Why Brands Grow: THE POWER OF DIFFERENTIATION AND PENETRATION

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Koen Pauwels and Oliver Koll examine the complex relationship between consumers' attitudes toward a brand and its market outcomes. An analysis of more than 150 brands in five countries reveals the intricate reciprocal connections between customer perceptions and behaviors, brand differentiation, and market penetration in both stable and emerging markets.

Building strong brands is one of the most important responsibilities of marketers. The more a brand appeals to consumers, the more buyers it attracts and/or the higher its price can be, relative to those of the same product, unbranded. The resulting incremental sales revenues are often termed a brand's *revenue premium*.[1] Today's expanding range of purchasing channels encourages overwhelmed consumers to rely on brands in making decisions, such that those brands are more important than ever.

Do Attitudes Drive Behavior or Reveal Past Choices?

Both practitioners and academics judge the strength of brands by examining consumers' attitudes or behavior in relation to them. Strong brands have better sales or reach, but also tend to inspire in consumers more sympathy, trust, and expectation of quality.[2] A common term used to describe the strength of brands, namely brand equity, takes both these characteristics into account by distinguishing cognitive brand equity (i.e. positive attitudes) and behavioral brand equity (i.e. higher choice likelihood). So how can managers enhance brand equity?

Experts tend to adhere to one of two schools of thought. Both agree that consumers must be aware of the brand in order for marketers to build its strength, but they disagree about the next link in the chain. Traditionally, marketing experts held that potential buyers first become aware of a brand, then develop either a positive or a negative attitude toward the brand, and finally decide whether to buy. More recently, several scholars pointed out that a brand's buyers give it better ratings than those who have not bought, suggesting that, in fact, attitude follows behavior.[3] Andrew Ehrenberg proposed a new model, termed the awareness-trial-reinforcement model or ATR, in which positive attitudes develop only *after* purchase. The same group of researchers also found that buyers rate small brands less well than large brands.[4] These findings had little effect on the dominant belief that attitudes drive behaviors until, in 2010, Byron Sharp published his book *How Brands Grow: What Marketers Don't Know*. The book argued that brands do not grow stronger than their rivals by improving consumer attitudes, but by being more mentally and physically available. Consumers who are more aware of a brand are simply more likely to buy it. Because most of us are fond of our choices and our possessions, Sharp and his colleagues viewed attitudes as nothing more than lagging indicators of behavior. Behavior does not follow attitude, they argued, attitude follows behavior.

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This debate is not just intellectually interesting, but vital to many facets of marketing. An organization that aims to influence customers' attitudes toward its brand(s) will approach brand building very differently from one whose focus is on building customers' awareness. If understanding customers' attitudes is of little diagnostic value, much of what is now central to market research education and practice would have little value. Organizations would need to seek different skills and universities would need to adjust their curricula.

Marketing and management scholars, moreover, base their research methods on their belief that consumers' attitudes predict their choices (or vice versa). This debate therefore influences the direction of the discipline.

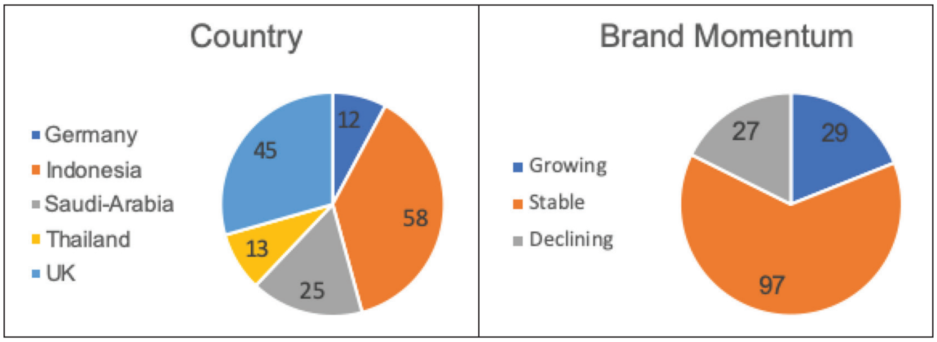
Consumers Choose Strongly Differentiated Brands

The marketing management literature has traditionally emphasized differentiation, that is setting your brand apart by offering something that competing brands don't, and which matters to many of your potential customers. While differentiation is not essential, it does make consumers *more likely* to choose one brand over another.[5] There are many ways to stand out. Some marketing managers choose to link their brand with specific celebrities. Nike, for example, has associated itself with star athletes including Michael Jordan, Serena Williams, Tiger Woods and many more. Other brands link themselves to specific groups or lifestyles, like Red Bull (Gives You Wings) which promises better performance in challenging circumstances. Still others proclaim a purpose, appealing to their stakeholders' values. One example is Dove's Real Beauty Campaign which emphasizes that all individuals should enjoy a positive relationship with their appearance. By differentiating its brand, a company can overcome disadvantages of price or features and influence how consumers respond to its other marketing efforts.[6] Brand differentiation, then, is key. Without it, companies will see less growth than their strongly differentiated competitors.[7]

What Comes First, Attitudes or Behaviors?

The approach of brand managers, particularly with regard to differentiation, is shaped by which of these views they adopt. Those who believe that behavior follows attitude will want to associate their brand with trust, strength, aesthetic appeal, value, and other appealing traits. If potential buyers find the traits attractive and the price acceptable, they will purchase the product. Brand managers who believe that

Figure 1: *Sample Characteristics of the 153 brands*



FMCG brands from five countries, with a similar number of brands with growing and declining market shares.[12]

attitude follows behavior will view brand differentiation as both unattainable and ineffective, focusing instead on the ease with which their brand comes to consumers' minds and how readily those consumers can find their product.[8]

In 2021, Decker wrote that "nearly everybody in the industry has lined up on one side or the other" and "marketing people describe themselves as 'pro' Ehrenberg-Bass or 'anti,' with the latter asking 'who knows more about branding: a bunch of egghead academics, or people in the trenches actually working at brands?'[9] Despite this polarization, the academic marketing literature has been largely silent on the subject.[10]

To shed new light on the matter, we analyzed 153 brands active in Germany, Indonesia, Saudi Arabia, Thailand, and the UK. We hoped to determine if attitude drives behavior or vice versa, or if both are true. We also wanted to know how important differentiation is, relative to other attitude metrics, so that managers would have a firm understanding of its benefits, or lack thereof. We tested our findings by comparing large and small brands as well as mature (Germany and the UK) and emerging markets (Indonesia, Saudi Arabia and Thailand).

The empirical study

We used panel data ~~sorted by market~~ from several thousand households about consumers' purchases of fast-moving consumer goods (FMCGs), those which sell quickly and for comparatively low prices, ranging from personal and home care products to food and beverages. We also examined survey ratings of consumers who bought items in each category according to brand and country.[11] For each brand, we looked at two behavioral success factors: market share, the proportion of purchases ~~of a given type of product which are~~ the brand in question, and penetration, the proportion of the population who have bought the brand at least once. We measured brand awareness by the respondents' ability to recall a brand unaided when given the type of product. We also measured three indicators of attitude: perceived differentiation, percentage of respondents who believe the brand "offers something that other brands do not"; perceived value, percentage of respondents who do not think the brand "costs more than you are prepared to pay"; and customer satisfaction, percentage of respondents who "would recommend the brand to others." As shown in Figure 1, this data covers both mature and emerging economies, as well as brands with growing, declining, and stable market shares.

Direction of Causality

Determining causality over time is challenging because both changes in X and the past of Y may help predict changes to Y. For example, does yesterday's weather in Boston help us to predict today's weather in London if we already know yesterday's weather in London? In 1969, C.W. Granger proposed what are now known as Granger Causality (GC) tests to answer questions of this kind. Using this along with multivariate regression models, which trace the relationships between a set of variables, in this case the six metrics described above,[13] we built two predictive models. The first traced the influence only of each variable's past on its own current value (Y). The second traced the influence of both its own past and the past of each of the other variables (X). If the second model yielded at least 5 percent better forecasting,[14] we concluded that X affects the value of Y, termed *X Granger Causes Y.* By running the same analyses with the two variables in opposite positions we determined whether the two variables affect each other, termed *dual causality.* In this case we know that X Granger Causes Y and Y Granger Causes X.[15]

Dual causality is the norm

The first thing we learned is that dual causality is common. For ninety-six brands, differentiation caused and was caused by awareness, and for eighty-two of those brands, it had the same relationship with perceived value. The market share of ninety-five brands showed a comparably strong mutual relationship with perceived value, and for sixty brands, with penetration. Ninety-two brands enjoyed a similar mutual relationship between penetration and awareness.

Most of the instances in which the causality moved in only one direction involved market share driving other variables including penetration, awareness, differentiation, and satisfaction. Only perceived value is more likely to drive market

Figure 2: *Effects of Differentiation On the Other Studied Metrics*

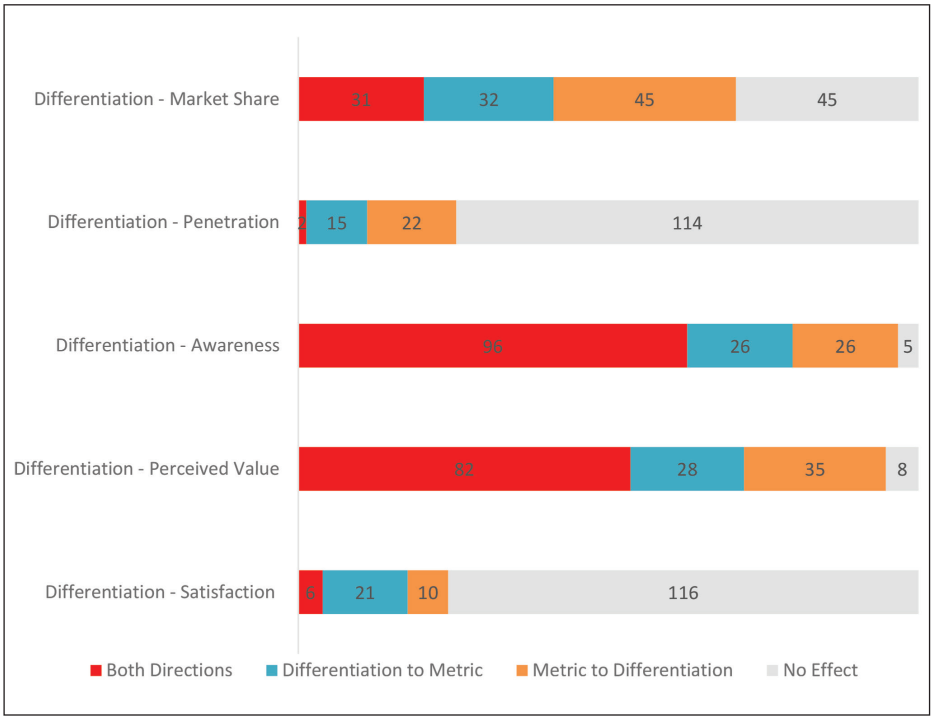
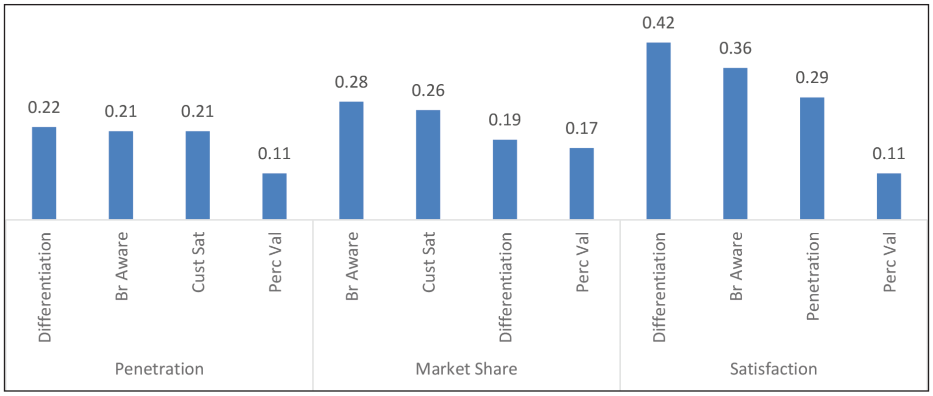


Figure 3: *Top drivers of penetration, market share and satisfaction*



Numbers show the elasticities of changes in the four mindset metrics relative to share, penetration, and satisfaction

share than vice versa, and that by a narrow margin (twenty-six vs twenty-four brands). Instances of other factors driving market share without receiving a reciprocal boost were uncommon: differentiation and satisfaction (thirty-two brands each), penetration (twenty-nine brands), perceived value (twenty-six brands) and awareness (twenty-four brands).

Figure 2 shows that the influence of differentiation on awareness, perceived value, and market share is particularly pronounced and that its influence on penetration and satisfaction is comparatively slight.

Importance of Predictors

To examine the strength of the relationship between the six focal variables, we regressed each of them (a) on its own past and (b) on the present and past of the other variables. The exceptions are penetration and market share, which were too highly (> 0.80) correlated to be included in the same model. Details regarding this analysis can be found in the appendix.[16]

We have formulated our results as the percent by which the outcome variable increases in response to a 1 percent increase in the marketing variable, termed the *elasticity*. Our findings are in keeping with those of other studies which examined comparable relationships and reported elasticities between 0.10 and 0.70.[17] Figure 3 shows the top four drivers of market share, penetration, and satisfaction, the results which most marketing managers focus on.

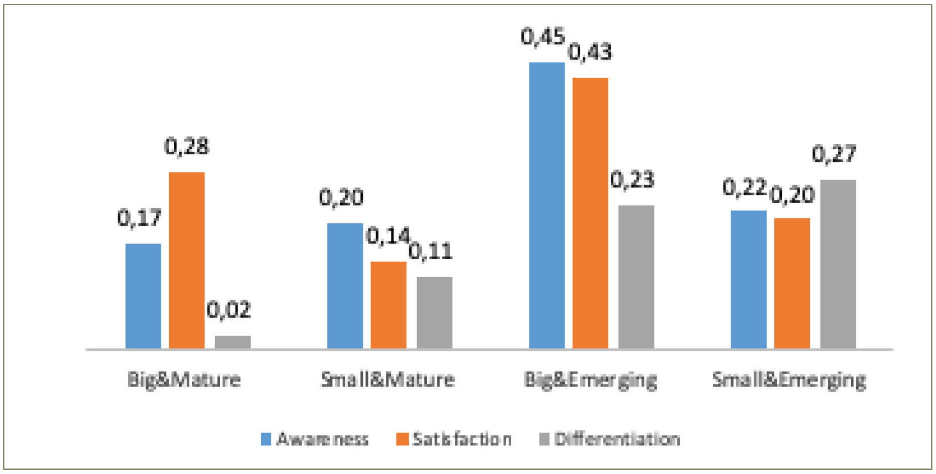
Differentiation Often Drives Penetration and Market Share

Market penetration is most strongly affected by brand differentiation (whose average elasticity is 0.22), brand awareness (0.21), customer satisfaction (0.21), and perceived value (0.11). On average, a 10 percent improvement in differentiation will lead to a 2.2 percent increase in penetration. The differentiation of brands like Sedaap Soy Sauce in Indonesia and Rejoice Shampoo in Thailand have had a particularly strong effect on penetration.

Market share is driven largely by brand awareness and customer satisfaction (average elasticities of 0.28 and 0.26), followed by differentiation (0.19) and finally perceived value (0.17). Vaseline skincare in Indonesia and Fairy Fabric Conditioner in the UK have been particularly successful in increasing their market share by improving their differentiation.

Customer satisfaction is strongly driven by brand differentiation (0.42), awareness (0.36) and penetration (0.29) and less by perceived value (0.11). Meanwhile, brand awareness is most affected by penetration and customer satisfaction (0.28 and 0.25), followed by differentiation (0.19), and finally perceived value (0.10) Perceived value's greatest influences are brand awareness and customer satisfaction (0.66 and 0.65), then penetration and differentiation (0.59 and 0.58). And finally, differentiation is most increased by customer satisfaction (0.50), awareness and penetration (0.32 and 0.31) and finally perceived value (0.20).

Figure 4: *Fostering growth according to brand size and market development*



The average elasticity of the three mindset metrics and market share for combinations of a brand's size and the development of its market

Moderation analysis

Next we examined were different for brands that are big or small (relative to the average market share of the top ten brands in a category), brands in different success trajectories (growing, declining, stable), brands in different categories (Home Care, Personal Care, Food/Refreshments), brands in whose category consumers have a different degree of interest (high versus low involvement based on scores sourced from a global survey on consumer category perceptions run by GfK and Kantar), and brands in different countries (emerging vs mature market). Details of our analytical approach can be found in the appendix.[18]

The characteristics of brand and economy change little

Most of the findings remain consistent across brands regardless of their share movement, category involvement, and category. But we find that the strength of some relationships varies depending on a brand's size and the market's maturity.

We found that, in building share and penetration, bigger brands benefit more from high customer satisfaction than smaller brands. Meanwhile smaller brands working to build awareness benefit more from differentiation and perceived value. In emerging markets, differentiation is more important to both share and penetration than in mature markets and awareness more strongly drives market share. In mature markets, improving perceived value increases differentiation. Figure 4 shows how awareness, satisfaction and differentiation affect market share in different situations.

Too much of the discussion in marketing is rooted in our desire to establish conflict between two opposite points of view, and then see one side win.

Implications

We have found no clear causality between consumers' attitudes towards a given brand and their behavior. We found many instances in which behavior followed attitude, but also many instances in which the reverse was true. There are several possible explanations for this apparent dichotomy, the simplest of which is this: Some consumers may learn about a brand, change their perception, and then behave differently, while at the same time, others may encounter a brand in the store, purchase it, and change their views because of that experience.

Our study therefore confirms both established thinking on building brand equity, arguing that attitudes cause behaviors, and more recent claims that behaviors cause attitudes. Given the human tendency to seek simple cause and effect relationships, this duality may be discomfiting, particularly to those looking to simplify their decisions. But too much of the discussion in marketing (and many other social sciences) is rooted in our desire to establish conflict between two opposite points of view, and then see one side win. By learning to accept that both sides are often correct, and that causation often runs both ways, we will only benefit. In political science, for example, donations and polls are known to drive one another, as are social and traditional news media.[19] Business scholars, likewise, have empirically demonstrated reciprocal relationships between ad spending and sales as well as between corporate social responsibility (CSR) and financial performance.[20]

Neither markets nor consumer preferences and perceptions are stable. The best any company can hope for is to run faster than the competition.

Differentiation drives penetration and market share

We have also examined whether brands draw value from offering something different from their competitors (differentiation) or simply from being uniquely identifiable (distinctiveness). Our measure of brand differentiation, the percentage of consumers who feel that the brand “offers something that other brands do not,” does not explicitly require that the brand have a unique product or service, but it does go beyond the Ehrenberg-Bass Institute’s requirement for brand distinctiveness, that consumers be able to identify the brand.[21] We have found that such brand differentiation, whether actual or perceived, fuels penetration and market share. And distinctiveness may spur differentiation because, “even if customers do not identify the brand message in the selection of colors or the typeface, subconsciously they will know that certain branding clues can signify strategic differentiators such as premium quality, a healthier option, a variant for children or a fun and cheeky character of the brand.”[22] For instance, customers may prefer Gillette because it differentiates its shavers by promising outstanding longevity, the smoothest shave you can get, and continuous blade improvement. Unique, and sometimes trademarked, cues, such as logo, tagline, and celebrity endorsers convey all or some of these associations to consumers, even if some do not perceive them as unique to Gillette. Neither markets nor consumer preferences and perceptions are stable. The best any company can hope for is to run faster than the competition by maintaining sufficient brand differentiation in a large enough part of the market.

Because attitudes and behaviors often drive one another, it is worth improving both, using marketing instruments to build consumers’ trust and approval, while increasing the product’s availability to influence their choices. We show that it would be unwise to discard the differentiate or die philosophy. Building strong brand differentiation earns companies positive results at the market level. Differentiation and perceived value fuel awareness, the mindset metric most essential to driving market share and second only to differentiation in driving penetration.

Focus on both attitudes and behavior to grow your brand.

We have found differentiation to be more important than have some previous studies, which have typically focused on big brands in mature markets. This difference may stem from our study’s broader scope. Indeed, differentiation becomes increasingly important as we move from big brands in mature markets to small brands in emerging markets. We have also found customer satisfaction to be the most important driver of market share for big brands in mature markets. Brand awareness, meanwhile, is key to both small brands in mature markets and big brands in emerging markets. Marketers must therefore design growth strategies according to the size of their brand and the maturity of their market.

In emerging markets, marketers should focus on building awareness through brand differentiation and perceived value. Consumers in these markets typically want to familiarize themselves with a brand before they even enter the store. Differentiation is less important for FMCGs in mature markets than for those in emerging markets, and perceived value matters more. Past research has shown that FMCG buyers in mature markets are less swayed by image arguments than those in emerging markets.[23] Moreover, differentiation may have less influence in mature markets because companies have had more time to learn from their customers and each other, making their offerings more similar than those in emerging markets. Consumers’ decisions also tend to be more routine and less complicated in mature markets. Big brands in mature markets should therefore emphasize unique packaging, color, appearance, and other distinctive qualities to help consumers spot their brand on shelves crowded with alternatives.

Big brands should not rest on their laurels, though. Customer satisfaction has a far stronger effect on their market penetration and share than on those of small brands. Because big brands tend to be well-known and widely purchased, the customer is theirs to lose. And their popularity means that bad news about them spreads fast, reducing customer satisfaction and, with it, sales. On the other hand, customers’ familiarity with large brands means that, as long as those brands don’t fail to satisfy, many will go on purchasing them, in part because of their availability and prominent placement in stores. By contrast, customer satisfaction affects small brands less. Instead, they face the task of convincing those who are not yet their customers to consider, and ultimately choose, their products. Our study demonstrates that their best course is to improve differentiation. ■

Author Bios

Koen Pauwels is a distinguished professor of marketing at Northeastern University's D'Amore-McKim School of Business in Boston and co-founder of its DATA initiative. He holds positions in BI Oslo in Norway and VU Amsterdam in the Netherlands. He is a Senior Editor for the *Journal of Marketing* and the *International Journal of Research* and assists companies in evaluating and improving their marketing.

Oliver Koll is a professor of marketing at the University of Innsbruck in Austria. He is a co-founder of a marketing strategy consultancy that specializes in brand positioning and brand equity evaluation.

Endnotes

1. The concept of the revenue premium as a measure of brand strength was introduced by Ailawadi and her co-authors in 2005, describing how strong brands attract more buyers and/or convince their buyers to accept higher prices; see Kusum L. Ailawadi, Donald R. Lehmann, and Scott A. Neslin, "Revenue Premium as an Outcome Measure of Brand Equity," *Journal of Marketing* 67, no. 4 (2003): 1-17.
2. We refer the interested reader to:
   Shuba Srnivasan, Marc Vanhuele, Koen Pauwels, "Mind-Set Metrics in Market Response Models: An Integrative Approach," *Journal of Marketing Research* 47, no. 4 (2010): 672-684.
   William R. Dillon et al., "Understanding What's in a Brand Rating: A Model for Assessing Brand and Attribute Effects and Their Relationship to Brand Equity," *Journal of Marketing Research* 38, no. 4 (2001): 415–29. http://www.jstor.org/stable/1558608.
3. This idea is presented, for example, in T. Patrick Barwise and Andrew S. Ehrenberg, "Consumer Beliefs and Brand Usage," *Journal of the Market Research Society* 27, no. 2 (1985): 81-93.
4. This phenomenon is termed *double jeopardy*. Although the concept has been around for decades, it is not broadly covered in marketing textbooks. For more information, read: Andrew S. C. Ehrenberg, Gerald J. Goodhardt, and T. Patrick Barwise, "Double Jeopardy Revisited," *Journal of Marketing* 54, no. 3 (1990): 82-91.
5. Dozens of papers and books highlight the idea and emphasize the value of differentiation. Three we suggest consulting are:
   Kevin Lane Keller, "Conceptualizing, Measuring, and Managing Customer-Based Brand Equity." *Journal of Marketing* 57, no. 1 (1993): 1–22. https://doi.org/10.2307/1252054.
   Marc Fischer, Franziska Völckner, and Henrik Sattler. "How Important Are Brands? A Cross-Category, Cross-Country Study." *Journal of Marketing Research* 47, no. 5 (2010): 823–39. http://www.jstor.org/stable/20751546.
   Al Ries and Jack Trout, *Positioning: The Battle for Your Mind* (New York: Warner Books, 1986).
6. The different marketing tools used by a company re termed the marketing mix. For more information see:
   Tülin Erdem, and Joffre Swait, "Brand Equity as a Signaling Phenomenon," *Journal of Consumer Psychology* 7, no. 2 (1998): 131–157.
   Hannes Datta, Ailawadi L. Kusam, and Harald J. van Heerde, "How Well Does Consumer-Based Brand Equity Align with Sales-Based Brand Equity and Marketing-Mix Response?" *Journal of Marketing* 81, no. 3 (2017): 1-20.
7. For more details read: Nigel Hollis, "How Brands Really Grow: Seth Godon vs. Byron Sharp," accessed Sept 10, 2019, https://www.millwardbrown.com/Insights/Point-of-View/How_brands_really_grow/.
8. These ideas have been presented in various publications from the Ehrenberg-Bass Institute, for example in Jenni Romaniuk, Byron Sharp, and Andrew Ehrenberg, "Evidence Concerning the Importance of Perceived Brand Differentiation," *Australasian Marketing Journal* 15 no. 2 (2007): 42-54. Other publications include Romaniuk and Sharp (2003), Ehrenberg, Barnard, Kennedy and Bloom (2002), Romaniuk, Sharp and Ehrenberg (2007), Romaniuk and Gaillard (2007), Winchester, Romaniuk and Bogomolova (2008), and Sharp and Dawes (2010).
9. Ethan Decker, "The 'Wiggle Room' in Marketing Science," *Contagious*, March 15, 2021, https://www.contagious.com/news-and-views/creativity-marketing-science-sharp-how-brands-grow-wiggle-room
10. Only two papers take a conceptual stance on this subject and one an empirical stance. John Rossiter holds that Barwise and Ehrenberg's conclusions do not follow from their data and that Ehrenberg's (ATR) model is of questionable usefulness. Meanwhile Lia Zarantanello, et al. take direct issue with the claim that brand differentiation does not matter, but do not provide an empirical comparison. In the one empirical paper on the subject, Koen Pauwels and Bernadette van Ewijk demonstrate a dual causality between behavior and attitude, quantifying the explanatory and predictive power of sales. Their study, however, covers only one country (the Netherlands) and does not include brand differentiation among its metrics. For more details we refer the reader to
    Lia Zarantonello et al., "How Consumer-Based Brand Equity Relates to Market Share of Global and Local Brands in Developed and Emerging Countries," *International Marketing Review* 37, no. 2 (2020).
    John R. Rossiter, "Comments on 'Consumer Beliefs and Brand Usage' and on Ehrenberg's ATR Model," *Journal of the Market Research Society* 29, no. 1 (January 1987): 83–8.
    Koen Pauwels and Bernadette van Ewijk, "Enduring Attitudes and Contextual Interest: When and Why Attitude Surveys Still Matter in the Online Consumer Decision Journey," *Journal of Interactive Marketing* 52, (Nov. 2020): 20-34.
11. Our selection criteria included (1) at least 2 years (25 monthly observations) of purchase data on each brand, (2) matching mindset metrics for each country over the same period (to run our time series tests and models), and (3) at least ten brands in each country (to make inferences about the country).
12. We determined growth or decline of market share based on a significant time trend when regressing market share on an intercept and a time trend.
13. G. W. J. Granger, "Investigating Causal Relations by Econometric Models and Cross-Spectral Methods," *Econometrica* 37, no. 3 (Aug. 1969): 424-438.
14. Note that, with only 25 observations, we used the most commonly used within-sample testing approach, not out-of-sample forecasting. Our results remain robust if we incorporate fewer lags than the reported analysis using six lags.
15. For marketing applications of Granger Causality, see
    - Anatoli Colicev et al., "Improving Consumer Mindset Metrics and Shareholder Value Through Social Media: The Different Roles of Owned and Earned Media." *Journal of Marketing* 82, no. 1 (2018): 37–56, http://www.jstor.org/stable/44878276.
    - Michael Trusov, Randolph E. Bucklin, and Koen Pauwels. "Effects of Word-of-Mouth versus Traditional Marketing: Findings from an Internet Social Networking Site." *Journal of Marketing* 73, no. 5 (2009): 90-102, http://www.jstor.org/stable/20619048.
16. Each variable is expressed in logs of the raw data, so the coefficients can be directly interpreted as elasticities. For example, the penetration equation is: $Penetration_{it} = a_i + b1_i * BrandAwareness_{it} + b2_i * BrandAwareness_{it-1} + c1_i * PerceivedValue_{it} + c2_i * PerceivedValue_{it-1} + d1_i * Distinction_{it} + d2_i * Distinction_{it-1} + e1_i * CustomerSatisfaction_{it} + e2_i * CustomerSatisfaction_{it-1} + r_i * Penetration_{it-1} + error_{it}$ [equation 1] Before running the regression, we first verify that none of the variable pairs are correlated in excess of 0.80. That is the case for 2 brands in Indonesia, which we exclude from analysis, leaving 151 brands for the multivariate regression. Besides such multicollinearity (correlation among the explanatory variables), another threat to managerial inference from this analysis is endogeneity, i.e. correlation of an explanatory variable with the error term. For example, a brand's advertising campaign (not captured in our data) may increase both penetration and differentiation. Regressing penetration on differentiation would show a positive coefficient, even though differentiation does not drive penetration. This example also shows two sources of endogeneity: simultaneity (we chose to regress penetration on differentiation, but differentiation is itself a dependent variable driven by other variables) and omitted variables (in this case, the advertising campaign). Our analysis accounts for simultaneity by the Granger Causality tests. However, we can't rule out that unmeasured

variables could drive both the dependent and independent variable. This issue is not specific to our chosen model, and managers should always be careful interpreting model results given this caveat.

17. Shuba Srnivasan, Marc Vanhuele, and Koen Pauwels, "Mind-Set Metrics in Market Response Models: An Integrative Approach," *Journal of Marketing Research* 47, no. 4 (2010): 672-684.
18. For instance, the moderator regression of the effect of penetration (PE) on brand awareness (BA) in regression 1 (reg 1) is specified as: $PEtoBA_{i,reg1} = a + f * bigbrand_i + g * categoryinvolvementhigh_i + h * emergingmarket_i + i * growbrand_i + j * declbrand_i + k * homecat_i + l * foodrefrcat_i + e_i$ [equation 2]
19. Raoul V. Kübler, Koen H. Pauwels, and Kai Manke, "How Social Media Drove the 2016 US Presidential Election: A Longitudinal Topic and Platform Analysis," accessed 2020, http://dx.doi.org/10.2139/ssrn.3661846 John Sides and Lynn Vavreck, "The Gamble: Choice and Chance in the 2012 Presidential Election," (Princeton, NJ: Princeton University Press, 2013)
20. Marnik G. Dekimpe and Dominique M. Hanssens, "Sustained Spending and Persistent Response: A New Look at Long-Term Marketing Profitability." *Journal of Marketing Research* 36, no. 4 (1999): 397--412. https://doi.org/10.2307/3151996.
21. Jenni Romaniuk, Byron Sharp, and Andrew Ehrenberg, "Evidence Concerning the Importance of Perceived Brand Differentiation," *Australasian Marketing Journal* 15, no. 2 (2007): 42--54.
22. Some of main discussion points and differences between the concepts of distinction and differentiation have been discussed by Magdalena Adamska (2019) on this blog: https://brandstruck.co/blog-post/brand-differentiation-vs-brand-distinctiveness-what-matters-more/
23. An example of a paper that compares the effectiveness of marketing actions in mature versus developing markets: Koen Pauwels, Selin Erguncu, and Gokhan Yildirim, "Winning Hearts, Minds and Sales: How Marketing Communication Enters the Purchase Process in Emerging and Mature Markets," *International Journal of Research in Marketing* 30, no. 1 (2013): 57-68.