The Six Behavioural Science Principles that Make or Break Innovation in Technology, Durables, Services and Other Non-CPG Markets

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Behavioural Economics (as the application of different strands of psychology to understand and predict economic behaviour) highlights many of the principles underlying behaviour. In particular, psychologists or behavioural economists (depending on how you market yourself) are wont to show how we frame our options, form impressions and construct preferences before we ‘decide’ or choose, all of which run on auto-pilot rather than ‘full-on’ reasoning processes in many instances.

Many of the mechanisms uncovered by Behavioural Science over time are now bundled in the ‘dual process’ framework of System 1 and System 2, a general psychological theory of human reasoning. System 1 is fast, intuitive and very much informed by previous experiences whilst System 2 calls for more intensive hence slower reasoning (but not necessarily fully conscious or self-reflective).

In a previous piece, some of the mechanisms at work as consumers evaluate concepts were highlighted for consumer packaged goods (CPG); they are typically market situations where CPG buyers have plenty of reference points (e.g., from mental representations of product categories, similarity of usage occasions, repeated and frequent purchase and consumption experiences, etc.).

How behavioural science informs the adoption of non-CPG – such as technology products, durables, healthcare and well-being, pharma or services (including digital) – shows some clear differences with CPG. This review:

- shows how Ipsos incorporates the various mechanisms at work in the adoption of new technology products, durables and services into its InnoQuest*Vantis evaluation, forecasting and optimisation tools,
- explains why these tools have been so successful over the last 30 years at forecasting market success and helping companies make the best of innovation opportunities across a wide range of technology, durables, services, healthcare and pharmaceuticals, and many other non-CPG markets,
- highlights the six key behavioural principles that make or break innovation in non-CPG sectors.
Reference Points

Innovation in technology and service sectors often forces potential buyers to frame their options outside the reference of whatever was available yesterday. Such innovations are able to push products and services into categories (or sub-categories) of their own and limit the impact of reference points on how innovation is perceived, impressions and preferences are formed and consumer demand is impacted.

Relying on previous experiences is one of the most effective ways to avoid making bad decisions or choices and negative emotions. It is also the most efficient route because it does not require us to consider new options and process much information. However, innovation in technology, durables and service markets often makes it difficult to rely on previous experiences to shape future choices. Consequently, consumers are likely to engage in more information processing about new options. Information processing can be of the quick impression type (System 1) as much as slower and more effortful processing (System 2). For example, consumers formed quick positive impressions of Google Wallet based on a ‘turn your mobile phone into a wallet’ promise but in the process of checking-out Google Wallet beyond their initial impressions, they eventually found out that their carrier doesn’t support it. Consumers moved from impression to fact.

Sub-contracting System 2 to Devices

More and more of our brain functions are sub-contracted to devices from orientation, location, searching alternatives, canvassing views, comparing, evaluating, etc. This makes the cost of System 2 processing very low and its over-riding (or making its voice heard vs.) our first impressions more likely to happen. For example, the attention of buyers of devices or entertainment systems can be initially attracted to some options because of specific cues (brand, price, specific functionalities, aesthetics, location in-store, etc.) but using their device to seek online reviews while in-store can quickly and strongly reshape buyers’ options and preferences.

The Cost of Behaviour

Consumer psychologists have long established that consumers have a desire to ‘maximise’ outcomes (even if they are not “impeccable” maximisers) as well as a drive to minimise effort (mental or physical ‘costs’). The pressure to pay attention and process information related to innovation in technology, durables and service markets rather than to rely on obsolete previous experiences or knowledge pushes consumers to constantly ‘decide’ whether to engage or not. This is not a self-reflective process but an automated and largely unconscious cost-benefit analysis that reveals consumers’ level of motivation: can I be bothered paying attention, sustaining attention and processing (forming impressions, quick comparisons and evaluations, etc.)?

InnoQuest*Vantis uses an indirect mechanism to infer the impact of motivation and ‘costs’ on likely behaviour by asking consumers to which extent they would seek more information after being exposed to some limited information about the innovation. Across multiple sectors, this has proven to be one of the more effective predictors of behaviour.
Motivation and Quick Impressions

Motivation is what moves consumers (first on the inside as impression and desire and then on the outside as purchase behaviour). Consequently, a key metric of InnoQuest*Vantis tests is need alignment: does the new product ‘solve a problem or fulfil a need’? This is not measured as some kind of deep self-reflective evaluation of an innovation but more simply as a quick impression of how a new product or service resonates with consumers.

The Power of Differentiation

Behavioural science (from Bartlett’s schemas to Tversky’s contrast model) shows how similarities and differentiation play a disproportionate role in how we form impressions. Technology, durables and service sector innovations offer many points through which differentiation can be communicated to and perceived by consumers (e.g., advertising, distribution, performance expectations, consumer experience, aesthetics and visual appeal, tangible features, pricing, overall impression, feel, etc.). The technology sector provides many cases of innovation that creates massive differentiation in consumers’ minds simply because it disrupts some or all points of consumers’ experiences so radically: Uber, Airbnb, self-regulation devices like Misfit or Fitbit, Instagram, etc. A key metric of InnoQuest*Vantis tests is differentiation measured as perceptions of being ‘new and different’, whichever way consumers construct differentiation.

Fears and Uncertainty

Social psychologists and neuroscientists describe trust as an efficient mechanism we use to handle complexity, especially in situations of risk and uncertainty. Consumers’ response to innovation in technology, durables and service markets is sometimes coloured by unspoken fears or uncertainty that create distrust and inhibit engagement. Our research clearly shows that lack of trust inhibits attention and reduces consumers’ likelihood to engage and process innovation. Peer-to-peer (P2P) lending is a classic case of uncertainty holding back behaviour. There is no shortage of borrowers for small personal or micro-business loans but most retail investors remain unsure: uncertainty about the P2P sector’s regulation, no recognisable brand names and questions about online security. Yet, as online transactions become routinely embedded in our lives and the desperate search for yield among retail investors endures, behaviour will change and P2P will increase momentum. Because of the many sources of uncertainty, InnoQuest*Vantis tests measure believability and clarity and use roundabout methods to uncover latent fears and uncertainty.
Jumping on the Bandwagon

Many social psychologists (from Ash to Cialdini) have extensively and vividly described the impact of other people on individual preferences, decisions and choices. Others like Rogers and Bass specifically worked on describing and formalising the link between social forces and the diffusion of innovation. Once ‘innovators’ and ‘early adopters’ are on board, the conditions are set for others to jump on the bandwagon and accelerate the diffusion of an innovation in its target market. Availability and pricing can of course act as constraints on diffusion but other factors also act to make adoption faster in its market. The rise of social media only amplifies and accelerates the bandwagon effect on the adoption of an innovation. Spotify has grown from 6 million paid subscriptions in 2013 to 10 million in 2014 and is expected to reach 15 million in 2015. Apart from its aggressive geographical push compared to other services like Pandora, Spotify has created strong network effects through collaborative playlists as well as general playlists and song sharing with Spotify connections. The more new connections Spotify makes on its platform, the more its appeal increases for potential subscribers. Spotify recognised early on that music was the ideal sector to build a subscription-based business on through powerful network effects due to the social nature of music experience.

InnoQuest*Vantis tests systematically measure buzz through word of mouth as well as consumers’ social media activity. Sometimes, an innovation can show limited impact in the short term but the extent and shape of its buzz can powerfully impact the speed of diffusion in its target market and pay-back time. Ipsos’ modelling of diffusion effects helps marketers maximise market opportunities and carefully plan their roadmap for future innovations whose half-life is getting shorter and shorter.

Emotion and Intention

Contrary to shallow interpretations of research in cognitive psychology, System 1 cannot be reduced to emotion as it is as much about the absence of wilful and effortful processing of situations as it is about using emotion to construct impressions. Relying solely on emotion and intention results in sometimes severe distortions of what consumers eventually do in non-CPG markets although both evidently capture something of consumers’ pre-disposition to act. Our testing of Ultra High Definition 4K TV showed strong performance in both emotional pull and purchase intention. Sales, however, remain slow as potential buyers process the situation of how difficult it is to stream 4K movie content for viewing. This is unlikely to change until the cable industry dedicates a ‘broader band-width’ channel to move large 4K files on the internet. InnoQuest*Vantis tests measure both emotion and intentions but we also realise that the first rule of behaviour change has always been (and will remain) ‘make it easy’.

From Concept Testing to Market Success

InnoQuest*Vantis tests carefully combine the various aspects of consumers’ response to innovation in technology, durables, service and other non-CPG markets, all of which are measured as quick impressions after consumer exposure to innovation. Those impressions reflect the various mechanisms used to ignore, stop paying attention to as well as make sense of and engage with innovation: motivation and ‘costs’, trust (impacted by believability and clarity), differentiation, emotion and intentions.

Marketing plans and the response to price further drive expectations of consumer demand. Social media connection amplifies and accelerates the diffusion of innovation.
Over the last 30 years Ipsos has conducted 30,000 InnoQuest*Vantis tests in a multitude of categories of technology, durables, service, healthcare, pharmaceutical, automotive and other non-CPG markets around the world. InnoQuest*Vantis has been remarkably successful at identifying the markers of in-market success and helping marketers optimise business opportunities for their innovations. When non-CPG products or services have been launched, the validation track record is a staggering forecasting accuracy of ± 20% in 90% of launches.

A key reason for the success of InnoQuest*Vantis is its ability to capture the essential aspects of how consumers respond to innovations in non-CPG markets through short surveys. Indeed, this brief review shows how key insights gained from behavioural science dovetail very closely with InnoQuest*Vantis tests. Research design has been matching principles of behaviour learnt from marketing academics and consumer psychologists right from the day the Vantis team ventured into non-CPG business sectors 30 years ago. Without such close alignment, we would be at a loss to account for InnoQuest*Vantis’ success with clients and sectors around the world.

Six Principles from Behavioural Science to Maximise the Adoption of Innovation

Six principles emerge from Behavioural Science that can make or break an innovation’s success in technology, durables, services and other non-CPG sectors:

1. **Address a real consumer need**: Whether it makes life simpler or saves time or removes some negative, innovation has to resonate with people and the way they live their life.

2. **Ensure differentiation**: Differentiation has two direct benefits. First, it increases the likelihood that consumers pay attention. Attention is the first step to choice. Second, differentiation multiplies the impact of an attractive (i.e., motivating) innovation on its adoption.

3. **Create desire but address uncertainty upfront**: An attractive innovation creates desire but fears and uncertainty create barriers: a trust/distrust mechanism kicks in strongly, early and fast. Fears and uncertainty need addressing upfront so that consumers move from attention to engagement rather than switch off. Yet, switch-offs may be retrieved further down the pathway: what early adopters do becomes a powerful signal of trust for everyone else to jump on the bandwagon.

4. **Accelerate the bandwagon effect**: Digital life multiplies avenues to increase the speed of diffusion and advance pay-back time. In an increasing number of sectors, faster changes to technology mean shorter lifecycles. Time to pay-back becomes critical.

5. **Maximise value**: Value is in the eye of the buyer, not in the cost-plus pricing formula. This means that it is crucial to determine both how much innovation resonates with potential buyers and their willingness to pay (preferably through methods that reveal willingness to pay (WTP) like choice models rather than asking directly).

6. **Push doesn’t make up for pull**: When innovation does not pull enough consumers, one option is to increase push (media spend, availability, etc.) to make the numbers. A better option is to fit around the type of innovation. For this reason, we have identified two dozen innovation archetypes and laid out their respective business strategies: for example using an appropriate pricing strategy or riding the bandwagon effectively over the life cycle, etc. Pushing innovation is most rewarding (and most efficient) when there is potential for mass consumer appeal or the push accelerates pull (as in ‘network effects’).
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Pascal Bourgeat, Ph.D. (Consumer Behaviour) is Director of Behavioural Science at Ipsos in Australia. He designs research and works with private and public sector clients and Ipsos teams on a range of behaviour-related issues: CPG consumers and shoppers, customers of service sectors, users of public sector services like health and transport, patients and healthcare professionals and more.

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Ed Wolkenmuth is the Founder and Chairman of Vantis, a specialization of Ipsos Marketing that engages with companies outside the fast moving consumable goods sector. With 40 years of experience, Ed consults with Product Marketing & Development executives at many of the FT500 global companies. Prior to the acquisition of Vantis by Ipsos in 2002, Ed was President of ACNielsen Vantis, and held the position of standing member of the ACNielsen BASES Management Board. He earned an MBA from the Wharton School of Business and holds a Master’s of Science degree in the field of Engineering.
About Ipsos

Ipsos is an independent market research company controlled and managed by research professionals. Founded in France in 1975, Ipsos has grown into a worldwide research group with a strong presence in all key markets. Ipsos ranks third in the global research industry.

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