

The psychological revolution is now

Notes for the Brain Shopper conference



What's in the notes

The notes are designed to be dipped into, to answer the questions you might have after the talk. You don't need to read these notes in order or full, just jump to what you are looking for.

- Highlights contains a summary of the talk delivered at the Brainshopper conference
- Case studies gives practical examples of how these ideas have been applied for real world brands
- Articles are excerpts from different publications that help unpack the insights and real-world impact of Scalable Consumer Psychology.
- Understanding the process of Scalable Consumer Psychology gives you a marketer's eye view of how the process of Scalable Consumer Psychology.
- Understanding the science behind Scalable Consumer Psychology is designed to give further understanding of the scientific principles and concepts behind the development of Scalable Consumer Psychology.

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Highlights

System 1/2 approaches leave marketers treating their customers like primitives. The science behind this model is 40 years out of date. Modern research using a variety of sciences shows there is an additional system, intuitive/creative intelligence, a system more powerful at real world decision making than rational thinking or survival instincts. Working with this intelligence creates long term meaningful and loyal relationships with customers, as well as statistical evidence showing marketing becomes 24x as effective.

Rational thinking can, using simple logic, be demonstrated not be able to perform real world decision making. Rational thinking requires two conditions to be met

- 1) There is a single right answer
- 2) There is sufficient data to calculate a right answer

Neither of these conditions is compatible with real world decisions. The brain solves this by using a more powerful intuitive/creative framework, which at a high level can be viewed as Storytelling.

Influencing consumer's is about telling the right stories, and from studying successful story telling it has been established that the development deep immersive and meaningful story worlds is the critical element over simple measures like how much emotion a story evokes. Creative/intuitive thinking cannot be treated in a base way like system 1.

For marketers, as we have limited time with an audience, this means we need to match the stories/story worlds that consumers tell to themselves in terms of tone, context, symbolism and most importantly characters. Purely aligning with these stories and placing your brand as a meaningful character in that world, without any attempts to directly influence the consumer has been shown to be 24x more powerful at changing behaviour than direct attempts to influence using "behavioural nudges".

Scalable Consumer psychology allows psychological profiles (the nature of a person's inner world from their transient personality in that product category to the narratives structures they use, to their mood and agenda) to be gathered on a mass scale into psychological databases. A variety of data science techniques allows optimal multi-dimensional segmentation models to be constructed, and for marketing plans, campaign objectives, creative briefs, media plans, marketing automation, real-time personalisation, behavioural analytics and impact analysis to be based on these insights.

Insights are intuitive and actionable as they are based on human understanding. This results in a fully connected, data-driven and human centric marketing cycle. The output of such a cycle is psychologically optimised marketing whether delivered on everything from broadcast media to personalised digital formats.

Scalable consumer psychology is delivering sizable rewards for the brands that embrace. It allows brands to form transparent, creative and collaborative relationships with their customers resulting in long term loyal and meaningful relationships.

Case Studies

ROI and Data-Driven Marketing in Fast-Moving Consumer Markets

Executive Summary

CrowdCat worked with the international entertainment business Universal Music Group (UMG) starting in 2013, using scalable consumer psychology to influence over 5,400 campaigns.

The effectiveness of our approach was proved comprehensively to the board of UMG.

It was determined that the return on investment across over 5,000 campaigns averaged 23x that of other marketing activities.

UMG consequently reaffirmed and increased their investment in the CrowdCat programme.

The need for more evidence in a complex world

Although the increased sales that follow a promotion can look positive, they are not always sustained and other variables are always in play, casting uncertainty over what is genuinely effective, and what is simply luck.

Like other FMCG and Entertainment brands, the music world changes too fast and there are too many variables for these admittedly impressive headline results to stand unchallenged, and the UMG team asked us to help uncover the underlying data to give them the evidence to expand the programme.

In consultation with UMG, we advised it was possible for us to statistically evaluate, based on sales and customer data, the campaign impact compared with what would have happened with no promotion.

Measuring thousands of campaigns solves the problem

We analysed and averaged performance over hundreds of artists, thousands of campaigns and millions of data points to deliver evidence based financial models and statistical certainty. This proved the extent to which CrowdCat and UMG's teams were able to make a consistent and measurable difference to revenue performance and profitability.

UMG's response

As with all good long-term partnerships, our work with UMG has delivered significant benefits for both parties. When we presented the initial results of our work to the board of UMG, they immediately committed to an ongoing relationship.

"Crowdcat has revolutionised the way we understand our audience and promote our artists globally."

Monica Hyacinth, VP Digital Global, Universal Music Group Brands

Predictable long-term advantage

In the world of marketing, some campaigns succeed and some fail and the common component is an inability to predict these outcomes. It's easy to suggest success by showcasing those campaigns that appeared to work the best, but to us scientists, this is misleading, unscientific and unrepresentative. We work towards long-term, scalable competitive advantage using science.

To prove something scientifically you have to repeat results again and again, thousands of times. And that's what we've done with UMG. It's not about the best performing outliers, it's about the average rise.

Science is truly scalable

Our results being replicable, make our programme highly scalable. UMG not only shows that our results can be delivered at scale across thousands of campaigns and hundreds of business units, but that the effectiveness of our services grow disproportionately compared to their scale.

Scientific techniques scale much more easily and quickly than processes dependent on talent and creativity. Whole organisations come together through a single human-centric view of their audience. If data from a paid media campaign in Japan informs strategy in a social campaign in Brazil, then insight and learning grow exponentially.

After this evaluation project was completed, and its results presented to the UMG board, they consequently reaffirmed and increased their investment in the CrowdCat programme.

Personalisation and Transformation in Financial Services

Financial Services organisations can be 'blessed' with more data on their customers than the average consumer-facing business. However, turning this data into sound, effective and actionable marketing insight is often not straightforward.

CrowdCat's expertise with Mass Consumer Psychology means we look at your audiences independently and in a different way. We capture proven intelligence that explains how each person makes decisions, how audiences can be grouped from common themes that appear in these decision-making processes, and what approaches will definitely not work, as well as what will work when communicating with these audience groups.

The data we accumulate gives us clear patterns on what the major issues are in the minds of consumers making choices and decisions over financial services and products.

Most of this work is bespoke to each brand and the context of the particular decision relating to that brand, but some of the general principles are invaluable to any FS business looking to positively influence its customers.

Executive Summary

This study uncovers some key industry insights and potential strategies for Financial Services brands, gained from research with one of our clients – a leading insurance brand, with 1.5 million customers.

The need to grow average-revenue-per-customer (ARPU) with each individual from their loyal customer base was the challenge targeted at CrowdCat.

Our analysis of completed research highlighted some important misconceptions about how customers felt about their proposition, and affected how it was communicated to them.

The traditional importance in financial services of reassuring customers of the competence, financial security and longevity of the institution are in danger of missing entirely the core problems experienced by the consumer. Indeed more often than not, when they raise the issue of trust, they are not reassured by messages of financial stability. It seems the 'trust' issues experienced by consumers are not trust of the organisation, but of the consumers in themselves.

Business Opportunity

The insurers unique position grants them a higher degree of trust from their potential customers than is typical in other consumer relationships.

Despite this fact, conversion levels – from free and introductory products to paid-for products – are no better than the industry norms. Customers do not engage even where the benefit to the customer is quite apparent, and the decision fairly clear cut.

CrowdCat's Brief

They tasked CrowdCat with discovering how to increase their conversion rates and Average Revenue Per User by building a psychological model that their internal marketing team could use to redefine their approach across their marketing channels.

CrowdCat's work took the form of a discovery project where we began engaging with their customers at a small and then increasing scale to uncover a 360 degree psychological model for customer communications.

Research Summary: The Psychology of Financial Decisions

The psychology of consumer choice within the finance industry has particular complexities. There is a unique structure of information complexity (often impenetrable to the consumer) combined with extremely high consumer anxiety/volatility.

This combination leads to consumers being highly decision avoidant, maintaining their relationship with products that may not be optimal and in turn leading to incredibly infrequent and irrational decision making.

The messaging also requires the consumer to believe that any decision they make is logical and based on an understanding of the product, even though differences between products are often beyond the consumer's understanding.

CrowdCat's research led to the understanding of the necessity of a three-step approach to consumer messaging:

- Initial stage messaging needs to be geared towards reducing consumer anxiety in the presence of the brand.

- When the consumer moves into engagement with the provider but before they show purchase intent, the messaging needs to tailor to their primary positive driver for choice.
- After the consumer shows decision intent, the messaging needs to shift to allow the consumer to form simple post-rationalisation of their decision

Dive down

Let's explore in depth that key first element – how to reduce anxiety – and its uncovering of some highly interesting strategies for the wider business and financial services community.

How to Reduce Anxiety

Although some marketers may believe that irrationality is related to emotional decision-making and therefore may increase opportunities to use influence, the truth is that irrational decision-making is very unstable.

This is because the responses to influencers are unpredictable, and most influencers will be situational and outside the control of marketers.

Creating rationality (all be it emotionally based) with the consumer's decision-making is critical for any provider that wants to increase their effectiveness.

CrowdCats initial challenge therefore was to map out the driving force for this layer of irrationality.

Using specialist interview techniques, we studied the cognitive processes of a significant number of consumers. These interviews showed that there were two key groups in the audience with different anxiety drivers.

1. The first group locates their anxiety in terms of being pushed into purchasing unnecessary insurance either by their fears of doing the right thing or by their fears of saying no to the insurance provider's representative. This group avoids communication with the provider to prevent the purchase of unnecessary insurance.

2. The second group locates their anxiety in the potential events that the insurance covered. They manage this anxiety by deflating the probability of those events to near zero and therefore evaluate the products as being worthless and the providers therefore as being profiteers. This group avoids communication with the provider as they see them as a pusher of useless products.

Although these two groups locate their anxiety differently, the concept at the centre of this psychological structure is the same – trust.

Trust is a very common concept to arise when looking at financial providers, however its interpretation is commonly that the issue is the lack of trust consumers have for providers. Although this too may be a barrier, the decision avoidance and irrationality is not centred on this issue, but on the fact that the consumer does not trust themselves.

Several other groups were uncovered of interest to the client which are not covered here.

Changing Your Approach

This finding dramatically changes your primary communications strategy. Typically, providers are trying to develop the consumer's trust in them. They focus on concepts like security through their scale, friendliness through professional and confident staff and integrity through adhering to best practice and compliance. These concepts tend to inflate the perception of power imbalance between the consumer and the institution which further increase the levels of anxiety.

To communicate and influence people who don't trust themselves you need to elevate them rather than yourself. The key is to identify the typical, core fears within that audience and to arm them with the knowledge to master those fears and to gain confidence.

Example:

You replace messages like

"Our expert staff can identify the best product for you. Our brand is proud to provide the best products for our customers"

With

"Evaluating products can seem daunting, but there are some good sources of impartial and simple advice. The Money Advice Service, a government funded independent source advice has several good articles on..."

Our interviews discovered 4-5 key fears within each group and tested information and information sources that could effectively combat each fear.

Conclusion

These insights, plus the detailed data in the context of their brand, enable the formulation of key primary marketing messages that will associate lower anxiety with the Insurance brand and consequently to minimise any decision avoidance in their communications with consumers.

With the strategy and the key themes for communication uncovered, the brand are moving forward to employ these techniques by addressing the right message to the right person, based on our work at increasing scale with greater and greater proportions of their customer base.

Final Note – Mass Profiling of Potential Customers

It is important to understand that even if the target audience isn't known, the same techniques work with anonymous consumers – for example via an ad or digital survey – to determine their psychological profile and so which message to send.

Which means new markets and customers can be profiled and evaluated, ahead of having to invest any advertising and marketing spend in a new area. We are excited to be involved in ongoing initiatives in the whole financial services marketplace as its quiet revolution takes place.

Mini – It's all in the eye of the beholder

Brands seek to establish a clear proposition with their consumers. They work hard to reinforce it with well-placed advertising campaigns and messaging.

The British Mini is a clear and well understood proposition – its small, tiny, cute. A much-loved brand with a loyal audience who get what it stands for. They know it's not big. It's in the name.

The challenge when you have such a well understood brand image, is when you branch out in a new direction.

When Mini launched their first family-sized car, it became apparent they would have to change customers perceptions.

CrowdCat was challenged to help their top creative and outdoor media agencies get the message across that this Mini, er, wasn't.

Business Opportunity

The economics of automotive manufacturers means that ranges spanning several different models make sense. When a consumer likes your brand but you don't have a solution for them, its a missed opportunity.

Consumers needs change with time and situation. The Mini brand needed to accommodate them. The Mini Countryman was a Mini for people who needed more space.

Initial Research Findings

Traditional Marketing approaches initially considered by agencies typically proposed to draw attention to the key new attribute – space – while equally reaffirming that it was 'still a Mini'.

In short – the best of both worlds.

CrowdCat's expertise in Mass Consumer Psychology meant we quickly identified that this approach would – at a psychological level – be a confusing message for any consumer to process. As such it would not be successful – the likely outcome being the consumer choosing to go with an established family car brand instead.

The reason behind this is that such a proposition is innately conflicted – the features are at odds with one another. In trying to overcome a fundamental point of difference – in this case size – it triggers rejection in the psychological decision-making processes. A similar conflict is experienced when any brand attempts to combine the archetypal low cost/high quality proposition.

Research shows brands need to identify and focus on one core theme, not several opposing ones.

CrowdCat's Psychological Approach

CrowdCat used cognitive profiling to identify the critical single block preventing customers from purchasing, namely that their preconceptions would not allow them to perceive the vehicle accurately as family-sized.

With such a well understood brand, there was a clear conundrum – placing any word that implied 'larger sized' anywhere near the Mini brand instantly caused confusion and negative consumer sentiment.

To solve this problem we identified the brand would benefit from using a direct experiential solution. Something that would help put the Mini brand in a completely different context in people's minds. We used the detailed cognitive data to develop and test a 20s immersive visual experience that literally rewired consumer's thinking and allowed them to perceive the vehicle accurately.

Working alongside the creative agency, CrowdCat devised a real world experiential display that would remain on brand, attract massive consumer engagement and be able to deliver the designed immersive visual experience to an audience of potentially 7 million.

"The campaign was badged as a World Record Attempt for the number of people in a Mini. The strapline was 'How Many People Can the New 4 door Mini CountryMan Hold?'"

With short time-frames it was essential that all parties worked seamlessly: Brand Marketing Team + CrowdCat + Agency all in sync. In fact, having the data-backed, focused brief from CrowdCat at the outset, avoided any significant rework or review

during execution. To support the campaign, four Experiential Displays were built and rotated around the country over an 8 week period.

Outcomes

CrowdCat clearly defined the messaging and mechanism which could be predicted to be effective – based on verified data. Our psychological research and insight, combined with the presence of visual ‘evidence’ and reinforcement proved remarkably effective in gaining social engagement and sharing.

Data capture evidenced that out of 7M people who walked passed the display, 1.5M stopped and were visually engaged with the experience for 20s or more. Interactions of greater than 20 seconds were measured as being effective in re-positioning the brand for a consumer. The result was that the new Mini Countryman sold out before it even hit the show rooms.

Unsung Heroes – Scientists aren't really rational either

Post the merger of 2 major publishing empires, Springer Nature is now a significant force in scientific, scholarly, professional and educational publishing. The new management team was seeking to reshape the business.

At the centre of publishing science research, and particularly in Open Research, there is a core decision to be made by scientists. Essentially each scientist asks themselves "in which journal should I publish my research findings?"

The outcome of these series of singular decisions defines the entire effectiveness of Springer's marketing effort.

Existing research findings

Using standard market research practices, Springer had determined that there are two major selection drivers for scientists: relevance and reputation.

Through a variety of well-structured and expertly executed surveys and techniques, Springer had tried to probe into a deeper level the way scientists evaluate choice. Due to the complexity of the choice framework however, they only created a map of the IQ-based self-narrative scientists use to retrospectively justify their choices, rather than the deeper mechanics of how those high value choices are made in the first place.

CrowdCat's approach

We embarked on a discovery project to map out one of the selection drivers: reputation.

During the exploration phase, we used specialised interview techniques to reveal the actual decision-making process that scientists go through. This identified a process that is not intellectual or dispassionate, but one that is related to the deep-seated beliefs, values and motivations that lie at the heart of why each scientist decided to dedicate their life to science.

Each decision to publish is in essence a miniature replay of the initial decision to commit their life to scientific endeavour.

Selecting an engagement framework

We researched and developed a framework through which we could reproduce this mental context in an online experience – “Unsung Heroes”. This framework was chosen as it allows scientists to explore their personalities and beliefs and how these relate to the unsung historic heroes in science, people to who scientists relate to strongly.

This allowed our audiences to explore characters like Charles Drew the African American who fought racial prejudice to perform the revolutionary research that allowed blood transfusion to be available for everybody. Through his commitment, millions of lives have been saved, yet during his working life hospital treatment was often refused to African Americans.

Richard Summers – Chief Scientist, CrowdCat

Starting small

We used the Unsung Heroes experience to run a series of small scale online surveys to allow us to conduct a full quantitative analysis of how Springer’s audiences organised ideas and the different value levels they placed on them.

Between each survey round we analysed the sensitivity and accuracy of the questions, then by making small amends released a new survey of far higher capability. This approach allowed us to generate highly accurate information from each scientist that completed the quiz.

Scalable Consumer Psychology in action

In the final phase, we engaged with larger and larger volumes of scientists. To do this we created a fun 60 second digital experience which used the relationships we had learned from surveys to allow the audiences to explore themselves in relationship to the Unsung Heroes.

This experience saw completion rates rising to 86%. Although promoted through Springer Nature channels from social media to web-banners, nearly 20% of the completed profiles came from link sharing. Social listening revealed that the experience had generated a large number of positive sentiment, multi-chain, multi-person conversations within the social space.

By the end of the activity over 5000 scientists had engaged with the brand deeply, aligning themselves with the BioMed Central brand through an Unsung Hero of Science.

Audience insight and personalisation

The project would have stood up as a successful marketing campaign on its own. However, its true value came from the audience insight that it generated.

Every audience organises ideas into 3-5 top level categories, and within each audience there are segments whose decision making is primarily influenced by ideas in one of these categories.

This project allowed these 'organisations of ideas' to be mapped in detail into thematic groupings. We then analysed the proportions of the audiences who were primarily influenced by each of the distinct thematic groups.

In short, finding the right messages to send to the right customer.

Results: Brand engagement and insight

Immediate benefit was realised in the generation of positive brand relationships and social sharing of voice around Springer's flagship brand.

Further ongoing value was recognised in the discovery and potential of the high engagement communications framework, Unsung Heroes, that could both be used to influence customer behaviour and to gather ongoing insight.

Results: Organisational transformation

We combined the data from this project with pre-existing segmentation information and studied the relationship between customer value and psychological drivers.

This meant that Springer could now describe the differences between known segments and how they relate to customer value – a key indicator for data-driven organisational change.

The big new idea, the catalyst for ongoing change, came from the derivation, from new data, of a detailed and actionable psychological model of customers influences that could be employed across all marketing channels.

Working with Richard and the team at CrowdCat was an enlightening experience. The ability to gain such a deep understanding of our audience of scientists stretches far beyond anything we had previously achieved and we are transforming our business as a result of this knowledge.

Grace Baynes – Marketing and Development Director, Springer Nature

Springer and CrowdCat are now working in partnership on a long-term personalisation and transformation programme.

Articles

System 1 & 2 – The road to soulless marketing

Did Apple build its empire by simply calculating what to tell people? Did Amazon take over the e-commerce world by nudging the consumer's unconscious? Did Dyson conquer the competition by simply creating ad's that entertained their audience? The answer to all three of these questions is a resounding "no". Each company had a vision, a deep brand mission, a philosophy which permeated every level of its structure and defined a long-term relationship with its loyal customer base.

Too often in neuro-marketing we reduce people to simple primitives; too often we reduce diversity to banal stereo types. System 1/System 2 models lead us to believe that for the most part this is true, our day to day lives are run by the most basic drives and unintelligent decisions. It leads us to treat our customers with contempt and lose our souls as marketers.

System 1/ System 2 models are inaccurate and are based on the bias of scientists who erroneously believe that rational thinking is the most powerful form of thought. Evidence, common sense and science actually show us that intuition and creativity are more powerful forms of thinking. This leads quickly to understanding that there are 3 systems not 2: -

- 1) The survival system – a fight or flight system designed to process the world at lightning speed and keep us alive, but which has no part in shaping our long term or meaningful behaviour.
- 2) An intuitive/creative system – the most sophisticated form of thought responsible for all human progress which shapes our decisions and generates our behaviours in any long term or meaningful sense.
- 3) A rational system – a system that allows communication through language, to allow wisdom to pass from one to another and which allows checking of the basic validity of creative ideas. This system however is unable to effect real world decisions as it is incapable of actually making them.

Marketing is mostly about targeting the intuitive/creative system, of showing our customers a new vision of the world and new possibilities for their place in it. For the greatest brands it is a transparent, collaborative and creative venture which results in deeply meaningful relationships with customers, long term loyalty from them and true differentiation and value for the brand.

To start assessing the truth of this thinking ask yourself what you really believe about yourself

- are you simply a primitive set of competing instincts defined by your gender, age and income level?
- are your emotions just simple chemical imbalances caused by your evolutionary history as a wild witless beast?

Alternatively, do you believe that human beings are wonderfully diverse, exploring unimaginably complex ways of existing in our extraordinary world and that our feelings are the expression of a deep connection to the meaning and direction of our lives.

20 years ago, the fastest computer in the world was the Cray II, it weighed 70 tonnes, was industrial sized, needed liquid nitrogen to cool its microprocessors and is roughly the power of an iPhone5; no match for the smart phone you have in your pocket today. It's an amazing thought, and leaves us in awe of our technology.

But if we consider the smart phone as a walking pace in terms of information processing, then it would take about a year to walk from here to Sydney. As your foot touched the pavement for your first step, your brain would already have gone around the world **200,000** times. Needless to say, the power of your smart phone or even the most powerful super computers today are no match for what you have between your ears.

It's important to reflect that in those few seconds that a consumer stands in front of the shelf, considering which brand they are going to purchase, they process more information than a state of the art laptop can in 2000 years. Is this compatible with the view of System 1/ System 2? It stands to reason that those that propose those models have a lack of understanding of the power of the brain.

How can scientists get this so wrong? As a scientist, I need to apologise as the truth is it is our hubris, our arrogance of believing in our intelligence over others. Scientists are able to believe in something that is simply an interpretation in the face of common sense. It's also worth pointing out how old the System 1/ System 2 model is, the basis of this idea dates back to the 1800s and even its modern form it is based on 1970s science. Would you want to run your business on 1970s IT infrastructure?

The central reason scientists come to the wrong interpretation is that they are fully indoctrinated with the preconceptions and cultural biases of a hyper technological society. The essential component of this, is the belief that rational/logical thinking is the most powerful. From this school of thought, we believe that our science and technology is based only on rational endeavour and that this is to have given us our powerful position of dominance as a species.

This belief is erroneous, and the first way to understand this, is to simply understand what a rational problem is. A rational problem needs two things

- 1) A single correct answer
- 2) Enough information to calculate it

It's a lovely idea, but absolutely impractical for real world decision making. Consider the problem of who you're going to marry or which job offer you should accept. It is absurd to try and frame these as rational problems. But it doesn't have to be big decisions, what we say to someone or just a simple decision around a simple task creates a fork in our road, one where it is impossible to see all ends and consequences.

Our brain has evolved to cope successfully in a world where the link between cause and effect are incalculable and unpredictable. The fact is however we do this seamlessly and successfully which implies that we have a more powerful form of thinking than rational.

Practical evidence for this exists from autistic savants, those that display incredible abilities to memorise, recognise patterns or make calculations. Yet these individuals despite their enhanced rational capabilities are left unable to operate functionally in normal society without enormous help. Peeling this problem down to its core, understanding how autism effects systems in the brain to allow these hyper

developments of rational skills to develop only serves to add to the confirmation that rational thinking is an ineffective method of real world problem solving.

Scientists will typically object, seeing their field as the victory of logic and rationality over intuition and superstition. This however is not the case, science is, when done well, simply the reflection of how healthy human beings operate. A scientist uses imagination and intuition to generate a hypothesis, creatively to generate a framework to test its validity in a persuasive way to other scientists and rationality only in the final check of whether the hypothesis has remained valid through the test. Other scientists react instinctually to other's world view and decide whether to propose an alternative view of the world or to try and further validate the proposed one.

Science needs rationality to allow it to have a common framework, to keep scientists focused on evidence. Science however, like every other area of human endeavour is progressed through creativity and intuition.

System 1/System 2 models are old, inaccurate and based on pre-conceptions that if you think about them for any time are illogical, unscientific and defy common sense. By buying into these models, marketers are inevitably led to treating their consumers like primitives, leaving their marketing soulless and cutting off all possibilities of having a deep long-term relationship with their customers.

Common sense, science and evidence tell us that rational thinking is in fact much less powerful in real world decision making than intuition/creativity and the power of the brain points to our intuitive/creative thinking being incredibly sophisticated. This leads to the understanding that there are 3 basic systems not 2, a survival instinct, an intuitive/creative mind and a rational capability. The power of long term relationships and meaningful decisions rests with the 2nd and therefore makes it the target of marketers.

By following this thread, we are pointed to the fact that human beings are immensely complex, diverse and capable. Science is able to support marketers in understanding their customers, by allowing the invisible inner world of millions of people to be understood and modelled in manageable and meaningful ways. What science should never be allowed to do, is to shackle the creativity of marketers with a limited rational view of human behaviour.

What is Scalable Consumer Psychology?

Imagine if you could sit down with all of your customers, one-on-one, and allow a psychologist to identify exactly how each individual thinks, feels and chooses, in their own inner world. Imagine if that same psychologist could also study the ways in which each customer communicates and connects with those around him or her. Imagine if you could take such levels of insight into your creative marketing process and produce creative executions for each individual customer, tailored exactly to that person.

If you could, it would certainly be no surprise to see your engagement, influence and brand loyalty increase by several multiples across your customer base.

The issue of course is scalability, we certainly can't spend hours and thousands of Pounds getting to know each customer individually. Even if we could, they certainly wouldn't give us that time anyway. Scalable Consumer Psychology (SCP) is a process that allows us to gain these insights to nearly the same accuracy, using methods that are practically applicable to audiences of thousands and millions, and that are applied at a cost of only pence per consumer.

SCP generates detailed information for each consumer about how they think, feel, communicate and choose. It uses a combination of scientific and mathematical methodologies to identify common themes and create segmentation models to optimise the impact of your engagement activities. It ensures that you can get the right messages to the right consumers, based on their individual psychological profiles.

Brands can benefit from operating a handful of created top-tier segments, or by taking SCP further they can build effective systems for personalisation, right down to an audience of one in order reap the rewards of deepening relationships with consumers as individuals.

SCP also generates data in a global data format, which is compatible with most relevant information infrastructures. This allows the data output of the SCP processes to be used across all business systems from CRM to Programmatic to BI. Therefore, SCP can positively impact every marketing channel, as well as be used globally over 100s of business units in an organisation.

SCP genuinely ensures that the consumer is the very epicentre of the organisation, transforming audience insight to enhance engagement, marketing effectiveness and the all-important ROI.

A core trait for us as marketers should be to recognise the vast diversity of people and psychologies, and of course the different contexts such as mood and situation that determine behaviour. SCP is the enabler for brands to embrace this diversity, truly understanding customers as individual people and engaging with them as such.

If Brand Transparency is the new Black, then is AI the new Opaque?

It's raining on a Tuesday afternoon at the Judge Business School Cambridge University where a room of business leaders are discussing the future of consumer behaviour and marketing.

Marcia Kilgore, the founder of so many successful brands, captivates her audience in a description of the devious world of cosmetics. Showing her new successful flagship brand Beauty Pie, she declares "Transparency is the new Black".

This rallying cry to be open, authentic and honest is mirrored by many of the successful disruptive founders and influencers around her. Alex Letts, the founder of unbank, describes how he has launched a fintech company dedicated to unwinding the unethical nature of bank charges. Catherine Summers, the top fashion blogger describes how she has forged trust with her thousands of followers through authentically presenting who she is.

The thinking? If we are honest and authentic, then our customers will fall in love with us and our businesses will flourish. But are we sure this is really true?

So Are Customers always Authentic and Transparent?

Diana Fleishmann, a lecturer in evolutionary psychology, would strongly disagree. "Successful social communication relies on unacknowledged motivations, of being deeply unauthentic", her theory on 'Adaptive Trainers' insists.

In fact, it seems entire areas of our brain are dedicated to remembering other's preferences so we can buy them a great birthday present – in an attempt to manage their future behaviour. But this apparent act of generosity is undermined when you realise why you make that effort – with what might be described as 'benevolent self-interest' at its heart.

In short, we quickly become Machiavellian when we engage in any relationship we expect to recur.

Richard Summers. Chief Scientist at CrowdCat, speaks about empirical evidence from studying millions of people and their buying decisions around hundreds of products. What is absolutely clear from the data is that people are unaware of why they do the things they do. "When asked to describe why they make a decision, it is not that they intentionally lie, its simply that their reflective post-rationalisations of their behaviour are totally at odds with their actual behaviour. Mainly this occurs because our culture gives us a poor and broken model of how to understand ourselves" he confirmed.

Although not as inflammatory as Dianna's position, it is another indicator that we are not, at all, authentic. What we believe to be true is frequently at odds with what is true.

Whether it be a lack of self-understanding or a ploy to make people like us, authentic is not then a straightforward human position.

If our customers are not authentic, then how can a brand be?

The answer might be that they become capable of pulling the same trick as the human brain does. Creating an authentic shell of beliefs about what they are doing which is entirely separate from what their organisation is actually doing, at the coalface.

In short, a separation between Management Intent and Organisational Process

It occurs that one mechanism creating this might be AI – Artificial Intelligence, or machine learning.

AI systems are basically computer programs that learn patterns.'

By learning patterns they are able to predict things – whether that's Netflix predicting what movie you would like to watch next to Amazon's predictive analytics that allow packages to leave the warehouse before the delivery address is known.

AI opens up enormous possibilities, through scale, speed and low cost. Rapidly like the internet did, AI is touching every business process and radically effecting the products available to consumers. The Gmail app on my phone offers up appropriate responses to an email I've just received – but it's not a human that's reading my mail. Harvard Business Review cites a virtual assistant named Angie, which sends about 30,000 emails a month and interprets the responses to determine who is a hot lead. Only her recommendations are followed up, the rest ignored.

The most interesting thing about AI however, is not what it can do but what it can't. AI is not self-aware, it can't tell you why it does the things it does. It learns patterns, it does it very effectively, it can make things work better but nobody knows what patterns its learning.

These same forward-thinking brands that embrace transparency also embrace the brave new world of AI; which leaves an interesting contradiction. Often these companies are transparent on the surface, authentically showing us exactly what they do. At their heart, however are a core of processes run by AI and these processes are utterly opaque. It's not that the customer doesn't know what they are doing; what is interesting is the brand doesn't know either.

Is AI capable of being ethical?

As the discussion moves on into ethics and data, this theme is developed into a cautionary point of view.

Ray Anderson, one of the icons of technology innovation in Cambridge. "We are often avoiding our ethical dilemmas by placing those decisions in the hands of AI".

From Uber's bidding system to Facebook's edge ranking algorithms, AI systems with seemingly benign or even benevolent purpose are delivering less-than-ethical behaviour.

Remember these systems are often the only option for companies where a human-involved process simply cannot cope. Every single minute, some 18,000 minutes of video are posted on YouTube, meaning human-only moderation has long been impossible. It is not that their design is biased, but the human behaviour they learn and react to.

Increasingly decisions are being made by machines which not only have no morals but are also incapable of being scrutinised. If we intentionally create a policy that means we discriminate against women, or lower income people, or disabled people, we create moral outrage. The truth is however that AI is already creating its own policy, it's just that nobody knows or can introspect it to discover that its doing it.

Could we audit AI to show Transparency?

To better understand humans, Cognitive Psychology explores behaviour and thought processes. Deepmind – the Google/Alphabet think tank – considers Cognitive Psychology

as one solution, if one is needed. A recent paper proposed a new approach to this problem that employs methods from cognitive psychology to understand deep neural networks.

By considering cognitive psychology as a potential solution to uncover exactly this opaqueness, it begins to open up a route to audit, and then perhaps highlight transparently, any found bias in such an AI system.

It should be recognised however that unlike the systems we have become used to, AI is continually learning and adapting. Rather than a typical IT system that gives repeatable consistent results, AI will need multiple return audits.

The core issue however is that our cognitive psychological models would only be guesses, they would in no way match up to the complexity of what the AI was actually doing. Unless we built an algorithm with known parameters that could do what the AI did, we could not be certain of any conclusion, and this is of course self-defeating.

And in that last analysis what do we realistically think will happen? If an AI system has learned that women are as far as it can discern not great leads, or less-educated people need more fraud-checking, what do we do?

Are These Systems Deliberately Opaque, Or Purely Pragmatic?

If AI should become the new way to be opaque and avoid scrutiny, this would rightly concern people. But is it the brand or the consumer that is to blame?

We, the consumer, in our belief in being authentic, are demanding total transparency from our brands, – and so brands are responding. This then represents a perhaps impossible contradiction for businesses that are asked to survive by appearing likeable, transparent, and so selling us things.

There is perhaps a delicious irony if, in allowing AI to do things we couldn't intentionally do elsewhere in our business, brands mimic the human's ability for self-deception, and for saying one thing while doing another.

This article was authored by Richard Summers and Tim Sutton, following the 2017 Cambridge University Judge Institute conference 'The Science of Disruption'.

Banks – all the data and AI in the world and still stuck

The major banks are stuck. Although each has vast numbers of customers, they are unable to differentiate from each other.

At the same time, the new Payment Services Directive (PSD2) becomes law in January 2018. As a significant step towards so-called open banking, PSD2 is opening the market to the new breed of FinTech providers; brands that are strongly differentiated and capturing market share irresistibly.

The possibility exists that, over the next decade or so, our major banks could fade away into the obscurity of the financial infrastructure. Seen the right way however, this new environment opens a second possibility, which is that of a major bank creating real connection to its customer's lives and stepping out in front of all others.

Major banks have both incredibly large numbers of customers, and data about their lives from every financial transaction that they make. Customer conversions are so profitable that banks have almost limitless technology and scientific expertise at their disposal to analyse this lake of big data. Banks have had all the advantages of psychometrics and neuro-marketing years before it arrived on the radar of most retail brands.

This is information and resources that most brands can only dream of. Given this, why are banks so bad at reaching out to their customers and building relationships with them? It's no secret that banks are among the least loved institutions in our culture.

There are many good, solid, rational reasons for this problem, but the one that matters most is the lack of emotional connection with consumers. At the core of this crisis is a cultural clash – banks have a deeply held belief in the ability of rationality to create financial products that are both useful and profitable. Consumers on the other hand display less rationality in financial decision-making, perhaps less than in any other area of life. The result is two cultures that can't even begin to speak each other's language, let alone connect emotionally.

We recently delved into the mysteries of consumer decision-making in one of our largest ever cognitive studies. What quickly emerged was perhaps the most defining problem in finance marketing today.

Finance marketers have correctly identified consumer trust as being a central issue, but they misunderstand the consumer's concern as being one of trust for the institution. Hence, finance marketing is focussed on trying to inspire trust from the feeling of permanence, to the alignment with ethics or the rigour of process.

Consumer decisions however are defined not by the lack of trust in their institution, but a lack of trust in themselves. Spend a few moments thinking how differently you would communicate with someone who didn't trust themselves, as opposed to someone who didn't trust you. This radically different requirement in communication leads straight to the heart of how banks fail to connect and differentiate themselves to their consumers.

A rational frame leaves us distant, unable to understand the subtleties that are everything in a personal connection. Our relationship to money is complex, formed from so many highly emotional experiences throughout our lives – from our pocket money to our first house, from our first pay check to our first financial crisis. We don't have one way of thinking. We don't approach financial decisions from one point of view.

For us as marketers, it is critical to understand that the personality that a consumer has when picking a credit card is not in any way similar to that of when he or she chooses a mortgage. From universal credit scoring, to overly simplified behavioural models, consumers are left treated as single dimensional stereotypes. With so much going on for each consumer, it is no surprise that such an approach leaves them cold and detached when it comes to banks.

It is possible to spend time with consumers to understand how all these issues connect. Banks have the expertise, information infrastructure, and access to information to build powerful multi-dimensional segmentation models, to enable them to connect and personalise to the different aspects of each and every consumer.

A major bank has a unique opportunity, one that is enhanced by the opening of the industry. To step forward and build an unprecedented deep emotional connection with their audiences, to differentiate themselves from the others and to become the bank that sits at the heart of everyday lives.

Understanding today's Politics means Brands can learn the difference between unstable Polarity, and long-term Loyalty.

This article uses recent political events to explain how people react differently to the messages they receive, how humans deal with complex decision-making in real world scenarios, and how they are responding to the modern media world in increasingly tribal ways. It explores post-rationalisation and its side effects and how brands can avoid the pitfalls while discovering brand purpose and what makes their customers choose them.

One of the central things we do in our consumer marketing work is to measure the strength of positive and negative associations people have with elemental propositions, that is, statements about the world that bring together basic/ground-level ideas.

We take these measurements over millions of people and hundreds of decision-making processes. When we do this, we never need measures that span from negative to positive as we tend to see a proposition as either a spectrum of positives; or instead as a range of negatives. Put another way, we've never seen anyone disagree with anyone else about anything fundamental.

But how can that statement be true in a post-Brexit, post-Trump, fractured society? A world where people find it hard to talk to each other about their differences of opinion because they are so fundamental. Surely these very problems highlight where we do fundamentally disagree, and that in such a fundamental disagreement we lack the empathy to be able to collaborate across those divides?

Our real differences are subtler than you think

In contrast, we would suggest that a Bernie Sanders supporter and a Donald Trump supporter likely agree on almost everything fundamental. How could this possibly be true? Perhaps the best place to highlight this is to look at social security/welfare issues in society. Here are some questions both Trump and Sanders supporters typically answer in the same way.

Can a person you would consider a worthy, useful member of society then suffer bad luck and so be unable to support themselves?

(sub-question) Is it beneficial and right for society to support such a person?

Are there people who take advantage of social security due to selfishness?

(sub-question) Is it harmful and wrong for society to support such a person?

The difference between right and left, between say, Trump and Sanders supporters is the relative size they place on these problems. They agree fundamentally that both situations exist and on whether these are positive or negative things. In fact, interestingly for most of them, they agree that both problems are very important and the difference is only slight.

How is it that two groups of people with fundamentally aligned view and only subtly different evaluations of the world are so diametrically opposed they are left unable to talk to each other about their positions?

Is this simple demographics, or something deeper?

One answer is that this is called tribal behaviour. Although only marginally different in terms of values, the two groups see themselves in different tribes, and a primitive sense of belonging and threat drives them apart. It is certainly true that different geographical areas of the States have either more Trump supporters or more for Sanders. This left/right divide has always been true.

What is interesting now however, is that this divide seems to have taken root within families. There are many families now who can't discuss politics with each other because these divides are so volatile. This flies in the face of the driving force being simply social or geographical or economic.

So why is this happening?

1. The increasing Tribality of news

One change however that has clearly been identified is that we are beginning to receive our news in silos. In emotional terms, it's more comforting to read articles that agree with

what we already think; while information that challenges our world view causes us anxiety and disruption.

In the past we could choose our preferred newspaper's by their leaning, but the main readerships still went to the major nationals which represented large-scale viewpoints and were simply not able to be personalised to what articles we read yesterday. Now – usually in a bid to make sure we stay on their site – media and social media sites are deliberately only targeting us with news that already fits our model of the world.

People find themselves insulated from the anxiety of learning and growing unchallenged as long as they stay in their own digital universe. In the past they had a choice, connect to those around you and accept the challenge to your world view or lose that connection. Now consumers can have the illusion of connection without the need to take on that anxiety, and this is creating the conditions where families each with starkly differing external interests and connections (~tribes) are finding they can't talk to each other.

Although this is one step closer to the truth, and correctly identifies what enables these issues, it still doesn't explain the fundamental driver – why do we form such embedded opinions that we will isolate ourselves from even close social connections, to avoid challenging them?

2. How people manage Decision Complexity

Reflecting upon the 2016 UK 'Brexit' vote, the electorate was given the responsibility for a decision that no expert in the world could predict and one where many of the advocates on each side didn't themselves understand the complexities of the systems involved. For example, one side wanted a "free trade area" and the other a "single market", yet even most finance professionals cannot adequately explain the difference between the two.

The electorate needed a way to manage this confusion, to reduce the anxiety of making a decision they couldn't realistically understand, which would likely reverberate upon their own children and their children's children, and had potentially serious economic impacts. To cope, most people used a human system we already deploy every day to simplify our lives – known as post rationalisation.

When we make a typical decision, we process all the vast amounts of information in approximately 15 seconds. To give you some idea of scale, the amount of information we

process in an average decision would take a current personal computer some 1500 years to fully process. Once that decision is made, we need to reduce it down and simplify it, to allow future decisions to be manageable – if we have to re-process every aspect of a decision that would be a tremendous overhead upon our daily lives.

3. Decision-making in the real world

What makes decisions difficult is that they are probabilistic and based on vast but incomplete sets of information. Making a real-world decision is a bit like playing a move in a grand master level chess game when you don't know exactly where all yours or the opponent's pieces are or whether the future rules of the game might subtly shift. Amazingly we make pretty good decisions most of the time.

Post-rationalisation gives us the ability to turn a hugely complex decision into a tiny number of "logical" steps. What we have done is convert partial information into complete information (by pretending the holes are filled in) and turning a large number of potentially good outcomes to a single correct one.

Even more powerful is the way we can transmit these structures over space and time through language. We are designed, for strong evolutionary reasons, to quickly remember and adapt our behaviour to ideas received in this form. We test the world against these simple patterns and generate rigid beliefs and plans of action. This ability allows us to act cohesively and intelligently – we no longer need to test every plan of action through hard experience which opens so many new horizons for us.

Caution: Post-rationalised Polarity has side effects.

This thinking shortcut system however does have a side effect, we become much more rigid around the decisions we take on from others than those that are based on our own experience. Where we have experience, we have a system that can take on the many shades of a situation and find a relevant and flexible response. Where a decision is based on others' post-rationalisation we respond to our own confusion by rigidly holding on to our certainty that we are right.

This psychological stress leads to an odd behaviour called the backfire effect, where we hold onto beliefs even tighter when shown evidence that they are incorrect. This tends to

polarise opinions, in that as they cannot be argued through from knowledge or experience, they can only be either accepted in full, or denied absolutely.

The increasing volatility, pace of change, and connected complexity of the world, when combined with the more limited silos from which we consume our news, are driving, or perhaps allowing, us to dig ourselves in to more polarised political opinion, apparently unable to communicate or compromise.

What this means for brands, and our brand purpose?

Much of the time the consumer does not realistically understand the core difference between products. Product space is crowded and so these differences really occur as perception rather than reality. Capturing this post-rationalisation and polarisation through catchy phrases and simplifications is certainly very possible, in fact much of the time that's exactly the frame marketers see their messaging in. Post-rationalised positions create brand advocacy, are socially shareable and create strong influence across social networks – and in that light are surely a good thing.

Marketers beware however – polarisation begets instability. Consumers that take on polarised positions without any deeper underpinning may for an initial time period seem highly loyal, never considering another brand choice. Although a customer not evaluating your product as close to or even worse than in some respects than others is highly appealing, it does create a big issue.

The lack of individuals personal reflection and consideration of your product or service creates unrealistic beliefs. A belief that your product does match them or their needs perfectly despite any evidence to the contrary. This is unstable. The gap between expectation and reality may widen to a spectacular degree, and as this happens consumers become more demanding and brands have to invest more in keeping them happy.

Eventually they can't keep up and suddenly the consumer's beliefs have to give way leading to anger and disillusionment. The resulting negativity is far stronger than usually experienced by a brand.

As useful as positive brand advocates are, they have a tenth the power of a counter advocate. One bad review offsets 10 good ones, if you like. We are wired as a species to avoid negative consequence far more strongly than we are wired to seek positive ones. A

network of post-rationalised believers is a serious upset waiting to happen, where one bad experience can spread havoc across thousands of your customers in a matter of hours.

Only by seeking a great fit with your customers will you create long term win-win.

We live in a world where brand value is a product of experience and perception. In that world it is sometimes easy to run away with shaping perceptions and generating easy wins, with viral offbeat campaigns and creating a noise within their 15 minutes of fame. This is fine if it is backed with well- matched brand philosophy, capability and equity. Which means understanding why your customers are your customers.

For those brands however that want to stay the course, who want long term growing relationships with their customers we need to dig deeper into our how and why our customers choose us. From living our values to being creative in our communication, there is one principle that underlies a stable growing relationship with your customers – the commitment to empower them to make better choices – even when that may lead to them choosing an alternative brand.

To do this best brands live with their customers, walk in their shoes, are passionate about the same things and, over time, really get to understand their real brand values – not those in the organisation’s business plan, but in their customers everyday lives.

Understanding the process of Scalable Consumer Psychology

Capture

The purpose of this phase is to qualitatively Capture the elements of the consumer's psychological process so that they can be quantitatively studied throughout the rest of the process.

Capture involves one on one interviews of approximately 15 people. The interview involves visual, auditory and biometric recording and a specialised format designed to elicit information not consciously known by the candidate. Interviews are performed at point of choice or as near to as practically possible.

The data is used to construct a set of deliverables: -

- 1) One or more psychological context descriptions which match the point of choice.
- 2) One or more cognitive/emotional strategies which match the point of choice.
- 3) A large number (200-1000) concepts related to the point of choice.
- 4) Some limited information about the relationship between context, strategies and concepts.

Define

The purpose of this phase is to Define the relationship between concepts as well as clarifying the relationship between contexts and strategies.

Define involves developing a series of gamified surveys designed to tease out the association of the consumer's ideas sitting below their level of awareness. Typically, data is gathered in sets of 50, with each set used to optimise the survey and utilise it for the next group. A survey of this type, gathering detailed and accurate information will take approximately 6 mins to complete.

The data is used to construct the full psychological matrix for every candidate. Each time the survey is optimised it captures these matrices to increasing degrees of detail/accuracy.

Aggregate

The purpose of this phase is to Aggregate the audience into 4-5 groups of related influence profiles. Once enough accurate and detailed matrices have been gathered, statistical algorithms can be used to look for patterns of influence, these patterns can then be interpreted and prioritised to allow segment differentiators to be identified.

In a second step, statistical algorithms are used to define the relationships between the segment identifiers and the actual digital-consumer interactions within the survey to create a prioritised list of the best interactions and analytics which help identify a consumer. This list allows short digital experiences (30s-60s) to be produced which can differentiate the segment of consumers nearly as well as the 6-minute survey.

Engage

The purpose of this phase is to Engage a wider audience of consumers to test the influence principles formulated from the previous phases. Engage creates a short digital experience which uses a highly engaging psychological gamified quiz to tell the consumers something highly relevant about themselves. The engage phase incorporates many independent elements: -

- 1) Testing the ability of the segmentation model to accurately differentiate consumers in a short engaging experience rather than a long form survey.
- 2) Testing models of the user's shareable social identity through creating shareable Identity Reveals.
- 3) Analysing interaction and social metrics to measure the alignment of the psychological matrices for each segment with the consumers identified by the experience of being in that segment.
- 4) Refining the segmentation model with additional behavioural characteristics and segment differentiators.

- 5) Iteratively refining & testing a creative execution/process and through that the usability of psychological profiles which can then be used in a wider marketing context.

Engage experiences are the cross over point between research and creative execution. They create increased brand loyalty, engagement and positive share of voice as well as large amounts of highly accurate psychological data.

Categorise

This purpose of this phase is to develop in association with a creative marketing team a real world in-ad and landing experience that can increase conversion by using both psychological insight and real-time personalisation (i.e. to categorise the consumer into the correct segment and deliver the segment relevant influential content).

The categorise phase uses the improved, refined and tested insights of the engage phase to create this experience. Further refinement of the segment differentiators allows Categorise experiences to start making intelligent inference about the consumer's segment in the first few seconds of interaction. This ability is grafted seamlessly into an optimised set of user-journeys and creative/content, to create a compelling experience that personalises to the consumer as they interact with it.

Profile

The purpose of the Profile phase is to establish how to measure segment differentiators (and therefore work out as much about the consumer as possible) from current digital real estate. This phase is critical in maximising the gathering of segmentation and psychological data and in broadening the net of behavioural analytics being deployed and interpreted.

As an example, an analytic phase may look at the web-analytics of consumers whose segments are known because they engaged with an Engage experience. This allows statistical algorithms to isolate potential indicators and to allow an iterative process of refining and testing analytics to make it capable of measuring the consumer's segment. Depending on the other data available it may also be possible to build statistical indicators for the consumer's state which then opens the window to a deeper understanding of the potential value in the brand's audience.

Surface

The purpose of this phase is to Surface segmentation information to every system within the organisation by making it available from a secure web-service. Current data and analytics are pushed through a machine learning layer which constantly analyses, enhances and builds segmentation information.

This layer is then wrapped in a secure web-service so that any system within the organisation can query a consumer's segmentation data. As the system is continuously building this data from analytics information in real-time, the data the service provides will be based on all information on the consumer available including interactions with the brand that occurring at that time.

Understanding the science behind Scalable Consumer Psychology

Principles of Influencing Consumer Behaviour

Marketing is all about influencing consumer decisions, but for any brand (when properly analysed) there is a short list of key decisions that they need to influence to gain market share and competitive advantage.

Every decision a consumer makes is made within a psychological context, a set of related background triggers that put the consumer into a very specific mental state. The way we think, remember and even our personality is dependent on this context. Understanding how your brand fits into the context of how consumer's make real world decisions is the key to understanding how to influence them.

Real-world Decision Making

Real-world decision making operates on a three-layer system for the consumer: -

Layer 1: Decision Avoidant – this is in fact an extension of our survival or flight/flight instincts. Consumer's operating from this layer will make no non-habitual choices and will avoid all marketing messages. As this represents the greatest part of our external interactions (as most of the time our other two layers are pre-occupied with our internal worlds), the main challenge is to draw consumers into interacting externally from the other layers.

Layer 2: Creative – to make a new choice is to progress through a creative process, to learn a new response to the world. The second layer controls all our learning of new responses and operates by deploying a jointly cognitive and emotional strategy to find a new path forwards which we recognise as feelings, temperaments and behaviours – adventurousness, moral concern, assertiveness etc. We select our strategies from 4 basic categories Energetic, Directed, Social and Explorative which break down into ultimately hundreds of strategic elements. The basic category of strategy we pick and the elements we blend together within it to create our response are context dependent.

Layer 3: Post-Rationalisation – Once we have made a choice we will post-rationalise it so that it fits with our identity, social group and explicitly held goals. We are more aware of our own post-rationalisations than anything else and our brains are ultimately engineered to believe them to be the source of our behaviour rather than our reaction to it.

Limitations of Brand Engagement

When we engage consumers in any form we gain “supportive” influence over their decisions, which is best described as a subtle draw towards our brands or products. An example is brand recognition – the more we recognise a brand, the more familiar it becomes, the more we feel subtly drawn to it by a sense of security and comfort.

We describe this as supportive influence, not because it isn’t powerful or powerful for a brand, but because it does not differentiate one brand from another. Any brand can effectively buy media exposure and through that create a recognition around its brand. This is why the market leaders have an advantage over newcomers.

Ultimately all supportive influencers operate on this brand equitable basis and so in most markets they cannot be used to gain market share from or competitive advantage by one market leader over another. To make progress therefore a brand needs to understand how to wield insights specific to itself of how to reduce avoidant influence and increase direct influence.

Avoiding Avoidant Influence

As described above (Real-world decision making) when consumers open themselves to learning a new choice/behaviour they will based on context select a particular top-level category of strategy (Energetic, Directed, Relational or Explorative). Any audience contains 4 fundamental segments, one for each of the consumers who align primarily with that strategy group. The type of influence we gain over the consumer is dependent on the relationship between the strategies present in the marketing message and the one the consumer is using: -

Influence	Situation	Consumer Response
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Avoidant	The marketing message contains communication within two or more of the strategy groups	The consumer does not know how to relate the message to their emotional world, suffers confusion and rejects the message
Supportive	The marketing message contains a single strategy which is not aligned with the consumer	There is a possibility of consumer engagement which when it occurs is experienced in a positive way. This experience does not powerfully influence consumer choice but will add supportive influence effects.
Direct	The marketing message contains a single strategy aligned with the consumer	The consumer is highly likely to engage and will experience this positively. The experience will create recall at the future decision point which will create a positive nudge towards your brand or product. The size of this nudge will be dependent on the more exact fit between the messaging strategy, previous brand experience and the consumer.

Avoidant influence is the primary reason that brands lose market against their competitors – essentially their own marketing is accidentally training their customers to avoid their brand. The driving force behind this avoidance is confusion and that confusion is typically caused by the engagement with marketing messages that mix incompatible strategies together e.g. trying to tell a consumer something is cheap and great quality often results in them not buying it, despite it seeming logically like a win-win.

Avoidant influence is unfortunately 5-10x more powerful than any other influence and so removing it from your marketing is the top priority from a psychological stand point. The most important way this is done is to map the 4 fundamental ways consumers think in key decision-making contexts and make sure that no communication mixes messages between thought processes.

Creating Direct Influence

As a brand, we never ultimately know exactly how a consumer structures their thinking within our critical decision contexts. The more we do know however the more we can outperform the competition who are reliant on supportive influence and hampered by avoidant influence.

At its most approximate level you are trying to determine which basic strategy group the consumer is utilising and communicate appropriately. By analysing each group statistically you can create an optimum and prioritised communication strategy which will create the greatest total level of direct influence the entire customer base.

Consumers are categories by discovering, testing and utilising specific analytics triggers that increase our certainty as to which group they fall into. Triggers can be used over a customer's lifetime by looking at their historic behaviour, storing segment information in CRMs and enacting personalisation through appropriate technology in each channel. Triggers can equally be fed through machine learning services and utilised to customise user journeys and/or content to generate true Real-Time Personalisation.

Although audiences fall into 4 aggregate groups in their top structure, there is a complex set of hierarchical groups that sit within these. Triggers can be utilised in a similar way to differentiate between ever more tightly defined psychologies. As these definitions tighten, the statistical average of the group becomes a better match to all individuals within it and so the levels of direct influence increase. How far you take this approach depends on many factors but predominantly the ROI of deploying more complex and personalised marketing against the sales uplifts it causes.

Psychological Insight in Creative Marketing

At the core of a marketing process is creativity, the process by which the "what" you are going to communicate is created. Psychological data can be used to improve the power of

this process's output by giving creative marketers access to the relevant psychological profiles of the segment(s) they are targeting.

At the core of psychological profile, is a set of data that describes a network of cognitive/emotional strategies that consumers who fit with that profile utilise. This network describes the connection outward from one strategy to all others, i.e. the probability that the consumer will move from the current cognitive/emotional strategy to any of the other typical strategies for that segment. Data will also exist in the network on the probability of the consumer starting at any given node when making a decision as well as the probability of them exiting the decision (i.e. rejecting the message) at any given node.

This raw data is processed into a profile, a detailed description of how the consumer thinks, feels, communicates and chooses. The complex sets of probabilities are transformed into an intuitive sense of how that person progresses through their decision, where they start, what paths they tend to tread and what's likely to cause confusion and therefore cause your message to fail.

On top of this profiles embed psychological research into the communication and perceptible biases of people using any given cognitive/emotional strategy. This type of information is translated into their preferences of the tone of content they will readily consume in that state; from information about copy style to image features to the structure of the narrative.

In the end, a psychological profile is an in depth description of a person who doesn't exist, but is a statistical realisation of the person you would create your marketing for if you want to create the greatest total direct influence over the entire segment that you are targeting. They are like highly detailed personas, but personas that are based on massive amounts of quantitative psychological data taken from your real audience rather than conjecture by a subject expert.

When we create a narrative to influence someone we use as much information as we know about them and fill the rest in with our knowledge of our own reactions. Knowing someone is 50, female and earns £40-60k a year tells you very little about their internal world. Similarly, being able to describe that a person has read 3 articles on Brexit and bought a pair of beige chinos on Tuesday at 4pm does not help very much either. In both

cases you are by no fault of your own left creating marketing for yourself (except trying to imagine what it's like to you at 50 and wearing beige trousers).

A psychological profile would tell you that a person relates their decision to buy to exploring the world particularly in a big picture artistic way; that they will respond to ideas of the product being created through the skill of traditional craftsmen in exotic places; that they will find discounting disruptive to their buying motivation; that they respond to poetic rhythm in words and respond to images of couples looking at ocean sunsets; that the use of onomatopoeic word plays will intrigue and engage them.

If you knew information like this, then then this tells you an enormous amount about where to take your marketing creative. This is what a psychological profile is, except in far greater volume and detail, and why it is such a powerful tool for the creative marketing process.

Moving an audience to action

Consumers don't jump from non-customer to regular loyal customer. It is always a journey of several key decision points to make that transition. To be effective in our influence of the audience you want to map both the consumers psychology at the decision points and their progress along the line between unengaged potential customer to loyal super fan. Once you know both those things you can target the right message for that particular consumer to directly influence the next key decision point they need to flow through.

We call the progress point of the consumer along the journey their **state** and their psychological segment at the decision point their **type**. If you collect good information around the states and types of your consumers it allows you to build up a detailed picture of your crowd and most importantly how a campaign should be constructed to create the biggest value for the brand. This construction typically keys into other factors like seasonal trends to generate an optimum annual strategy for your marketing.

Acquiring Positive Share of Voice

Consumer influence does not occur in isolation but in our modern hyper connected digital world. It is as important to consider the social effects of influence rather than just the isolated individual effect.

Psychological data however is not just useful and interesting to the brand, it is equally valued by the consumer. Creating for instance digital quizzes (*10 questions to determine which world leader you are most like.*) that leverage the predictive power of psychological databases and machine learning to give the consumer an outcome story (e.g. their alignment with a particular celebrity, activity or product) is highly valued by consumers and makes them highly motivated to exchange psychological insight with you. This approach allows the gathering of highly detailed psychological data in large volumes.

Further however, when these outcome stories are set in the right narrative to deliver a socially desirable view of the consumer then they become highly sharable. By grafting the brand, the psychological insight, the outcome story context and the primary influence message together, it is possible to create campaigns that generate multiples in the effectiveness of their influence through social sharing of their outcome stories.

Glossary for Scalable Consumer Psychology

There are some key ideas in Scalable Consumer Psychology, outline here, which help understand the process much better.

Choice	When a consumer consciously considers his or her options, and from completing that consideration makes a decision. This is contrasted against the vast majority of decisions which are made unconsciously and habitually.
Recall	The activation of memories of an element of an experience (e.g. the jingle from a TV ad) at the point where the consumer is making a choice.

Influence	When a recalled element of an experience affects the outcome of a consumer's choice in the designed and desired way.
Customer Journey	The significant interactions, experiences and choices a consumer makes over their lifetime exposure to the brand.
Point of Choice	A significant moment in the consumer's journey when they make a choice e.g. when they choose to buy a product from the shelf.
Cognitive/Emotional Strategy	An active choice making strategy that the consumer enacts, typically considered at the point of choice. These strategies combine emotional and cognitive dimensions e.g. Adventurousness, Diligence, Caution.
Confusion	The breakdown of cognitive order (confused thinking) with the consumer, caused by a recall that does not fit with their overall world view and current cognitive/emotional strategy.
Aborted Choice	When a consumer stops considering their options due to confusion, and returns the decision back to unconscious/habitual thinking.
Concept	Foreground cognitive elements that flow in a stream of consciousness as we consider a choice. Generally, these are

	words though some people think in pictures, numbers etc.
Context	The overall background or 'inner-world' in which a consumer makes his or her choice. This inner world is often only weakly related to the physical environment that the consumer is in.
Profile	A detailed description of how a consumer thinks, feels, communicates and chooses at the point of choice. This will include the ideas mostly likely to influence him or her and how best to communicate those ideas through narrative structure, copy/script style, image selection etc.
Identity Reveal	Profiles can be created to help a consumer understand themselves. These are generally delivered to the consumer at the end of an experience that has asked them some psychological questions. By using a database of known correlations about psychologies it is possible to tell users surprising things they didn't know about themselves.
Identity Attachment Response	The psychological process, identical to a process involved in falling in love, where strong feelings of attachment form around someone/ something that helps us find unknown elements of ourselves. Identity Attachment Response is usually

	triggered by an Identity Reveal in a well crafted experience.
Segment	A way of grouping an audience together in a manageable number of segments (e.g. 4-5) so that targeted marketing has the greatest overall impact. Each segment will have a psychological profile which will underpin the optimal creative strategy to be deployed for that segment.
Segment Differentiator	A segment differentiator is a behavioural indicator that can tell whether a consumer is likely (positive) to be or not likely (negative) to be in a segment (positive). Segment Differentiators can be based on generic behaviour, behaviour in specific experiences (e.g. psychological quizzes), based on historic data or used in real time.
Statistical Algorithm	A statistical algorithm is a computer/mathematical program that can predict the probability of a certain outcome (e.g. the segment of a consumer) based on a large number of input indicators. The difference between statistical algorithms and machine learning is that the algorithmic process of the former is known and designed by a statistician whereas the latter is unknown.
Model	A statistical algorithm that can turn behavioural indicators (e.g. from web-analytics) into segmentation/

	personalisation and/or customer value/econometric information.
Activation Vector	This vector describes all the likelihoods of a consumer starting the process of considering their options with a particular concept. The concepts with the highest probabilities are essentially top of mind and most important to consider in terms of influence
Exit Vector	This vector describes all the likelihoods of a consumer aborting their process of consideration if they come to a particular concept. The concepts with the highest probabilities are essentially no-go areas for the brand.
Associative Matrix	The associative matrix describes the association between all the common concepts that a consumer will rotate through when considering their options.
Influence Vector	A vector that describes all the probabilities that a concept will be in the optimum influence strategy. This vector is generated algorithmically from the activation vector, exit vector and associative matrix and is used by statistical algorithms to calculate optimal segments.

Consumer Type	A category of consumers that are in the same segment across all considered points of choice in the customer journey.
State	The position on the path of that consumer (or consumer type) between no brand knowledge and high brand loyalty.

Concepts in Scalable Consumer Psychology

Choice

In order to consider the problem of how consumers choose their brands, products and behaviours, its important to define and clarify what a choice is. Our brains, computationally speaking, make conservatively billions of decisions a day. The vast majority barely ever exist in our consciousness because they are so low level e.g. how to put one foot in front of the other. Of the small set that we would potentially identify as chosen behaviours, around 5,000 per day, we have only the mental capacity to consider around 50.

This effectively means that 99% of meaningful behavioural decisions we make are unconscious. When we make a decision unconsciously, it is based on habitual response. Most of what we throw into our baskets at the supermarket is what we bought last time and the only way that changes is if we take time to consider our actions.

To gain a new customer to a product or brand needs that person to behave out of habit, which in turn requires them to consciously consider their options. In SCP the definition of a choice is when the consumer considers their options consciously and this results in a behaviour (even if it is identical to the habitual behaviour).

The central problem SCP is solving, is when a consumer enters a specific choice (e.g. standing at the shelf and considering shampoo) how we create marketing messages that have both optimum *recall* and *influence* at that point of choice. This problem can be

solved at a whole audience level or right down to an audience of one personalisation model.

Psychological Context & Message Recall

Context in psychology is highly relevant in marketing. Everything we do occurs within the physical context around us and in a similar way, everything we think and feel occurs within a psychological context, a background to our inner world.

How closely our psychological context relates to our physical context determines how close we are to creating a choice: when we are deep in thought (be that a day dream or problem solving) our psychological context can become disconnected from our physical context, however when we are about to act, our psychological and physical context relate closely.

When we take information in and memorise it, we do so within a context. When we recall information we also do this within a context. What we remember is closely related to the context in which the experience occurred. The closer the original experience context is to the current context, the more likely we will recall that experience.

In marketing, therefore we need to understand two distinct and vital moments in time

- 1) Message consumption: the place where a consumer has an experience of our brand or product.
- 2) Point of choice: the place where the consumer makes a choice or potentially displays a desired behaviour (e.g. purchase) toward our brand or product.

Achieving matched contexts in brand messaging

So, to best recall and respond to any of our messaging, it is clear the psychological context when message consumption occurs must match as closely as possible the psychological context of the point of choice.

When the psychological context at the point of choice is well matched, most of the elements that must exist, actually exist in the consumer's inner world rather than directly being linked to any physical context.

This means that with an understanding of these elements, triggers can be designed to cause those effects to be activated in a way most compatible with the environment of message consumption. By activating these elements, the consumer enters the same psychological context as they will experience at point of choice. This is key to success, and is designed in to the discovery project at the outset.

The result of matching the psychological contexts in this way is to dramatically increase message recall at point of choice. Psychological context mapping is therefore the first stage of any SCP exercise. As we need to be able to induce the right psychological context to be able to study the right thoughts, feelings, communication styles and choice frameworks. It is also the foundation for good creative as no matter how influential your message is, if it isn't recalled at the right time it will have limited impact on actual behaviour.

Confusion & Direction of Choice

The mind is a complex and chaotic place where ideas collide, fragment and fuse continuously. Contrary to what you might expect, we use the world to help us lower confused state, organise our ideas and create order in a chaotic world. When people are placed in sensory deprivation the mind does not relax but within few minutes becomes chaotic eventually causing sensory hallucinations and even psychotic breaks. In short, the world helps us stay sane.

We are built to seek out experiences that reduce confusion, even though a behaviour might look thrill seeking or stretching, often at another level it is stabilising our internal world through creating a greater sense of purpose. If we think about consumers actively seeking experiences that reduce their confusion and also that they are selecting only 1% of possible choices to do that with, then we can understand at some level the consumer is continuously looking for, assessing, experimenting with, rejecting or engaging with experiences that involve choice.

Within the space when a choice opens, it is also sensible to see that consumers gravitate to options that give them reduce confusion (clarity) e.g. heading towards a familiar brand. What separates the brand aware from the brand loyal from the super fan? The driving force and differentiator is confusion around your brand/product.

Somebody who is brand aware will typically experience a subtle draw to your products caused by cognitive bias, however this draw is not large enough to be exclusive and the

consumer will not display much loyalty. For someone brand loyal, there will be 1-2 mental associations which are embedded in your brand (products, experience, values) that provide them with a moderate degree of certainty. A super fan will have 3+ associations providing a high degree of certainty.

Reducing our confusion feels good, so we build positive emotional associations around those brands that do it. More importantly

- 1) It becomes a downhill mental slope to pick the brand around which the consumer has the lowest confusion.
- 2) It becomes an uphill task to select a brand that we don't regularly buy if it creates more confusion than our current choice.

Small decreases in brand confusion can lead to big increases in bias (loyalty) towards your brand. To reduce confusion, we need to understand the consumer's mental world and how our message fit into that world to decrease their confusion. This information is generated in the form of Psychological Profiles in SCP.

Psychological Profile

A psychological profile is in essence a detailed description of how a person thinks, feels, communicates and chooses at a particular point of choice. In terms of Universal Films, a typical point of choice might be "which film should I go and see at the cinema?". The profile takes two types of information (contextual triggers, cognitive/emotional map) and works them into an intuitive and actionable description of the person.

The cognitive/emotional map lays out the most common ideas and feelings that run through a consumers head at the point of choice. Each idea typically fits within a small number of "strategies" e.g. being adventurous or imaginative which in turn tie to typical communications styles associated with that way of thinking. On top of this three metrics are defined for every idea

- 1) Activation probability: the probability that this idea will be the first to occur at the point of choice.

- 2) Confusion level: the level of confusion caused by this idea which will be related to whether associating with it is good or bad for your brand.
- 3) Association: how closely associated is this idea with all the others. Typically, your mind cycles from one idea to the next nearest.

A psychologist can take this raw information and turn it into a profile by working through the best way to structure and communicate a message to have greatest impact.

Examples would be turning: -

- emotional/cognitive strategies into communications styles; how to shape copy or select imagery.
- describe how to structure the ideas of your narrative (be that post, video or image) to make it fit and therefore be absorbed optimally by the consumer.

Profiles can be based on individuals, but more often they are based on a mathematically optimised profile for a segment – not the average of all people in the segment, but the person/profile which by structuring messaging from will have the maximum total influence on the segment.

Psychological Segment

People are diverse, they have different ways of thinking, life goals and environments. Realistically however we can't create marketing collateral from scratch for every user, we need to be able to group them into 4-5 segments to make this manageable. How do we group people together so, within the confines of practicality of the number of segments, we can give each group a message that optimally influences them.

Psychological segmentation breaks the audience down into segments based on an understanding of the consumer, the brand and the relationship between the two. This understanding is then combined with complex algorithms that can identify: -

- how to group individuals in a way where a single well-crafted message can be highly influential

- how to distinguish between types of consumer so they can be practically identified and targeted.

Psychological Model

A psychological model is a statistical algorithm that can turn behavioural indicators (e.g. from web-analytics) into the data required to create a psychological profile. Models are created by quantitative psychologists and statisticians as an upscaling process in SCP.

Psychological Models can be used at a number of levels from helping to create a Segmentation Model, to populating a CRM, to being used to train machine learning layers to maximise programmatic targeting.

Psychological State

A brand is not interested in a single point of choice but a series of them across the customer lifetime. Each point of choice will generate a different context, segmentation model and profiles. This allows you to target any behaviour you want to influence and generate targeted marketing for it based on the segments, context and profiles.

The problem this doesn't answer is which behaviour should I target with which customers. For consumers in any segment and any choice point they will exist at a different level of positive influence. The psychological state of the consumer is their level of positive influence across all the points of choice i.e. a description of their relationship to your brand.

By studying the dynamics of psychological states, it becomes possible to understand the easiest way to increase current customer value/loyalty and the probability of being able to make that increment. If you further use econometric data, you can answer the question what is the average increase of customer value for that increase in loyalty. Armed with this information you can work out at a top level what campaigns to run and when, and at a lower level which kind of messages to target at which consumers.