make a better product but on how cleverly they can manipulate our behaviour?

The answer is that the tie that bound the interests of businesses (like Adam Smith’s famous baker) to the interests of their customers are weakened, meaning the route to profit is less often to make delicious crunchy bread, and more often to trick people into a purchase.

If the economic costs of manipulation aren't enough, there are political costs too. Because for all that we often fall for these tricks - I know I do - consumers aren't stupid. We see what's going on. On a busy day we miss the button, or stick with the default. But almost as damaging are the times when we spot the trap in our path and sidestep it, grumbling as we do so. Or the time when we spot the trick later on in our bank account, and fire off an infuriated email for a refund. Every one of these moments corrode the trust on which consumer markets depend. More than two in five people (41%) now think websites often make it too easy to make the wrong choice.

If nothing else, this political rationale should prompt the government and regulators to go further in confronting the challenge of design. If there’s one lesson from the consumer crises we’ve seen unfold in recent years, it’s that stories that start with regulators dragging their heels don’t end well. That’s how we end up with mounting frustrations leading to politicians and over-zealous regulation. Some regulators are alive to this problem but something as broad as design needs solutions and a strategic approach which are as systematic as the problem itself. We’ll need to address the self-evident problem of online manipulation sooner or later, and in regulation sooner is the wiser path.
Paul Adams and Owain Service.

In the opening passages of the book *Nudge*, Richard Thaler and Cass Sunstein argue that ‘there is no such thing as “neutral” design’. Imagine that you are designing a building, for example. You have to make choices about where it is located, how the rooms will be configured, and where to put the toilets.

Each of these decisions, whether they were made intentionally or not, will have consequences in terms of how people use the building. None of these decisions will be completely neutral. In this paper, the same core insight, drawn from the worlds of behavioural science and design, is applied to online retail and digital design.

What we learn is that in many instances digital platforms will have been designed - sometimes intentionally, sometimes accidentally - in ways that make us more susceptible to falling foul of certain systematic biases. In some cases, this leads to decisions that are not in our own self interest.

We learn, for example, that digital platforms often play on our tendency to place greater value on benefits received today than the costs incurred tomorrow (‘present bias’); that our attention can be drawn to particularly novel or prominent buttons or features that seem more attractive (‘salience’); and that we are more likely to choose options that remove effort (‘path of least resistance’).

To inform Citizens Advice’s work and contribute to this report, we conducted a large-scale, online experiment to discover more systematically what the effect of these design choices are upon consumer choices (see Annex 1 for more information).

We did this by creating four prototypes of a retail shopping app and setting a large sample of consumers a task. We wanted to know if the design elements affected their choices.
What we found was that when Buy Now Pay Later options were made more salient (e.g. colourful branding and in-app marketing), potential future costs were not made prominent and ‘express checkouts’ were included that removed effort on the part of the consumer, BNPL was much more likely to be selected. And less well understood.

Just as in the real world, in other words, there are no neutral design decisions. And that is why this paper is both a timely and important reminder that design choices have real world consequences.
Online shopping is easy and smooth, offering consumers greater choice, information and accessibility.

However, consumers are not always getting the best outcomes. Things like regret, accidental use and overspending are regular parts of the online shopping experience.

Why is this the case?

Our report brings together research and examples from behavioural economics and impactful regulatory interventions that show the design of online shopping is crucial in how consumers make choices. We look at some common design tactics including...

- drip pricing
- countdown timers
- frictions
- use of defaults
- how information is presented

In some cases, practices are so bad they should just be banned.
But most design features are more nuanced.

They can be used to:

- support customers to make the decisions
- be manipulative or pressuring

...and context is everything.

It’s for businesses to work out how to make design work for consumers - but they have to do it and show their working.

What’s needed is an outcomes based framework requiring businesses to put consumers at the heart of design.

But when design relates to high-risk products, then more is needed to ensure that design practices across the consumer journey work to support consumer choice at key decision points. Regulators must focus on design.

Our report looks at how specific changes to design can reduce serious harm in three high-risk business areas:
Executive summary

The digital revolution has impacted every part of our lives. In the UK, a quarter of all retail shopping is done online - up from just under 10% a decade ago. It’s not just shopping. We increasingly book hotels, hire cars, borrow money and gamble through online platforms.

These changes have brought enormous benefits. Online shopping is easy and convenient, with access anywhere and anytime. Websites and apps are designed to give a smooth, intuitive experience. It’s never been simpler to spend. But has it become too easy? 1 in 4 people have made purchasing decisions online which they regret; more than a third of online gamblers have gambled without realising they were betting; consumers spend half a billion pounds each year on subscriptions which have automatically renewed without them realising. And for others, it can feel like the way things are designed online are out to trip you up, with 41% of people agreeing that ‘websites often make it too easy to click the wrong button or make the wrong choice’.

These outcomes suggest that things are not working as well as they could. Moreover, problems like regret, accidental use, feeling under pressure when spending, or spending more than you intended to suggest that the problem isn’t with what people are buying but how. This report argues that ‘how’ matters.

In this report we bring together research and examples from behavioural economics and impactful regulatory interventions that show the environment of online shopping is crucial in how consumers make choices. The way information is presented, how decisions are framed and the design of consumer journeys has a significant impact on whether consumers make decisions they are happy with, or whether they lead to harm.

Design really matters. It’s at the heart of why online shopping is so easy and intuitive to use, but it can be used in ways that can manipulate consumer decision making through the exploitation of behavioural biases. We look at some common design tactics (including drip pricing, use of defaults, frictions and how information is presented) in online shopping to see how they can pressure and mislead consumers. Some practices are almost always harmful, while others
need to be used with care and understanding of the impact they have on consumers’ decisions. And some features are optional, like including a countdown timer, while others - like what defaults are set - are both unavoidable and impactful.

As a result, the case for regulating digital design is not simply a matter of banning a few bad practices. It’s about creating a framework to ensure that when businesses make these unavoidable decisions around design, the interests of consumers are considered front and centre. The idea that design has a powerful impact on consumers is not limited to the digital world. But there are some ways that online is genuinely different which strengthen the case for regulation.

The first is that consumers behave differently online. We generally pay less attention, carry out other tasks and rely much more on rules of thumb to make decisions. This ‘Type 1’ thinking is usually the mode we're in when shopping online, as opposed to how we engage in brick and mortar shops. The second is that business and designers have much more control over online environments and as a result there is an imbalance of power between consumers and businesses online. Not only do businesses hold considerable data about consumers but they can cheaply and easily test the impact of differently designed customer journeys which are then personalised to maximise sales. Much of this occurs without consumers being aware.

The harm from poor design is felt most sharply by people in vulnerable circumstances. For example, when looking at subscription traps we found 26% of people have signed up accidentally, but this rises to 46% of people with a mental disability or mental health problem, and 45% of people on Universal Credit. Regulating design is an opportunity to create a more inclusive framework for how consumers shop online.

To regulate effectively means we have to look across the whole customer journey and at how design practices across that journey can shape consumer choice at key decision points. The report provides a conceptual framework for how we can think about this and applies it to three high-risk business models: Buy Now Pay Later credit, online gambling and subscriptions. In cases like these,
where poor design can lead to considerable consumer harm, it's both possible to identify areas where design could work better and proportionate to require it through regulation. We unpick how it's easy to get into risky spending through smooth customer journeys without adequate product information for consumers. But the ease of getting into ongoing spending commitments is matched by the difficulty in trying to exit a contract or close an account.

**Recommendations**

The recommendations in this report can be split into two groups. The first set of recommendations apply broadly to all places where digital design is used in consumer markets.

The second set of recommendations are specific to particular high-risk markets and business models, where we think that more bespoke interventions are needed in order to ensure consumers are protected and the markets work effectively.

**General recommendations**

1. The government should take the opportunity to use the forthcoming Consumer Bill to create a requirement on business to take consumers’ best interests into account when considering digital design, modelled on the FCA’s Consumer Duty. The requirement would aim to ensure:
   a. Businesses identify key choices consumers need to make when using their online services and evidence that they have considered how the design elements of the website/app support their customers in making decisions
   b. Records are kept of key design decisions in such a manner that allows enforcement agencies, such as the CMA, to be able to establish why they were taken and how consumers’ interests were considered.

2. The government should use the Consumer Bill to place a duty on sectoral regulators to consider the case for introducing additional rules
and guidance around how firms in their markets make decisions around design.

3. The Department for Business, Energy and Industrial Strategy should take forward a review of online design practices which are likely to be manipulative and move to ban these. The government should use the Consumer Bill to ensure that BEIS has the necessary powers to swiftly ban through secondary legislation design practices which in most cases lead to consumer harm.

4. The Competition and Markets Authority should set out guidance for business on best practice around features such as scarcity claims and how business should interpret existing consumer law when making decisions around digital design.

Market specific recommendations

Buy Now Pay Later credit
   a. HMT must ensure that BNPL credit is brought under FCA regulation without delay.

   b. As part of the regulation of BNPL, the FCA should ensure lenders introduce effective design, such as the use of pop up disclosures, with the aim of improving comprehension and adding friction. Lenders should be required to monitor and evaluate the effectiveness of any measures taken to ensure they prevent consumer harm.

   c. As part of the review of the Consumer Credit Act, HMT and the FCA should take the opportunity to consider the online consumer journey for credit products in general and ensure that the potential for online design to raise consumer comprehension around key information disclosures is realised.

Online gambling
d. DCMS should ensure the Gambling Act white paper adopts ‘Safer by default’ as standard practice for online gambling platforms - mechanisms like reality checks, stake limits and deposit limits should apply automatically on sign up, with an option for customers to opt out, rather than having to opt in.

e. DCMS should also look at how adaptive design features, which change according to consumer gambling habits, can be used to help protect the most vulnerable consumers. For example, those currently in debt or at identifiable risk of falling into it should not be targeted with adverts, emails and notifications, nor should they be offered incentives or free bets to continue gambling.

f. The gambling white paper should also include a call for design changes that promote the best-interests of consumers across all platforms, including:
   i. Increased clarity about when real gambling is happening, and real spend is taking place;
   ii. Limits on the number of offers and incentives each customer is exposed to in a given period;
   iii. Removal of all barriers to withdrawing winnings.

Subscription traps

g. BEIS ensures the Digital Markets, Competition and Consumer Bill includes a ban on opt-out auto-renewals at the end of fixed-term subscription contracts and to ensure that rolling contracts get consumers’ consent to continue with the subscription at least once a year

h. The Bill should also ensure that entering into a subscription at the end of a free trial is opt-in rather than opt-out
i. BEIS continues with existing commitments around information provision and exit processes.
1. Context of this report

Key takeaways

➔ Online shopping is a growing trend, coming at the expense of bricks and mortar shops
➔ Many of the features which can be seen as benefits of online shopping can also be harmful
➔ Significant numbers of consumers have experienced regret, overspending and not being able to find key information when shopping online. Two fifths think that websites make it too easy to make the wrong choice.
➔ These issues relate to the design of websites and the impact that design has on how consumers make decisions - the ‘online choice architecture’.

More and more of us are choosing to shop, spend and engage with businesses online. From buying groceries and clothes to borrowing money or making a bet, we’re all spending more time and money online.

Doing things online is very convenient, allowing access anytime and anywhere. Websites, apps and online platforms are carefully designed for a smooth, easy consumer experience. But many of these features which provide benefits to consumers can also create new risks. This report looks at how design online plays a significant role in shaping what choices we make online and how poor or malicious design can trip consumers up.

The shift from bricks and mortar to online

The growth of online spending in the UK is a long term trend but one which was boosted by the Covid-19 pandemic. Lockdown restrictions drastically reduced access to brick and mortar shops, and boosted how much and how often
consumers were spending online. In February 2020, online shopping accounted for 19.7% of all retail sales but this rose sharply following the introduction of pandemic restrictions, peaking at 37% in January 2021.¹ Online shopping still remains at higher levels than before the pandemic accounting for 26.6% of all official retail sales, suggesting the trend is here to stay.

This growth has come at the expense of bricks and mortar shops. Between October 2019 and 2022 the proportion of retail sales online grew by over a third, from 19.1% to 26%. But in the same period, total retail sales haven't grown and have, in fact, slightly reduced.² As a result, the increase in online sales represents a significant shift in consumer behaviour away from physical shops and into the newer, less controlled space of online shopping.

It's not just retail sales that have seen a considerable boost. Spending in other digital markets like online gambling have also seen growth powered by the pandemic. The Gross Gambling Yield (GGY) from remote betting which includes casino and bingo games has increased from £4.2 billion in 2015/16 to £6.4 billion

¹Office for National Statistics (ONS), How our spending has changed since the end of coronavirus (COVID-19), July 2022.
²ONS, Retail sales, Great Britain: October 2022.
in 2021/22.³ Buy Now Pay Later has also grown rapidly in the UK. Its success has been made possible by the fact BNPL is ‘predominantly technology-driven, focusing on utilising digital platforms to provide seamless consumer journeys’.⁴ Between January 2019 and December 2021, the total value of BNPL lending in the UK grew 21 times larger, with an estimated £2.7bn lent through BNPL during 2020.⁵ And we’ve seen the growth of subscription services - a market worth £25 billion - for everything from entertainment to food and drink, as well as household items like toilet paper, with many online services using this model.⁶

### Online: opportunities and risks

Online shopping offers consumers new benefits: you can shop anytime, anywhere whether it's on your smartphone, laptop or tablet. And it's simple, with 87% of consumers saying they felt online shopping was easy to do. Smooth customer journeys, convenience, and the ability to compare prices and hunt around for the best deals are some ways consumers benefit from online shopping.

But, all is not well. We found that 27% of consumers have regretted something they bought online, while 24% have ended up spending more than they expected to. A further 26% of consumers felt they spent an excessive amount of time trying to find information about their purchase, with 28% not being able to contact anyone when something went wrong.

In fact, many of the features which are seen as benefits of online shopping can also be harmful. Smooth, frictionless consumer journeys offer great convenience but can mean that people rush into spending. Being able to shop, borrow or gamble at a moment’s notice may, for some, lead to a loss of control. The Woolard Review, which looked at change and innovation in consumer credit market noted:

⁶ This figure is taken from an impact assessment conducted by Business, Energy and Industrial Strategy and refers to subscriptions in non-regulated sectors: (BEIS), *Consumer and competition reform: Subscriptions regulations,* July 2021.
The growth of online lending is one of the main areas of change in the credit market. Many of the features of digital platforms which some consumers find beneficial - such as smooth consumer journeys, 24/7 access and not needing to interact directly with other people - can present problems for others.

These effects can be more pronounced when people are already in vulnerable circumstances. As the Money and Mental Health Policy Institute highlighted:

*The internet can be a valuable resource for people with mental health problems, but it can also expose them to significant risks due to the way common symptoms interact with the nature of many online spaces – always available, frictionless and less regulated.*

**It’s the design, stupid**

These consumer experiences, which relate to regret or ability to control spending, suggest that people are making decisions online which don’t reflect what they actually want. This isn’t about what is being sold but rather how it’s being sold. Insights from behavioural economics and psychology have stressed the importance of context and design - the ‘choice architecture’ - in how people make decisions. In the last decade, the government and regulators have been drawing on nudge theory in order to actively drive certain outcomes. Requiring businesses to display calorie counts on menus is an example of a nudge meant to enable consumers to make healthier choices when eating. Making workplace pensions opt-out rather than opt-in has led to a dramatic increase in people saving through pensions.

But there’s a growing understanding that these behavioural insights can be used to manipulate people. Design practices like dark nudges, dark patterns, and sludge can be found across different digital markets can lead to poor consumer outcomes. Our polling found that **41% of online shoppers think that websites often make it too easy to click the wrong button or make the wrong choice.**

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7 Holkar, Merlyn and Lees, Chris. 2020, *Convenience at a Cost: Online Shopping and Mental Health*, *The Money and Mental Health Policy Institute.*

The impact isn't limited to individual consumers. The CMA has raised concerns that design can also 'weaken or distort' competition by shifting 'businesses' incentives to compete on product attributes that benefit the consumer, such as quality and total price paid, towards less beneficial attributes, such as price displayed upfront or pressure to buy.\(^9\)

This report makes clear that these practices must be addressed. But it also makes a more fundamental point: design isn't neutral. The choices made by designers have a significant impact on how consumers make decisions. That confers a responsibility on those designers and the firms which interact with consumers online. The FCA's Consumer Duty is a good example of setting expectations of businesses to promote better consumer outcomes. We argue that approaches like this have a role in online markets beyond financial services.

The issue of choice architecture isn't unique to online shopping but online does have some unique features. The availability of extensive data on consumers, the ability to A/B test cheaply and repeatedly, and personalisation are some of features which makes online choice architecture distinctive. Regulation not only needs to keep pace with these changes but must do so in a way that recognises the scale of change taking place in the shift to online shopping.

\(^9\)Competitions and Market Authority (CMA). 2022, Online Choice Architecture: How digital design can harm competition and consumers, p.v-vi.
2. Design matters: 4 key examples of how design influences our decisions

Key takeaways

➔ There is growing awareness by government, regulators, academics and consumers that poor or malicious design online can be harmful.

➔ Some design features (e.g., drip pricing) offer no value to consumers and are likely to be harmful most of the time.

➔ Others, such as countdown timers and scarcity claims, are more nuanced. They can be useful for some consumers but also put pressure on others. Care is therefore needed to ensure that they are used appropriately.

➔ Many design decisions are both inevitable and not neutral: it is unavoidable that firms will need to make decisions around design which will have significant effects on how consumers make choices on their websites.

➔ What constitutes ‘good’ design from a consumer perspective will vary depending on the context and therefore requires firms to base design decisions on an evidence based understanding of their customers.

This chapter gives some examples of important design practices and the impact they have on consumer choices. Some of the biggest changes in how we think about consumer markets which have come in the last decade have resulted from a deepening understanding about how people make decisions. Behavioural psychology and economics has shown time and time again that things which are not relevant to a ‘rational’ approach to making decisions can have a huge impact on what choice is taken.

Things like the colour of a button, the size and location of key information, whether a choice is opt-in or opt-out or the level of friction at different parts of
the consumer journey can influence important decisions around spending. This is why design of the online environments in which we make decisions (known as ‘Online Choice Architecture’ or ‘OCA’) is so important. It’s not just the ‘what’ that counts, that what we’re buying is safe or what information we’re given about a product or service, it’s also the ‘how’.

‘How’ matters: the impact of design

A study in the US from 2002 looked at whether the background of a website had any impact on consumer choices. Participants were directed to a website selling sofas which had a welcome screen before taking you to see the products. For one set of participants, the background of the welcome screen had fluffy clouds. The other set saw a background with pictures of coins.

When offered a choice between purchasing a more expensive but comfy sofa or a cheaper model, 61% of the group who had seen the clouds selected the more expensive sofa, compared with 52% of the group who had seen coins. As one of the authors later put it, this is “a remarkable change in consumer behaviour for a minor adjustment to the site which carried no information about the product or its appearance”.  

The idea that subtle design choices can influence consumer spending isn’t lost on firms. An often cited 2019 paper found 11% of websites in the US make use of ‘dark patterns‘ which the paper defines as “design choices that benefit an online service by coercing, steering, or deceiving users into making decisions that, if fully informed and capable of selecting alternatives, they might not make.” Recently, the CMA has highlighted that the design of websites can distort consumer behaviour, weaken or distort competition and it can maintain, leverage or exploit market power.

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10 This example is taken from Johnson, Eric, (2022): The Elements of Choice: Why the Way We Decide Matters, p.66. The study itself is Mandel & Johnson, When web pages influence choice: effects of visual primes on experts and novices, 2002.


12 CMA, Online Choice Architecture: How digital design can harm competition and consumers, p.v-vi.
In 2021, the Department for Business, Energy and Industrial Strategy (BEIS), as part of its consultation ahead of the forthcoming Consumer Bill, asked about behavioural techniques which could be used to exploit consumer behaviour online. BEIS noted that most respondents “agreed that consumers were not aware of businesses using behavioural techniques to influence choice that affects consumers purchasing decisions, and that this is a concern that should be addressed”.  

We set out and explore below some important examples of design practices and how they can influence consumer behaviours. These further illustrate that design makes a difference and that there are important decisions around the design of online choice architecture which firms need to be able to make effectively and be able to justify if consumers are to receive good outcomes.

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**Example 1: drip pricing and scarcity claims**

We start by looking at some specific design features which commonly appear online and which can be used to maliciously influence consumers’ decision making.

**Drip pricing**

Drip pricing refers to when a price is displayed in a way which gives the impression that it is what the customer will pay but then additional costs are added in along the consumer journey leading to a much higher final price.

As well as drawing people in with an artificially low headline price, the practice exploits behavioural biases including the ‘anchoring effect’ (where the fact the initial price was low creates an impression the overall price is low) and the ‘sunk cost fallacy’ (where people tend to stick with a process they've already committed time and effort to).

Drip pricing has been found to be present in a variety of online consumer markets, including hotel bookings, car hire and airline tickets. More recently, in

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2021 the CMA wrote to providers of PCR tests for Covid-19 to highlight concerns around their use of drip pricing, among other practices.\textsuperscript{14}

The example below from a budget airline, shows how drip pricing works at each step of the customer journey. Firstly, various prices for a flight on different days are generated, with the cheapest options flagged as ‘lowest fare’.

![Flight Price Table]

However, the baseline prices advertised above includes a cabin bag but additional bags and choosing seating arrangements are only available at added costs. However, as the screenshot below shows, one of the options for added options is described as ‘\textit{essentials}’ which may lead consumers to feel this is the sensible option.

\textsuperscript{14} CMA, \textit{Open Letter from CMA to PCR test providers}, August 2021.
The next step requires consumers to select their seats, and also has options to upgrade from a ‘standard’ seat to an ‘up front’ seat and one with ‘extra legroom’. While consumers can choose not to select these extras, they still have to go through this step to make choices about where to sit - even if they prefer not to select a seat and be allocated one instead.

In the checkout stage below, we see the baseline price with the added option of ‘essentials’ that includes an additional bag and seat allocation.
There is significant academic evidence that drip pricing leads to consumer harm. Consumers will tend to spend more and to shop around less, and the practice can lead businesses to compete on the initial headline price rather than the overall price.\textsuperscript{15} It is difficult to find any value for consumers in the practice of drip pricing and the CMA’s recent discussion paper suggested that drip pricing is “likely to be harmful or deceptive all the time”. The practice is also unpopular with consumers. Around half of people (52%) think that drip pricing would have a negative impact on their spending decisions.

\textbf{Scarcity claims}

Scarcity claims refer to a collection of practices which include the use of countdown timers, claims around limited stock (“Only 5 remaining”) or around the number of people looking at a product (“Hurry! There are 12 people looking at this room right now”).

\textsuperscript{15} A thorough review of the evidence of drip pricing, alongside several other OCA practices, can be found in the CMA’s excellent Evidence Review of Online Choice Architecture and Consumer and Competition Harm.
Example of scarcity claims from a popular fashion website

Unlike drip pricing, which is likely to always be harmful, scarcity claims can provide useful information to customers. We found that **35% of people felt information about stock levels to have a positive impact on their spending.** But positive consumer experience in relation to scarcity claims needs to be tempered by the fact these claims may not be valid - something consumers can't judge.\(^6\)

This is reflected in the fact that scarcity claims can also be used in manipulative ways, as consumer experience shows. Around **3 in 10 people (29%) reported that stock level alerts had led to them spending more than they intended.** A similar number (28%) felt the alert put pressure on them to make a purchase and 14% said it made them feel anxious.

A related feature is the inclusion of **countdown timers** which tell you that there is limited time to make a purchase or where deals are only available for a limited time. Around **a third of people (32%) feel countdown timers have a negative impact on their spending decisions**, with only 21% thinking they can be positive. Countdown timers are often found **together with other scarcity claims to increase pressure on consumers to act quickly** like this example below.

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\(^6\) The validity of scarcity claims is subject to regulatory investigation: [CMA investigates online selling practices based on ‘urgency’ claims](#), November 2022.
Screenshot from a website making several different scarcity claims simultaneously

Scarcity claims and countdown timers prey on two connected consumer behavioural biases. ‘Scarcity heuristic’ means consumers will value products that seem less available and ‘regret aversion’ is the desire to avoid future regret. This means consumers may make decisions which aren’t aligned with their preferences in order to avoid future regret by missing out on a product or deal now that is framed as scarce.

Designers are aware of this impact. An example which illustrates this clearly is a flight booking website which claimed to tell customers looking at a flight how many people were looking at the same flight. In reality, however, the site used a random number generator so claims that “38 people are looking at the same flight as you” were completely false.¹⁷

This example shows that design features can be used to manipulate consumers. While this example is extreme, it doesn’t change the fact that scarcity claims do have an impact on consumer behaviour or that firms are willing to use scarcity claims to influence consumer choice. This means that firms need to balance between what information is genuinely useful to customers and putting undue pressure on consumers to make a purchase. This conflict of interest turns up again and again when looking at design.

A final point is that the effect of scarcity claims appears to persist even when consumers know they’re being manipulated. The CMA raised this point in a recent report noting an experiment where “participants who took timed deals rather than waiting to see wider options ended up, on average, with lower payoffs than those who waited. They also found participants’ behaviour did not improve with experience, suggesting that consumers may find it hard to protect themselves by avoiding or ignoring such claims in future.”¹⁸ This reinforces the case that firms must act with due care when using these features.

Example 2: Defaults

Defaults are the poster child of behavioural economics, commonly used as examples of where a ‘nudge’ can lead to a significant change in behaviour. Many countries, for example, have found that changing organ donorship from an opt-in system (where the default is to not be on the register and consent is required to be added) to opt-out (where the default is everyone is on the register unless they ask to be taken off) leads to a sizable increase in the number of people registered to be donors. That there can be heated moral debates over how a default is set only serves to show how powerful they are.

Design elements like what option is pre-selected on a website; whether you have to uncheck a box to avoid promotional emails or add-ons; or whether a choice is structured as opt-in or opt-out are everywhere in consumer markets. Unlike features like countdown clocks, defaults aren’t something designers can choose to add into a website or not, there will always have to be a choice of what default option is offered to a customer (including having no option selected at all). It’s an example of an integral feature of design which isn’t neutral.

In consumer markets, there’s also no simple principle for suggesting how defaults should be set up. Two examples illustrate this point:

- **Insurance add-ons.** When buying products, insurance is often offered as an add-on. This can range from cancellation insurance for train tickets or gig tickets, additional warranty when buying a goods, to legal expenses

cover. In the past these were often preselected so that customers had to opt-out of the add-on by un-ticking a box. In 2015 the FCA banned this practice noting that “opt-out selling exploits' customers' default bias and this can have a significant effect on customers' choices.”19 The regulator found, when looking at motor legal expenses insurance, that one firm achieved successful sales figures of around 80% when it was sold on an opt-out basis, as compared to a 40% successful sales rate when the product was sold on an opt-in basis.

- **Deutsche Bahn seat reservations.** The economist Eric Johnson provides the following insightful example of a default. The German railroad Deutsche Bahn made a change to its website from having seat reservations as opt-in to having them included as a default. This change resulted in change from 9% of customers purchasing a seat reservation to 47% - a staggering difference. Moreover, as reservations cost €2 the change increased the firm’s annual revenue by €40 million. Johnson looked into the impact of this and found “the railroad told us that their customer surveys indicated that customers were happier with the new default, and many felt customers thought the railroad had made the change to make sure customers were more comfortable.”20

These examples both led to consumer outcomes improving, despite one being a move from opt-out to opt-in (insurance) and the other being from opt-in to opt-out (Deutsche Bahn), and even when the last one led to customers spending more than previously. The right default for designers to set up will depend on the context of the situation and, critically, the actual interests of consumers. This highlights the importance of firms and designers thinking carefully about how they make design decisions and basing these decisions on an evidence based understanding of their customers.

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20 Johnson, *The Elements of Choice*, p.133
Example 3: Friction

The smooth, slick experience of online shopping is a product of design. There are difficult tensions around where friction might be useful to help some consumers make better decisions, even if it makes the overall journey less smooth. We explore this through two examples: the lack of friction at key decision points and the use of deferred payments. Friction can also be used the other way, to make certain decisions harder (known as sludge).

Lack of friction

Online shopping can offer smooth customer journeys when signing up to a subscription, opening a BNPL or gambling account or making a one-off purchase. But this is something of a double edged sword: no-one wants a clunky journey but quick decision making can inhibit careful consideration and lead to poor decisions.

Where consumer journeys are smooth, consumers tend to follow the ‘path of least resistance’. They are predisposed towards taking a course of action that feels like the least effort, even if this is not what they set out to do or what they want. As a result, consumers may end up making significant decisions such as entering into a subscription contract or taking out credit in a less careful way than if they had been prompted to pause and reflect. We know that 28% of people used BNPL without realising and that 1 in 4 people have signed up to a subscription by accident.

The impact will differ across consumers. The Money and Mental Health Policy Institute have argued that frictionless online shopping environments can enable higher spending and that existing mental health problems can exacerbate this. They reported that 54% of people with a mental health problem “felt that online shopping sites make it too easy to spend more money than you can afford.”

Introducing friction into the customer journey needn’t be difficult. An illustrative example comes from a major TV streaming service, which has lowered friction to

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enable people to keep watching by bringing up the next episode immediately. However, they have also introduced a ‘are you still watching’ pop up which users must click on after they have watched an uninterrupted three episodes or 90 minutes.

An example of added friction in a popular TV streaming service

Deferred payments

This is where customers make a purchase, or enter a contract, at one point in time but the payment is deferred. This reduces the barriers to consumers making a purchase and includes examples like taking payment details in order for a customer to access a free trial. In this case, customers may set up a payment card but the free trial separates this from the actual costs which will come down the line.

A striking example of the impact of deferring payments is the growth of Buy Now Pay Later credit. Buy Now Pay Later is a multi-billion pound business model built on the idea that it’s valuable for businesses to defer payments. One report looking at the sector stated that 72% of UK businesses allowing purchases via Buy Now Pay Later credit saw an increase in sales conversions and half saw an increase in the average value of purchases.22

While deferred payment options can help smooth budgets, especially when spending is planned, these business models carry risks. Deferred payment options embedded within a smooth BNPL customer journey can encourage overspending by making products seem more affordable than they might be. **30% of BNPL have reported spending more than they expected.** The option of making smaller payments can lead consumers to think they are making low-cost purchases based on monthly payments, when in fact they are making high-cost purchases which have simply been spread out.

**Sludge**

The risk of seamlessly signing up to a subscription or taking out credit is compounded by the sludge that consumers experience at the end of the customer journey. Sludge is where the use of additional friction at the end of customer journey makes it difficult for consumers to exit a contract, close an account or withdraw winnings.

Sludge techniques also exploit consumer tendency towards path of least resistance. Here, people are unlikely to close an account or end a contract because there are additional steps to go through and these steps might not always be clear to follow.

Our previous work on online gambling highlighted how **86% of online gamblers thought it was easy to open an account.** However, this compares poorly to gamblers’ experience of attempting to withdraw winnings which can require placing additional bets or playing extra games. **Almost one third of online gamblers** reported having to either **place another bet, deposit more money or start another game** before they could withdraw their winnings from an online account. This additional friction makes it harder to withdraw money, and therefore easier to continue betting.

In the example below, there is an added step of contacting customer services - without any information like a phone number or email address - in order to withdraw winnings of less than £5.

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Example of additional steps to withdraw money from a gambling website

Finding information about how to close a gambling account on betting websites is also tricky for online gamblers. Customers are asked to go through additional steps in order to close an account but not given the information to do this. Below are two examples where online gamblers are advised to contact the company but without any follow up information.

An example of lack of information about closing your account on a gambling website

We also see this tactic in subscriptions where consumers can enter into contracts online but have to call a phone number or send an email in order to cancel. Below is a popular weekly news magazine where you can subscribe online but the options for cancelling include contacting them by phone or live message.
How do I cancel my subscription?

We're sorry that you wish to cancel. We'd love to discuss a more affordable or flexible subscription option so that you can keep enjoying everything The Economist has to offer.

To discuss your options, please contact our dedicated service centre by phone or live chat, the details of which can be found in the Help and Support section in your My Account page.

If you have purchased your subscription through a subscriptions agent, please get in touch with your Agent directly.

An example of additional steps - like a phone call - to cancel a subscription

Example 4: Presentation of information

The presentation of information in customer journeys is an important aspect of web design which shapes consumer behaviour and outcomes. Tactics like visual hierarchy highlight information that make products and services seem really appealing, while shrouding works to minimise or hide vital information that consumers need before making fully informed spending decisions.

Visual hierarchy works to draw consumer attention to specific information and specific choices. This tactic exploits two different behavioural biases: ‘anchoring bias’ and ‘optimism bias’. Anchoring bias, which we also saw when looking at drip pricing, refers to how consumers tend to prioritise the first piece of information they see about a product or service when making spending choices. Optimism bias can see consumers overestimating their ability to make payments in the future, in favour of taking advantage of a good offer in the present.

This example of a subscription below shows visual hierarchy in action which plays on both optimism and anchoring bias. The choice that is pre-selected as ‘best value’, is also prominently highlighted in a different colour to other options. Some information is prioritised (‘our best value’), while other information is minimised (what you will pay in the future). Visual hierarchy often works alongside the shrouding of key information - like the total cost of a subscription.
Example of the use of visual hierarchies for a subscription to a news magazine.

A typical example of shrouding is the use of complex terms and conditions that might be hidden or minimised in a customer journey. We know from wider research that information remedies alone aren't enough to ensure consumers understand what they might be signing up to or buying. We also know that when shopping online, most consumers accept terms and conditions without reading them or looking at them very briefly.

However, making sure key information is accessible and that consumers engage with this, is especially vital when taking out credit (BNPL) or signing up to a subscription, as these are ongoing financial commitments which carry particular risks. The example below shows that while it is an option to click on T&C’s, key information about BNPL has not been flagged. For example, that BNPL is a credit product, information about whether there are late fees and impacts on credit scores from using BNPL.

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Example of level of disclosure from a BNPL provider at the checkout

So, where does this leave us?

What this chapter underlines is that the design of websites matters because it shapes how consumers make decisions when shopping online. Different design tactics can elicit different kinds of responses, meaning that design can be used to manipulate consumers into making choices they otherwise would not have.

But there’s a bigger point to be made: design isn’t neutral, it is unavoidable that firms will need to make decisions which will have significant impacts on consumers. And it’s often not possible to make these decisions in the abstract, they depend on the specific context and circumstances of the consumers. As a result, while some practices may be so poor that the correct policy response is to ban them, this approach will not be sufficient to address the thorny problems which digital design presents. There are real choices which firms will need to make (e.g. how to set defaults) which need a framework around them to ensure that it’s not just done to benefit the firm but also to consider consumers.
3. The case for regulating digital design

Key takeaways

➔ We consider there to be a strong case for introducing a regulatory framework around digital design.

➔ While design always matters, online/digital environments pose unique challenges. Firms able to access large amounts of data on customers, to apply subtle design tricks and personalise the environment in which customers make decisions to such an extent that there is an inherent imbalance of power which needs to be addressed to ensure it isn’t abused.

➔ Consumers behave differently online and some design practices may be so effective that consumer behaviour changes alone are unlikely to address them.

➔ A combination of an outcomes based framework, modelled on the FCA’s Consumer Duty and targeted interventions to ban practices which are most harmful is suggested.

➔ Sectoral regulators and bodies like the CMA have a role to play in considering if additional rules or guidance could be valuable. There is a case for having specific, targeted rules to shape design where products or services carry additional risks.

In this chapter we set out the case for regulating design online. This builds on the conclusions of the previous chapter: that design matters, that it can be used to exploit consumers and that design isn’t neutral. There will always be decisions for firms to make when designing the online consumer journey and given the material impact these decisions have on consumer behaviour, it’s essential that these decisions are made with the consumers’ best interests in mind.
The potential for behavioural biases can be exploited by poor design isn’t unique to online settings. The choices around pension enrollment or organ donorship occur offline and yet benefit from careful consideration about how choices are framed. However, there are some important differences both in terms of consumer behaviour and also the sheer range of options, data and personalisation available to firms and designers online. These differences make the case for introducing a framework for governing design all the more important in digital environments.

Online is different to offline

There are some fundamental differences between consumer behaviour online and consumer behaviour in person. One such difference is that consumers pay less attention to certain tasks online than they would normally do if they encountered the same task in the real world. A study from 2009 looked at how much attention people paid to some simple instructions in-person versus online. While 14% of participants taking part in-person didn’t follow instructions, this rose to 46% of participants who were online.26

When online, people are more likely to be moving quickly between tasks such as shopping, messaging, scrolling. Academics in the US found that this ‘switching of mindsets’ when online reduces the ability of people to self-regulate leading to ‘indulgent rather than restrained choices’.27 Furthermore, research has also shown that people behave in more uninhibited ways when online due to feelings of anonymity.28

These findings echo the work of Daniel Kahneman and others who have argued that people have two interacting modes of thinking. Type 1 thinking is automatic, intuitive and quick, leading to fast decision making based on heuristics and rules of thumb. Type 2 thinking, by contrast, is slower, more

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deliberative and leads to more considered decision making based on concentration and greater intake of information.\textsuperscript{29}

In the context of digital markets, the tendency for consumers to generally pay less attention to the details of transactions lays the foundation for further design tricks to be employed to push consumer behaviour along ‘Type 1’ routes, away from more careful and considered ‘Type 2’ thinking. As a result, there are considerable \textbf{barriers} to facilitating and promoting careful decisions amongst consumers when they are shopping online.

On top of this, there are a wide range of tools available to online platform designers, which allow them to meticulously exploit these characteristic online behaviours for maximum profit. Though there are certainly design tricks that can be, and are, employed in bricks and mortar shops to encourage consumers to spend - positioning special offers right next to checkouts, for example - these are dwarfed by the range of possibilities for tailoring choice architecture online.

Online customer journeys are subject to far fewer contingencies that might interfere with customer experience than in-person shopping. The impact of an unpredictable physical environment, as well as interactions with other customers and staff, are all absent in the online consumer journey. This means that digital platform designers can exercise \textbf{effective control} over the intricate details of the customer experience, in a way that could never be recreated in brick and mortar shops.

All of this together makes it clear there are distinctive challenges involved in protecting consumers in digital shopping environments. Not only are consumers less likely in the first place to be making careful and considered decisions when shopping online; online designers also have many more tools at their disposal to design the intricate details of the consumer journey to maximise profit from this consumer behaviour.

\textbf{There’s a fundamental imbalance of power}

It has always been the case that firms will use whatever tools they have at their disposal to encourage customers to buy their products and services. But the

shift towards online shopping has greatly expanded the range of tools available, the amount of data which firms can access about individual consumers, and the ability to fine tune and personalise the online experience. The extent of the control that designers can exercise over the consumer journey when it comes to online platforms creates a significant imbalance of power between consumers and firms.

Unlike the design of brick and mortar shops, the design of online platforms can be cheaply and repeatedly A/B tested. This is where two different versions of a website are shown to two different groups of participants under otherwise controlled conditions, which allows designers to precisely measure which combination of features has the most powerful impact on consumer behaviour.

The ability to make minute tweaks, for example, to the background colours of a website, exact wording of a scarcity claim, or the order in which information is supplied to customers: all of this can be trialled and continually amended by platform designers to find the optimum combination of factors to encourage consumers to spend more money or make more purchases.

Another key aspect of online platforms is the capacity for personalisation. With in-person shopping, the same premise can only be designed in a way to be appealing to as many customers as possible; but with digital platforms each consumers' experience can be personalised to appeal to them specifically and cater to their individual preferences. Personalisation can be explicit - such as incorporating a customer’s name and other personal information into their experience (e.g. ‘Welcome back Sandra! Dozens of other people in Suffolk are playing bingo with us right now’). But it also has the potential to be subtle in a way which consumers would not notice.

It is, ultimately, firms and designers who are in the position to choose how to shape the environment in which their consumers make decisions. With the sheer range of design elements they have to work with, the amount of data which can be combined with personalisation and tuned with A/B testing, consumers are simply outgunned. Situations such as these, where there is an imbalance of power combined with a conflict of interest, are precisely where regulation is needed to level the playing field.
Poor design leads to worse outcomes for people in vulnerable circumstances or marginalised communities

The final reason why it’s essential there to be a better framework around design decisions is that poor design can have a greater impact on people in vulnerable circumstances.

Research by the Money and Mental Health Policy Institute found that three in ten (29%) people who have recently experienced a mental health problem have spent more than they can afford when shopping online, over twice the rate among people who have never experienced mental health problems (12%). Similarly, people in these situations are three times as likely as to report feeling stressed as a result of shopping online, and over two and a half times more likely to have felt depressed as a result of shopping online.

Our own research into specific business models also finds that people in difficult circumstances are more likely to be hardest hit. This is both because they are more susceptible to poor design and also because the impact is more acute.

For example:

- When looking into subscription traps (see Annex 3), we found 26% of people have signed up to a subscription accidentally, but this rises to 46% of people with a mental disability or mental health problem, and 45% of people on Universal Credit.

- When looking at BNPL (Annex 1), we found 28% who used BNPL without realising, but this rises to a stark 86% for trans people.

- Amongst people that gamble online (Annex 2), we found that 35% of people have at some point spent money without realising it while gaming or betting. But for some racially minoritised groups the numbers are far higher: 70% for people from Asian backgrounds, for instance. Another example is the substantially higher rates of gambling debt amongst people with mental disabilities: as of April 2022, 28% of people with a mental disability were in gambling debt, compared to only 11% of people without any disabilities.
While poor design can have a worse impact on people in vulnerable circumstances, better design could offer an opportunity to provide additional support to people in these situations. A framework which ensures consumers are placed at the heart of design decisions would also provide an approach for ‘inclusive design’ more broadly.

**How could regulation of digital design work?**

If there is to be a regulatory framework for digital design, the next question is what form it should take. There are two broad approaches which could be taken. A **rules-based approach** would rely on creating a set of rules and guidance which would prescribe certain approaches or look to ban specific practices. An **outcomes-based** approach, which focuses less on mandating specific elements of design, and instead requires firms to take decisions on the basis of achieving certain outcomes.

We think both approaches have a role to play. The examples in the previous chapter highlight some important broad points about design, namely:

- some design practices are almost always harmful,
- some are positive in some contexts but harmful in others, and
- some decisions are both unavoidable and have a significant impact on consumer behaviours.

These points suggest the shape that regulation would need to take. The first point supports a case for banning certain practices. The other two support a case for introducing an outcomes-based framework for how firms make decisions around design. Where products or services are high-risk, we see a case for having additional rules around design in order to achieve an adequate level of protection for consumers. The remainder of this chapter sets this out in more detail.

**Some practices are almost always harmful.** Features like drip pricing or misleading scarcity claims offer no value to consumers and can lead to making poor decisions, as well as damaging competition. The use and provision of fake reviews is a particularly egregious example, which the government has committed to addressing in the Consumer Bill. For cases such as these, where a
specific element of design adds no value and is likely only to mislead or manipulate a consumer, it is proportionate to ban them.

This logic appears to have been accepted by BEIS when consulting ahead of the Consumer Bill. Outside of fake reviews, the view of BEIS is that further evidence would be needed to evidence which practices fall into this category. The Department highlighted that the majority of respondents to the consultation would welcome the government looking at this further. The government should therefore take this work forward.

If primary legislation is required to ensure that such practices are banned, there may not be sufficient time to do this alongside passage of the Consumer Bill. However, waiting for another opportunity to take forward primary legislation on consumer protection would be unnecessarily slow as well as burdensome on Parliament. It is essential that consumer protection legislation can adapt quickly. Therefore, the government should ensure that the Consumer Bill gives BEIS the necessary powers in secondary legislation to swiftly put in place bans once it has the necessary evidence.

It is unavoidable that firms will have to make design decisions which are highly impactful on consumer outcomes. Defaults illustrate this point well. How defaults are set up, or whether binary decisions are opt-in or opt-out, tends to have a significant impact on what choices are actually made. But it's not possible to simply not have the feature - there will always be defaults and a decision will need to be taken around how to set them up. Similarly, there may be information which is required to be disclosed to the customer (e.g., the cost of borrowing), and so firms will have to make decisions around how that information is displayed. Again, firms must make a decision around design which can have a significant effect on whether the information is read and understood or ignored.30

Furthermore, it may not always be possible to tell in advance what design decisions are appropriate. A lot depends on the specific choices which the consumer needs to make and the characteristics of the consumers making the

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30 We have looked at this in detail around how information is provided to customers as part of Buy Now Pay Later credit - see Annex 1.
decisions. Scarcity claims can, in certain situations, be useful to consumers but they also place pressure on customers which can impact their decision making. Presenting information in certain ways or adding friction to a consumer journey may have different effects on different groups of consumers.

To identify what design is most appropriate is therefore something which needs to be established within the given context and, ideally, based on evidence. This isn’t far from how many design decisions are taken in practice, for instance, A/B testing is used by designers to see how different design decisions shape consumer behaviours.

As decisions about design have to be taken and are important to driving good consumer outcomes (or avoiding poor ones), some framework is needed around how those decisions are taken. But the fact that decisions are context dependent means the framework cannot - in general - be too rigid and specify what decisions should be taken. Instead, what matters is the way the decisions are made and the outcome they generate.

An important example of what such a framework could look like is the FCA’s new Consumer Duty. The Consumer Duty has the aim of ensuring that firms put their customers’ needs first when making business decisions and to “act to deliver good outcomes for retail customers”. In particular, firms are required to “act in good faith, avoid causing foreseeable harm, and enable and support customers to pursue their financial objectives”.

A framework such as this is appropriate for digital design. It sets clear but suitably high-level expectations on business which focus not on what decisions are taken but the considerations firms should take when making them. By focusing on outcomes, it gives a way to approach such a broad and rapidly changing practice as digital design by making it clear to firms that they have to actively take customers’ needs into account when making key decisions around design.

An effective framework like this should ensure firms identify what the key choices are which their consumers have to make when interacting with their business online (e.g., whether to push buy on a shopping cart, whether to borrow money, whether to enter or terminate a contract, whether to gamble or
whether to withdraw winnings). And it should then ensure that firms look to make careful, considered decisions around how digital design puts consumers’ needs first and supports them in making those decisions.

**The middle ground between principles and outright bans.** We’ve argued above for a two pronged approach to regulating digital design: outright banning the worst practices in all cases and ensuring firms consider customers’ best interests when making decisions around digital design. These represent two different approaches to regulation: a prescriptive set of rules on the one hand (banning) and a set of principles on the other. Is there a case for something in the middle: A set of rules which prescribe good design practices?

When looking at a general framework which applies to all digital design, we think this is unlikely to be the right way forward for the same reasons we have given in support of a framework like the Consumer Duty. **However, in certain situations there is a strong case for putting in place more specific rules.** One situation is where the products or services being sold are high-risk. This includes situations such as borrowing money or gambling (where there is risk of debt) or entering into potentially costly long-term contracts, including subscriptions. In such situations, it may be proportionate to have additional rules - including banning certain practices within these particular markets - which set out best practice to ensure that consumers are protected. This is something which should be considered by sectoral regulators where they are present. We consider some specific examples in the next chapter.

Another situation is where practices are very commonly used and where there may be a case for setting out guidance for how firms should best consider design decisions. An example here would be around how firms approach using features like scarcity claims or countdown timers. A regulator such as the CMA would be well placed to offer broad guidance on these practices.
**Recommendations**

1. The government should take the opportunity to use the forthcoming Consumer Bill to create a requirement on business to take consumers’ best interests into account when considering digital design, modelled on the FCA’s Consumer Duty. The requirement would aim to ensure:
   
   a. Businesses identify key choices consumers need to make when using their online services and evidence that they have considered how the design elements of the website/app support their customers in making decisions.
   
   b. Records are kept of key design decisions in such a manner that allows enforcement agencies, such as the CMA, to be able to establish why they were taken and how consumers’ interests were considered.

2. The government should use the Consumer Bill to place a duty on sectoral regulators to consider the case for introducing additional rules and guidance around how firms in their markets make decisions around design.

3. The Department for Business, Energy and Industrial Strategy should take forward a review of online design practices which are likely to be manipulative and move to ban these. The government should use the Consumer Bill to ensure that BEIS has the necessary powers to swiftly ban through secondary legislation design practices which in most cases lead to consumer harm.
4. The Competition and Markets Authority should set out guidance for business on best practice around features such as scarcity claims and how business should interpret existing consumer law when making decisions around digital design.
4. Exploring the customer journey

Key takeaways

➔ Design is not just about individual features, like defaults or friction, but also about how multiple design elements interact simultaneously or across the consumer journey.

➔ We set out a framework for considering the effect of different design features across the consumer journey and draw 4 principles from this.

➔ These are applied to three high-risk business models where we consider it proportionate that specific design elements be mandated in order to ensure consumers are protected.

In this final chapter, we provide a conceptual framework for exploring the customer journey which digs into how particular design practices, at key decision points, can shape consumer choices. This approach moves us away from focusing on individual practices to thinking about a typical customer journey a consumer might take in order to more effectively guide regulation.

A holistic approach

In Chapter 2 we highlighted some specific individual practices such as selection of defaults. These individual practices matter and there have been impactful interventions made by looking at improving certain practices in isolation (e.g., making add-on insurance opt-in).

However, in reality consumers are not only subject to design features and practices in isolation. Someone online will be subject to lots of different design practices both simultaneously and over the course of their whole consumer journey. These have a cumulative effect and can work in tandem with one another to drive consumers to make certain decisions.

This section provides a conceptual framework of the customer journey organised around four key decision points outlined below. This framework was
developed in collaboration with design and behavioural science experts at CogCo.31

A framework for looking at design across the consumer journey

The framework maps the use of different design features at each key point of the customer journey and how they work together to influence consumer decision making through the exploitation of behavioural biases.

While there is value in considering each of these parts of the consumer journey separately, it is the way that they combine which can lead to harm. In particular, practices which encourage Type 1 thinking are embedded in the parts of the consumer journey where we would usually expect consumers to benefit from making more considered, active decisions (Type 2).

The framework looks at four critical parts of the consumer journey:

1. How consumers are initially drawn into considering a purchase or signing a contract.
2. The initial spending decision to make a purchase or sign a contract.
3. Decisions around repeat use, including additional purchases, using a service again or more, or renewing a contract.
4. How consumers can terminate their relationship with the firm.

The following diagram illustrates our framework and how these four parts can contribute to consumers being drawn in then trapped into a pattern of spending.

31 More information about CogCo can be found on their website here: https://cogco.co/
A framework for looking across the consumer journey

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<th>Behavioural effects</th>
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<td>Deferred costs</td>
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Looking across the consumer journey, we can see how various design elements and behavioural biases interact in a way which can drive harm.

- In Pillar 1 (Initial Appeal), consumers’ attention can be drawn through the use of up-front offers and the deferral of costs; while the downsides of using a product might be hidden or obfuscated and the best case scenario is emphasised. These design features play upon our tendency to place greater value on benefits received today, than the costs of tomorrow (‘present bias’); to be influenced by how an offer is ‘framed’; and to be overly optimistic for future outcomes (‘optimism bias’).

- In Pillar 2 (‘Easy In’), consumers can be encouraged to make more costly selections through the visuals and default choices on a web-page; and how products are designed to persuade us to sign-up and then make it as simple and easy as possible. We explain how these design features play upon our tendency for our attention to be drawn to novel or prominent features (‘salience’) and for us to be overly influenced by defaults (‘default effects’) and irrelevant information (‘anchoring’). We also see in this section that we will often choose options which remove effort (‘path of least resistance’) and that we can be persuaded easily when we’re worried about missing out (‘regret aversion’ and ‘scarcity heuristic’).

- In Pillar 3 (‘Sustain Use’) design features can help to maintain consumers’ use of a product or service over time. This includes common features like the automatic payment and renewal of subscriptions and transactions; the splitting of payments into chunks and the use of fun to maintain or increase our use. These elements remove friction and some of the psychological barriers to payment (‘defaults’, ‘pain of payment’ and the ‘path of least resistance’). And help to reconfigure how we think about the cost of transactions by encouraging us to split them into smaller, more fun parts, rather than focus on the whole (‘mental accounting’ and ‘gamification’).

- And finally, in Pillar 4 (‘Hard Out’), design elements can be applied to make it difficult to leave once you have taken the decision to exit. Very often this is the result of ‘exit frictions’ or design features that make leaving more
challenging than joining in the first place. Dissuasion tactics (offers that are unlocked at the point you want to leave) are also used. From a behavioural perspective, we explore how these elements make use of our natural tendency to be less likely to follow through with more complex tasks (‘cognitive effort’), prefer to defer the hassle for a later day (‘present bias’) and can be persuaded when thinking about what we might lose (‘loss aversion’).

Looking across the consumer journey and looking at design in a holistic manner would, in our view, be a useful approach for all firms when considering digital design. However, we consider it to be essential where the products or services being sold are higher-risk. The above description suggests a number of principles which firms should apply:

Looking across the consumer journey, digital design should follow 4 principles:

**Principle 1:** Ensure information is clearly provided in a way which ensures that consumers have high levels of awareness and understanding of key, salient facts.

**Principle 2:** Ensure consumers are prompted into active decisions at key points, including at initial purchase, points of repeat or sustained use, and at renewal or places where use could end.

**Principle 3:** Adapt to the needs of consumers who are identified as being in vulnerable circumstances

**Principle 4:** Ensure that it is as easy to exit a contract as it is to enter it

Applying this to 3 high-risk business models

We now apply this approach to three high-risk business models: buy now pay later credit, online gambling and subscription traps. We set out here an overview of how design elements within the consumer journey can contribute to poor
outcomes, but these are considered in greater detail in the three annexes to this report. The annexes also contain specific recommendations on how design issues in these markets should be addressed.

1. Buy Now Pay Later

Consumers are likely to be familiar with BNPL before they even begin the customer journey. BNPL providers have partnered with celebrities and influencers, making highly effective use of social media as well as pioneering very distinctive branding techniques trading on a fun and laid back image. BNPL is often regarded as risk free (in comparison to credit cards) given the business model is premised on not charging interest.

The hidden or complex T&C’s typical of BNPL customer journeys are not sufficient in improving consumer comprehension and there is a lack of additional information which clearly emphasises that BNPL is a credit product. 17% of BNPL users didn’t understand that missed payments or late fees could affect their credit score.
Initial appeal and lack of disclosure is then matched by ease of signing up which is so smooth that 28% of people have used BNPL without realising. Furthermore, the current absence of affordability checks reduces any friction in use. The ability to gain easy access to credit which allows consumers to defer payments over a period of weeks or months, also encourages repeat use and often across multiple providers. 46% of BNPL customers have used more than 2 or more different providers, and 10% have used 4 or more.

An average BNPL user is paying off an average of 2 purchases at any one time. Being able to spread payments can make otherwise unaffordable items feel like they are within budget for consumers, even if they aren't. 25% of BNPL customers have missed a payment or made a late payment on a BNPL purchase. This means BNPL users can end up in debt, fall behind on other bills or use their credit cards to pay off purchases.

In Annex 1 we set out how changes to the design of information provision can lead to dramatic differences in levels of consumer comprehension of key aspects of BNPL without necessarily impacting on BNPL usage (Principle 1). This is supported by evidence from a large-scale behavioural trial.

**BNPL Recommendations**

1. HMT must ensure that BNPL credit is brought under FCA regulation without delay.

2. As part of the regulation of BNPL, the FCA should ensure lenders introduce effective design, such as the use of pop up disclosures, with the aim of improving comprehension and adding friction. Lenders should be required to monitor and evaluate the effectiveness of any measures taken to ensure they prevent consumer harm.

3. As part of the review of the Consumer Credit Act, HMT and the FCA should take the opportunity to consider the online consumer journey for credit products in general and ensure that the potential for online design to raise consumer comprehension around key information disclosures is realised.
2. Online gambling

Once someone has decided to gamble they can open an account quickly and easily. However, **35% of online gamblers have spent money accidentally or unintentionally** where it was not made clear they were gambling. Safety features which can be found on gambling websites are off by default and online gamblers would have to enable them.

Online gamblers may find it difficult to stay in control of gambling, particularly if safety features have not been enabled. **42% of online gamblers say they always lose track of time** when gambling, which rises to **50% for non-sports betting** and **55% for online poker**. People who play poker and bet on non-sports events are also more likely to gamble overnight between 10am and 9am.

If online gamblers decide they want to withdraw their winnings, they are likely to **encounter barriers**. They may have to reach a minimum amount before being able to withdraw winnings or be asked to contact customer services. This encourages online gamblers to **keep playing** in order to meet a minimum
requirement. Free bets to keep people playing when they might want to stop is another way people get stuck. **78% of those who always regret gambling after the fact report always or often taking up the offer of free bets.**

In Annex 2 we set out the forthcoming Online Gambling Bill should drive changes throughout the consumer journey to ensure:

- People are aware that they are actually gambling (Principle 1)
- higher uptake of safety features drive active decisions around whether to keep gambling (Principle 2)
- Communications and incentives are not targeted at people struggling with gambling (Principle 3)
- people can withdraw money as easily as they can deposit it (Principle 4)

## Online gambling recommendations

1. DCMS should ensure the Gambling Act white paper adopts ‘Safer by default’ as standard practice for online gambling platforms - mechanisms like reality checks, stake limits and deposit limits should apply automatically on sign up, with an option for customers to opt out, rather than having to opt in.

2. DCMS should also look at how adaptive design features, which change according to consumer gambling habits, can be used to help protect the most vulnerable consumers. For example, those currently in debt or at identifiable risk of falling into it should not be targeted with adverts, emails and notifications, nor should they be offered incentives or free bets to continue gambling.

3. The gambling white paper should also include a call for design changes that promote the best-interests of consumers across all platforms, including:
   - Increased clarity about when real gambling is happening, and real spend is taking place;
b. Limits on the number of offers and incentives each customer is exposed to in a given period;
c. Removal of all barriers to withdrawing winnings.

3. Subscription traps

A customer journey with subscription traps

Subscriptions are very easy to get into and difficult to get out of. **1 in 4 people have signed up to a subscription by accident.** Consumers may also sign up to take advantage of a free trial or a steeply reduced offer, with the intention of cancelling after at the end of this period, but can often forget to do so. **3 in 5 people got into subscriptions** did so because they forgot to cancel a free trial.

This means subscriptions can auto-renew at a higher price, sometimes without consumers being aware this is the case. **Over 4 in 5 (82%) people with an unused subscription reported that it auto-renewed.** Even when consumers are reminded about auto-renewal, difficult cancellation processes can put people off from exiting a contract.
The example below from a cleaning subscription strongly suggests at the checkout that you can cancel at any time, but, in reality, you have to wait 10-days after signing up to cancel the subscription.

Subscriptions are often advertised in ways that make their daily price or monthly price seem low and affordable, but where the total cost price is not made clear to consumers. If a consumer decides they no longer want a subscription - whether they signed up accidentally, forget to cancel after a free trial or don’t use the subscription - then barriers to cancelling a contract are also high.

Consumers may sign up for subscriptions online but many businesses force people to cancel offline by calling a phone line. Other dissuasion tactics include new offers or deals or even paying exit fees. Of consumers who wanted to cancel a subscription, 67% weren’t able to because the process of cancelling was too difficult.

There are problems right across the consumer journey. More is needed to ensure consumers are aware they are signing up to a subscription (Principle 1) to remove barriers to ending subscriptions (Principle 4). At key decision points, the ending of free trials and renewal of subscriptions, the structure of the choice (opt-out rather than opt-in) plays on inertia. In Annex 2 we apply Principle 2 and make the case for changing the default, so that customers have to make an active decision to continue with a subscription after a free trial or when renewing.
Subscription traps

1. BEIS ensures the Digital Markets, Competition and Consumer Bill includes a ban on opt-out auto-renewals at the end of fixed-term subscription contracts and to ensure that rolling contracts get consumers’ consent to continue with the subscription at least once a year

2. The bill should also ensure that entering into a subscription at the end of a free trial is opt-in rather than opt-out

3. BEIS continues with existing commitments around information provision and exit processes.
Annexes

1. Buy Now Pay Later
2. Online gambling
3. Subscription traps
4. Technical annex
5. Key terms
6. Research note
Key terms

**Behavioural biases**

**Anchoring effect**
The anchoring effect is a cognitive bias whereby people tend to prioritise the first piece of information they receive about something; this initial information ‘anchors’ the persons’ overall perception of, and judgement about, the thing in question.

**Cognitive effort**
Cognitive effort refers to the amount of mental work involved in a particular task; the more complex the task, the more cognitive effort it requires - and the less likely we are to follow through on it as a result.

**Default bias**
Default bias refers to the tendency for people to choose action over inaction, meaning that their actions will be skewed towards whatever default option they are presented with.

**Framing effect**
The framing effect refers to the tendency for our perceptions and decisions to be influenced by the way things are presented to us (they way they are framed).

**Loss aversion**
Loss aversion is a cognitive bias whereby individuals tend to assign disproportionate weight to the prospect of losing something, compared to the comparable weight assigned to the prospect of winning the same thing. In other words, avoiding loss is valued more highly than acquiring gains of equivalent value.

**Optimism bias**
Optimism bias refers to the tendency for people to overestimate the chances of positive things happening to them, and underestimate the chances of negative things happening to them.
**Pain of payment**
The pain of payment refers to the negative emotions we attach to paying out money when we make a purchase. It is connected to loss aversion, which is the tendency to prefer avoiding loss over making gains.

**Path of least resistance**
The path of least resistance refers to our tendency to follow the course of action which requires less effort from us than the other available courses of action (even where we may have initially set out to take another path).

**Present bias**
Present bias refers to the tendency to give stronger weight in their deliberations to payoffs received today than costs incurred tomorrow as a result – a tendency which biases our actions towards the present.

**Regret aversion**
Regret aversion refers to the desire to avoid future regret, which can bias our behaviour towards courses of action that we deem least likely to make us regretful.

**Salience**
Salience is a heuristic we use to make decisions, whereby we focus our attention on information that is prominent, novel or otherwise stands out.

**Scarcity heuristic**
The scarcity heuristic refers to our tendency to make decisions based on the assumption that something which is less readily available, or scarce, must therefore be more valuable.

**Sunk cost fallacy**
The sunk cost fallacy refers to our tendency to persevere with a task or process we have already committed time and resources too, and the corresponding reluctance to cut our losses and abandon such tasks or processes.
Online choice architecture practices

Dark patterns
Collections of design features that together steer, coerce or deceive consumers into making decisions that they would otherwise not make.

Deferred costs
When customers agree to purchase a product, enter a contract or sign up to a service, but the actual taking of the payment for this is deferred to a later point in time. This has the effect of making the purchase, contract or service more appealing.

Drip pricing
When a low price for a product or service is initially displayed to a customer, only for further costs to be added along the customer journey, leading to a much higher final price.

Frictions
Online consumer journeys are generally designed in a way to be as frictionless as possible – to provide consumers with smooth, seamless experiences. A friction, accordingly, is any design feature that disrupts this smooth and seamless customer journey. Frictions can either promote or inhibit consumer best-interest decisions, depending on how they are deployed.

Nudge
Nudge is a term for any design technique deployed by a choice architect to steer or shape a person’s choices in a certain direction, without limiting the range of options open to them.

Opt-in
An opt-in system is where a certain option is presented to consumers as something that they have to actively select, in contrast to the pre-selected default option (the option that will result from consumer inactivity). Using an opt-in system is a way to introduce friction into the consumer journey towards a particular option.
**Opt-out**
An opt-out system is where a certain option is pre-selected by default for consumers, in contrast to an alternative option which requires them to actively move away from the default option. Using an opt-out system is a way to minimise friction in the consumer journey towards a particular option.

**Scarcity claims**
Scarcity claims are used to communicate to consumers that certain products are in high-demand, and therefore have limited availability that might be time-sensitive.

**Shrouding**
Shrouding refers to hiding, obfuscating or otherwise minimising certain information from customers – information which might have a consequential impact on the decisions customers make if it were clearly presented to them.

**Sludge**
Sludge refers to a set of frictions implemented at key points along a customer journey, designed to make certain decisions and courses of action harder (for example, ending a contract or closing an account).

**Visual hierarchy**
Visual hierarchy is a design technique whereby certain information which makes a product appear appealing is highlighted and brought specifically to customers’ attention.
Research note

BNPL

Citizens Advice commissioned Opinium to survey 2,288 UK adults who have used BNPL in the last 12 months to ask about their experience of the BNPL customer journey. Fieldwork took place online between 11 - 28 March 2022.

Citizens Advice also commissioned a nationally representative survey of 6,000 UK adults, conducted by ICM, exploring the impact of the cost of living crisis on people’s lives. Fieldwork took place 27 May - 17 June 2022. All figures used are from the above commissioned research unless otherwise stated.

Online gambling

Citizens Advice commissioned Savanta to survey 2014 UK adults (18+) who had gambled online in the 3 months prior to polling, about their gambling habits, their experience with various aspects of gambling platform choice architecture, and the harms they may be experiencing as a result of their gambling. Survey participants were selected using quota targets (across age, gender, region) to ensure the research was in line with the gambler audience identified in previous research. Fieldwork took place online between 25th March and 2nd April 2022. All gambling figures used in this report are from Savanta polling unless otherwise stated.

Subscription traps

Subscription polling data referenced in this report, unless otherwise stated, is from nationally representative polling of 3,002 UK adults commissioned by Citizens Advice and conducted by ICM Unlimited between 11 - 21 October 2022.

Omnibus polling

Citizens Advice commissioned questions in omnibus polling of 2000 UK adults about their online shopping experiences. The polling was carried out by Opinium between 4th - 8th of November, 2022.
Citizens Advice helps people find a way forward.

We provide free, confidential and independent advice to help people overcome their problems. We are a voice for our clients and consumers on the issues that matter to them.

We value diversity, champion equality, and challenge discrimination and harassment.

We’re here for everyone.