

decode Science Update 1_2013

The peak-end effect:
Optimising customer experience with contact
points

April 2013

Welcome to the decode Science Update

No matter what do we in marketing – whether it be organising an event, producing a TV commercial or designing a customer journey, we want to leave the customer with a positive impression. But how exactly does that work, how do customers evaluate an experience with our contact points? One might intuitively assume that we, as customers, somehow establish a mean average of all the experiences that we have had, and that this average then determines our subsequent assessments. If, on average, we have had more positive experiences, our assessment will be better. Most surveys, e.g. pretests or customer satisfaction studies, are based on this idea: customers rate the commercial, the hotel visit or the customer journey according to a scale (e.g. according to enjoyment, satisfaction).

But the brain works differently – it does not establish a mean average, but derives the overall assessment from specific moments in an experience. This has consequences for the way in which we structure contact points with customers, and how we can make them more effective. **So what determines whether we rate a commercial, or our experience of a product or a service, as positive?** Knowing the answer to this gives us a powerful lever to improve the experience and therefore our customers' evaluations.

In this Science Update you will learn how customers react to experiences with a brand, which levers determine the overall evaluation and how these can be used for our own marketing activities – from TV ads to the customer journey.

We hope you enjoy this Science Update
Your decode team



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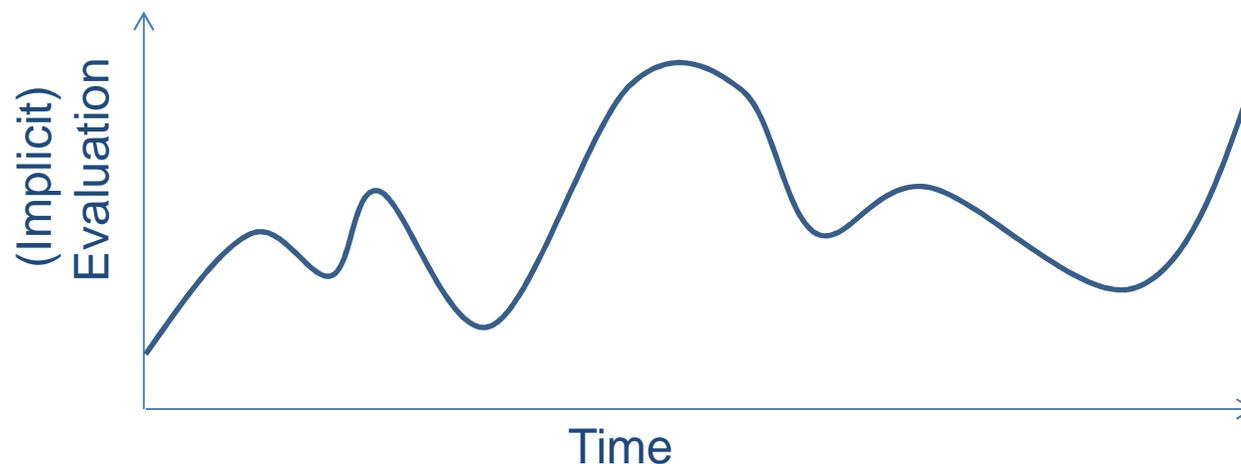
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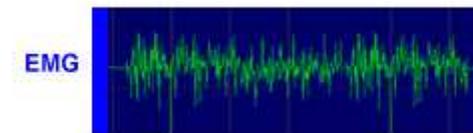
Evaluating experiences: From moment to moment

Our brain constantly evaluates everything that we experience and perceive. It evaluates every moment according to whether it is positive or negative. This evaluation happens mostly implicitly, when we are not consciously thinking about whether we find something good or not. The result of the evaluation – known as the valency – shows whether an experience is positive or negative. **This evaluation is very sensitive and varies from moment to moment.** So when we watch a TV commercial, our brain continuously evaluates whether the experience is positive or negative (valency). If these evaluations are measured over time, e.g. by skin resistance reading or by the tracking of facial expressions, *temperature curves* are produced with troughs (negative evaluation) and peaks (positive evaluation).



Examples

Electromyography (facial muscles)



Electrodermal activity (skin resistance)

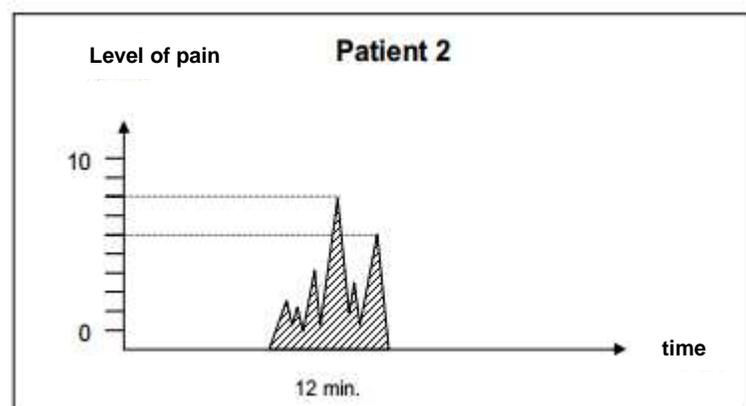
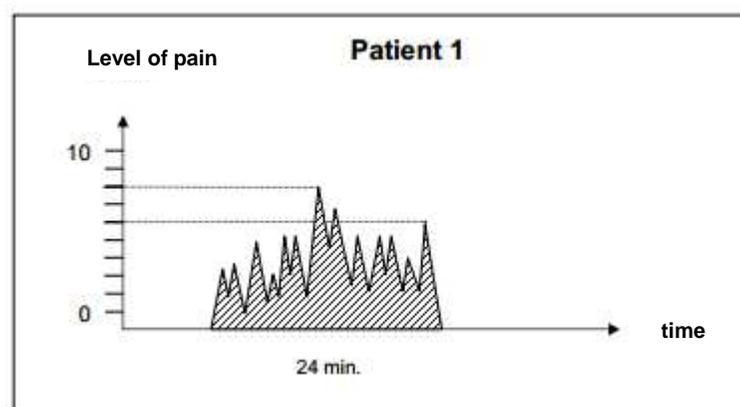


Intuitively, one would assume that the best outcome would be generated by having the most positive experience possible at each and every moment. The assumption behind this is that our brain establishes a sort of average value with regard to the overall experience, e.g. the duration of a TV commercial or a visit to an event.

A whole series of studies now shows this assumption to be false. **The brain does not establish an average value, but uses particular moments in the process in order to create an overall evaluation.** So which moments are particularly key in evoking as positive an experience as possible in the recipient?

Duration Neglect: the duration is not taken into account

In a classic and often-replicated experiment the Nobel Laureate and behavioural economist Daniel Kahneman demonstrated for the first time how our brains act in order to evaluate experiences. He asked patients undergoing a colonoscopy how high their level of pain was every minute. The patients were asked to rate the level of pain experienced on a scale of 0 (no pain) to 10 (very strong pain).



If we look at the illustrations showing the pain experience of two patients, it is clear that patient 1 felt a lot more pain – three times as much – as patient 2. **Yet in a follow-up survey after the procedure, both patients said that they had roughly the same amount of pain.**

How is this possible? Our retrospective evaluation of experiences is clearly subject to distortion. The reason: **our evaluation does not take into account the duration of the pain.** This effect is known as **duration neglect**.

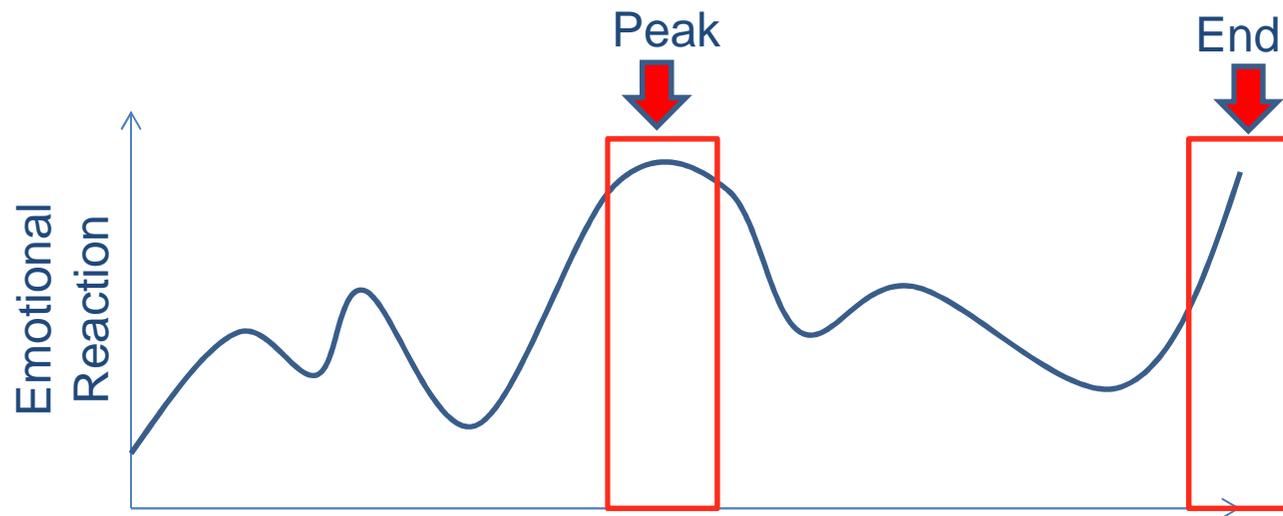
Studies conducted by the psychologist Baumgartner, which we will look at more closely later, are among those that show that this also applies to positive experiences. According to this then, **there is only a small correlation between the duration of a commercial and the overall evaluation.** The specific pattern of the evaluation temperature curve is what will determine whether the evaluation is good, bad or indifferent.

Two moments in the curve are of particular importance here.

The peak-end effect: The peak and the end dominate the evaluation

In the retrospective evaluation of experiences (positive and negative) two parameters play a key role:

1. **The peak**, e.g. The maximum pain experienced during treatment or the most positive experience during a commercial or a customer journey.
2. **The end**: The more positive the end, the better the overall experience. Hence the motto: Quit while you're ahead.



The more intensive the peak and the more positive the end, the better the evaluation of the overall experience. The brain establishes the overall assessment mainly from the average value between the peak moment and the end. Let's look at this in more detail.

The peak-end effect for positive experiences

The James Dean effect: In a study, scientists from the University of Illinois (USA) asked respondents to rate different life stories for desirability. The first key result: people rate a happy life that ends suddenly (peak and end coincide) more highly than a life with five extra years that are not so happy (end is less positive than peak). The researchers called this the James Dean effect. The peak-end effect applies exactly to this: the more intensive the peak and the more positive the end, the better – irrespective of the lifespan (duration neglect). Conversely an unhappy life was rated less negatively when five better years followed at the end.

Source: Diener, E., Wirtz, D., & Oishi, S. (2001). End effects of rated life quality: The James Dean effect. Psychological Science, 12, 124-128

Lottery: In a study conducted by scientists from Dartmouth College (Hanover, USA), participants received a prize of a free DVD. The DVD was either from an A list (rated very good) or a B list (rated mediocre). Some of the participants received a second DVD (A or B). After each person had received one or two DVDs, they were asked to rate their satisfaction with their prize on a scale of 1 (very unhappy) to 7 (very happy). The table shows the result.

Scale	Prize	Rating
1	A + A	5.5
2	A	5.2
3	B + A	4.8
4	A + B	3.2
5	B	2.6

People who received two DVDs were happiest. Those who only received a B DVD were least happy. Nothing surprising in that. But the really fascinating thing is what occurred between these two extremes. If we were to evaluate this on the basis of the average value, the A+B and B+A groups should be happier than the A group, because they received both an A and a B DVD.

But this is not the case.

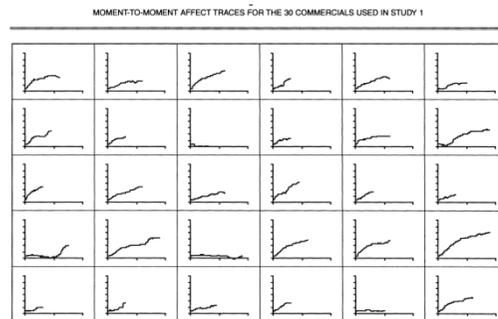
Rather, it is consistent with the peak-end rule that those who first received an A DVD and then a B DVD (A+B group) were just as (un)happy as the B group, because the A+B group shows the greatest negative difference between peak (A DVD) and end (B DVD). However the B+A group were much happier, because there was a rise towards the end (from B to A). Let's now look at what this means for TV commercials.

Do, A., Rupert, A. & Wolford, G. (2008). Evaluation of pleasurable experiences: The peak-end-rule. Psychonomic Bulletin & Review, 15(1), 96-98.

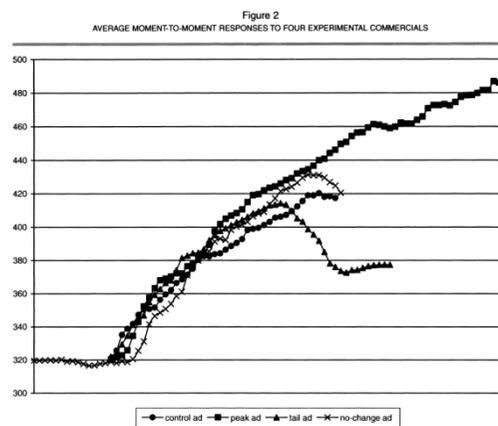
The peak-end rule for TV commercials

In an extensive study the psychologist Hans Baumgartner and his team from Pennsylvania State University considered the question of **which moments during a TV commercial had the greatest influence on the evaluation of the commercial and the brand, as well as on brand recall**. They looked at 30 TV commercials with a so-called *feelings monitor*, which recorded how the viewers rated every moment of a commercial. Then the participants were asked to rate each commercial and the brand advertised overall. The key results were as follows:

Temperature curves of 30 commercials



Temperature curves of „manipulated,, commercials



Note: Horizontal axis indicates time in seconds; vertical axis shows average moment-to-moment responses (with a neutral point of 320).

- **The peak-end rule also applies to TV commercials:** Participants preferred commercials with intensive / high peaks, a strong and positive end, as well as a steep upward trend in the temperature curve.
- **The steeper the rise to the peak, the better the evaluation of the commercial.**
- A longer overall duration of the commercial may help to push the peak higher – but it correlates only slightly with the overall evaluation.
- **The peak moment and the end determine not only the enjoyment of the commercial but also the positive evaluation of the brand as well as brand recall.**
- The researchers were also able to evoke these effects within commercials specially revised for this purpose. This means that it is possible to structure the peak, the rise to the peak and the end systematically in such a way that the overall evaluation of the commercial, the evaluation of the brand and brand recall increase.

Implications for marketing (1/2)

What are the implications for marketing of these findings?

- **Strategic design of peaks:** Often the aim of services or customer journeys is to guarantee that they run as smoothly as possible. In the case of the peak-end effect the aim should be to guarantee as positive a peak as possible during the process, as well as to make the end as positive as possible. For a customer journey or a path-to-purchase, it is important to generate a peak in the process, instead of dividing the budget equally between all process steps using the 'watering can principle'.
- **Peaks are generated by surprising the customer.** This works well if the customer receives, or comes across, something that he did not expect or with which he is familiar in other contexts. Let's look at two examples: Virgin Airlines has been giving out ice creams to passengers at the start of its inflight entertainment programme. The only other place this happens is in the cinema; it is unexpected and generates a positive peak. Another example: A car salesman put a car that a customer had just purchased in the middle of the showroom and covered it up. After the formalities were completed, the cover was pulled off the car with great fanfare and the customer was able to drive his new car out of the showroom in front of everyone. (Peak and end coincide here, which has a particularly positive effect).
- **It is not only the first impression that counts, but also the end.** Often little attention is paid to the end of an experience, whether it be checking out of an hotel, unwrapping a newly bought product or the end of a commercial. But the more positive the end – especially in comparison with the peak – the more positive the overall evaluation. The purchase is only rarely the end of the process. So it is important, for example, to make unwrapping the product at home as positive as possible and to generate a positive peak in this regard (e.g. with appropriate packaging that surprises positively, as is the case with Apple for instance).

Implications for marketing (2/2)

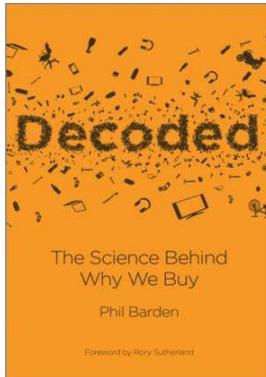
- **Care should be taken with the simple satisfaction or enjoyment survey** – it is often much more important to know where the peak is, how the peak is evaluated and how the end is evaluated in comparison to this.
- If we use **process measurements** (e.g. skin resistance reading for commercials) the point is not that the evaluation is as positive as possible at every second, particularly since fluctuations are normal in narrative arcs. The point is that the peak and end are as positive as possible. As it is predominantly the peak and the end that are remembered, it is also important to **integrate the brand here**.

One example is the following Heineken commercial. The protagonist goes to a party, he greets various guests and interacts with them. After a while he gets onto the stage, he is given a beer (Heineken) and then the party really gets started (peak). Integrating the brand at this point means that brand recall and, simultaneously, the attitude to the brand are improved.



<http://www.youtube.com/watch?v=i4m5Wkywew0>

We have a new book out



A compilation of the best of decode's three previous **marketing bestsellers**, **updated** with the latest learnings from science and **supplemented with new core themes** and chapters:

- **Decoding of purchasing decisions** (chapter 2)
- **Perception of touch-points** (chapter 3)
- **Application of behavioural economy in marketing** (chapter 4)
- **New Cases** for the UK market
- Preface by Rory Sutherland, Executive Creative Director and Vice-Chairman, OgilvyOne London and Vice-Chairman, Ogilvy Group UK

Out on 1 February. First edition almost sold out already. Korean translation is in progress

Reviews

When Phil first introduced me to this new and important understanding it crystallised my fears that the long-standing approach to marketing needed to be fundamentally reevaluated. In his book, he not only persuasively and cogently argues his case but also shows how we need to think in new ways to maximise our marketing efficiency and effectiveness.

Sean Gogarty. Senior Vice President, Household Care, Unilever

The first practical application of Kahneman's Nobel Prize-winning work to everyday marketing - brilliant!

Paul Fishlock. Founder of ad agency Behaviour Change Partners

A perfect mixture of deep ideas from visual and decision neuroscience, and clear pictures of why those ideas matter for marketing.

Colin Camerer. Robert Kirby Professor of Behavioral Economics, Caltech

Our implicit motivations drive most of our decisions and actions every day. Phil Barden understands this, explains it, and clearly demonstrates how to use this new understanding to the benefit of more effective, action driven, marketing.

Phil Chapman. Vice President Chocolate Category, Mondelez

More about the book on the website: www.decoded-book.com
Extract: <http://www.decoded-book.com/FlashBookExtract/index.html>

decode press review

- **Weave:** Interview with **Dr. Christian Scheier:** *The audience has the best seats in the executive suites.*
http://www.decode-online.de/downloads/pdf/Weave_Reptil_Hirn_Surft_mit_Christian_Scheier.pdf
- **B2B. The magazine for B2B brands:** **Dr. Björn Held** on the power of packaging: *Packvertising: expertly unwrapped.*
<http://www.b-2-b.de/packvertising-gekonnt-eingewickelt/>
- **austropack:** Article by **Dr. Björn Held:** *The secret power. Using packaging codes systematically.*
http://www.decode-online.de/downloads/pdf/austropack_DieGeheimeMacht_Verpackungscodes_BjoernHeld.pdf
- **Bayern2/Radio – Zuendfunk:** Expert contribution from **Dr. Christian Scheier** in: *The overdose. How Red Bull is creeping into our lives.*
<http://www.br.de/radio/bayern2/sendungen/zuendfunk/red-bull-kulturmacht-100.html>
- **iXtenso, Online trade journal:** Interview with **Dr. Christian Scheier:** *Consumers don't tell the whole truth in market research.*
http://www.ixtenso.com/de/rubrik/verkaufsfoerderung/pos-marketing/15125-konsumenten_sagen_in_der_marktforschung_nicht_die_ganze_wahrheit.html
- **absatzwirtschaft - marketing.site.de:** Column by **Dr. Christian Scheier:** *The psychology of discounts.*
<http://www.marketing-site.de/content/die-psychologie-von-discounts;78187>
- **NDR-TV Markt – The market checkers:** Expert contribution from **Dr. Björn Held** on the subject of *retail psychology.*
<http://www.youtube.com/watch?v=eclzXF1je70>

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