



**Digital Brand  
Equity**

# WHAT **DATA TELLS US** ABOUT BRANDS



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# Executive summary

Brands have the power to provide an enduring sense of stability. In times like these, that makes them more important than ever. It's clear that brands are relevant; the problem lies in how to measure them. Traditional brand analysis methods fail to quantify the (commercial) success of a brand, which makes it difficult to set the right budget priorities and threatens to undermine the brand itself. Brand managers today face two major challenges: first, how can they empirically prove how important a brand is to the success of a business? And second, how do they translate a theoretical, fact-based brand analysis into a systematic brand management strategy consisting of specific brand-related measures?

As the boundaries between consumers' offline and online lives become increasingly blurred, brand managers no longer have to rely on customer surveys to gain a clear view of the brand experience at each relevant touchpoint. Consumers now 'respond' to the stimuli of a brand by voluntarily posting comments online in which they reveal what associations they have with the brand. These individual consumer responses add up to a wealth of statistical information that enables brand managers to identify relevant aspects of their brand's image within its specific industry. Now, brand managers can leverage social listening and text mining of consumers' brand associations.

This methodology is at the core of our Digital Brand Equity (DBE) approach, a cost-effective, science-based digital brand measurement technique. Because DBE is based on highly granular, frequent data collection, it gives brand managers an end-to-end brand measurement methodology. DBE is rapidly becoming a go-to solution among global brands when it comes to aligning strategic and operational brand decision-making. In contrast to evaluation methods that are purely sales- or performance-driven, DBE is a clear, real-time approach that allows brand managers to determine exactly how much value each asset and marketing activity adds to the overall perception of a brand.

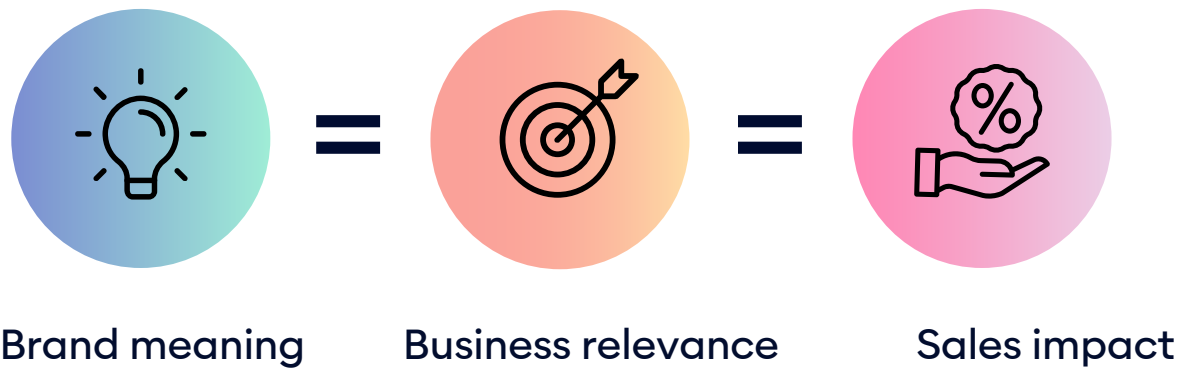
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01

**The brand dilemma:**  
The only place where gut  
instinct still counts



Everyone agrees that brands are important. Yet, how can we prove exactly how important they are? And how can we systematically translate a brand's importance into concrete actions?

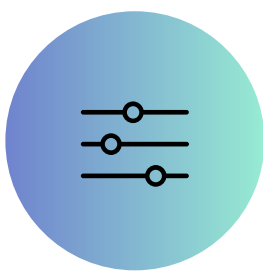


Today, the world around us seems to be moving faster and faster. Technology continues to evolve at lightning speed. In this context, brands provide us with something steady to hold onto—and that makes them more important than ever. But what are the main elements of a brand today? According to leading brand researchers, modern brands need to be adaptive and flexible, but, above all, they must have an authentic, recognisable core (Kotler, 2018). At the same time, standing out from the crowd with a cohesive brand message is no easy task, especially as brands face such fierce competition when trying to attract consumers' attention. Experts often use the term **attention economy** to summarise this reality. Every day, an average consumer encounters an estimated 6,000 advertising touchpoints (IMK). As a result, the chances are slimmer than ever for a single branded message (one 'stimulus') to stand out. This is why it is crucial for brands today to serve as carriers of key information. When a consumer processes a single branded message, it should not only position the brand as top-of-mind, but also trigger a network of brand associations which they have learned (and which they share within their social circles).

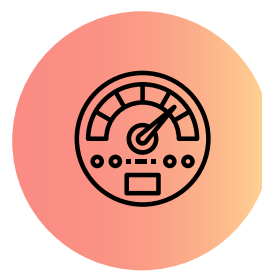
Conventional brand measurement approaches still largely fail to make a solid business case for brand metrics.



How can we express the meaning of a brand in numbers? To start with, it's important to make a distinction between the brand's value proposition and all other sales drivers (the 4 P's) and to thoroughly validate this using statistical data. Traditional marketing mix models generally include these steps too; however, in the past, for the sake of simplicity and in the absence of reliable brand data, brand researchers have used the baseline (the unexplainable percentage of sales within regression models) to signify brand strength. Conventional brand measurement methods have always struggled to clearly quantify the link between the brand and the company's profits. This is one of the major reasons why performance marketing continues to rise in popularity compared to classic brand communication.



Systematic brand management



End-to-end brand measurement

It's a familiar scene to anyone who's ever had the pleasure of attending a branding workshop: CMOs, brand managers and consultants toss around ideas about messaging, positioning, personas, territories and brand values. After lengthy discussions, they finally



arrive at a new idea for which direction the brand should take. Yet how sure can they really be? After all, this trial-and-error process depends largely on anecdotal evidence, personal preferences and best practices borrowed from other 'modern' brands. In the best-case scenario, they can also add into the mix some classic market research data on brand perception and brand strength to add a bit more certainty. But even then, since brand perception and strength are usually only measured in the most general terms, this process is still anything but a systematic, data-driven brand management strategy. After all, if we only have a meta-level measurement of brand perception to go by, then choosing the right strategic and operational actions is a purely creative process at best. In other words, it is opinion-driven rather than data-driven. And this is why branding workshops exist in the first place, working from within the brand itself to formulate new ideas.

In reality, the qualities that consumers associate with a brand name or logo are actually the result of how they perceive the brand/company every time they come into contact with it (especially through the main touchpoints: products, services and POS experiences). This is why it's essential for brand managers to measure their brands in greater detail and not just in general, unquantified terms. A truly systematic, data-driven approach to brand management requires a comprehensive, end-to-end measurement of brand perception at every point of contact between consumers and the brand, whether it's products, campaigns, technologies, testimonials, sponsorships, events, partnerships or beyond.

An effective brand measurement approach must reliably prove the brand's business relevance and enable brand managers to take the right brand-related actions.



02

**Choosing a brand  
measurement method  
that proves business relevance**



Most companies measure the strength of their brand in the sales funnel in terms of how it relates to predefined item sets and assumed behaviour. High brand awareness is defined by the percentage of brand considerers (people who would consider the brand when making a purchase) and consumers who would buy from the brand.

Rooted in the AIDA model, which dates all the way back to 1898, the sales funnel is well-known and understood throughout the branding and marketing world today.

**But how do brand performance KPIs relate to real-life business metrics, such as sales, market penetration and market share?** And how can brand managers draw conclusions about the brand experience that makes people more likely to consider a brand in the first place? Answers to these questions are rare. While, in theory, brand measurement is supposedly the basis for all brand management, the reality is often very different. To overcome this dilemma, we need to rethink the way we measure brands, specifically in the key areas discussed below.



## Data granularity

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For data to be truly useful to brand managers, it needs to be granular, meaning that it zooms in on every level and takes every marketing lever into account. If we want to make science-based cause-and-effect thinking the norm in brand management, then we have to make every brand experience measurable, whether it's a visit to a company's new flagship store or the launch of a new sustainability campaign. The financial cost of capturing this data using conventional survey methods would simply be too high, which is why most companies avoid that approach. Aside from the price tag, there are also justifiable concerns about how valid survey-based measurements really are. And, in the rare cases where companies do conduct large-scale surveys, the findings are always so heavily aggregated and abstract that they make it impossible to measure or manage just one specific branding activity. As a result, brand management is often seen as more of an art than a science. Yet, even the most minor brand

experience shapes the image of a brand that people share within their social circles. Whether tangible or intangible, these experiences determine what people associate with the brand, and a detailed understanding of this level of the brand experience is the true basis for solid brand management.



## Data frequency

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Effective brand measurement not only requires granular data, it also requires for data to be collected very frequently. This enables brand managers to reach valid conclusions in the short- to medium term, without having to collect years' worth of data first. The only way to measure the effects of a specific marketing activity is to collect data with a very high-frequency time series. For one thing, this allows companies to respond in real-time with effective branded messaging (for example, if consumers are responding negatively to the brand on social media). But on a much more fundamental level, it allows brand managers to quantify the causes and effects of their activities, so they can start thinking in terms of causality rather than correlation. This is another area where classic survey-based data collection is often too slow. Say, for example, that a brand manager wants to measure how a new product launch impacts brand strength and perception. In that case, they need to be able to focus in on the exact time at which the effect occurs. It takes far more than an annual or semi-annual survey to capture effects with such precision. An effective brand measurement method should enable brand managers to measure brand perception and strength on a weekly basis at least.



## Brand theory: Translating practical requirements into fact-based measurement

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Academic researchers have been working for years to develop a conceptual approach to brand measurement, yet their insights have long been ignored in the business world. Thought leaders such as Aaker, Berry, Keller, Lane, Park and Srinivasan, for example, have all linked granular brand associations, brand awareness and brand image with the financial advantages of what they call 'customer-based brand equity'. The work of Keller (1993) attempts to quantify brand equity from the perspective of behavioural science rather than market economics, laying a theoretical groundwork that researchers have expanded upon ever since. Keller's customer-based brand equity approach defines brand strength as the 'specific consumer response to marketing the brand based on acquired brand knowledge.' This definition combines brand awareness with the brand associations that make up the brand's image in the minds of consumers.

Market researchers have been relatively successful when it comes to measuring brand awareness (which is one basic condition for brand strength, but not the only one). However, it is much more challenging to measure consumers' brand associations, which are based on many different aspects, from overarching brand attitudes and perceived brand benefits, to specific underlying brand characteristics and beyond. Market research may allow a company to capture consumers' general attitudes towards its brand. Yet it lacks the granularity that the company requires to be able to determine which brand attributes or selling points they should focus on when designing their communications strategies. So, once again, brand managers are stuck relying on gut instinct to answer crucial questions, such as 'Is it customer service or price that enables a company to position itself as a premium brand in the minds of consumers?' When it comes to capturing non-product-related, intangible brand characteristics and symbolic benefits, artificial measurement points in retrospective

random surveys are particularly problematic. How can a company expect a survey respondent to accurately report and characterise their associations with various aspects of the brand, especially when it's been weeks since they made their purchase or encountered a brand touchpoint?

In short, it's clear that real-life brand measurement and brand management have hardly applied any of the findings of scientific brand theory that have been established over the past two decades of academic research. Conventional brand measurement methods are too expensive, too slow and too unspecific, which is why they are so out-of-touch with actual business success and decision-making processes. Today, brand management and brand consulting are still far removed from theory-driven quantitative brand research. Instead, they remain in the hands of branding gurus, each one espousing their own philosophy. And in this environment, the focus is not on objective measurement methods, but on the endless stream of buzzwords that have come to define the practice of brand management.







03

## **S-O-O-R 2.0:**

The data-driven alternative to  
classic survey methods

Digital data is now an everyday fact of modern life. And this is good news for brand managers. Vast datasets are rich with insights into how consumers respond to brands. They present us with the perfect opportunity to apply the objective, scientific methods of attitude-/behaviour-based brand measurement described in the previous section. Data-driven analysis is the missing link between brand management and measuring brand success.

Today, our online and offline lives are fully intertwined. The things we do and say online are a very accurate reflection of what's important to us in the real world. We all leave behind digital search and communications histories that provide deep insights into our needs, perceptions, attitudes and behaviours. This has opened up completely new possibilities for marketing research. A market researcher's job is no longer to ask questions, but to simply 'listen'. And this means listening to consumers who express their opinions without even being asked. It doesn't matter who does the talking either: a single post by one user becomes a building block of information about an entire target group (the multiplier effect). To collect this data, researchers can use any number of tools or specially programmed crawlers.

Following classic **S-O-R** logic, market researchers tried to explain different responses to different marketing stimuli by questioning artificial, latent constructs that relate to the organism (the consumer's mind in this case). Measuring these responses allows researchers to assess real behaviour, even before looking at purchase behaviour. Alongside the O for organism, now there's also an **O for output**. This means that 'Stimulus - Organism - Response' becomes **Stimulus - Output - Organism - Response**. What we are describing is the digital soundbox: a sounding board that lets companies see how consumers respond to what their brand is doing—in real time and with no filters. This gives companies a chance to see how the desires, values and motivations that consumers articulate here explain long-term (buying) behavioural tendencies towards their brand.

## From classic S-O-R logic to digital S-O-O-R 2.0: The digital soundtrack

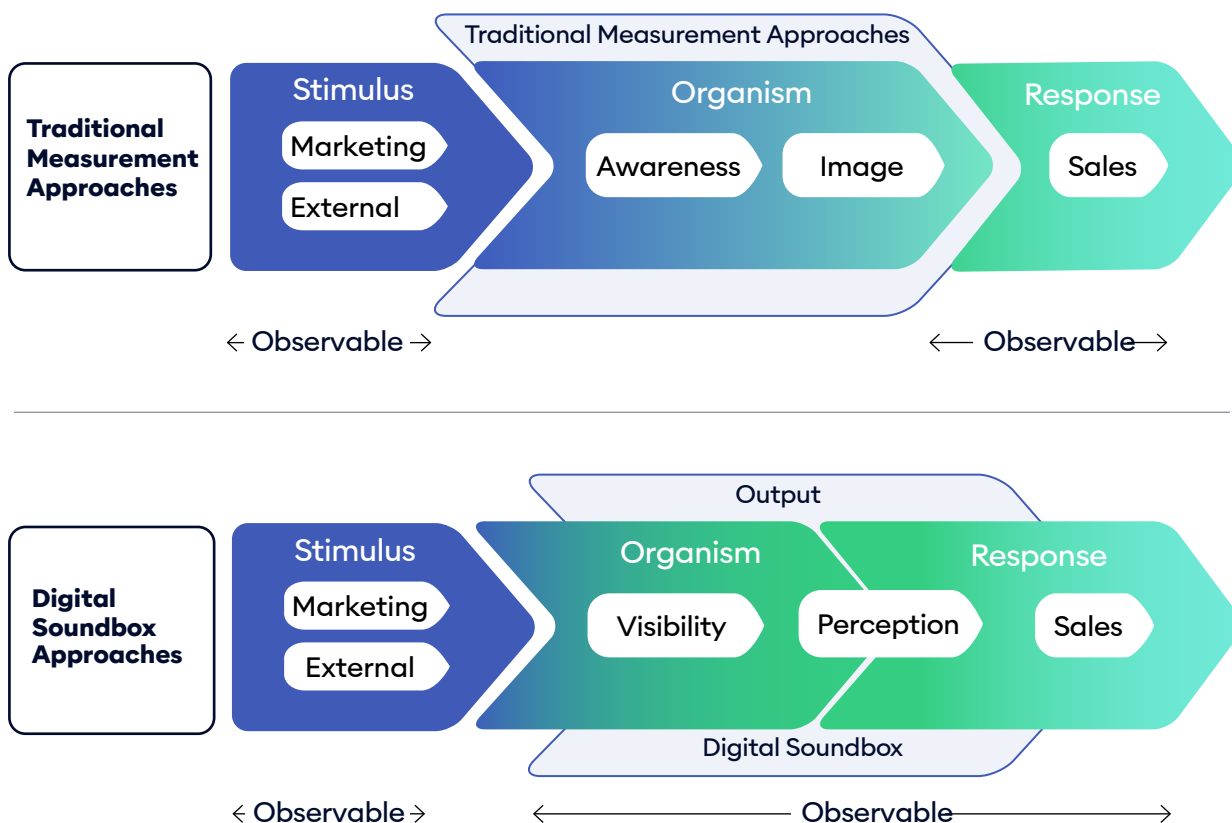


Figure 1: The Digital Soundbox based on the S-O-O-R 2.0 logic versus traditional measurement approaches

It is crucial for researchers to systematically evaluate this extensive 'social listening' data, which expands the realm of classic market research and, unlike conventional approaches, provides unbiased consumer insights in real time. The ongoing lack of acceptance towards digital data has nothing to do with the data's power to provide insights. There are other reasons why company leaders have been reluctant to incorporate data into their decision-making processes. This is due first of all to the disruptive character of data (including the lack of the necessary skills and resources within companies). A second reason is that there is often simply a lack of theoretical understanding. We address both of these reasons.

Data offers far more benefits to brand managers than merely descriptive analysis or keeping track of KPIs (engagement, etc.). It also gives them a chance to put proven science-based measurement paradigms into practice. **New data captures the full**

**spectrum of subjective brand perception** Data is not just about keeping count of easily quantifiable actions like page visits, shares or views. It also gives researchers a chance to perform an in-depth analysis of consumer's motivations, attitudes and behaviours towards brands, products, campaigns or even testimonials. By analysing the tone and content of what people are posting online when they refer to brand names, campaign content or other qualitative attributes of a brand, we can distinguish and analyse rational, symbolic and emotional aspects of these consumers' behaviour.

Proper use of digital brand measurement data allows researchers to measure brands more comprehensively on every level and at every marketing lever. Yet, even more importantly, it lowers the baseline (the percentage of non-explainable purchase decisions within time series models that explain sales) from 30% to between 5 and 10%. Contrary to current trends in brand measurement and consulting, the label 'brand strength' can hardly be applied to the baseline, which is nothing more than a reservoir for all the proportions of variance that are not explainable within marketing effect models. Now that data is omnipresent, we can and should quantify specific consumer associations and responses in the form of digital footprints, and link these to marketing and sales metrics. This is exactly what our Digital Brand Equity (DBE) approach enables us to do.



## Digital Brand Equity (DBE): A digital, industry-specific approach to measuring science-based brand metrics

Our DBE approach brings classic brand theory to a new level by combining it with new digital media, technologies and analytics, as well as rigorous scientific methodology. DBE provides a consistent link between strategic brand positioning and continuous marketing activities at the operational level of the 4 P's. We have validated our approach repeatedly in various use cases, and multiple major brands have fully embraced it. The following sections explain what's behind it, how it works and what brand managers can do with it.



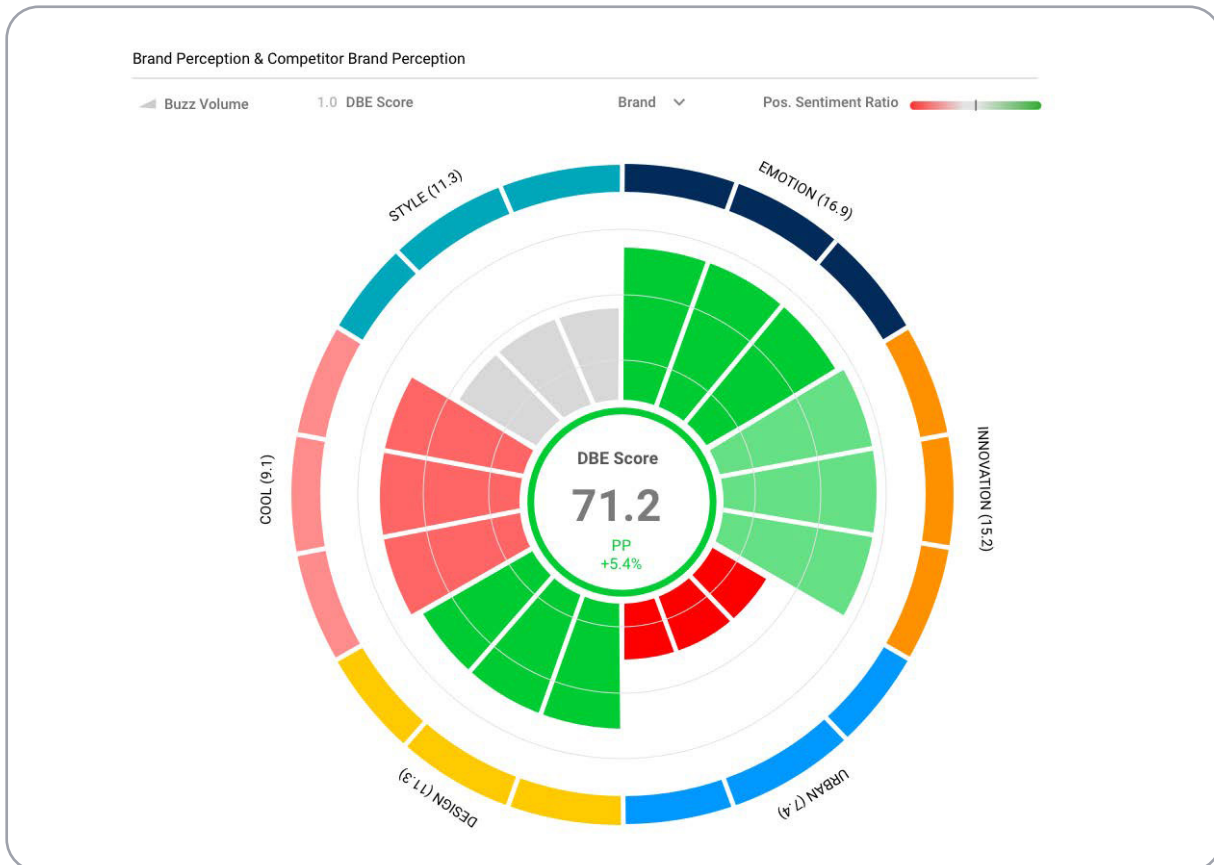


Figure 2: Example of a brand association wheel based on DBE measurements as a module within the TD Reply Pulse dashboard.



**Digital Brand Equity (DBE) = the digital renaissance of customer-based brand equity (CBBE)**

Let's return to the topic of measuring brand associations in the minds of consumers. According to Keller's customer-based brand equity (CBBE) approach, these associations (i.e., 'acquired brand knowledge') are precisely what causes consumers to respond to brands in specific ways. This means that we can measure brand equity based on brand awareness as well as the brand image that consumers share within their social environment. That image refers to specific attributes, benefits or more general attitudes towards the brand. To translate these brand associations on the various hierarchical and abstraction levels (attributes, benefits, attitudes) into

customer-based brand equity, Keller assesses the value of brand associations based on the criteria of strength, favorability and uniqueness of brand associations (see Table 1). Our Digital Brand Equity approach focuses precisely on these essential elements of customer-based brand equity and translates them into a digital brand measurement method.




Criteria for evaluating brand associations	Conceptual component based on Keller's CBBE	Operationalised in TD Reply's DBE
<p><b>Strength of associations</b></p> 	<p>Strength of node connections in a semantic network, defining salience</p>	<p>Number of mentions of an association in relation to other associations as well as the overall buzz surrounding a brand</p>
<p><b>Favorability of associations</b></p> 	<p>Subjective relevance and personal valence</p>	<p>Tone/sentiment of the mentions of an association</p>
<p><b>Uniqueness of associations</b></p> 	<p>Comparison of associations in a competitive context</p>	<p>Measurement of the relative salience of brand mentions and sentiment to the relevant competition</p>

Table 1: From Keller's CBBE to TD Reply's DBE

Measuring the strength and favorability of key brand associations enables us to profile brands accordingly and quantify them in the form of a combined digital brand perception score.

04

**Digital Brand Equity (DBE)=**  
systematic data-driven brand  
management in 5 steps

DBE is not a separate tool in itself, but a brand equity measurement method that can be integrated into any social listening tool already in use in-house. It digitally measures your brand using text recognition (NLP) and matching algorithms, as well as high-scale statistics that are efficiently rolled out. You have the freedom to choose which social listening tool you use to collect user-generated content; the DBE works independently of the platform. The **5 steps** below explain exactly how it works:

## Measuring the brand identity target image based on proven brand associations

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Several years ago, we started developing our digital brand measurement tool based on Jennifer Aaker's work on measuring brand personality. The starting point of our Digital Brand Equity approach was the method of holistically measuring brand associations (in this case, brand personality traits) to identify patterns and correlations within them and to condense the individual measured variables into overarching brand dimensions. Since then, our library of operationalised brand associations has grown far beyond the personality traits initially used by Aaker. Today, it also includes broader functional, emotional or symbolic benefit components.

This pool of relevant brand associations, which has been built up across multiple industries and brands, enables us to perform a lean setup and to customise the associations to be measured, based on the client's brand identity target image, which is usually already defined. Yet it's equally effective even if the client has no clear brand identity target image, or if we need to first conduct exploratory research to determine which associations consumers have with the brand.

## 2

### Validating the measurement tools inside the consumer's digital reality

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After the brand associations are defined based on the brand identity target image and translated and operationalised into language used by consumers, we put them to their first stress test in comparison with brand-related conversations that we've identified online.

Based on the initial operationalisation, an iterative calibration of the operationalisation takes place, accounting for relevant buzzwords, slang phrases or hashtags from consumers of various target groups and cohorts. By calibrating the social listening operationalisation, we ensure that we are also measuring relevant associations that are meant, for example, to be authentic or provocative, but are rarely formulated as such. This reality check is an indispensable step towards truly getting in touch with consumers.

## 3

### Identifying overarching brand dimensions using multivariate analysis and visualisation

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Next, we clean the data and identify outliers. After that, we check the vast number of operationalised brand associations for underlying patterns of similarity, so we can synthesise them into a smaller number of overarching brand image 'dimensions' based on factor analysis. These dimensions can be interpreted in terms of content and precisely broken down in terms of time. They include aspects such as sustainability, progressiveness or tradition, which can then be compared with one other. They can also be compared with the equivalent dimensions of competing brands. To do that, we also quantify the overarching dimensions of the brand images for the selection of relevant competitors and use social network analyses (SNA) to see how they stack



up against one another. This allows us to go beyond the limitations of conventional brand measurement and truly uncover and visualise the mental maps of consumers. As a result, we reveal how and exactly to what extent brands compete with each other when it comes to specific dimensions of their image.

After the brand dimensions have been identified, we must then render them understandable and tangible. Mood boards are one effective, tangible means of relating brand images from the market back to the company's marketing and branding teams.

## 4 Brand management through continual DBE tracking

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Who is my main competitor? Finding out the answer to this question, not just in general, but also on the level of specific brand management variables, is the first step towards gaining competitive advantages. This knowledge can help companies to win over a specific target group, for example, in the battle to achieve salient positioning for a specific dimension of their brand image, such as sustainability.

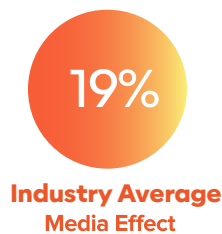
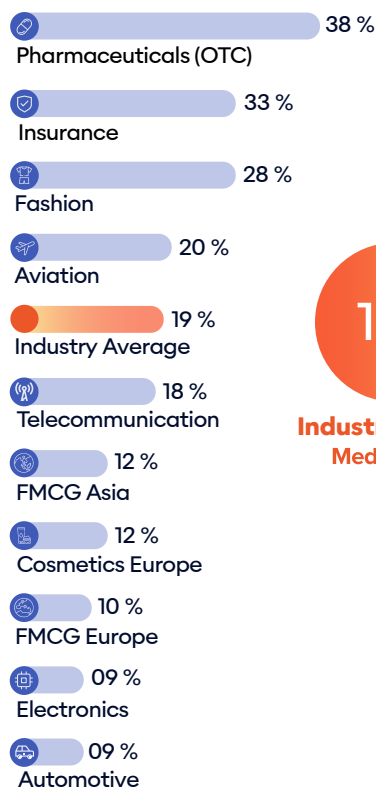
Yet, DBE is not just an effective means of consolidating valuable findings to inform your brand management strategy. Much more importantly, it provides the granularity of insights that is necessary for making brand-related decisions at the operational level. The continuous tracking of relevant brand drivers in the dashboard offers the possibility of linking relative competitive positions with concrete marketing strategies almost in real time. Instead of only observing the change in brand image, this makes it possible to assess the success of marketing on brand design.

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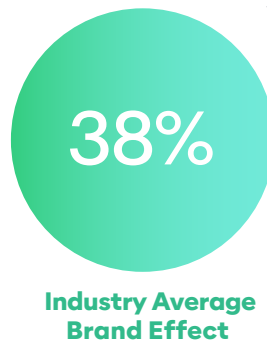
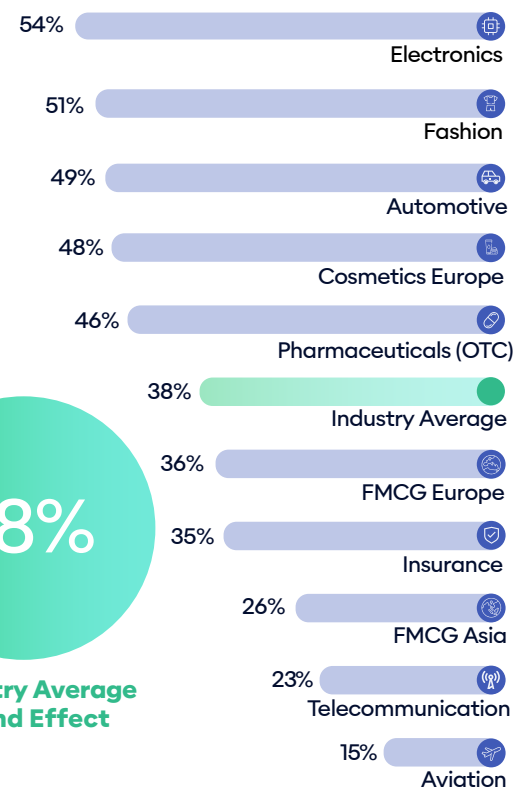
# Quantifying the brand's contribution to success by integrating it into sales models

You can only succeed in interlocking brand strategy, brand measurement and brand management if your company's marketing department is able to target messaging in such a way that facets of the brand image which provide a competitive advantage with regard to consumer (sales) behaviour are used to stimulate performance. Once we have defined, operationalised and understood the brand dimensions that we have identified, it is time to put them to the test within marketing effect modelling. Here, with the help of high-frequency data, we determine the brand's actual value proposition, based on the explained variance in sales – all in a statistically valid manner and allowing for data traceability.

### AVERAGE MEDIA EFFECT x-Industry Benchmarks



### AVERAGE BRAND EFFECT x-Industry Benchmarks



High Reliance

Low Reliance

Figure 3: Statistically modeled effect sizes of brand and media performance on realized sales across industries (in %). Based on data from TD Reply client projects in the period 2013-2020.

05



# Digital Brand Equity in action

A number of iconic brands have already made our DBE approach an integral part of their brand management and brand success tracking. DBE enables brand managers to consistently link strategic brand positioning with ongoing marketing activities at the operational level. This approach is an effective solution for meeting a wide range of challenges in many different fields

**One leading manufacturer of sporting goods** has embraced our DBE model to comprehensively measure its brand perception and strength across all sports categories, products and testimonials. For them, the result has been a holistic, highly detailed analysis of their brand within its competitive context. Using classic brand tracking, it would have been (financially) infeasible for them to have achieved such a detailed level of insight. This makes DBE a powerful, data-driven tool for aligning strategic and operational brand-related decisions. It shows brand managers exactly how much value each individual asset and marketing activity adds to the overall perception of their brand. As such, DBE serves as a counterweight to a purely sales- or performance-driven evaluation methods. Brand managers at the company use granular DBE data to make strategic recommendations on which sports categories, products and testimonials are best suited for driving certain brand associations.

**A leading car manufacturer** has used granular, high-frequency DBE data in their marketing effect modelling to clearly prove and measure how important their brand is to their sales success. The data clearly reveals how the brand's value proposition results in an actual variance in sales. For brand managers, this solid evidence of the brand's actual business relevance is crucial when making the case for further investment in brand management activities. This is especially true in business environments like the automotive industry, which are primarily engineering-driven. The DBE data also flows automatically into the global data analytics hub, which continuously measures the image of each brand and its competing brands. In addition to continuous tracking, it is also important to conduct deep-dive analyses and measure

the success of brand-related marketing activities such as campaigns, launches, events and trade fairs. With DBE data, the company can also check in advance to see how potential partnerships or presence on a new platform fit their brand (brand fit).

**A leading airline** is using DBE to evaluate and readjust brand experiences throughout the customer journey. Here, it is essential to understand the brand experience from start to finish, not only during the customer's flight experience itself, but also at much earlier stages, such as finding inspiration for a trip and making future travel plans. Each of these brand touchpoints influences how customers perceive the brand. The strength of DBE lies precisely in this granular, detailed analysis of brand perception at each specific brand touchpoint. Now, the company can evaluate each touchpoint individually to fully understand the customer's current perception. And this enables it to tweak brand perception on the whole, as well as at each step of the journey.

These examples show how DBE enables brand managers to answer many different strategic and operational questions. DBE is our solution for providing the importance of the brand, systematically translating the brand into specific actions and consistently overcoming the brand dilemma.





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# DRIVING CHANGE THROUGH DATA

