Using an emotional model to measure ad effectiveness

An emotional metric could improve the measurement of advertising effectiveness compared with traditional evaluative techniques, writes **Orlando Wood,** BrainJuicer

ADVANCES IN NEUROSCIENCE in the past 20 years have told us much about the way the human mind works. We now understand that emotions guide and bias our decision-making and are essential for it. If we ignore our emotions, we do so at our peril.

Not only does it turn out that emotions are more central to our decision-making than we have previously acknowledged, but the role of our core consciousness in decision-making is also being called into question. Scientists at the Bernstein Centre for Computational Neuroscience have shown that a decision is formed in our subconscious as much as six seconds before we believe we have consciously made that decision.

Much has been written in recent years on emotion and its role in advertising. Theories of high and low attention processing have been advanced to explain the role of emotion. Binet and Field (2007) have illustrated with their analysis of IPA data that high attention processing - where the viewer brings conscious thinking to bear on an ad - is "not always necessary" and "not always sufficient". Heath (2009) also asserts that "we always form an attitude about a decision through emotion and subconscious rational processing before we start to consciously and actively 'think' about it". He asserts that TV advertising is not goal-driven but stimulus-driven, and it is our feelings when watching TV ads that inform sub- and semi-conscious thinking, which in turn leads to covert brand-linked attitude change and, ultimately, a decision.

Yet, the research industry has for years structured its pre-testing techniques around a top-down, highly rational, information-processing model of 'high attention processing', which rests on the belief that the communication of a well-branded message with the impact to gain our conscious attention is the route to effectiveness. This approach does not fit at all with recent learning from neuroscience and, it seems, does not even get close to what we really need to measure. Could it be that established pre-testing methods are imposing an artificial, unhelpful and unnecessary 'maximum headroom' on advertising, making it difficult for highly emotional ads to get clearance? After all, we can all, no doubt, think of at least one example of a brilliant ad that has fallen foul of traditional pre-testing, only to go on to be extremely successful in market, thanks to the gut-feel of a brave marketer.

FIGURE 1

BrainJuicer has just conducted a research experiment that draws on IPA effectiveness data to test the hypothesis that traditional evaluative measures, such as persuasion and brand linkage, discriminate against engaging effective advertising. We wanted to establish whether they could be working against effective ads and investigate whether an emotional metric could improve the measurement of advertising effectiveness and provide a greater range of sensitivity.

The research was undertaken in conjunction with the IPA so that we could use its effectiveness data. Our experiment compared the results of a number of traditional measures and an emotional measure - Brainjuieer's award-winning FaceTrace - with the IPA's data. FaceTrace uses pictures of human faces in different states of emotion to measure emotional response. It is based on the work of psychologist Paul Ekman, who has established that there are seven human emotions that we all express in the same way, regardless of our background or culture - happiness, fear, disgust, anger, surprise, contempt and sadness. He concludes that these are the basic emotions required for human existence. These emotions, and the intensity with which any emotion is felt (intensity also takes into account those feeling nothing/neutral), are the key quantitative outputs from the measure. We use faces in our question because they are a direct route to the way people are feeling, and minimise the evaluative filters that are usually applied by respondents to market research questions.

A total of 18 historical TV ads were tested monadically from 2006 onwards from campaigns where TV had a weight of at least 50%. The ads were from food, drink, household, personal care and durables categories. The analysis was conducted on behalf of the IPA by Peter Field, an independent consultant, conversant with the IPA effectiveness database. At no point was BrainJuicer party to the effectiveness data for any individual ad.

The effectiveness measure that we use in our experiment is the average number of 'very large business effects' reported in the questionnaire that accompanies each IPA paper submission. These business effects comprise market share gain, reduction of price sensitivity, customer acquisition, profit gain and loyalty. The number of these very large business effects has been shown by Binet and Field in *Marketing in the Era of Accountability* to be strongly correlated with market share gain and indicative of higher ROI. It is also available for every ad of interest, whereas ROI and market share gain data are not. The database also holds spend data for many of these ads in the form of excess share of voice (ESOV), which enables us to take spend into account.

BrainJuicer provided the data collected for the 18 ads to the IPA across a number of pre-testing measures. The ads tested were ordered on their scores for every individual measure of interest For example, to assess the ability of the 'persuasion' research measure to predict effectiveness, we would order the ads on how well they had performed on 'persuasion', with the most persuasive ads at the top of the list and the least persuasive at the bottom. An average effectiveness score would then be

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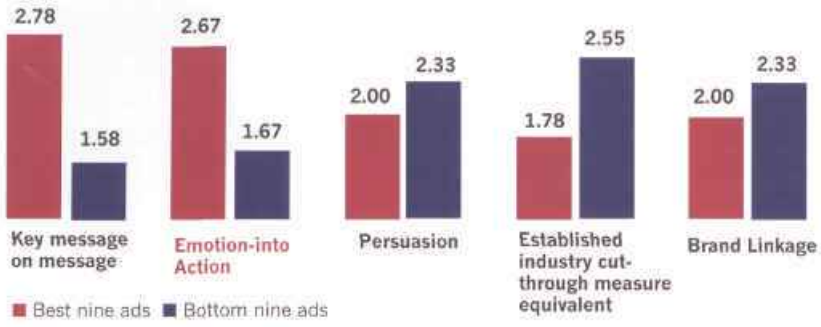
FIGURE 2

Business effects

Average number of business effects achieved for top and bottom nine ads when ordered on each measure



Base: 18 ads for which business effectiveness data is available from the IPA *Source: BrainJuicer*

supplied by the IPA for the best and the worst nine ads on 'persuasion', as measured by the research. If the best nine ads on this measure were, on average, more effective than the weakest, we could reasonably conclude that this measure was a sound predictor of business effectiveness.

The findings of the experiment represent a real challenge to the established high-attention, information-processing advertising model. The analysis reveals that emotional response - simply the way people feel about an ad - is a better predictor of effectiveness than commonly used information-processing measures. It reveals that persuasion and brand linkage measures are only likely to predict moderate levels of effectiveness, and do indeed actively discriminate against highly effective ads. Figure 1 shows how these traditional measures are better at predicting mere 'large effects' than the 'very large effects' associated with ROI and share gain, whereas emotional intensity is a better predictor of very large effects.

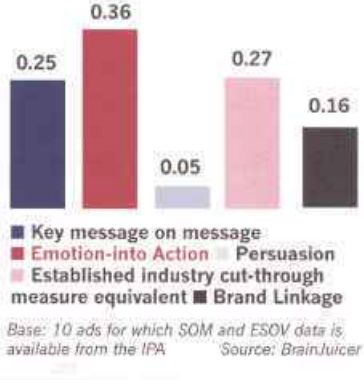
Furthermore, the results show how the presence of emotion is particularly indicative of share and profit gain, and reductions in price sensitivity, and that established cut-through measures actively discriminate against ads that delivered on these business effects in market. That emotional campaigns can deliver more effectively than persuasion or information-based campaigns on sales, share or profit objectives is supported by Binet and Field's analysis of the IPA DataMine (2007).

Using observed relationships between each of the emotions and likely behaviour, we have developed an Emotion-into-Action score that translates the emotional profile of an ad into a measure that is highly predictive of both effectiveness and efficiency. This compares very favourably with other quantitative pre-testing measures, which mislead and fail to predict the effectiveness of the ads on test (Figure 2). It is also predictive of scale of profit growth, while higher scores on an established industry, cut-through, measure equivalent are indicative of lower levels of profit growth in market.

FIGURE 3

Efficiency variation

Extent to which variation in each measure explains variation in efficiency (R-squared values)



Base: 10 ads for which SOM and ESOV data is available from the IPA *Source: BrainJuicer*

So what about message delivery? The ads that perform strongly in our test on message delivery are also effective, but they have the unfair advantage of a disproportionately large amount of spend behind them, in the form of high levels of ESOV. This is defined as share of voice minus share of market and has been widely shown to be a strong driver of share growth (Figure 2).

When we examine spend (where data is available) to establish efficiency, we see that the ads performing well on message delivery are much less efficient than those performing well on Emotion-into-Action. This can be seen in Figure 3, which shows the ability of each measure to explain efficiency (efficiency calculated as share of market gain divided by excess share of voice, adjusted using JP Jones's published data to correct for brand size and take into account the differing levels of 'equilibrium SOV of brands of different sizes *(Marketing in the Era of Accountability*, 2007, pp47-48).

In other words, the ability of an ad to deliver on its intended message in research is indicative of very large business effects in market, but only at high levels of spend, whereas Emotion-into-Action can predict equally large business effects in market at far lower levels of spend. An emotional communication strategy therefore gives you a greater bang for your buck, but far from spending less on ads with high levels of emotion, we believe it is important to spend more on them precisely to leverage their greater efficiency.

Measuring emotional response should be central, not peripheral, to pre-testing. It will ensure that we do not unfairly punish strong emotional ads and lead to better ROI. It will tell you where to focus your investment and better predict profit growth for your brand.

Fonte: Admap, Washington, v. 45, n. 1, p. 40-41, Jan. 2010.