

decode Science Update 1_2015

The Power of Customer Habits

Both a Barrier and an Opportunity for Marketing and Innovations

Mai 2015

Welcome to the decode Science Update

A core marketing objective is to win over new customers, for instance by introducing successful innovations. However, this is often more difficult than you might think. Many innovations flop, as we all know., so winning over new customers is anything but a trivial matter. We naively expect customers to change their behaviour – either switching to a new brand (preferably ours) or by substituting their current purchase for a new, innovative solution.

The challenge: **changing people's behaviour** is extremely difficult. It has been known for a long time that it is not sufficient to simply inform people about a new product. Information alone seldom changes behaviour, otherwise both smokers and overweight people would be things of the past, and the failure rate of new products would be substantially lower.

In addition to this: **human behaviour is tremendously habituated**. We are, as they say, creatures of habit. Studies show that a large proportion of our actions are repeated every day. And habits are very difficult to change, because they are extremely efficient. We don't have to think about things, we can be "on autopilot".

Now there are **exciting new insights into the neuronal principles of how habits function**, generated by neuroscientific and psychological experiments and studies. Founded on this, there is a new approach to the question of how, in marketing terms, we can understand our customers' behaviour even better in order to successfully introduce innovations into the market. In this Science Update we take a look at these new insights and show what can be derived from them for marketing in practice.

Happy reading !
Your decode team



Dr. Christian Scheier

Dirk Held

PD Dr. Martin Scarabis

Johannes Schneider

Dr. Björn Held

Tobias Eckert

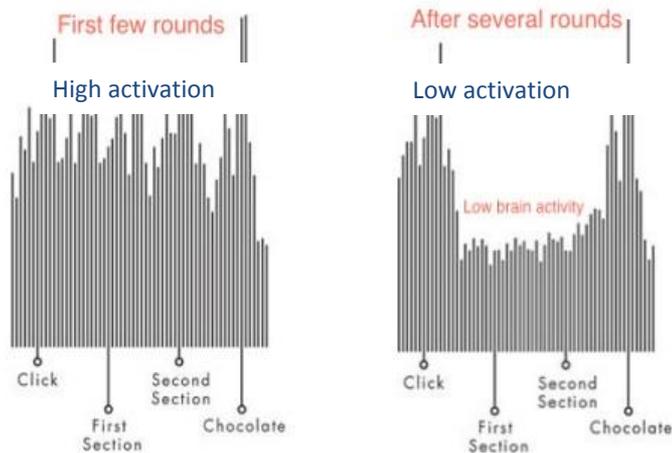
Juliane Matussek

Phil Barden

Making a habit of everyday life

From cleaning our teeth in the morning, to the journey to the office, through to the ritual of going to bed: we don't decide everything from scratch each day – in fact we repeat patterns of behaviour from day to day, without thinking about them, on autopilot. According to studies by [Wendy Wood](#), Professor of Psychology and Business at the University of Southern California, **about 45 percent of daily routines/processes** are **entirely a matter of habit** – we repeat them each and every day without giving them significant thought.

One of the main reasons that habits form is that they **relieve the brain**. When we act on autopilot, the brain uses significantly less energy. This is why we can often have good ideas when taking a shower or going for a walk – habitual activities that are performed without thinking about them, seemingly on autopilot. This relief of the brain can be quantified by using appropriate measurements (see illustration).

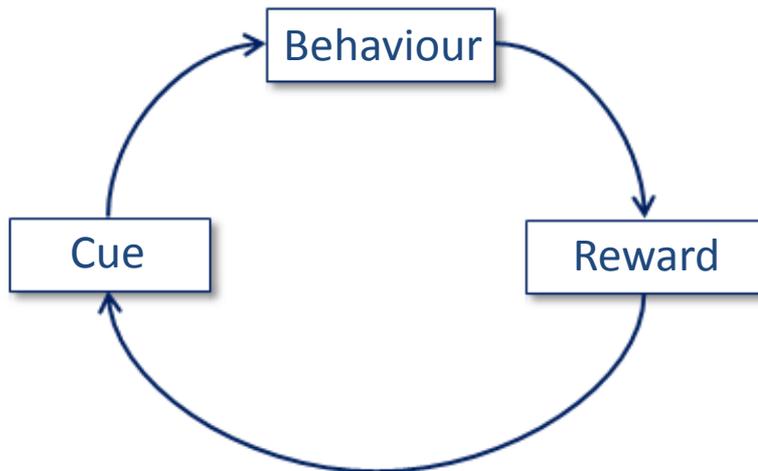


In a typical experiment (for animals) the animal is placed in a new environment. Somewhere there is a reward (e.g. chocolate). After an acoustic signal (e.g. a click), the animal explores its environment until it finds the reward. At first the neurons fire like mad (left image). With time however, the activity reduces substantially (right image). The neurons only fire at the acoustic signal (the *cue*) and when the reward is received (here: chocolate). In between, the brain flies on autopilot – the routine is automatically activated and performed as soon as the *cue* occurs in the environment. A leading research institute for the neuronal principles of habits is the [Greybiel Laboratory at the M.I.T.](#) (USA), headed by Prof. Ann Greybiel.

On average, it takes up to two months before a habit forms (when performed daily), provided that the context doesn't change or that it remains stable. Everyone has experienced this: if the coffee machine is suddenly relocated, at first the established routine fails as you go to the old location, until you adjust. But this also demonstrates that **habits always change or "break up" if the context changes** – this offers exciting possibilities for marketing, as we shall see.

The Habit Loop

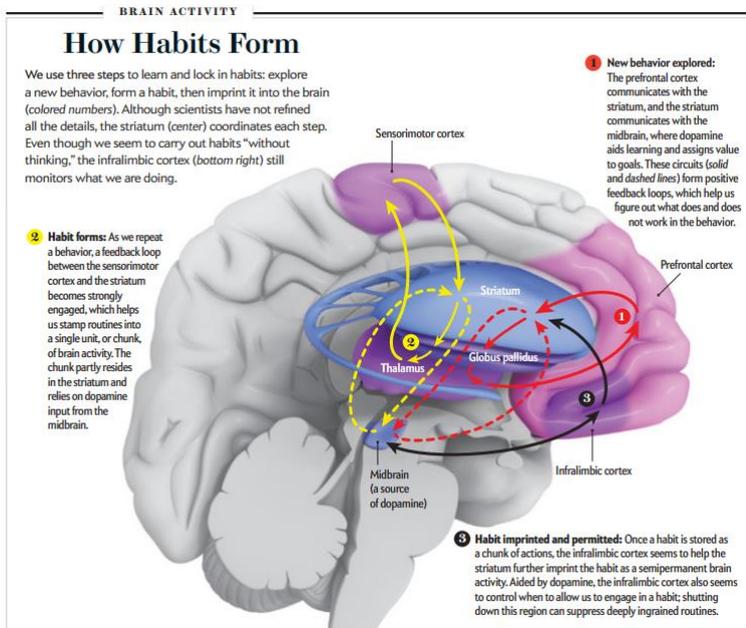
How exactly do habits work? And how can we use that understanding to best effect in marketing? Let's take a look at the most important insights in this respect. As a rule, with habits we only tend to think about the habituated behaviour (e.g. cleaning teeth or smoking) itself. **But in order to understand habits and how they arise, and hence to uncover approaches to changing them, we must consider also the cue and the reward, which motivate the behaviour.**



- **Cues** (prompts, triggers) are perceptible incentives in the environment (e.g. a buzzing mobile phone), situations (e.g. times of day, places) or even moods (tiredness, boredom), which trigger certain behaviour. Thus for instance only certain products are bought in supermarket A (e.g. non-food) and other products in supermarket B (e.g. food), although everything could be bought everywhere. The influence of cues extends so far that reformed drug addicts start to suffer from (placebo) withdrawal symptoms again if they enter the Underground station in which they used to sell or consume drugs. Habitual behaviour is not triggered without these cues. Thus we find it easy to change our behaviour when on holiday, but once we are home again we fall back into our old habits
- **Reward:** WHY the habit has formed. Habits form on the basis of rewards that are obtained and experienced due to the behaviour. Only if this behaviour was accompanied in the past by some sort of reward are we motivated to behave like this again. In the process, the reward can be very specific (e.g. thirst is quenched), or rather of a psychological (e.g. calming) or social nature (e.g. recognition). During the subsequent course of events the cue alone is enough to trigger the behaviour, even if no more reward is experienced.

The neurologic of habits

Exactly how habits form and how they are regulated in the brain has only just begun to be understood by scientists in the last few years. However, the main principles are well recognised. The illustration shows the brain structures involved and also the diverse interactions that are necessary in order to regulate habits.



- 1. Try out new behaviour:** The basis for this is the frontal lobe (the most highly developed part of the brain) in which the environment and our inner needs, amongst other things, are processed – in interaction with the reward system (striatum). Habits are formed when we try out new things and this experience is rewarding.
- 2. Form a habit:** When we repeat rewarding behaviour, a feedback loop leads to a habit being formed: Together with the sensory and motor parts of the cortex (they control the sequence of behaviour) the reward system forms a "chunk of behaviour", i.e. the whole sequence of behaviour is brought together as a single unit and "uncoiled", as soon as the trigger is available.
- 3. Anchor it deep in the brain:** Once a sequence of behaviour is stored as a "chunk", the infralimbic cortex (lower frontal lobe) controls the further "trickling" of the habit. This is the reason why habits, once stored in this way, can be reactivated at any time (one reason for the often high relapse rates e.g. for drug usage or eating disorders etc.).

Source and copyright: Graybiel, A. & Smith, K. (2014). The neuroscience of habits. *Scientific American*, 40-43.

The (anticipated) reward is central to the formation of a habit. Once formed, habits are activated by internal or external incentives – even if the reward is missing subsequently. The well known US motivation expert Jim Rohn put it this way: "**Motivation is what gets you started. Habit is what keeps you going.**" This mechanism also explains why we find it so difficult to change our habits. For one thing, the cue automatically triggers the behaviour – it simply proceeds, sometimes without our being aware of it (see e.g. [Neal et al., 2012](#)). And if we do not perform the behaviour that our brain has learnt to associate with a reward, then the brain evaluates this as a loss or a punishment.

Changing habits 1/2

How then can habits be changed? Up to now, efforts to change habits have been based on the idea of using information to change the attitude, and thus the behaviour. This may be right if it is a case of forming new habits (insofar as the reward becomes clear), but not for existing habits. **Habituated behaviour can hardly be influenced by information.** There are much more powerful and influential ways, for example by focusing on the environment or surroundings (context & cues) to which a habit is linked. Opportunities to change habits result for instance then, when **radical changes occur in the environment or the life situation** ("life events"). If the cue is eliminated then the habitual behaviour is simply not activated. Then new rewards, and hence new patterns of behaviour, become necessary or new paths are taken to achieve "old" rewards.

The US retail chain *Target* uses changes in buying behaviour as an indicator of changes in living conditions or lifestages. For example, the company can predict due from her buying behaviour that a female customer is 6 or 7 months pregnant: pregnant ladies in the second or third trimester of pregnancy begin to shop differently or to shop for certain things. If you spot this, then you can offer corresponding products pro-actively and so link the purchase of these products with Target. Thus Target becomes the cue for the purchase of these products, i.e. these products will be habitually purchased from Target in future, despite the fact that these customers could also buy the same products at the same price elsewhere. The cue – in this case the shopping location – activates the act, and it proceeds automatically. However, Target goes one step further. **Because the company understands that a birth is also accompanied by a significant change in habits, it also makes special offers or offers coupons for products that are not normally bought at Target** (e.g. foodstuffs). As many habits are rearranged around the birth of a child, such a special offer can be successful – shoppers suddenly begin to buy not only their cleaning materials or nappies at Target, but other foodstuffs too. In this [video](#) Target's leading analyst explains the approach.

As another example, people often change their telecommunications provider when they move house. They have to re-register anyway, so making this change does not lead to any additional effort as considerable rearrangement is necessary in any case. Likewise, customers change their brand of washing powder when they have children, as their requirements change.

How can a cue be associated with a habit? A classic example is the first successful toothpaste advert (Pepsodent). At the time (end of the 20th century) it very successfully established a new (for the time) but perceptible cue – the feeling of plaque on the teeth – as well as, coupled to it, new behaviour: teeth cleaning with toothpaste linked to a new reward (a light tingling sensation in the mouth).

Changing habits 2/2



A fine example of how a cue – here an environmental incentive – can change behaviour, are the "[piano stairs](#)": In order to persuade people to use the stairs instead of the escalator, the staircase was "disguised" as a piano (see illustration), featuring sounds that are generated when the steps are stepped on.

This change led to 66 percent more pedestrians using the stairs instead of the escalator.



Copenhagen Airport wanted to persuade its guests to no longer smoke directly after leaving the building, as had been the case, but to smoke instead in the designated smoking zones. An analysis showed that the cue that activated the behaviour took place *in the building*: The smokers were already taking out their cigarettes about 20 metres ahead of the exit, and from that point the behaviour could no longer be stopped. The unwanted smoking reduced substantially when a sign for the smoking zone was placed in the building, about 20 metres ahead of the exit. This interrupted the original cue, and the visitors were open to being guided by the conspicuous "Smoke Here" cues - with the result that over [50 percent fewer smokers smoked in the non-smoking zones](#).

Case study: *Febreze*

In a very readable book on the subject (*The Power of Habits*) the New York Times Journalist Charles Duhigg describes the case study of the Procter & Gamble brand *Febreze*, which turns over [more than a billion dollars](#) annually. The company was certain it had a winner when it was launched on the market in 1996: the first spray that could remove bad odours from practically every textile fabric – ideal for smokers, cat and dog owners, sportsmen, motorists etc. The product was positioned accordingly: *Febreze* removes bad odours from textiles. The product was launched, advertised – and it flopped. But why?

Analyses finally showed that an essential fact stood in the way of success for *Febreze*: **there was no perceptible problem**, as the sense of smell itself habituates to smells. Unlike the dental plaque example, where everyone notices it, a smoker no longer notices how his clothes or the apartment smell of tobacco. Even the foulest smells fade if you are regularly or even continuously exposed to them. Without a perceptible problem, however, there is no reward, i.e. the promise to rid an apartment of foul smells is not relevant if, subjectively, there are no foul smells present because the residents have got used to them. The cue and the reward were missing.



The key point was now **to link the product to existing routines** instead of setting up a new routine, because that was impossible without a perceptible cue. The relevant practical routine was the cleaning. The team responsible found that the "cleaning habit" is often accompanied by a smile – people are happy with the result. The clean-looking apartment was the reward. ***Febreze* was now linked to this reward:** after cleaning they sprayed the freshly cleaned furniture, beds or floors with *Febreze*. For this the originally odourless spray was given extra scents. This scent was now perceptible and, hence, the perceptible scent strengthened the reward of the cleaning routine. The advertising showed that the apartment now smelled as good as it looked – namely clean and fresh. **Instead of removing the smells from soiled textiles, *Febreze* became the crowning glory and an integral part of the cleaning routine.**

Product properties activate habits

"I always buy the *red* deodorant." You hear statements like this a lot when you discuss consumers' shopping behaviour with them. They always buy the same product, and sometimes they also know the brand name, but not the exact name of the product. They buy the product again and again and are therefore loyal because this act of buying is habituated. **Distinguishing habituated buying behaviour from loyal buying behaviour on the basis of conviction is difficult, because they both lead to the same outcome or behaviour.**

For fast moving consumer goods, central cues that are linked to habits are elements of the packaging, e.g. the colours, a visual or the shape of a product. Companies often only recognise whether repetitive buying behaviour is based on habit or conviction when it is too late. For example, when they change the packaging in the course of a relaunch and – without intending to – change cues that are necessary for the activation of the habit. For instance, a washing powder manufacturer in France changed the colour of its washing powder from pink to a creamy white in order to emphasise its cleaning properties. In the process however, the main cue of 'pink' was lost. Very quickly the brand lost significant market share and around half of the customers lost switched to competitor products that also used the colour 'pink' on their packaging.

For product design and development it is thus imperative to know which cues on the packaging trigger the habituated act of buying. These cues must – in whatever form – survive. Otherwise there is a risk of losing customers as opposed to growing the business. In trademark law too, this is being taken more and more into account: it is not just about how similar e.g. two products or brands are overall, but whether the central cue is similar enough to confuse customers (e.g. "Paula" by Dr. Oetker and "Flecki" by Aldi, who both use the cue of chocolate "spots" and a cartoon cow).

Furthermore, this has consequences for advertising: **the central cues for activation of the habit should be adequately dramatised in communications in order to support the habit loop.** Especially since the buyers of a brand pay more attention to its advertising than do non-buyers (the reason for this is the so-called dissonance reduction). Through recognition of the central cue, advertising can become more efficient and support the activation of habituated buying acts at the point of sale.

Implications for marketing practice

Habits not only determine many or even most of our actions in everyday life, but they are the basis for many of our buying decisions – in particular for purchases that are regularly repeated. In these cases, the habit displays its strength: habits are relieving, efficient ways to gain the desired reward.

In the process, the following aspects must be taken into account for marketing practice:

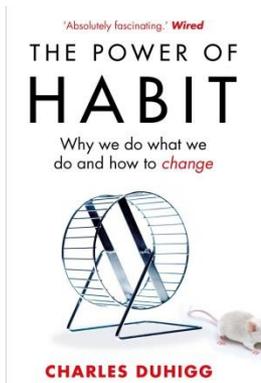
- **Focus on behaviour:** the perspective of habits puts the focus on the behaviour of customers. How often is the product used? Who uses the product? In what context is the product used? How many individual actions must the customer make in order to use the product? The more actions there are, the more demanding is the formation of a habit and the more important is a precise analysis of customer behaviour. In communications it is then about forming new habits and the strengthening or breaking up of existing habits.

- For **innovations** especially it can be a great help to understand whether, or to what extent, the new offer can be integrated into existing habits and, if not, how the formation of a new habit can be guaranteed and supported. We must understand the **habit loop** in particular – **the triggering cue, the routine or sequence of behaviour and the reward that motivates everything**. We can start at any of the three levers.

- The perspective of habit is also very exciting for many **digital products and services**, particularly as many have themselves become a part of our habits, and so even feature among the best examples of the power of the habit loop: Who can ignore the sound of an incoming SMS and not automatically look to see who has sent it? Most digital platforms – e.g. Google, iTunes, Facebook or Instagram – are also successful because, in part, they (intentionally or not) perfectly match the way in which the brain forms automatisms and habits. There is usually a triggering incentive (e.g. push message from an app; desire for change), which activates a routine (take out mobile phone, activate app, enter search term in Google) and is accompanied by a reward (read message, feeling of being close to others, etc.).

Being (or becoming) part of a customer habit via a product or service is, in our experience, one of the most profitable approaches there is. But key to the process is that it is only what *really* rewards the customer that flows into habit loops.

Further reading & options



The [book by Charles Duhigg](#) already mentioned offers a good, well-founded introduction to the subject (with many practical examples).

Relevant scientific articles:

- Smith, K. & Graybiel, A. (2013) [A Dual Operator View of Habitual Behavior Reflecting Cortical and Striatal Dynamics](#). in *Neuron*, Vol. 79, No. 2, pages 361–374; July 24, 2013.
- Neal, D. T., & Wood, W. (2009). [Automaticity in situ and in the lab: The nature of habit in daily life](#). In E. Morsella, J. A. Bargh, P. Gollwitzer (Eds.), *Oxford handbook of human action* (pp. 442-457): Mechanisms of human action. New York: Oxford.

Inhouse Workshops

decode offers in-house workshops on marketing topics overall and innovations in particular, based on the importance of habits for practical marketing. Please talk to us if you are interested.

decode Press Mirror

- **Gehirn & Geist („Brain and Mind“)**
Expert statement by **Dr. Christian Scheier** (Issue 03/2015)
The power of brands.
http://scienceupdate.decode-online.de/system/files/GehirnUndGeist_Scheier_MachtDerMarken_03_2015.pdf
- **absatzwirtschaft**
Dr. Christian Scheier Interview (2nd February 2015)
How brain research influences marketing.
<http://www.absatzwirtschaft.de/wie-die-hirnforschung-das-marketing-beeinflusst-43145/>
- **w&v**
Dr. Christian Scheier Interview (Issue 16/2015)
Television stops the viewer's swirling thoughts.
http://scienceupdate.decode-online.de/system/files/w%26v_TV%20Wirkungstag_Interview%20Scheier_150416.PNG
- **MarkenR**
Contributions by **Dr. Christian Scheier** and Dr. Andreas Lubberger (December 2014 issue)
From the attack on facts to previous experience.
http://scienceupdate.decode-online.de/system/files/MarkenR_Scheier_VomAngriffderTatsachenaufdieErfahrungss%C3%A4tze_1411.pdf
- **enos Wine Magazine**
Contribution by **Dr. Björn Held** (Issue 01/2015)
Your taste belongs to me!
http://scienceupdate.decode-online.de/system/files/enos_%202015-1_DeinGeschmackGeh%C3%B6rtMir_BH.pdf
- **Credit reform**
Expert statement by **Dr. Christian Scheier** (Issue 02/2015)
More desire to buy.
http://scienceupdate.decode-online.de/system/files/Creditreform_Scheier_Mehr%20Kauflust_1502.pdf

decode presentations

- **Castle discussions - Series of events at Heinrich-Heine University, Düsseldorf and the Düsseldorf Chamber of Industry & Commerce**
Dr. Christian Scheier
Subject: *Neuro-marketing: a report from practice.*
Mickeln castle in Düsseldorf, 15th June 2015
- **Marques Vienna 2015**
Dr. Christian Scheier
Subject: *The psychology of brands and its application to trademark law.*
Vienna, 16th September 2015
- **Munich Discussions**
Dr. Christian Scheier
Subject: *Who is driving societal changes, man or technology?*
Kempfenhausen on Lake Starnberg, 1st October 2015
- **Swiss Post – DirectDay**
Dr. Christian Scheier
Subject: *Lecture on the psychology of Marketing and Sales.*
Berne, 24th November 2015

decode Seminars

- **ZfU International Business School**

PD Dr. Martin Scarabis

Subject: *Neuro-Marketing in Practice. What your customers really want.*

Zurich, 9th and 10th April 2015 / 3rd and 4th March 2016 / 3rd and 4th November 2016

<http://www.zfu.ch/weiterbildung/seminare/lim/neuro-marketing-in-der-praxis/termine.html>

Registration for Science Update

The decode Science Update is often passed on to colleagues. Did this happen in your case?

Registration gives you guaranteed **access to all previous and future Science Updates**.

Register at: <http://www.decode-online.de/science-update/>

Welcome to the dialogue

decode Marketingberatung GmbH

Graumannsweg 19
D – 22087 Hamburg
Telephone: +49 (0)40 / 227 59 208

info@decode-online.de

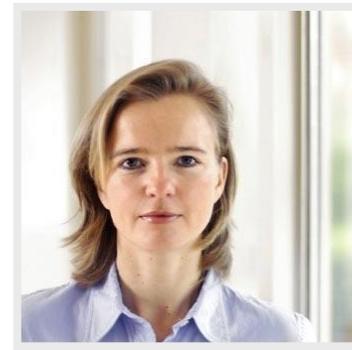
www.decode-online.de



Dr. Christian Scheier
Managing Director



Dirk Held
Managing Director



Cornelia Bruns
Customer Relationship Management