

From advert to action: behavioural insights into the advertising of financial products

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Summary

How are we affected by financial advertising? What do we pay attention to and when might we be misled? We explore the science of advertising to answer these questions. Building on earlier FCA work into behavioural biases, we summarise a large body of academic literature to explore the mechanisms behind consumer attention, understanding, and behaviour. We build this into a framework for understanding how consumers process information in the form of advertisements, divided into three stages: *See*, *Interpret* and *Act*. We then apply our findings in a novel setting: explaining what the science says about when an advert may be unclear, unfair or misleading.

In *See*, we find that attention may be predicted by the relative salience of information and is also affected by consumers' motivation and intentions; for example, those searching for a house are more likely to notice mortgage deals. In *Interpret*, we find that certain ways of presenting information, particularly those which make use of behavioural biases or which involve percentages may impede understanding and have the potential to mislead consumers in certain circumstances. In *Act*, we see that consumers may be influenced into action through techniques which encourage reliance on heuristics or emotion, rather than reason, and that this may cause problems.

Throughout, we offer fictitious examples of adverts to illustrate the behavioural points we observe and we suggest further areas for research which can guide our actions.

1 Introduction

“Advertising is actually a simple phenomenon in terms of economics. It is merely a substitute for a personal sales force – an extension, if you will, of the merchant who cries aloud his wares.”

Rosser Reeves, advertising executive and pioneer of TV advertising

In an environment filled with visual and auditory information, what determines the types and features of adverts we pay attention to? And what other factors might lead us towards action – even when it is not in our best interest? This paper reviews the academic literature from marketing, consumer psychology and behavioural economics to answer these questions and to outline the science of advertisements and how they affect consumers.

Context

The understanding and application of science in advertising can help to design clear and fair advertisements that consumers notice, understand and act on. Whether you are an advertiser, a compliance officer or a regulator, taking account of how consumers see, interpret and act on advertisements is valuable in helping to identify situations in which consumers may misunderstand, be misled or simply miss crucial information. This paper aims to consolidate a large body of academic literature on psychology and decision making relevant to advertising, for the use of practitioners, regulators and others.

Evolution of advertising and protection

For centuries, marketers have been trying to entice, inform and persuade us, from ancient Indian rock art paintings displaying commercial messages (Bhatia, 2000) to today's multi-billion pound, global industry. And like other industries, it has had its triumphs and its scandals. While it is not common to see snake oil for sale on UK streets today, the behavioural biases we are all susceptible to mean that consumers may still misunderstand or be misled into buying unsuitable products. This may be frequently seen in cases of foodstuffs claiming carefully-phrased health-boosting benefits that do not pass scientific tests or anti-ageing skin creams advertised using digitally enhanced photographs.

To preclude this, most countries have rules, guidelines and codes of practice drawn up by regulators and industry. In the UK, organisations responsible for this include the Advertising Standards Authority, the Committee of Advertising Practice and the Institute of Practitioners in Advertising, as well as the Financial Conduct Authority (FCA) in the context of adverts for financial products (known as “financial promotions”).¹ The FCA has rules in the FCA Handbook which set out how firms can advertise fairly. The overarching principle is that financial promotions must be **clear, fair and not misleading**.

¹ See FCA Handbook Glossary for definition. The insights in this paper cover many types of financial promotion, including traditional print and audiovisual advertising as well as inducements on firms' websites or price comparison pages.

However, while advertising has changed over time, for example by developing more sophisticated methods of targeting groups of consumers and harnessing technology to spread messages further and more quickly, many advertising rules do not explicitly reference recent advances in the scientific understanding of consumer behaviour.

We see a slightly different situation amongst advertisers. Over time, much has changed in the acceptance of advertising as an academic topic of study. Although successful advertising usually makes use of psychological principles, for most of the industry's history this was often by accident rather than by design. It is only fairly recently that advertisers have started to apply and test principles systematically and that academics have become increasingly interested in marketing as a field. This is illustrated by increasing numbers of advertising agencies creating or buying in behavioural expertise, for example Kyu's purchase of behavioural consultancy BEWorks and Ogilvy launching its Center for Behavioural Science.

This meeting of traditional advertising and behavioural science means that we now have a much greater understanding of "what works" in advertising and what mechanisms might be at play in certain circumstances. However, research by commercial firms is generally focused on the techniques that encourage specific actions, such as purchasing a product, whereas regulators may focus more on research and evidence which identifies situations where consumers may misunderstand or be misled. Firms and regulators are also likely to be interested in different magnitudes of impact; while a small percentage change in purchase rates due to use of a behavioural technique may be significant for a firm, regulators may need different evidence before acting, for example the likely market impact of interventions or the heterogeneity of the decisions of affected consumers.

Where this paper fits

In 2013, the FCA's Occasional Paper 1 set out an approach to behavioural economics and financial regulation and developed a framework for understanding behavioural biases and their effects on consumers (Erta, Hunt, Iscenko & Brambley, 2013; Wheatley, 2013). Since then, the FCA has carried out practical, original research in various consumer markets (see Occasional Paper series for details). It has also established a programme of applying evidence from psychology and behavioural insights to practical questions within regulation, to create tools which help regulators to make more efficient and effective decisions. The current paper builds on theory from these early papers and combines it with practical implications coming out of a programme of applied work on financial promotions.

While many of our findings are applicable to a wide range of consumer products, this paper is novel in focusing on financial advertisements, where consumers may be particularly susceptible to errors. This is because financial products may be long-term, complex and intangible, provide limited opportunity to learn and are used to facilitate other purchases and experiences rather than providing entertainment or experiences themselves. Decisions require trade-offs between the present and the future as well as an understanding of risk and uncertainty (Erta et al., 2013). Financial capability may be low; a 2015 study found that only 59% of people say that they can keep up financial commitments without difficulty (Money Advice Service, 2015). In addition, decisions about financial products may be highly important to individuals' financial security and future well-being, which means that the scope for error is small. All of this makes the advertising of financial products a unique and important area for investigation.

For the avoidance of doubt, nothing in this paper affects firms' obligations to comply with the FCA's rules, including that financial promotions must be clear, fair and not misleading. For the avoidance of doubt, firms should note that this paper is not guidance on the FCA's financial promotions rules. Some of the techniques described in this paper could be used to produce promotions that are not clear, are unfair and misleading, and it remains for individual firms to ensure that their promotions comply with the FCA's rules.

What is advertising for?

To understand how adverts affect consumers, we first need to consider what advertising is for. It is apparent that advertising facilitates competition, by allowing firms to tell consumers about the goods they have on offer and how these are different from competitors' goods. But does advertising do more than just inform? Marketing professionals point to the role of advertising in changing customers' preferences or improving their brand recognition (Fennis & Stroebe, 2014). Psychologists and behavioural scientists argue that advertising aims to prime potential customers to buy products when opportunity presents itself. In fact, our understanding of the purpose of advertising has become richer as our knowledge about human information processing has developed. We consider each of these approaches below.

Economic approach

Economists started studying advertising in earnest at the beginning of the 20th century, as described in Bagwell (2007). The initial dominant view was that advertising was **persuasive**; that it altered consumers' tastes and created (potentially spurious) product differentiation and brand loyalty. This is negative for competition, because it makes it difficult for new firms to command the same level of attention and interest and enter the market. This thinking moved on to consider the **informative** - and pro-competitive - effects of advertising. Economists argued that advertising helped to solve the problem that it is costly for consumers to search for products by providing information directly and efficiently. A third view is that advertising is **complementary** to the advertised product; that it does not change views or provide information, but simply enhances the existing features of a product.

Traditional approach

In classic psychology, the main determinant of human action is a person's attitudes. Under this view, the purpose of advertising is to change attitudes to make consumers more positive to products. Many classic advertising models rely on this approach (Fennis & Stroebe, 2014). For example, the widely-used AIDA model lists **attention, interest, desire and action** as sequential building blocks to a purchase decision. However, such models may require a high level of cognitive involvement, which does not necessarily concur with the behaviour we see. For example, people often do not act in accordance with their attitudes; think not recycling despite positive attitudes towards recycling, or eating cake despite wanting to lose weight.

Behavioural approach

The behavioural approach sees advertising in the context of a complex relationship between people and their environment. It accepts that psychology and inbuilt mechanisms can be powerful in driving our conscious and unconscious choices, even without changing our preferences and with a significant real world impact. For example, scientists investigating the effect of small changes such as adding photographs and prizes to the marketing literature of a consumer credit firm, found that these small changes have a meaningful effect on economic decisions, equivalent to changing the price of the product (Bertrand, Karlan, Mullainathan & Shafir, 2005). Furthermore, the behavioural approach recognises that while advertising has pro-competitive effects, it can also exact a cost on our attention; in some cases, putting us off the real content we set out to read or watch (Goldstein, McAfee, & Suri, 2014).

This paper takes a behavioural approach to analysing advertising and its effects. In it, we consider how advertising draws on inbuilt psychological mechanisms, invokes our emotions, changes our preferences and invites automatic responses, as well as tells us a story.

How do we process adverts?

So how do advertisers get from putting an advertisement in front of a consumer to that consumer buying their product? We know that consumers spend an average of only 1.73 seconds looking at adverts and there is evidence that consumers actively try to avoid looking at them (Pieters & Wedel 2004, in Pieters & Wedel 2008). In fact, there are a great number of steps which must be completed in order for a consumer to get to the point of acting on an advert they have been exposed to. To summarise the vast body of evidence on human information processing from the perspective of consumer responses to advertising, we have developed a novel framework: **See**, **Interpret** and **Act** (see Figure 1).

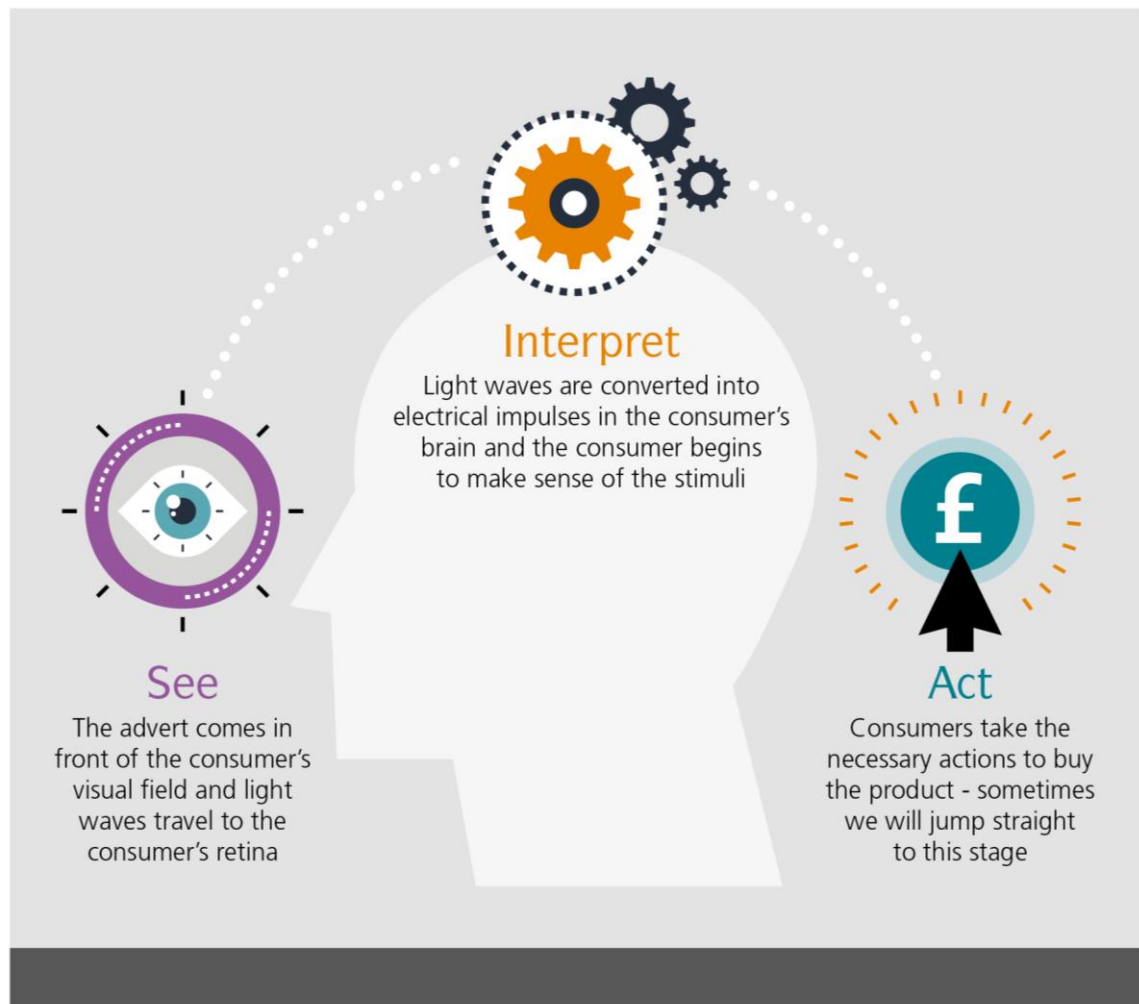


Figure 1: See, Interpret, Act

In the first stage, **See**, the consumer notices the advert (whether consciously or unconsciously) and sound or light waves travel to the consumer's retina. Fractions of a second later, the light waves are converted into electrical impulses in the consumer's brain and the second stage, **Interpret**, begins. Finally, the consumer may reach the third stage, **Act**, where they consciously or unconsciously prepare to take the necessary actions to buy the advertised product. Through this framework, we aim to guide the reader through studies of visual attention, into experiments in comprehension and inference and finally to methods of influence, picking out illustrative examples and practical implications along the way.

Our main findings are:

See: getting our attention

Most adverts are visual, although we also consider some radio and television advertising in this paper. We find that attention is driven both by the adverts themselves and by the motivations the consumer brings to the process. People notice things that are salient; that is, objects which stand out from their environments because they differ from them in colour, size or other attributes. This means that it is important to take into account the relative salience of different items of information within an advert when considering what consumers are likely to take away from it. But people are also affected by their current circumstances; what they are thinking and feeling at the time in which they come across an advert. This highlights the importance of considering context and possible effects of priming in assessing consumer responses.

Interpret: reaching an understanding

We find that framing, the presentation of numbers and using implications (rather than statements of facts), all affect consumer understanding. For example, most people find it easier to process absolute frequencies (1 in 10) than they do percentages (10%). We are affected by the framing of information, for example by Recommended Retail Prices (RRPs) and “Was X” prices, and we find it difficult to discount information we have read or heard even after being told it was untrue. This creates the potential for consumers to misunderstand and for advertisers to mislead. It means that when considering the effects of advertisements on consumers, it is important to take into account the **way** information is presented as well as the content of the information itself.

Act: being influenced

In the final stage, consumers may be influenced to purchase products through appeals to emotion or the use of principles of influence, such as reciprocity or scarcity. These techniques may not be noticed by the consumer, nor factor consciously into the consumer’s decision. Sometimes they may mean that consumers act inconsistently with their own preferences. It might be entirely appropriate for simple products to be sold through rules of thumb, for example on the basis of irrelevant emotional content or free gifts – in fact, this could have positive effects on competition. However, for complex products and circumstances or in cases of vulnerability, consumers may benefit from being encouraged to take the time to engage properly to avoid detriment. This means that it is important to take into account the circumstances of an advert including product features, target audience and behavioural techniques when considering the effects of adverts on consumers.

In each of the three stages, *See*, *Interpret* and *Act*, there is potential for things to go wrong and for consumers to be misled or otherwise be persuaded to buy products which are unsuitable for them. This paper explores examples of where this may happen and the characteristics of adverts as well as the psychological mechanisms which are more likely to cause misunderstanding, confusion and detrimental purchases.

2 See: getting our attention



The irony is that the advertising industry knows everyone hates what they produce. This is why they keep looking for new ways to force people to stay tuned.”

Simon Sinek, author of *Start With Why: How Great Leaders Inspire Everyone to Take Action*

Getting the attention of consumers is crucial to marketers and also of interest to regulators. So what characteristics make adverts or parts of adverts stand out from the crowd? In this chapter we discuss why certain features of adverts are noticed over others and what other factors affect our attention. We then explain possible implications for assessing financial promotions.

At the very start of the **See** process, the advert has to come within the consumer’s visual field while their eyes are open. Though this might sound obvious, the consumer is likely to come across a large number of adverts and other sources of information each day, while commuting, reading, attending sports games and browsing the Internet. How does the advertisement attract the customer’s attention such that it reaches this spot, whether voluntarily or involuntarily?

There are two ways to explain what we notice: **salience** (sometimes called “bottom-up attention”) and **motivation** (“top down attention”). Salience is caused by the difference between the object or advert in question and its surroundings and may be created on a number of dimensions including colour, size and language. But the physical characteristics of objects don’t tell the full story; we also bring our own motivations and intentions to the task at hand and these can direct our attention towards things that are on our minds.

This chapter explores first salience, giving examples of mock adverts which might grab our attention through salient features, and then moves on to consider motivation, including the effects of targeting, timing and banner blindness.

Salience

What makes something prominent, or “salient” as it is known in behavioural science, is primarily about the difference between the item in question and its surroundings (Fennis & Stroebe 2014). Relative to the immediate environment, how different is this or that piece of information? This means that it is not usually the case that certain colours or shapes naturally attract attention more often than others do, but that our attention is attracted by colours and shapes that are different from their surroundings.

Therefore prominence (or salience) should only be judged relative to other items. For example, it is sensible to compare the size of the headline against balancing information or judge how different the colour of crucial statements are from their backgrounds, rather than categorising certain features as inherently prominent.

Salience may be created on a number of dimensions including:

Size

In general, the larger an object is, the more attention it attracts (Lohse, 1997). However, this is logarithmic in nature. This means that small objects gain more attention from size increases than large objects (Weber's Law).

This is shown in the two adverts in Figure 2. The bottom picture has "up to 4%" enlarged by the same amount. Despite this, the "up to" appears to show a larger change than the "4%".

There is strong evidence that people do not pay attention to small print, such as terms and conditions (Clayton, Davidson, Leston, Lyon & Wells, 2013). This can mean that items that are not in the main text and headlines may not be read or attended to.

Colour

Attention is not necessarily attracted by the brightest or most detailed elements of an image (Yarbus, 1967), but by objects which are most different from their background.

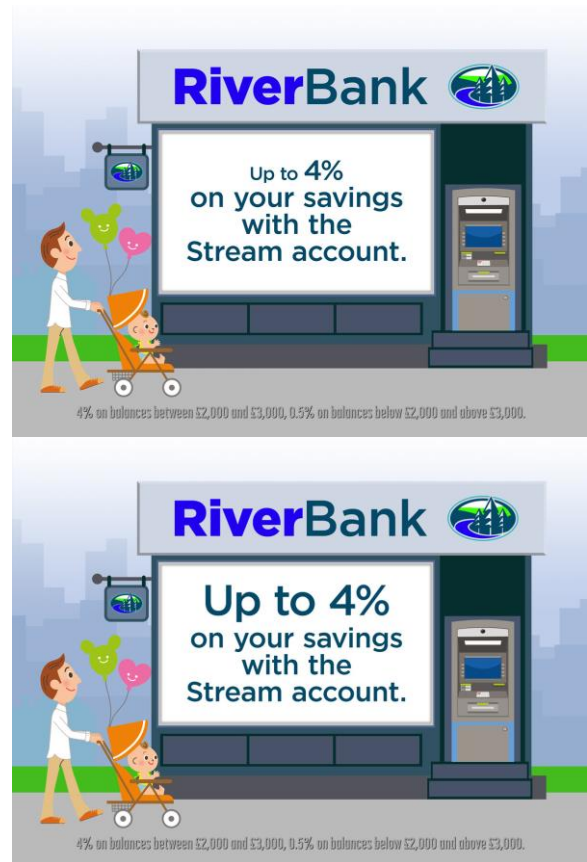
Colour contrast is important for salience, as well as readability. In the billboard advertisements in Figure 2, the contrast between the colour of the terms and conditions text at the bottom and the background makes it hard to read and less likely to be noticed. However, the contrast between the grey background and the blue and green text of the firm's name and account description is strong.

Consumers can sometimes learn to associate certain brands or products with particular colours (Singh, 2006). This is often culturally determined; for example red signifies danger in the US, but luck in China (Tornetta, Fox, & Blackbird, n.d.). Colour association may improve brand recognition and memory.

Incongruities

Our attention is often attracted by things that are not consistent with the scene, for example objects that are upside down or which would not normally be found in such a location (Pieters & Wedel, 2008; Yarbus, 1967). Our attention is also attracted by motion, especially starting or stopping or appearing or disappearing (Kusunoki, Gottlieb & Goldberg, 2000).

Figure 2: Size and colour



Size: Although both the "up to" and the "4%" have been enlarged by the same amount, the "up to" looks like it has been enlarged much more, because it was smaller originally.

Colour: In both adverts key information about the rate is difficult to see because there is insufficient contrast between the text and the background. The information also sits outside the main frame, meaning that it may not be treated as relevant information.

Webpages and eye movements

Web users tend to search webpages through a two-phase process (Faraday, 2000). During the first “scanning” phase, the user skims the page to find an entry point to the page. Once found, the user starts the second “inspection” phase, using the entry point as an anchor and scanning around it for information.

Eye tracking research shows that users typically view pages in an F-shaped pattern with objects on top left locations tending to be viewed before, or more frequently than objects located on right or lower locations (particularly if you need to scroll down the page to see them; Bergstrom & Schall, 2014). This means that content at the top of the page is the most likely to be read and that there is potential for information that is displayed in other locations to be missed.

Figure 3: Webpage eye tracking: where viewers look

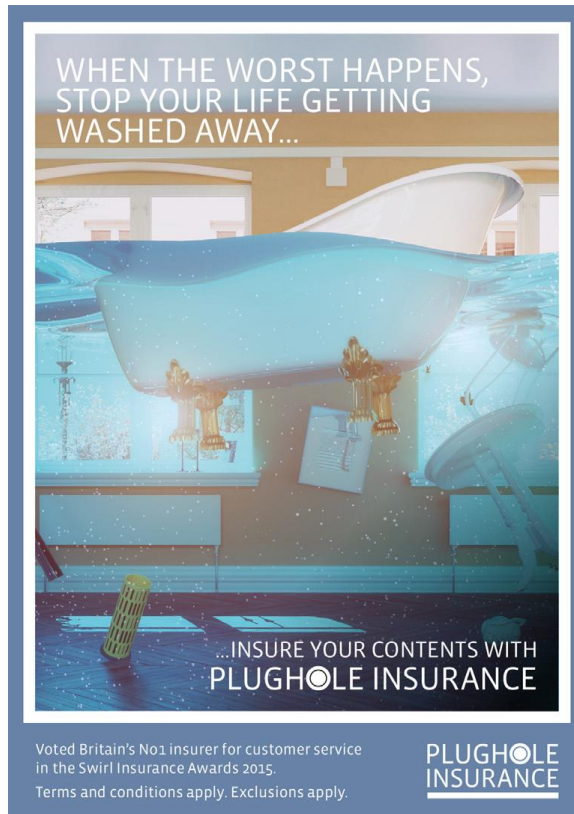


Heat maps from user eyetracking studies of three websites: an article in the “about us” section of a corporate website; a product page on an e-commerce site, a search engine results page. Source: Nielsen Norman Group. Retrieved from: <https://www.nngroup.com/articles/f-shaped-pattern-reading-web-content/>

Pictures

Pictures, graphs and other graphics often attract attention more than text, particularly if viewers are not actively looking for something (Pieters, Rosbergen & Hartog, 1996). It is estimated that 65 percent of the total fixation time is devoted to pictures (Kroeber-Riel, 1993, cited in Pieters et al., 1996), partly because they are easier to process and easier to convert into memory. This may be because as a species, we have been interpreting scenes and images for much longer than we have been using language. The fact that pictures attract more attention than text can mean that viewers may ignore or underweight written information, particularly if the picture is also emotive (e.g. scary or sexually arousing; Lurie & Mason, 2007).

Figure 4 below succinctly conveys information about the damage wrought by leaks through a picture. This may also evoke fear in viewers to motivate them to action.

Figure 4: Pictures

The majority of this advert uses an image as opposed to text to explain the distressing consequences of a leak.

Music

Music and jingles are frequently used in advertising as they tend to attract attention and facilitate recall of the product or brand, as well as generate emotion (Alexomanolaki, Loveday & Kennett, 2006). For example:

- Music may enhance the perceptual salience of visual activities on a screen (Boltz, Schulkind, & Kantra, 1991).
- Music can improve recall of concurrent images, compared with images and verbal information (Stewart, 1998).
- Jingles can help consumers to remember the main messages of adverts (Yalch, 1991).

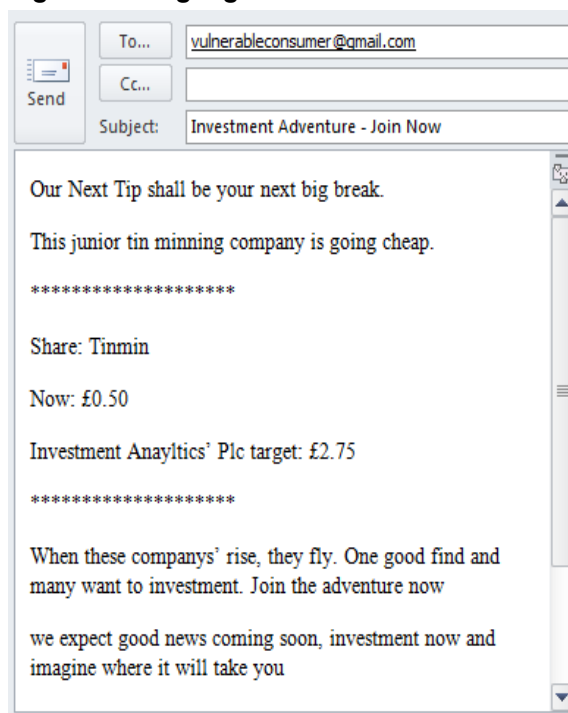
Language

Language which attracts attention, particularly when communicating information about danger or risks, tends to be:

- short but specific and complete
- personalised (e.g. containing the name of the recipient), and/or
- containing signal words such as “danger”, “warning”, “caution” and “notice” (Wogalter, Conzola & Smith-Jackson, 2002).

Sometimes advertisers may use different registers (styles of language) to target groups of consumers (Akerlof & Schiller, 2015). This could include using words associated with specific dialects or national languages or addressing customers in friendly, informal language.

Some also argue that advertisements with poor spelling and punctuation or making unrealistic claims are deliberately manipulating language to target customers (Heidhues & Koszegi, 2015). This “naivete-based discrimination” may be used to screen out more sophisticated viewers who will ignore adverts, while targeting those who might be taken in by the claims. Scams often use this technique to target the most vulnerable consumers (see Figure 5 for an example).

Figure 5: Language

This scam email uses implausible claims and poor grammar to attract the attention of less sophisticated recipients.

Motivation

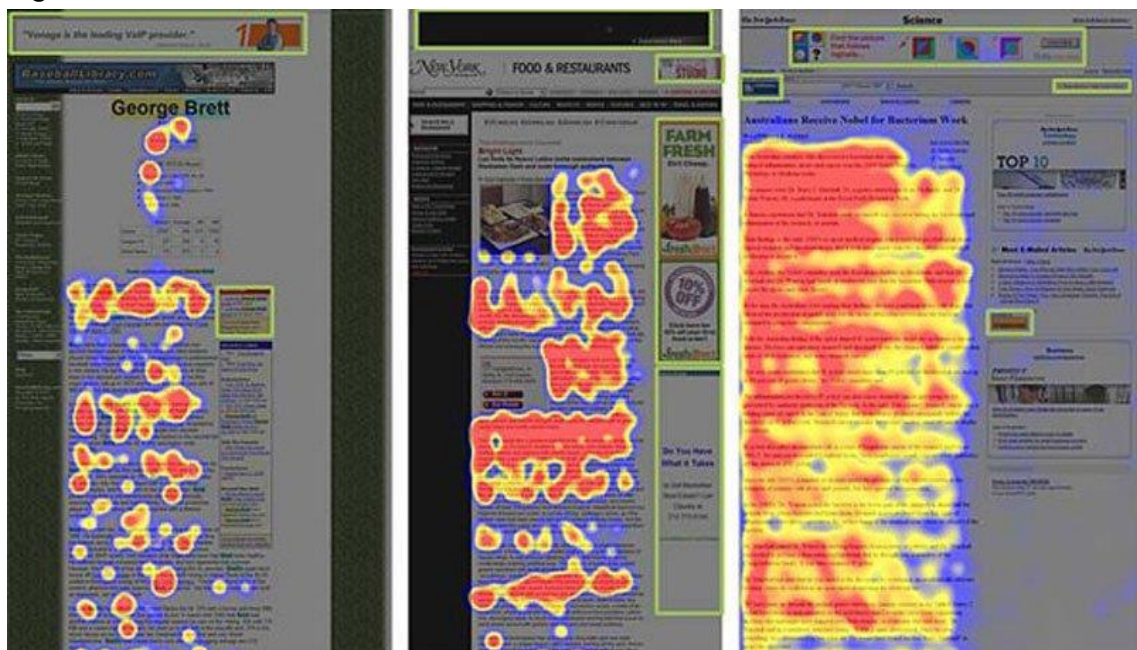
While our conscious attention often goes where our eyes are, our eyes also go to where our attention is. Indeed, it is not just the physical properties of adverts which determine how attention-grabbing we find them. Our motivations, intentions, prior experience and instincts (see box on instinctive attention) also affect how much and what we notice in adverts. This is sometimes called **top-down attention**.

If we are engaged in a particular task or set out with an intention in mind, for example, to find a mortgage, we begin to notice advertisements for mortgages everywhere and we begin to pay more attention to them than we otherwise would have. We become more likely to focus on the text than the pictures compared to those who are not searching for a mortgage (Pieters et al., 1996). We also begin to screen out other information around us which is not useful to us. Marketers may try to anticipate the motivation level of their customers, for example by putting the main message of an advert at the end if the audience is motivated, but at the start if they are not (Biswas, Biswas & Chatterjee, 2009).

Top-down attention is also seen in the “banner blindness” effect, where people become accustomed to avoiding highly visible, high-contrast banner advertisements or areas, such as the right-hand side of the webpage, where advertisements usually appear when reading online (see Figure 6 for an illustration; Benway & Lane, 1998).

This may even result in erroneously screening out relevant information because it looks like advertising material. Communications company, British Telecom (BT) discovered this after receiving a low take-up of new services from their mail-out of high quality, glossy printed material (Institute of Practitioners in Advertising, 2011). When they sent out plain letters in plain envelopes made to look less like advertising material, they experienced a jump in demand. However, getting attention by influencing consumer expectations in this way may be seen to be unfair. For example, the UK Advertising Standards Authority recently adjudicated a case in which a company sent out marketing material in white windowed envelopes and found that the envelope breached the CAP code by making it insufficiently clear that the direct mailing was a marketing communication before opening it (Advertising Standards Authority, 2017).

Figure 6: Banner blindness



These eye tracking heat maps show that people looked mainly at the text and pictures (red and yellow areas) but not at banner adverts. (Lubin & Hudson, 2014. Retrieved from: <http://uk.businessinsider.com/eye-tracking-heatmaps-2014-7>)

Targeting

The advent of widespread online communication has meant that it is now easier than ever to target adverts to consumers based on data about them (their age, gender, what they have previously bought or searched for). Because people pay attention to things that are relevant to them in the moment, this can be highly effective. However, there are two important considerations here. One is that as choices become more tailored to the individual's current preferences, the individual is less likely to discover new preferences (think of TV streaming services which suggest programmes similar to those you have previously chosen to watch). They may even develop a distorted knowledge of what products are actually available. The second is that data about consumers may be used to target those in particular circumstances, for example, those in debt or those who enjoy gambling, which could be detrimental to customers who are less able to ignore poor value or risky offers (Ronson, 2005).

Instinctive attention

There are some notable exceptions to the “contrast for attention” argument. These include faces, which tend to attract attention regardless of environment (Bergstrom & Schall 2014) and one's own name, which most people pick out above other things, including conversations they are taking part in (Newman 2005). This is likely to be because in evolutionary terms, people had high motivation to attend to these things. Being able to quickly interpret the facial expressions to predict the likely intentions of both predators and allies was often a matter of life or death in our early evolution. Today, paying attention to faces and one's own name plays a similar role; helping individuals to identify threats and opportunities, albeit often of a social nature rather than necessarily to ensure survival. In fact, there is evidence that a specific part of the human visual system – the fusiform face area - is specialised for facial recognition (Kanwisher, McDermott, & Chun, 1997). It is common to see advertisements which make use of these instincts; from personally addressed direct mail to Coca Cola's “Share a Coke” bottle naming campaign (Esterl, 2014).

Certain other physical properties which attract our attention appear to generate instinctive responses. For example, people tend pay attention to the middle area of an object or advert, probably because our vision is foveated, meaning that it can only acquire high resolution information from a very limited region surrounding the current gaze position (Engbert, Trukenbrod, Barthelmé, & Wichmann, 2015). This is consistent with a general preference for middle items, with most people preferring the items from the middle of a supermarket shelf, the middle stalls in a toilet block and the middle toilet roll of three (Christenfeld, 1995). It is therefore common to find the main message of an advertisement in the middle of the page, and it may be possible for consumers to miss items such as risk warnings at the edges of the page.

Timing, order and repetition

The time that information is received is very important in drawing attention. It tends to be easier to change behaviour when existing habits are already disrupted (Behavioural Insights Team, 2014). This could include major life events, such as moving house or having a child, or at the start of a new year, financial year or even month. If the timing is known, advertisers may try to contact eligible customers before such events, for example through direct mail. Many adverts advertise key products in relation to such key life events (see an example mortgage advert in Figure 7).

Figure 7: Timing



This TV advert is intended to attract the attention of viewers who are going through major life events such as having a baby.

There are times of the week and day when viewers are more receptive to adverts. Multiple large A/B tests on email timing effectiveness suggest that midweek emails and emails sent early and late in the day result in the most engagement (Ellering, 2016). Varying the time that adverts are displayed or shown can also help to target particular recipients (for example, television adverts for credit products shown during the daytime may be watched by unemployed people or posters advertising loans in September might be noticed by students).

Consumers are also affected by the order in which information is presented, typically remembering the first and last items better than other items (Ebbinghaus, 1913). These are called the **primacy** and **recency** effects.

Repetition of recently viewed information can also increase attention and learning, which may ultimately lead to action. However, this may not always be used positively. For example, repeated exposure to high risk and/or high cost products (e.g. direct mailings offering initial low interest credit) tailored to appeal to vulnerable customers may lead to detriment (see Ronson, 2005 for a case study).

Conclusions

Evidence from studies of visual attention tells us that two main factors matter: salience and motivation. These factors also help us to identify situations where consumers may miss important information or pay less attention to it and which could therefore lead to harm. For example, consumers may miss key information in the periphery of the advertisement. The FCA already requires that all relevant product information, including risk warnings and key exclusions, is sufficiently prominent, and the way it assesses cases is in line with the academic evidence referred to in this paper, including considering the relative prominence of items. The FCA is also exploring the use of eye tracking and other research technologies to understand further how consumers engage with adverts and how visual attention affects decision making.

Top-down attention is difficult to evaluate, since it is not usually possible to identify the circumstances in which a customer sees an advert and the capabilities, experiences and beliefs they bring to it. However, the medium used by the advertisement and the target audience may weigh into the assessment of how fair it is. This is reflected in the advertising rules and codes of practice of several organisations, which include reference to “average” consumers and target audience when considering fairness.

3 Interpret: reaching an understanding



What is the difference between unethical and ethical advertising? Unethical advertising uses falsehoods to deceive the public; ethical advertising uses truth to deceive the public.”

Vilhjalmur Stefansson, explorer and ethnologist

As consumers, where do we draw the line between legitimate and deceptive advertising? How do we differentiate lies from creative versions of the truth? And can we ever balance a best-case scenario headline with a risk warning or later clarification? This chapter describes how we understand the messages of adverts and what happens when this goes wrong.

The process of interpreting an advert is complex. After noticing an advert in the first place, the consumer's eyes and brain have to attempt to interpret the information which has attracted the consumer's gaze, turning it from light or sound waves, to a series of neural impulses, to a meaning, whether that is a set of lines making up an object, a message or an emotion. It is likely that the consumer will then attempt to interpret the advert by relating it to similar things they have seen before, and here they may draw inferences about the message the advertisement is trying to convey (whether accurate or not).

Importantly, the same information may mean something different to different people at different times in different contexts. Take the example of a drawing of a castle. If seen in an art gallery, visitors are likely to view it as a work of art. By the side of a road, drivers may understand it as a sign to a local visitor attraction. On the back of a postcard, the receiver will see it as the holiday destination of an acquaintance. In fact, the way that information is understood and interpreted depends on the circumstances in which information is presented as well as the experience, capability, motivation and prior beliefs of the reader. In this way, context may sometimes be more important to our understanding than content including when interpreting adverts.

This chapter begins by describing the groundwork which must be laid before any understanding or interpretation can occur. It then describes circumstances in which information is more likely to be misinterpreted, divided into three main topics: numbers, framing and words. It considers the psychological bases for systematic misunderstanding as well as external circumstances which might increase the likelihood of confusion.

Early processing: linking See to Interpret

Several elements need to be in place before any understanding or interpretation of information can occur. In the first place, information needs to be presented for long enough and with enough clarity that recipients can process it, beyond just noticing it, as in Chapter 2. For example, text presented on a screen needs to appear for long enough for the recipient to read it, the size of print needs to be large enough to see in the first place and there needs to be little enough clutter or competing information for recipients to notice it ahead of other demands on their attention (Wogalter, DeJoy & Laughery 2005). Some information providers and regulators specify

minimum print sizes or display lengths to facilitate initial processing, although despite this, information may be presented too quickly to be read (Wogalter et al., 2005).² Strategies aimed to improve initial processing include presenting text on screen at the same time as it is read by an announcer, dispersing messages throughout the advertisement and keeping key messages short.

In general, introducing time pressures to considering information or decisions is more likely to result in instinctive or stereotypical judgements by the recipient. There are thought to be two reasons for this. First, the pressure increases arousal levels, making people more likely to rely on emotion. Second, because their cognitive resources are occupied with monitoring the time available, consumers have less time to consider the information (Maule & Svenson, 1993). Many adverts may impose time limits - perhaps inadvertently - and where the information is complex and the decision high risk, consumers may come to decisions without fully considering or understanding the key information (see Scarcity section in Chapter 4 for more on this).

Perceptual fluency

People are also likely to prefer, believe and trust things that are simpler, and therefore easier for them to process (perceptual fluency; Shah & Oppenheimer, 2007). This includes clearer pictures and fonts and even statements that rhyme (Reber, Winkelman & Schwarz, 1998; McGlone & Tofiqbakhsh, 2000).

There is a good reason why simplicity is so powerful. With limited attention and capacity, humans can find it hard to separate what is important and what is not, and this process takes considerable cognitive (mental) effort. Reducing the effort needed to understand and process complex information makes people find it simpler and they may associate that simplicity with the information itself, even if in reality they are responding subconsciously to a bigger font or a better laid-out page. This is relevant when it comes to expressing complex aspects of a product – the more simply and clearly this is done; the more likely customers with low motivation are to feel positive about reading it and to make efforts to understand. However, in cases where readers are highly motivated, there is some evidence that reducing perceptual fluency can slow down thinking and improve memory for content.

Numbers

It is generally understood that numbers can be used to mislead (as the famous phrase goes – “lies, damned lies and statistics”). In fact, while language may appear intuitive – nearly all children learn to speak and understand (though not read and write) with no special instruction – complex mathematics is not usually intuitive. Like reading and writing, the understanding of numbers does not come naturally and needs to be taught. And like language, numbers can be presented in ways to aid understanding or in ways which mislead.

People are highly likely to make systematic errors when processing numbers. There is a vast literature on investment decisions in the field of behavioural finance, which shows that many decisions may be driven by systematic errors and emotion, rather than economic rationality. For example:

- **Aggregation of percentages:** People may miscalculate the result of two sequential percentage increases (Chen & Rao, 2007). For example, if a stock goes up by 30% and then 25%, people may interpret this as a 55% increase (i.e. 30% + 25%) rather than the 62.5% increase it really is (i.e. 30% of the original number and then 25% of the original amount **plus** 25% of the additional return). In the same way, people may overestimate the benefit of a positive and a negative percentage change, such as +40% and then -25% (really a 5% increase rather than 15% increase).

² The FCA does not have specific requirements about print size but has set out guidance on prominence in the following FSA paper: www.fca.org.uk/publication/guidance-consultation/gc11_15.pdf

- **Bundling:** People have difficulties in computing total cost when it is spread out over multiple prices. For example, in an experiment people incorrectly thought that shop A was cheaper than shop B overall because it was cheaper for more items (Alba, Broniarczyk, Shimp & Urbany, 1994). In fact, because shop A was only a little cheaper for these products and shop B was much cheaper for the remaining products, shop B was cheaper overall. The use of frequency without regard to the size of the differences is known as the “**frequency heuristic**” (Alba et. al. 1994).
- **Relative percentage increases:** In 1995, it was widely reported that the contraceptive pill increased the risk of blood clots by 100%. Many women stopped taking the pill leading to an estimated 13,000 abortions in the following year. In fact, while this statistic was quite correct, it was framed as a relative increase in risk. The absolute increase was actually fairly small, affecting only one additional person in every 7,000 (an increase of 0.014% to 0.029%) (Gigerenzer, Gassmaier, Kurz-Milcke, Schwartz & Woloshin, 2008).

There are certain situations which are more likely to lead to a misunderstanding of probability or risk than others (Rottenstreich & Kivetz, 2006). For example, customers may be drawn away from doing a proper calculation by the presence of easy rules of thumb such as the reciprocity principle (e.g. “always repay a favour”) or by salient examples of the impact - **availability bias** (e.g. examples of devastating house fires are easy to recall). Consumers are also more likely to misjudge probabilities when they believe they have some element of control over the outcome.

When it comes to communicating risk, comprehension may be reduced still further. There is considerable criticism of the way statistics are reported in the press and by marketers – a great collection of examples is on the *Understanding Uncertainty* website run by David Spiegelhalter, a statistician and collector of coincidences.

Finally and importantly, the financial literacy of target consumers is also relevant to their understanding of financial products (see box on financial literacy below).

Financial literacy and misunderstanding

There is significant evidence that financial illiteracy is widespread and that large numbers of people cannot answer simple questions about finance (Lusardi & Mitchell, 2005). However, marketers may assume an unrealistic level of financial literacy. This may be particularly problematic since advertisements for financial products may be ripe for misunderstanding. In general, financial products involve uncertainty and risk which cannot be precisely calculated (rather than just probability, like a pack of cards - though many people treat the two the same).

Many experiments report a low level of consumer understanding of financial terms, such as Annual Percentage Rate (APR) and diversification. For example, a survey by Lee and Hogarth (1999) found that less than ten percent of mortgage holders correctly understood the price of closed-end credit (fixed amount over a fixed time where the APR includes fees and charges). Similarly, Lusardi and Mitchell (2005) found that only half of US respondents aged 50+ could correctly answer two simple questions on interest compounding and inflation. This indicates that many people find it hard to understand how inflation can erode the value of investments and pensions.

In another study on diversification, those with low financial literacy thought that making a portfolio more diverse increased portfolio volatility, whereas those with high financial literacy thought that increasing diversification increases the mean expected return of a portfolio (Reinholtz, Fernbach & Langhe, 2016). Both are wrong, the correct answer is that diversification reduces portfolio volatility for the same return, only indirectly allowing for higher returns for a given level of risk.

In addition to this, it is likely that the value of a financial product is inherently difficult to

evaluate. Financial products tend to score low on all three criteria needed for evaluation: mode (easy to compare alternatives), knowledge (prior experience of the range of potential values) and nature (innate capacity for measurement such as the human ability to judge appropriate temperatures; Hsee & Zhang, 2010).

Improving the communication of numbers

Cognitive scientist, Gerd Gigerenzer and his colleagues have spent years teaching doctors and other professionals how to interpret risk and probability using frequency trees, which help professionals to understand risk in terms of absolute numbers (natural frequencies) rather than percentages. See below for an example of a natural frequency tree to help understand a medical risk.

Calculating using conditional probabilities versus natural frequencies

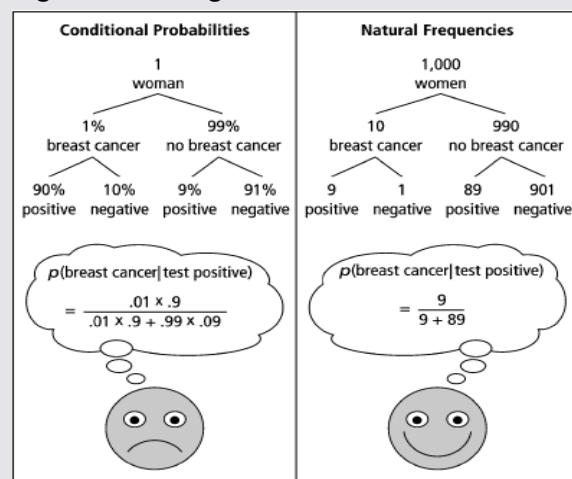
Gigerenzer et al. (2008) describe how to calculate risk using probabilities compared with frequencies:

“Assume you conduct breast cancer screening using mammography in a certain region. You know the following information about the women in this region:

- *The probability that a woman has breast cancer is 1% (prevalence)*
- *If a woman has breast cancer, the probability that she tests positive is 90% (sensitivity)*
- *If a woman does not have breast cancer, the probability that she nevertheless tests positive is 9% (false-positive rate)*

A woman tests positive. She wants to know from you whether that means that she has breast cancer for sure, or what the chances are.”

Figure 8: Making sense of statistics



Gigerenzer, G., Gassmaier, W., Kurz-Milcke, E., Schwartz, L. M., & Woloshin, S. (2008). Helping doctors and patients make sense of health statistics. *Psychological Science in the Public Interest*, 8(2).

Other attempts to improve the comprehension of numbers include using “perspectives” to improve people’s ability to recall and estimate unfamiliar measurements as well as detect errors (Barrio, Goldstein, & Hofman, 2016). For example, “Americans own almost 300 million firearms” would be accompanied by “To put this into perspective, 300 million firearms is about 1 firearm for every person in the United States”. The authors tested this approach in a series of randomised controlled trials and found that perspectives improved memory for given facts, estimation and error detection.

Framing

We are all aware of certain tricks used by marketers to highlight certain information and obscure others. But while tricks like the big £5 label in a shop window with the small “from” just before it are well known, there are many other ways that information may be presented to encourage a certain interpretation of it. This is called framing.

Loss or gain

Loss aversion describes the fact that we dislike losses disproportionately more than we like equivalent gains relative to some reference point. Changing our reference point is a key tool used by advertisers, as turning a choice from getting a gain to avoiding a loss can significantly increase motivation for action (see Figure 9 for an example).

Individuals are also less keen to take risks when the potential consequences are framed positively (Tversky & Kahneman, 1981).

Choice-set dependence

Choice-set dependence describes an individual's change in preferred option depending on what other options are available (Ariely, 2009). If I prefer *Economy* to *Full* insurance in Figure 10, my preference should be intact even if an inferior option is added, right? No. In fact, the **decoy effect** means that I might well prefer *Full* because the addition of the inferior *Standard* cover to the group makes *Full* look like a better deal.

Other similar effects include the **compromise effect** in which adding a third option makes one of the existing options appear a compromise between the other two, and the **similarity effect** in which adding an option which is similar to one of the others results in a higher probability that the unique option is chosen (Simonson & Tversky, 1992).

Figure 9: Loss Aversion

This motor insurance advert primes loss aversion by asking the viewer to think about the money they would lose (£109) by not switching their current insurer.

Figure 10: Choice-set dependence



Cover your home with Homely Insurance

For a 3-bedroom house in XY postcode, you could get:

Features	Economy	Standard	Full
24 hour helpline	✓	✓	✓
Boiler cover	✓		✓
Accidental damage		✓	✓
Price	From £50	From £150	From £150

Homely Insurance

Tel: 0123 456 789
 Web: www.oooooo-ooooooo.com
 Email: enquiries@oooooo-ooooooo.com


This home insurance offers three levels of insurance, of which one is a decoy (*Standard*), as it is the same price as *Full* cover, but with fewer benefits. It is likely that most customers will choose *Economy* or *Full* and that a larger proportion of customers will be persuaded towards *Full*, when they would prefer *Economy* if choosing from only two options.

Drip pricing

Another way to present costs in a way that makes them seem less unattractive is to present the first cost and then add additional or optional costs later (such as adding sales fees, platform fees and termination fees for investments after presenting the initial cost; OFT, 2010). Because the customer is already psychologically invested in the purchase by this point, they are less likely to back out when the further costs appear.

Once these strategies become sufficiently widespread and if they are not liked by consumers, other firms with a different sales method may highlight the frames used by other firms and emphasise the fact that they do not use these approaches (see Figure 12). This may work if consumers are sufficiently aware from previous experience that such charges would apply and do not underestimate the likelihood that they will incur them, for example due to overconfidence.

Figure 11: Drip Pricing



£+ PoundPlus Investing

Checkout Billing Payment Review & Place Order

PRODUCT	DESCRIPTION	PRICE
E+ Investment	Investment package	£X,XXX.XX
	Optional extras	
	Platform fee:	1% per year
	Operating fee:	1.25% per year
	Additional extras	
	Advisor:	£500 per session
	Total:	£X,XXX.XX

Previous Place Order

This investment platform adds on fees one at a time and only displays them at the end of the customer journey, when the customer is already psychologically invested in the products.

Default choices

The way a choice is presented affects one's decision (Johnson et al., 2012) and if a default option exists, it is often the case that a large proportion of choosers will end up with it (Cronqvist & Thaler, 2004). Defaults can be found everywhere and range from opt-out defaults such as having your insurance policy automatically renewed at its expiry (which takes some effort to opt-out of), to softer defaults such as seeing a suggested "default" amount to borrow on a loan calculator, which you can change using the slider (see Figure 13).

Anchoring

Anchoring describes the excessive role that the first piece of information can have on our thinking. Adverts may anchor viewers on numbers that are at the top of a range of outcomes, increasing their assessment of the value of the product, even if the probability of achieving that outcome is very low. Even telling customers that they are unlikely to receive the best-scenario returns presented (e.g. 50% maximum growth) may not cancel the effect. In fact, people are anchored by completely unrelated numbers (including Social Security number digits and spin-the-wheel results in the lab), and are still affected by anchoring when they are aware that it is happening (Ariely, Loewenstein, & Prelec, 2003; Tversky & Kahneman, 1974; Chapman & Johnson, 2000). It is therefore important that any anchors paint a balanced picture.

Figure 12: Firm responses



Unlike others, we charge a flat fee if you invest with us.

So you'll know what you're paying and there will be no surprises!

Your capital is at risk

KlearInvest Call us today on: 0123 456 789
www.oooooooooooo.com | info@oooooooooooo.com

This investment firm uses competitors' drip pricing behaviour to attract customers who might be looking for an alternative.

Figure 13: Defaults and anchors



BORROWBank

I would like to borrow **£15,000**

And pay it back over **48** months

REPRESENTATIVE EXAMPLE

Loan: **£15,000**

Interest rate (fixed): **16.9% over 4 years**

Monthly repayments: **£400.86 per month**

Total amount repayable: **£19,241.28**

Representative APR: **16.9%**

Total cost of credit: **£4,241.28**

1 YEAR 2 YEARS 3 YEARS 4 YEARS 5 YEARS 6 YEARS 7 YEARS

> GET AN INSTANT QUOTE NOW <

This loan calculator is a weak anchor, in that the customer can change the amounts in it. However, the representative example and the default setting, as well as the scale displayed may influence customers towards certain amounts.

Precision effect

People tend to see precise prices as smaller. Thomas, Simon and Kadiyali (2010) found that people judged precise house prices such as £395,425 to be less expensive than round prices such as £395,000, especially when they were feeling unsure. They hypothesise that this is because large precise prices are difficult to process and commonly rounded up. Therefore, people associate precise numbers with smaller values, especially under conditions of uncertainty.

We also tend to act as if prices a small amount less than a prominent whole number (e.g. 99p instead of £1), are much cheaper than they really are (Thomas & Morwitz, 2005). This may be due to categorisation – i.e. we put 99p into a different and lower category (e.g. under a pound) than £1 (which is in the £1 and over category).

Period choice

Framing costs over a shorter period, e.g. daily or weekly rather than annually can make them more attractive to customers by making them seem smaller (Gourville, 2003). Gourville found that this was effective for daily costs that are perceived to be small (up to about \$4); there was a preference against “large” daily costs (\$10). For an example, see Figure 14, where framing mobile phone insurance as a daily charge rather than an annual one makes the cost seem smaller.

It is possible that adverts which use inappropriate periods may risk misleading customers. For example, there is evidence that people are more accurate in budgeting their yearly expenses (because their lack of confidence makes them round upwards) than their monthly expenses, which they tend to underestimate. In fact, different time periods might be more appropriate for different products. For example, people do not usually budget for insurance costs daily – monthly or yearly periods may be more appropriate. But people do not usually budget for investment costs monthly or perhaps even yearly – a longer period might be appropriate.

Zero price effect

Zero is a very powerful number in advertising (Shampanier, Mazar & Ariely, 2007). People are more willing to choose goods that have reduced to nothing than goods that have been reduced by the same amount or more but still cost something. Many people even make efforts to acquire free goods that they would not buy at any price. This is thought to be due to the emotional feeling that people get from “free” things (see Reciprocity in Chapter 4).

Selective reporting

Sometimes advertisers may use selective reporting to make their products seem more attractive. For example, a firm may launch twenty funds, of which one may perform particularly well due to the recent performance of a particular kind of assets and the firm may choose this one for further advertisement (see Figure 16). This may distort the consumer’s understanding of the likelihood that funds will perform well.

Figure 14: Period choice



These otherwise identical phone insurance adverts show two period choices, either in pence per day or pounds per year. Although the amounts are the same, the shorter period may make the product sound much cheaper.

Figure 15: Zero price effect



This tweet advertising a 0% balance transfer credit card makes use of the zero price effect (0% over 0.1%) to attract customers.

Words and truth

Truth effect

Research into the truth effect, that earlier exposure to a claim increases belief in its truth, shows that people are very likely to remember conjecture (e.g. a headline which alleges that an event took place) as fact (Henkel & Mattison, 2011). This happens even if the claim is expressed with caveats, or as a question, or while raising doubt as to the reliability of the source. Even when directly told that the “fact” they have learned is untrue, people find it difficult to update their beliefs. This is also the case in court cases – juries are sometimes asked to disregard inadmissible evidence that they have heard and they find it difficult, if not impossible to do so.

As it is very difficult to “delete” facts from our knowledge which later turn out to be untrue, from the perspective of consumer understanding it is all the more important that the truth, the whole truth and nothing but the truth is given in adverts. However, some adverts make claims with omissions and ineffective caveats, while relying on risk warnings to give “the whole truth” – by which time it is usually too late.

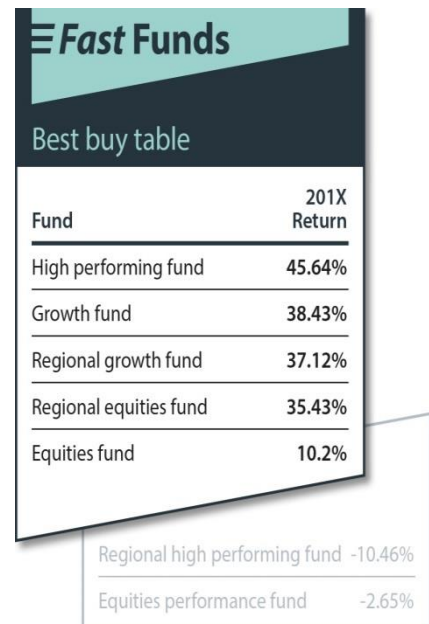
Omissions and caveats which lead to false impressions are often called “pragmatic implications” (see Gricean Maxims box). Common examples include:

- two juxtaposed phrases which imply a causal relationship: “You want only the best. Buy brand X”,
- hedge words such as “may”,
- comparative adjectives: “Gives you more rewards”, and
- piecemeal survey results: “Better than Competitor A on price, better than Competitor B on coverage”.

Searleman and Carter (1988) tested consumers on the above pragmatic implications and found that more than 50% of implied claims were remembered as fact immediately after hearing them in commercials (i.e. that Brand X was the best, or that the product gave more rewards than competitors). That is, even with the above couching and caveats and no direct statements, what people actually remembered were straightforward undisputed facts.

For this reason, the evidence suggests that it may not be enough to supply a risk warning or balancing message which is less prominent than the headline, or which is presented at a later stage. The FCA published guidance on social media and customer communications in 2015 which explained that shorter adverts, including tweets, should still be standalone compliant (clear, fair and not misleading) without the need for users to click on a link to see balancing information or caveats (Financial Conduct Authority, FG15/4, 2014). However, as part of the Smarter Consumer Communications initiative, the FCA is undertaking further work to explore alternative approaches to firms’ communications through social media (Financial Conduct Authority, 2016).

Figure 16: File drawer problem



Best buy tables as well as firms may display the funds which performed the best over a set period, ignoring those that performed less well, and potentially removing or renaming them in subsequent years. This can distort understanding of the market and potential returns.

Gricean Maxims

With his account of **conversational implicature**, prominent linguist and philosopher Paul Grice produced a theory to systematically describe how what people literally say (semantics) is different from what they actually mean (pragmatics). By assuming that participants to a conversation are adopting what Grice called the **Co-operative Principle** (1975), listeners and speakers are able to understand the subtext. The co-operative principle includes aiming to follow the:

- i. Maxim of Quantity (Make your contribution as informative as is required, but not more)
- ii. Maxim of Quality (Do not say what you believe to be false. Do not say that for which you lack adequate evidence)
- iii. Maxim of Relation (Be relevant)
- iv. Maxim of Manner (Avoid obscurity of expression, avoid ambiguity, be brief, be orderly)

Grice argues that mutual understanding of these maxims allow us to make implications and draw inferences, without having to state things explicitly. For an example:

Speaker A: I am out of petrol

Speaker B: There is a garage round the corner

Due to both speakers' understanding of and adherence to the maxim of relation ("Be relevant"), Speaker A can infer that he is likely to be able to get petrol at the garage round the corner currently (i.e. it is likely to be open and have petrol to sell). Grice also argues that intentionally violating maxims can generate "conversational implicature", for example:

"A is asked to write an academic reference for a pupil applying to a philosophy job and writes: 'Dear ..., Mr. X's command of English is excellent, and his attendance at tutorials has been regular. Yours, etc.'"

In this example, A has chosen to be co-operative by writing and clearly has the information required to evaluate Mr. X but is choosing not say it literally, violating the maxim of quantity. The implication is that A is trying to communicate information that they do not wish to state explicitly, namely that they think Mr.X is not good at philosophy.

There is evidence that customers are likely to infer positive benefits from any attributes named in an advert due to the maxim of relation, no matter how obscure and even when the link between the attribute and the benefit is not or insufficiently explained (Wänke 2007). For example, in one experiment (Wänke & Friese, 2006 as cited in Wänke, 2007), consumers were persuaded that body lotions containing "Recitin", a fictitious ingredient, were healthier, better for the skin and generally of higher quality than those without, simply by exposing them to an advert which prominently featured the word. Similarly, customers who were exposed to adverts claiming that the product was "without Recitin" rated body lotions which did not contain the product more favourably, since they assumed that the addition of this statement was relevant and that a positive link between it and some benefit existed.

It may be helpful to consider pragmatic implications in understanding what consumers take away from advertisements and to pay attention not only to what is said, but also how it is said. Even if the words are literally true, the message that the customer takes away could be incorrect.

Truth and memory

Significant research into eye witness testimony shows that memory can be unreliable (Braun & Loftus, 1998). In the domain of advertising, Braun and Loftus (1998) have shown that adverts can distort consumers' memories of products they have experienced (the "misinformation effect"), even if they are warned that the advert might be unreliable. Braun and Loftus tested this by giving participants chocolate bars in green wrappers and later showing them an advert suggesting either visually or verbally that the wrapper was blue. They found that a significant number of participants "remembered" the wrapper as blue or blue/green compared with participants who saw a control advert. They also found that participants continued to be misled even if they were warned that the advert might be misleading. However, there were indications, consistent with previous research, that it matters **when** the warning appears. If the warning is given at the point of recall (the memory test), it has no effect, but if given at the time of or just before presenting a misleading advert, it can reduce the misinformation effect, by encouraging consumers to read the information more slowly (Greene, Flynn & Loftus, 1982).

Conclusions

Many factors are important in determining how adverts are interpreted (or misinterpreted). Numbers and words may be misinterpreted in many ways and the way the advert is framed is also very important. Some techniques may be easy to spot and avoid, while others, such as anchoring, are hard to overcome even when consumers are aware that it is happening.

Given that we all find it hard to discount things that we paid attention to, even if we later find out that they were wrong, to enable consumer understanding, it is important that advertisements are balanced and do not "give with one hand while taking with the other". It is also important to pay attention to how information is expressed, not just what the information is. Techniques such as framing and pragmatic implications affect what consumers take away from an advertisement, which may be a different impression from what the words literally say.

4 Act: being influenced

“Good advertising does not just circulate information. It penetrates the public mind with desires and beliefs.” Leo Burnett, advertising executive

What techniques are used by marketers to encourage people to act on adverts? This section covers the impact of emotion in advertising and the tools of influence used by practitioners.

In **Act**, the final stage of processing, it is likely that the advert or some part of it (perhaps just the brand, the message, the feeling the advertisement evokes, or even a false inference) will be encoded into short or long term memory (Fennis & Stroebe, 2014). This doesn't mean that this information can automatically be accessed at a later point however. People may forget or may have difficulties retrieving the information at the appropriate moment. But the advert may have left a trace large enough to change attitudes or induce behaviour, such as purchasing the advertised product or service.

In the chapters so far, we have considered evidence showing that the way a customer sees and interprets an advert is not just due to the information within, but also to the presentation of the information and the customer's own knowledge, motivation and intentions. In this chapter, we consider how adverts may encourage customers to rely on feelings or on simple rules of thumb (heuristics) to make decisions, usually without the customer's awareness.

In any discussion of heuristics, it is important to say that behavioural biases and the use of emotion are not always a bad thing. If a customer buys a simple, cheap, suitable product using a rule of thumb (for example, “If I've heard of the product, it's probably good”), then there is likely to be no problem. In fact, there might be a problem if the customer had spent considerable time analysing the alternatives and calculating their relative values, since this would likely be a waste of their time and energy. However, many financial products can often be complex and tailored and it may not be preferable that they should be sold on the basis of heuristics.

Fast and slow thinking?

Models of human information processing can be categorised into dual process theories or other models including hybrid or parallel process models. Dual process theories are currently more widely established and accepted and describe two systems for decision making and learning; one that is fast and automatic (sometimes called heuristic processing) and one that is slow and deliberative (sometimes called analytical processing; Schneider and Shiffrin, 1977; Kahneman & Frederick, 2002; Stanovich & West, 2000; Chaiken, 1980). The fast system comes up with answers quickly, using basic rules of thumb, like “price is an indicator of quality” and is often used for repeated, low-cost or emotional decisions. The slow system is more effortful and takes longer, but helps us with complex, one-off decisions and computations. These “systems” should be seen as a metaphor rather than intending to represent any specific

parts of the brain.

While both systems work in tandem to help us make good and efficient decisions most of the time, sometimes we end up making a fast decision where a slow one might serve us better. This may be because we are tired or emotional, or because the context of making the decision leads us to apply rules of thumb which aren't appropriate for the circumstances.

However, the dual systems approach has been criticised on the basis of conceptual imprecision and methodological issues with some evidence. Alternative mechanisms have been proposed (e.g. parallel processing and hybrid models). See Evans and Stanovich (2013) for a review of the criticisms and a defence of dual process theories. We use a dual process model here because it illustrates well the purchasing and advertising behaviour we see in this paper.

Emotion

One important factor which drives consumers' decisions when it comes to advertising is emotion (sometimes called "affect"). Emotional, or affective reactions are often the very first reaction when someone sees something, occurring automatically and guiding subsequent processing and judgement (Zajonc, 1980, Loewenstein, Weber, Hsee, & Welch, 2001). They are also strong; a number of behavioural finance papers consider emotional reactions as a key component of asset price bubbles and market crashes (Tuckett, 2009).

In fact, many advertisements are designed to elicit an emotional response without providing any information about the product or company. For example, many retailers' Christmas advertisements do not contain any information about what you could buy in the relevant shops or why the retailer in question is better than competitors, but instead show (often unrelated) affective images and stories.

This is because an information-free affective approach may lead people to attribute the emotion they feel to the product or company (Cho, Schwarz, & Song, 2008). See Figure 17 for an advert containing strongly affective images and stories, while being light on product information.

Inducing an emotional response is a common technique when selling insurance and warranty products. There is good evidence that people tend to make judgements based on the severity of impact of a loss, rather than the likelihood of it, meaning that they are willing to buy poor value products in order to get "peace of mind" (Huysentruyt & Read, 2010). Advertisers may use this by drawing attention to the distressing consequences of a loss. This fear can precede and override logical reasoning (Loewenstein, Weber, Hsee, & Welch, 2001). For example, in an experiment by Johnson et al. (1993), when asked how much they were prepared to pay for life insurance for a flight, respondents were willing to pay more for insurance covering death due to an act of terrorism, than they were for death due to any reason (including terrorism).

Figure 17: Emotion



Need some extra space?

Get an unsecured home improvement loan to ease the pressure.

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Mauris eu tortor ligula. Phasellus sed fringilla felis. Integer eget justo ac nibh posuere congue nulla eu tristique ligula. Sed sit amet laoreet massa.

123 Street Name, Town, City A1 2AB
Tel: 0123 567 890 | E-mail: 0000@0000000000.co.uk
Web: www.0000000000.co.uk

Loans4Homes

This advert for unsecured loans makes use of cute puppies to attract attention and in the hope that customers may attribute their positive feelings to Loans4homes or the product itself.

Since we know that consumers are often heavily affected by emotional content, it may be helpful to consider the context in order to avoid the risk that consumers may use it to make quick and inappropriate decisions. However, persuasive advertising can be a valuable tool for competition and there are circumstances in which quick emotion-driven purchase decisions may be unproblematic. It can also encourage responsible behaviour, such as buying insurance for those who would otherwise underinsure. This suggests that determining suitability of the product to the audience is important in considering whether emotion is used appropriately.

One idea used in many industries for slowing decision making is to introduce “cooling on” periods. These differ from mandatory cooling off periods, for example in insurance, where the customer has a number of days to cancel without charge if they change their mind (which have limited effectiveness given that people are psychologically committed by this point and are unlikely to revisit the decision). In a “cooling on” period, customers cannot show inertia and just put the decision to one side; they need to actively do something to complete the decision and activate the product. This provides a pressure-free period in which the customer can stop and think. For example, until 2005 in the UK, there was a mandatory 24-hour waiting period for casino membership, in order to prevent impulsive gambling.

Another method to promote slow thinking used in other industries is pop-up warnings during purchase processes, for example to encourage online customers to check that they have entered the correct information or selected the correct quantity of products, particularly in cases where it might appear that mistakes have been made. To test comprehension directly, it would even be possible to ask mandatory questions to check that a customer has understood what they are buying.

Brand recognition

The heuristic of brand recognition is widely considered an important and influential metric in advertising and considerable effort is made by marketers to improve customers’ recall and memory of their brand (Institute of Practitioners in Advertising, 2011). There is some evidence that this works; even just being exposed to something until it becomes familiar has been shown to improve liking for it (the “mere exposure effect”; Janiszewski, 1993). This is probably because it becomes less threatening as it becomes familiar or because it creates an easy option we can choose without having to think (DeJoy, 2005).

The approach of building a brand through positive images and stories, even in the absence of product information, has been widely adopted. Brand priming can indeed be powerful. For example, simply being exposed to credit card insignia in an experiment made participants more likely to spend money afterwards (Feinberg, 1986). Repeated exposure to positive brand advertising may give individuals a false or exaggerated sense of familiarity or security, without any actual experience to determine whether this impression is correct.

Influence

There is a long history of the practice and teaching of influence, from Aristotle’s Ethos, Pathos and Logos strategies, through Pratkanis’s (2011) 107 social influence tactics, to the Institute of Practitioners in Advertising’s (2011) behavioural principles. A number of themes recur; namely, creating a relationship with the audience and getting them to like you, persuading through authority or social standing, offering a unique opportunity and inducing emotions in the customer. In the rest of this chapter, we cover a number of examples using Cialdini’s principles of influence (see Box).

Persuasion versus influence

Many advertisements seek to persuade by setting out a case that they hope a consumer will consciously consider and weigh up, ultimately deciding to buy the product. Others may pay less attention to building a case, but instead, use techniques to influence the customer to follow a well-practised script, often without conscious involvement, which leads to the same ultimate outcome of buying the product. Think of the bewildered consumer who comes home from a simple trip to buy milk at the supermarket, having somehow managed to sign up to a lengthy contract for satellite TV plus a range of “VIP extras” after bumping into a friendly salesperson and receiving a free pen.

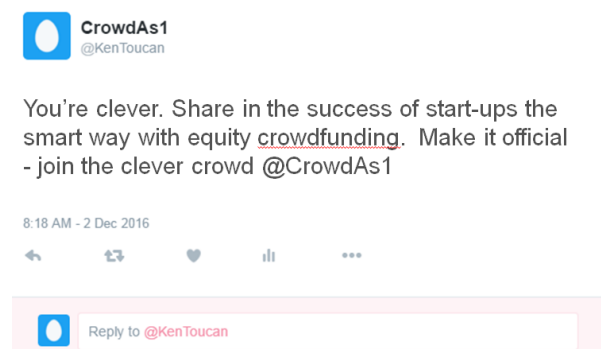
In 1987, Professor Robert Cialdini stepped away from his academic day job and went to learn the tricks of the trade from what he calls “compliance professionals”; satellite salespeople, used car retailers and charity street collectors. He used what he learnt there to come up with the 6 principles of influence: Liking, Authority, Scarcity, Social Proof, Consistency and Reciprocity. These are still used widely today and are discussed in more detail in this chapter.

Liking

Attractive individuals, as well as those who are more similar to us, are spontaneously attributed more favourable traits, such as talent, intelligence, and honesty, and are more likely to be believed (Bertrand et al., 2005). Similarly, an examination of the sales records of insurance companies found that customers were more likely to buy insurance from a salesperson who was like them in age, religion, politics and other characteristics (Evans, 1963).

The same is true of advertisements. Liking an advert often leads to liking the product, especially with unfamiliar products. For example, one of the factors Cialdini identified that promotes liking is the use of compliments (see Figure 18 across).

Figure 18: Liking



This tweet begins with a compliment. After reading this, the consumer may subconsciously associate positivity with the product or service.

Authority

People like to buy from experts and tend to respond to the symbols and signs of authority above the substance of what they say. For example, in one experiment, people were more likely to believe in the results of a fictitious pharmaceutical experiment when they were presented in a graph, simply by associating graphs with science and hence, expertise (Tal & Wansink, 2014). For this reason, many financial adverts use mathematical images or information about qualifications, particularly those targeted at people with higher socio-economic status.

Scarcity

Scarcity triggers loss aversion, making customers more likely to buy now to avoid the risk that they might not be able to buy later (Rosato, 2012). It also changes how people allocate their attention, directing them towards the most salient problems and away from temporally less pressing problems (Shah, Mullainathan, & Shafir, 2012).

Advertisers often use “limited editions”, prizes with closing dates and time limits, to increase feelings of scarcity among customers (although as with all of these principles, firms may actively use scarcity to persuade, but may genuinely have a scarce supply or time limit, such as in Figure 20 across). Inducing feelings of scarcity may dissuade customers from taking a more cautious analytical approach.

Social Proof

Social proof relies on the fact that people are heavily influenced by those around them. This means that advertisers can show others using their product to encourage the “bandwagon effect” – “Everyone who is anyone is doing it, why not you?” This is most effective when customers are uncertain about a product – seeing others gives them some assurance – and when the satisfied customer testimonials are from people like them, because it increases the chance that they too, will be satisfied.

Consistency

Many people like to be consistent with what they have said, thought or agreed previously, especially if it was done publicly. This preference for consistency is particularly strong for older individuals and those under emotional strain (Guadagno & Cialdini, 2010). Advertisers can use this by drawing us in through a small request, such as giving the product provider a call, and then

Figure 19: Authority



This advert gives information on the credentials of its staff in order to attract customers.

Figure 20: Scarcity



The time limit expressed in this advert may spur customers into investing by creating a feeling of scarcity.

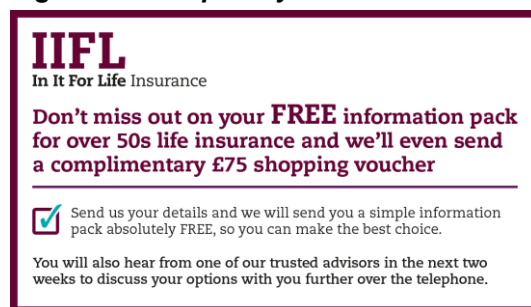
making a larger one, such as buying something (the “foot in the door” technique; see Schwartz, Bizman & Raz, 1983 for an example).

Reciprocity

The social norm of reciprocity says that if we receive something from someone else, we should repay the favour. This is a strong reflex amongst most people, which mostly helps to create a fairer society, but can be used by advertisers or others who are asking for money, particularly in personal interactions. For example, some charities send out “free” gifts of Christmas cards in the hope that recipients will reciprocate with money. Many do, even if they never wanted the cards in the first place, to avoid the feeling of guilt associated with breaking the reciprocity rule.

The principle of reciprocity does not only include physical gifts, for example free information uses the principle of reciprocity and salespeople may also apply this principle by “holding” limited offers for customers while they make a decision. This is particularly effective since it is both socially awkward as well as emotionally difficult to walk away from (see Consistency above).

Figure 23: Reciprocity



IIFL
In It For Life Insurance

Don't miss out on your FREE information pack for over 50s life insurance and we'll even send a complimentary £75 shopping voucher

☒ Send us your details and we will send you a simple information pack absolutely FREE, so you can make the best choice.

You will also hear from one of our trusted advisors in the next two weeks to discuss your options with you further over the telephone.

In this advert, the giving of an information pack is framed as a gift to the consumer in the hope that the consumer will reciprocate by being interested in the product.

Figure 21: Social proof



> Join over 20,000 people that are enjoying the benefits of CrowdingIn investment.

Your capital is at risk.

[CrowdingIn]

This advert uses the “bandwagon effect” by highlighting the number of other people investing in the product.

Figure 22: Consistency



This advert may evoke dissonance in pet owners, by making them compare the protection they see necessary for themselves to the protection they offer their pets. In some owners, the discrepancy between these things may lead them to action to redress the balance.

Conclusions

It is clearly possible to influence consumers through unconscious processes, including by appealing to instinctive reactions such as reciprocity and fear of missing out. A question that remains is how much is too much? Advertising on the basis of emotion and fast thinking may be suitable in low-risk environments and may even help competition in the interests of consumers, or encourage consumers to buy sensible, but “boring” products. However, it is also likely that in the wrong circumstances, techniques that encourage consumers to act without their overt and

conscious consideration could lead to misunderstanding and detriment. This points to suitability as a key factor in determining the circumstances when certain approaches may result in problems. It is clear that certain influence techniques are effective, but it is likely to depend on context as to whether they are unfair.

It is difficult to find a suitable way to measure when techniques might be unfair. Is it better to measure consumer understanding of their products, the decision making process of the consumer or the literal interpretation of the rules? In practice, it might be appropriate to take all of these factors into account.

5 Conclusions



“Nothing except the mint can make money without advertising” Thomas Babington
McCaulay, historian

Advertising is an important way for firms to tell customers about their products and services and convince them of their merits. It can be commercially and economically important in encouraging switching, finding new customers and hence, effective competition. But problems can occur if customers do not understand what they are buying, think they are buying something that they are not or buy something unsuitable, especially in circumstances where they are encouraged not to think carefully about it.

Problems can occur at every stage of consumers' information processing, See, Interpret and Act. The moment an advert comes in front of our visual field, our attention will be drawn to specific parts of it. This might be because of the salience of features of the advert itself or it might be because of the prior knowledge, motivation and intentions we bring to the experience (for example, we might be actively looking for that product). It is difficult to assess the prominence of features alone, for example prescribing a certain size of font or colour, as prominence is heavily context dependent. Instead it is sensible to consider the advert as a whole, comparing features with one another and the contrast with the background. Eye tracking can test what people actually see and pay attention to although it cannot tell us what they are thinking or how information might be encoded. Here we must rely on a wider range of academic and practical sources.

When we are interpreting the content of an advert, we may make errors. We are strongly influenced by framing and by the text that makes it into the headline, and we find it hard to discount this, even after we discover that it might not be correct. For this reason, headlines that are incongruous with risk warnings and small print may lead to consumers ignoring important messages. We are also influenced by the way numbers are presented and may make systematic mistakes when interpreting percentages. In general, we find natural frequencies much easier to understand and this might be an appropriate alternative in lots of cases.

And sometimes we just move straight to action on the basis of limited or no information. We are strongly influenced by factors which may be irrelevant to the situation, such as the attractiveness of the person selling the product or the need to remain consistent with our previously expressed views. Adverts may play on our emotions or encourage us to apply rules of thumb, which may drive our actions without our full and conscious awareness. In straightforward low-risk cases, such an approach may be entirely appropriate but in others, consumers may end up with unsuitable products they don't understand and follow inappropriate rules of thumb. From the perspective of consumer engagement, it may be informative to consider whether this low-involvement route is appropriate for the product and the target customer and limit its use in higher risk cases.

In general, it is helpful to think about advertisements from the point of view of the consumer who is exposed to them. Do they understand them? Are they taking away a balanced impression of the product? Have they given it thought or are they relying on heuristics or emotion? Are these

heuristics accurate and appropriate? There are a number of tools that firms and regulators could use to investigate this including comprehension tests, eye tracking and consumer “juries”. But there remains a lot that we do not know and that existing research does not fully address. For example, is advertising solely on the basis of heuristics ever acceptable? Or how exactly do customers interact with risk warnings at different times through a purchase journey? Lab experiments and field trials could help to address these questions.

Understanding psychology and how we process information is crucial to understanding the impact of advertisements and identifying when they might be unclear, unfair or misleading. It can help us to understand when behavioural techniques might be used to facilitate understanding and when they might result in misunderstanding. Existing literature can help us get to a better position and practical research can help us apply our knowledge more directly.

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