In Search of True Brand Equity Metrics: All Market Share Ain't Created Equal

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The elusive notion of brand equity is operationalized in a "share tiering" framework with a combination of multiple constructs: (1) relative barrier or brand price, (2) brand quality perceptions, (3) brand purchase loyalty, and (4) self-report future brand purchase trend. This general measurement framework for "true" brand equity when applied longitudinally permits the evaluation of markerting ROI. Recommended measures for the "share tiering" approach to brand equity measurement are illustrated using the cola category as an example.

INTRODUCTION

Much has been written of late about the holy grail of marketing, measuring the Return on Investment of Marketing dollars (ROI-M). The topic is certainly not a new one, especially as evidenced in the frequency of board room discussions on the topic. Recent interest has been driven by development of more sophisticated technologies for collecting the required quantities of customer level data that provide the basis to estimate such a statistic. We appear to be approaching the day when it will be possible to confidently measure the formerly elusive contribution of marketing to business success.

To illustrate the importance of this effort, the latest collaboration between P&G, VNU, and Arbitron is being billed as the "nirvana tool" (*Advertising Age*, 2004b). It promises to harness the enormous quantities of data from Nielsen's Home Scan customer panel purchase data and marry it with media activity at the customer level. But the question remains, marketing's contribution to "what"? The buzz surrounding ROI-M inevitably must lead to an examination of what it is we are hoping to *find* once the grail is discovered, namely the mysteries of "brand equity." Over time, this construct has become ever more important as the key to understanding the objectives, the mechanisms, and especially the net impact of the holistic impact of marketing. This article suggests the conceptual basis upon which foundation of ROI-M must be predicated, "true" brand equity.

The discussion of brand equity and its measurement has a broad range of bedfellows, both academic and corporate, that collectively share more than a bit of a "black box" orientation. Today, there are now at least six well-established consulting firms, each with its own method for valuing a brand. These firms take the measure of a brand on multiple dimensions and emerge with a dollar figure purporting to represent its "value" (*BtoB*, 2004; *Businessweek*, 2004). From a consulting orientation, much is made of the relative size of these amounts and their movements up and down over time. Unfortunately, much less attention is paid by management to the real question of what the figures really represent. All this has prompted some to question the value of these types of valuation, which are often more subjective than objective (MarketingNPV.com, 2004).

For companies that do not value their brands in the billions (and even some that do), the operative question is less what their brand is *worth* in dollar terms, than what their brand *could do* for them in terms of revenue and profit. *Is the brand's potential to deliver profitable revenue increasing or decreasing, and what is driving the change*? Framed in these terms, the real heart and soul of ROI is to understand the impact of marketing on "brand potential" *in dollar terms*. Moreover, gaining an

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understanding of the causal activities related to the changes would make brand equity measures more actionable. Reaching *that* holy grail of measurement and understanding requires considerably more than a black box orientation.

The slang phrase in the secondary title (*All Market Share Ain't Created Equal*) represents many of the problems that underlie traditional practices of measurement. As a reflection of brand potential or even brand health, traditional measures such as sales and market share are obviously flawed, as all marketers will agree. Yet, market share has endured as the gross measure of brand health. The reason? It is easily measured and understood, and readily translates into the universal language of business—success in obtaining sales in the competitive marketplace.

Other measures that more closely capture the true picture of a brand—such as customer satisfaction, brand loyalty, and brand meaning—have proven difficult to use for purposes of computing ROI-M. For example, how many expensive tracking studies have we seen that showed little if any difference over time? How many special project research studies that provide in-depth, problem-solving snapshots that cannot be generalized across consumer groups and provide no hint of what the brand looked like before or after? Price elasticity, of course, has something to say as a measure of equity. The result of research in this area is, unfortunately, that managers tend to make locally optimal pricing decisions based on current costs, projected short-term *share* gains, or current competitor prices (Mela and Urbany, 1997), indicating even the practice of marketing does not take into account equity and equity building.

Recognizing these issues, most experts conclude that brand measures should be uniquely designed for each firm and that multiple measures are required to provide a true picture of brand health. Handily, many brand experts have indicated which measures are most promising in creating this "brand scorecard." Less handily, and more disappointing, is the fact that there is little agreement on what those measures should be, as can be seen from the summary chart in Table 1.

As summarized, David Aaker offers his "Brand Equity 10," Kevin Keller offers his CBBE model and its associated measures, and Interbrand, Equitrend, and Y&R all use complex formulas that rely on four or more constructs. The greatest consistency across the recommended measures appears in the areas of "perceived quality" and "user satisfaction/loyalty." Aaker, Keller, and Equitrend all recommend these measures as foundational, although only Equitrend places them among the MOST important measures (Aaker gives that distinction to price premium, Keller to brand associations).

Of the five brand equity authorities, only Aaker recommends "market share" as an equity measure. However, he points out that share is limited as a measure of brand equity because the product class and competitor set need to be defined and sometimes this is not easy to do. He also notes that market share indicators

TABLE 1
Recommended/Applied Brand Equity Measures

	Aaker	Keller	Y&R	Equitrend	Interbrand
Associations		X	X		
Awareness	X	X			
Differentiation	X		X		
Distribution coverage	X				
Esteem			X		
International					X
Knowledge			X		
Leadership	X				XX
Legal protection					X
Market share	X				
Market trend					X
Marketing support					X
Perceived quality	X	X		XX	
Perceived value	X				
Personality	X		X		
Price premium	XX				
Relevance			X		
Salience				X	
User satisfaction/loyalty	X	X		XX	
Stability					X

Sources: Aaker (1996), Keller (2003)

TABLE 2
Definitions of "Marketing ROI"

66%	Incremental sales revenue generated by marketing activities
57%	Changes in brand awareness
55%	Total sales revenue generated by marketing activities
55%	Changes in purchase intention
51%	Changes in attitudes toward the brand
49%	Changes in market share
40%	Number of leads generated
34%	Ratio of advertising costs to sales revenue
34%	Cost per lead generated
30%	Reach and frequency achieved
25%	Gross rating points delivered
23%	Cost per sale generated
21%	Post-buy analysis comparing media plan to actual media delivery
19%	Changes in the financial value of brand equity
17%	Increase in customer lifetime value
6%	Other/none of the above

Source: ANA/Forrester (2004)

are (as we noted earlier) responsive to the short-term strategies that often undermine brand equity.

Lack of agreement about something this fundamental says much about the state of "brand strategy" and "brand research" as a discipline. By way of metaphor, imagine if the medical community had not reached agreement on how to measure the health of a person by examining their blood chemistry. Standards for cholesterol, ratios of white blood to red blood cells, iron levels, and more allow physicians to track a person's progress over time, predict their susceptibility to illness, and compare one individual to another.

Sadly, the consensus physicians take for granted does not exist for marketers. A 2004 survey of U.S. marketing executives sponsored by the Association of National Advertisers (ANA) and Forrester (see Table 2) revealed over 15 different operational definitions of ROI-M (*Ad Age*, 2004a).

Tim Ambler describes the ROI-M measures actually practiced by firms in the United Kingdom based on a survey of 200 top marketers and finance executives, and contrasts this list with the measures the same firms consider important enough to share with their boards (Ambler, 2000). The lists are not the same (see Table 3). While "awareness" and "market share" are the most widely tracked measures, "loyalty/retention" and "relative perceived quality" are the most highly valued.

How can marketers be expected to advise companies on how to effectively create and nurture brands if they do not share a clear point of view of what "brand equity" means? How can we expect marketing to become more rigorous and scientific if we do not have a shared platform for describing its most central construct—the equity of a brand?

TABLE 3
Most Commonly Used Metrics (United Kingdom)

	% Firms Using Measure	% Rated Top for Assessing Performance
Awareness	78	2
Market share (volume or value)	78	36
Relative price	70	37
Complaints (dissatisfaction level)	69	45
Consumer satisfaction	68	46
Distribution/availability	66	18
Total number of customers	65	40
Perceived quality/esteem	64	35
Loyalty/retention	64	67
Relative perceived quality	62	62

Source: Ambler (2000)

. . . just as all calories are not equally nutritious, not all share points contribute equally to the health of the brand; the caloric contribution of loyal customers is "nutrient rich," while those of less loyal customers can be thought of as "empty."

TRUE BRAND EQUITY METRICS

What is needed are new metrics based on a singular shared view of the essence of a brand's equity or "lifeblood." Ideally these metrics should illuminate the factors underlying and explaining a brand's potential for robust activity and its ability to protect against disease—meaning competitive attack. Like market share, these figures should be readily translatable into bottom-line impact. Unlike market share, they should also be useful in describing the actions a marketer should take to improve a brands' health. With that vision as a starting point, we turn now to a deeper understanding of what it means to have a "healthy" brand.

The truth that all market share points do not contribute equally to the health of a brand provides a useful starting premise. Looking at the share chart for a hypothetical consumer packaged goods category (see Figure 1), what can be deduced about the relative health of brands A, B, and C? The answer, of course, is very little. The aggressive use of price promotion that began in the early 1980s has made market share alone a poor indicator of brand health. Some share is just "rented" through pricing or unsustainable advertising levels. Clearly, share that results from activity from loyal customers is understood to be more sustainable—and profitable.

Inequity of contribution to share can be understood, then, to be the result of differences in the customer decisions that collectively make up share. Or returning to our health metaphor, just as all calories are not equally nutritious, not all share points contribute equally to the health of the brand; the caloric contribution of loyal customers is "nutrient rich," while those of less loyal customers can be thought of as "empty." Understanding how a brand is nourished provides useful information for evaluating brand health and, if necessary, prescribing a new brand diet.

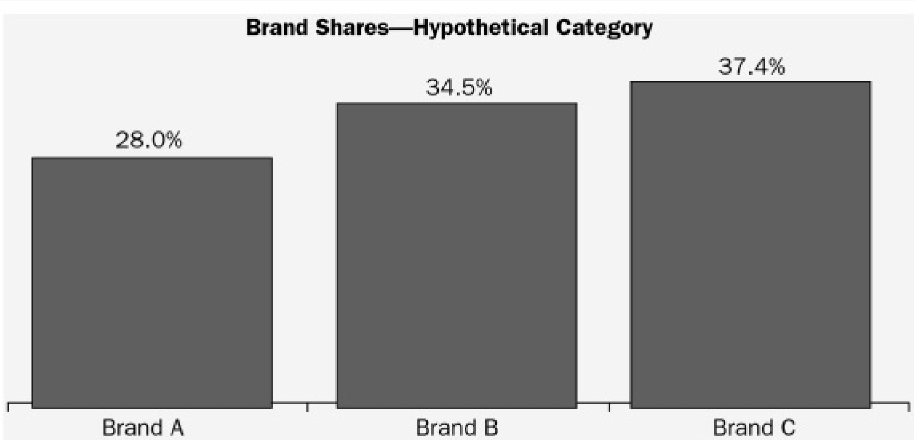

Figure 1 Illustration: Brand Share

Customer decisions are made for many different reasons and with differing degrees of conviction. Some decisions are made for the sake of convenience, others for price. Some are made out of beliefs based on prior experience with the brand, while others are based on second-hand knowledge. Others are based on a more ephemeral sense of what is cool or consistent with their self-image that day, year, or moment. Marketing has great impact on some of these decisions, but little on others. Unraveling the factors and interactions that drive customer choice behavior would illuminate much about brand health. It would also provide useful diagnostic information on how brand health and market share can be improved and sustained. Having a way to identify and track equity could help focus not only loyalty programs, but acquisition programs, brand strategy, and even business strategy in important ways. Consider how having information on the underlying dynamics of a brand share would help to address some of the most fundamental questions facing brand marketers.

1. *How is my brand doing versus competition?* Who is in better shape to adroitly and efficiently manage obstacles and capitalize on opportunities?
2. *Where does my offering stand in relation to what the customer wants?* How does the value proposition—reflecting the rel-

ative combined weights of price and quality—operate to segment the marketplace, in general, and for my brand?

3. *How are loyal customers defined?* What are the desired behaviors I need to encourage among customers to become "healthier"?
4. *What is the contribution of loyal customers to creating revenue and profits for my brand and for the category as a whole?* If loyal customers are the life blood of a brand, then to what extent does the "equity iron" in my blood give me energy, and to what extent do white blood cells protect me from competitive attack?
5. *What elements of the marketing mix will make my brand stronger?* How can the interaction of marketing efforts be decomposed to evaluate their relative effectiveness?
6. *What are the leading indicators for problems with my brand?* From a tactical perspective, what early warnings will diagnose potential sales problems looming in the marketplace so they can be addressed before they infect the entire brand franchise?
7. *How can I optimize my positioning and other strategic marketing decisions?* What messages should be provided to which target audience to create the desired impact on customer decision making?

Answering these questions with appropriate and consistent metrics requires first defining the construct we hope to measure. Here, at last, there is some consistency of opinion. The commonly agreed upon definition of "brand equity" is an intangible competitive advantage that permits an *economic cost advantage in marketing future products or services*. This economic cost advantage is manifested in higher price premiums, increased marketing efficiency, the value of brand licensing, and stock market impact.

Each of these impacts has been well studied and documented. What has been less studied are the dynamics that create these impacts. The mechanism that underlies these manifestations is agreed to be a latent value in the mind of customers that is exhibited through its impact on behavior. Positive equity results in behavior that benefits the brand through purchase frequency, brand loyalty, price insensitivity, willingness to recommend, and more.

Returning to the blood metaphor regarding the functionality of white and red blood cells proposed earlier, identifying the components of this advantage will allow us to create measures that reflect true equity. We propose that there are two active components—resiliency and leverage.

Resiliency

Resiliency is a brand's ability to protect itself and generate consistent volume and revenue, year after year. Resiliency also describes a brand's ability to gain more than its fair share of category revenue and profits in the face of inadequate marketing or competitive attack (e.g., perhaps the reason people still buy Firestone tires).

A deeper understanding of the "resilience" aspect of brand equity comes from examining how markets evolve (see Figure 2). Each layer of the pyramid represents a different stage of category maturity (with time moving from top to bottom). The colors represent brands and the size of the area represents category size and relative market share. In the beginning stages of category evolution, represented by the top of the pyramid, there is typically just one brand (B). The category is small, but the brand owns all there is of it. Its brand equity relative to competition is strong because there is no competition.

Naturally, success attracts competition and leads to a category growth phase, represented by the next two levels of the pyramid. As the market matures, the pioneering brand cedes share and sometimes leadership to new brands that typically play the roles of price leader (C) and quality leader (A). The original brand

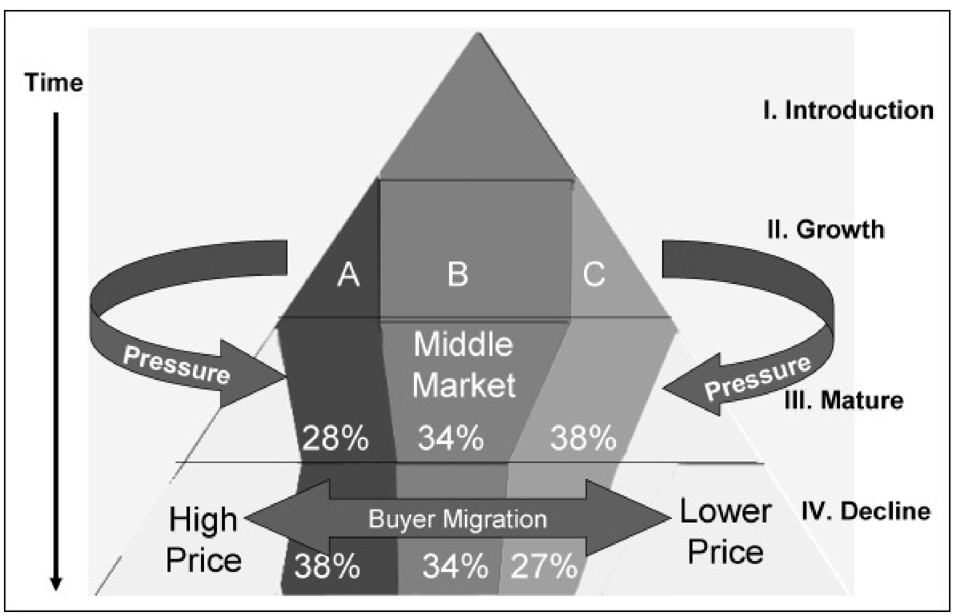

Figure 2 Market Evolution: Introduction to Decline

now may be bigger in an absolute sense due to overall category growth, but its equity has necessarily declined, as well as its market share. Its profitability is also likely to have declined due to a need to defend its position through marketing and/or price competition.

To continue the story, let us proceed to the lowest level of the pyramid, which describes the latest period when the mid-category has begun to decline. The decline could be due to many possible scenarios: new-product innovation within or outside the category, intensified price competition, lower marketing investment. Whatever the cause, the important point is that the impact of these market forces will not be shared equally by the brands. The pressure on the middle brands by the brands in the more extreme subcategories, typically emerging from price/quality segmentation, requires them to fight a dual front war—image/quality on one front and price on another. This is a tough place to be, as Sears, Oldsmobile, RCA, Netscape, and many others can testify.

The essential question to be answered is why does this differential impact exist? Why are some brands more able to withstand marketplace pressures than others? The answer lies in the "resilience" aspect of equity each brand possesses. In this case, the price brand (C) apparently had little equity, Brand B had a little more, and Brand A had the most (least decline).

The insulation factor exhibited by Brand A and to a lesser extent by Brand B is a an important component of brand equity that is not factored in to market share, nor is it represented by awareness, price premium, brand associations, leadership, or any other recommended brand equity measures. Yet it is an essential component if we are to accurately evaluate a brand's position and potential for future sales and earnings growth.

Leveragability

Leveragability is the *potential* energy to extend a brand successfully into related, or even unrelated, product categories (e.g., the reason people buy Harley baby clothes). Reynolds and Olson (2001) have proposed six subtypes of leveragable brand equity:

- *Bridge Equity*—value gained by extending a secondary brand name from the original brand
- *Scarcity Equity*—value created because brand has limited availability
- *Borrowed Equity*—value gained from similarities or associations with a different brand
- *Prestige Equity*—value created because users are part of a status group
- *Promotional Equity*—value gained from promotional activity
- *Latent Equity*—value derived from memories that are not currently being utilized

Regardless of the source of leveragable equity, its impact on brand longevity and future health can be profound. To this end, much attention is being given to the concept of brand portfolios, specifically on the realization that the most successful brands over time are those that expand their meaning to encompass multiple products within a category and even beyond the original category.

Consider Tylenol. The brand would have enjoyed a short life if it had not moved beyond its original meaning of an analgesic. Beginning as the "pain reliever trusted most by hospitals," today its portfolio franchise encompasses multiple product forms from tablets to liquids, relief for multiple types of pain, applications suitable for children as well as adults, and, most tellingly, relief of symptoms beyond just pain, such as coughs and sleeplessness. Without these extensions, Tylenol would not be the profit generating mega-brand it is for Johnson & Johnson.

Without the energy to move into new categories, over time a brand is likely to lose relevance even within its own category. There are many examples of first movers that lost ground to a more powerful equity from a related category. Epson is no longer the dominant player in printers, nor is AT&T in wireless, nor is Perrier in bottled waters, to name a few.

MEASURING BRAND EQUITY: THE SHARE TIER APPROACH

Assuming resilience and leveragability are the key components underlying brand equity, how can they be measured? We need to begin, as always, with the customer. The simple fact that some brands are more resilient and leveragable than others suggests that at the core of each brand franchise is a group of customers whose behavior is different from less loyal customers and that the *size and vitality of this loyal core varies by brand*.

Again, working on the premise that not all share points are equally valuable, the ability to differentially value share points by understanding the motivations and behavior of loyal customers appears to be a promising way to understand equity.

Figure 3 shows conceptually how share can be weighted or "tiered" according to its contribution to brand health by examining underlying consumer behavior patterns. The lighter shaded areas within the bar chart represent the contribution to revenue (or profit) from loyal customers. The remaining area represents the contribution from those with less affinity to the brand. In theory, the behavior of the core group more closely reflects the "true equity" of the brand, or at least the dynamic underlying its leveragability and resilience at that point in time. Every brand could benefit from having the core group

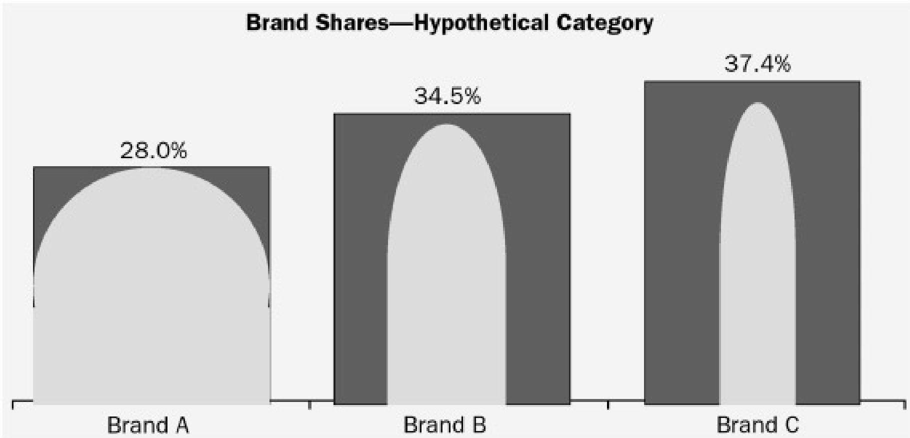

Figure 3 Illustration: Loyal Customers within Brand Franchises

represent a larger share of its total franchise.

If loyal customers are more valuable than less loyal customers, as is universally agreed, we need to now define a loyal customer for purposes of research. We propose using a model that suggests *three components to defining loyalty: beliefs, behavior, and the likelihood of these two factors remaining constant in the future.*

Both belief and behavior are required to describe loyalty because one cannot be loyal to a brand that is never bought, no matter how much admiration is expressed. Likewise, unless the brand is the only option, there must be some cognition or belief that drives one to choose it over another. The third component—future trend—represents one's likelihood of continuing to purchase a brand in the future at the same (or greater) rate as in the past. Without the future component, we have no way to determine whether the belief and behavior are sustainable. They could be simply the result of temporary marketplace events, such as out of stocks, or atypical customer situations such as temporary financial pressure (no cash on hand, job loss, etc.).

Together these three components—beliefs, behavior, and trend—provide a complete picture of an individual's "loyalty" to a brand, a picture that consists of a history of consistent purchasing behavior based upon a positive set of beliefs that the consumer thinks will remain consistent on into the future.

The next challenge is to *operationalize* these constructs. Let us look at each component individually.

1. Beliefs. The beliefs that drive behavior across most categories are "price" and "quality." Consider the distribution of price sensitivities in the marketplace. There are those who find a product "too expensive" as a result of not enough money to purchase, even though the buyer may believe completely that the product is a superior value, all things considered. In every city, there is a neighborhood where the houses are believed to cost "way too much," yet still appreciate faster than everywhere else in town. Most of us probably cannot afford to live there, even though we know the area is the best "bargain," in a world of unlimited resources. Even if the brand is affordable, there are other barriers, such as a customers' determination not to participate in the category. Most of us, for example, *could* buy a cup of Starbucks every day, even if we choose to make coffee at home. These two situations represent cases where consumers make a decision based on a quality/price trade-off. At the other end of the price-sensitivity spectrum are consumers for whom price, at least in this category, is never a barrier; once they decide to purchase in the category, only the best will do.

Product superiority and price sensitivity are in reality causally-related variables that can be plotted independently (see Figure 4). Loyal customers think their brand is superior for some reason, and this superiority has the effect of minimizing their price sensitivity. Nonloyal or occasional users have differing quality perceptions that result in *greater* price sensitivity.

Both price sensitivity and quality can be easily measured using a 4-point scale. Level of quality for a brand can be determined by classifying it as either "superior," "good," "acceptable," or "not acceptable." The level of price sensitivity can be classified as either "not a barrier," "a minor barrier," a "significant barrier," or an "absolute barrier" to purchase?

. . . three components to defining loyalty: beliefs, behavior, and the likelihood of these two factors remaining constant in the future.

2. *Behavior*. Behavior is more objectively measured than beliefs, but there are

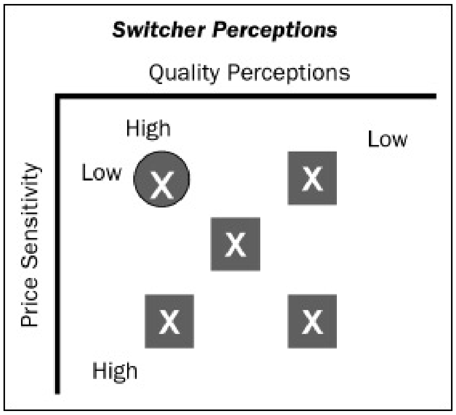

Figure 4 Relationship of Brand Perceptions of Quality and Price Sensitivity

many alternatives for obtaining behavioral data including survey self-report, purchase diary, and store purchase records such as that generated by scanners. Ideally, the data will be collected via repetitive sampling or consumer panels to reveal changes over time. Data should include not only brands purchased, but also purchase frequency and amount. It is advisable to initially use accurate scanner information and relate it to self-report measures to determine the validity of self-report measures for the category. It has been found that for frequently purchased consumer goods, classification of consumers as loyal and nonloyal by the two methods is consistent 90 percent of the time. In our example, loyalty is determined by self-report at the level of a minimum of four of the last five purchases (80 percent) over three months.

3. *Trend*. Future trend can be assessed by simply asking consumers to evaluate the normality of their recent purchase behavior and project future purchase behavior in terms of frequency, brands, and amount. In our example, we ask how "Over the next three months, how do you think your consumption of each of these Brands will change (and, why?)." Past trend has been shown in proprietary multinational studies to closely follow actual sales trends, thus providing a useful adjustment factor for purchase behavior measures. Additionally, we ask consumers to evaluate their likelihood of their consumption to change over the same time frame into the future. Future trend provides a diagnostic tool for forecasting likely shifts in behavior.

With loyalty defined theoretically and operationally let us now look at constructing metrics for evaluating brand resilience and brand leveragability. We begin by using the belief measures to classify customers with respect to their quality perceptions and price perceptions into one of 16 groups as represented by a 4 × 4 matrix (see Figure 5). This classification can be done on either a brand-specific or category-wide basis.

Q1P1 or #1 is the "Top Box," meaning these customers believe the brand is "superior" and "price is not a barrier." One would expect to find a good many of the behaviorally defined loyal customers to be found in this classification. The Q1P2 designation reflects those that believe the brand is "superior," but "price is a minor issue." Conversely, the Q2P1 designation says that "price is not an issue," but the product quality is "not superior," just "good." Those in the Q2P2 classification think the brand is "good," but price is a "minor issue." One would expect less loyal behavior from this classification group. (Note: The extreme points on the scale, "not acceptable quality" and "price is an absolute barrier," are worth tracking over time, for obvious reasons, but do not play a substantial role in evaluating equity.)

Once customers are classified, we can compute the number of customers in each cell, as well as their respective sales contribution. We have computed a distribution for the hypothetical category described earlier in its mature stage (III) (see Figure 6). These contributions represent the aggregated purchases of brands A, B, and C.

The expected outcome is that those who find "price not a barrier" and base their decisions on product quality alone contribute disproportionately to category volume. In fact, that is the case in this example; the "Top Box" accounts for nearly one-third of total category sales. Comput-

	Superior Quality	Good Quality	Acceptable Quality	Quality Not Acceptable
Price Not a Barrier	Q1P1 (#1)	Q2P1		
Price Minor Barrier	Q1P2	Q2P2		
Price Significant Barrier				
Price Absolute Barrier				

Figure 5 Quality/Price Matrix for Category

	Superior Quality	Good Quality	Acceptable Quality	Quality Not Acceptable
Price Not a Barrier	31.5%	13.9%	8.0%	0%
Price Minor Barrier	13.3%	12.2%	5.1%	0%
Price Significant Barrier	6.2%	7.1%	2.7%	0%
Price Absolute Barrier	0%	0%	0%	0%

Figure 6 Percentage of Category Sales by Price/Quality Perceptions

ing the marginal statistics for the quality classifications, we see that half of the sales for the category are accounted for by consumers believing the product is "superior to the competition." This contrasts with a slightly larger percentage being accounted for by the "price not a barrier" classification. This finding tells us that price is slightly more important in this category relative to product superiority perceptions. It is also worth noting that about 70 percent of all sales for the category are in the 2×2 in the upper left-hand corner.

Of course, these results will be different for different categories. They will also be different for each of our respective hypothetical brands. Nevertheless, understanding this dynamic for the category already provides us with a benchmark from which to evaluate brand equity. This framework (both category based and brand based) can also serve as a basis for measuring changes over time, in particular, with respect to different category and brand level marketing activities

Turning now to brands, we can use the same framework to assess how sales are allocated across the cells for each brand (see Figure 7). Each chart represents the sales contribution by quality and price classification group for each of our three brands. Looking first at the "Top Box" cell, there are striking differences, which drives different distributions across the levels in general. We see that for Brand A quality is a bigger driver of sales than price, with the reverse being true for Brand C. For Brand B, there is equilibrium between the two factors.

Looking for a moment at the relative differences between the top box cell and its two adjacent cells, Q2P1 and Q1P2, we can gain additional insights about the "tiered share" components of each brand. Brand A's adjacent cells combined total is not even half the amount of its top box. Contrast this to Brand B where the top box figure is about equal to the combined contributions of the adjacent cells. For Brand C, the "top box" is about 20 percent *less* than the combined total of the adjacent cells. Thus, these ratios provide additional insight as to the respective brands' true equity and illustrate better than anything said to date why market share alone is an inadequate metric for quantifying the quality of brand equity within the marketplace.

While we have not added the variable of profits, it is not a difficult leap to conclude that the sales from the top four more loyal cells is more profitable than that derived from the remaining price driven cells, further reinforcing the contention that all share points "ain't equal."

This "tiered share" approach is an improvement on traditional share measures, but it does not provide the whole picture with respect to the contribution of loyalty to our understanding of equity. Another perspective is provided by examining the number of customers within each classification (see Figure 8). This chart indicates for each perceptually defined cell, the percent of customers who are behaviorally defined as "loyal" to the brand.

For example, 92 percent of Brand A customers in the "Top Box" classification of price/quality beliefs are loyal; conversely, only 8 percent are not loyal. Examination of the other cells for Brand A shows the loyalty percentages are highly consistent with classification: those with more positive perceptions of the brand exhibit greater loyalty. Interestingly, the consistent differences across brands between the cells adjacent to the "Top Box" suggest that the product "superiority" belief is more influential with respect to loyalty than price. This is a common finding and has obvious implications for targeting and message strategy.

This same data can be applied to "tier" a brand's market share by identifying the percentage of sales contributed by loyal customers. This tiered share represents what portion of a brand's sales is driven by loyal choice behavior and what portion is driven by differently motivated choice behavior (see Figure 9). This metric, which we call "loyalty contribution," makes it easy to compare brands. Not

Brand A	Superior Quality	Good Quality	Acceptable Quality
Price Not a Barrier	58.1%	9.6%	2.4%
Price Minor Barrier	19.4%	3.6%	.6%
Price Significant Barriere	4.8%	1.2%	.2%

Brand B	Superior Quality	Good Quality	Acceptable Quality
Price Not a Barrier	32.6%	16.3%	8.2%
Price Minor Barrier	16.3%	8.2%	4.0%
Price Significant Barriere	8.2%	4.0%	2.0%

Brand C	Superior Quality	Good Quality	Acceptable Quality
Price Not a Barrier	18.7%	18.6%	14.0%
Price Minor Barrier	9.3%	10.5%	10.6%
Price Significant Barriere	7.0%	5.2%	5.9%

Figure 7 Percentage of Brand Sales by Price/Quality Perceptions

only does it provide insights about the "true" equity component of a brand's share, it is also possible to relate it, as we saw above, to the brands' overall financial performance, resilience, and leveragability.

Not only does it provide insights about the "true" equity component of a brand's share, it is also possible to relate it . . . to the brand's overall financial performance, resilience, and leveragability.

Of key interest, of course, is how loyalty contribution changes over time with respect to the interaction of the competitive marketing activities. Identifying and tracking this component could help focus not only loyalty programs, but acquisition programs, brand strategy, and even business strategy in important ways.

With this data analysis complete, the challenge now is to use the "share tier" data we have been discussing—quality/price beliefs and loyalty behavior—to derive useful measures for assessing and tracking brand equity. To that end, we propose four summary metrics:

1. *"Top Box L" Contribution (beliefs defined)*. This metric reflects the percent of sales contributed by loyal customers who believe the brand has "superior quality" and who are "price insensitive." Contribution can be developed for the category as well as for individual brands. This figure represents the most loyal "core" of a franchise, those most insulated from competitive marketing activities. This figure was described in Figure 7. It is easily translated into a financial contribution statistic as we shall see in the illustration to follow.

2. *Overall "Loyalty Contribution" (behavior defined)*. This metric reflects the percent of brand sales contributed by all loyal customers, regardless of belief classification. Again, this measure can be computed both for the category, to provide norms as well as for individual brands, and is directly related to sales and financial performance. A category benchmark is provided calculating the loyalty contri-bution to total category sales. Here we see about *56 percent* ($4,450/$7,999) of the category sales can be attributed to loyal customers (see Table 4).

3. *"Equity Share" (behavior defined)*. This metric reflects the relative percentage that a brand owns of the sales attributable to *all loyal* customers in the category. It rep-

			Quality					
			"Superior"			"Good"		
			A	B	C	A	B	C
Price Sensitivity	**"None"**	A	92			65		
		B		93			63	
		C			91			62
	"Minor"	A	74			40		
		B		76			37	
		C			74			38

Figure 8 Percentage of Loyal Customers by Price/Quality Classification

resents the brand's share of the category's most desirable, and profitable, customers. It can be translated into both sales and profit figures (see Table 4) but is specific to brand performance and has no category equivalent. In our example below, Brand A has "equity share" that is disproportionate to its market share.

4. *Leveragability Index (belief defined)*. This metric, seen in Table 5, attempts to measure the relative importance of product quality with respect to price, suggesting that if the degree of quality perception is much stronger than price, there is a potential to leverage that perception into other areas beyond the immediate market. This index can be computed in several ways, depending on whether one wants to include Top Box. In this example, Brand A's index of 70 can be interpreted to mean 70 percent of the sales sourced from the key loyal customers (Q1P2–Superior Quality with Price as a Minor Barrier as a percentage of Q1P2 + P1Q2). Similarly, Brand C's index of 37 means that 37 percent of its key, non-Q1P1 sales are driven by perceived product superiority, where 63 percent is driven primarily by price. Clearly in this example, Brand A would appear to have a greater opportunity to extend its equity.

With these metrics in mind, let us now return to the question of "which hypothetical brand has the greatest equity?" By examining the underlying customer purchase behavior and the beliefs that motivated their decisions, we are in a better position to understand which brand is more likely to generate profitable growth, withstand competitive pressure, and enable its company to extend into new markets.

The summary of metrics (see Table 6) suggests that Brand A offers equity disproportionate to its market share. Its value to the firm goes well beyond immediate sales and profits. Brand A is more likely to be responsive to marketing efforts and more resilient to adverse market forces. We can make this determination based on a deeper understanding of the consumer beliefs and behaviors that underlie Brand A's performance, and the likelihood those beliefs and behaviors can be sustained into the future.

By starting with a definition of the equity constructs to be measured, we have created a set of metrics that is close to reflecting the "true equity" of a brand. Together, they illuminate the positions of brands within a category beyond the information provided by market share alone, or

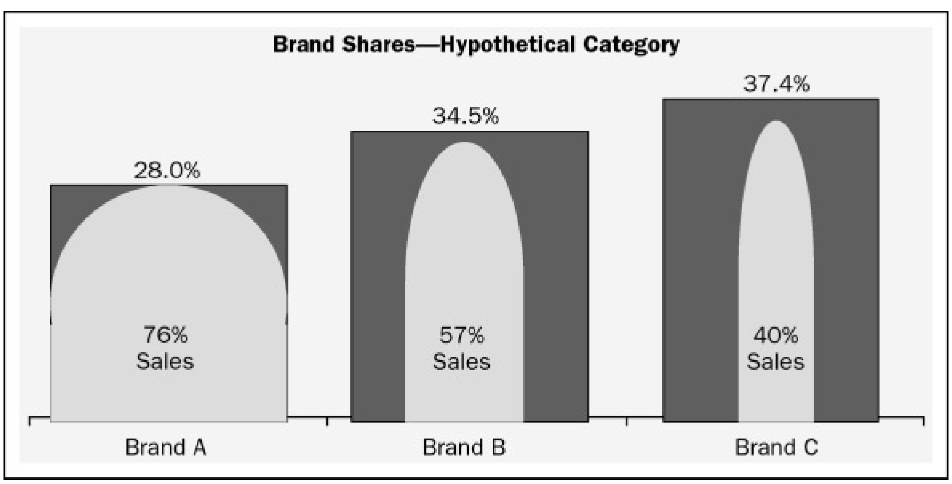

Figure 9 Percentage of Sales Contributed by Loyal Customers

TABLE 4

Equity Shares versus Market Shares

	Sales (MM)	Market Share	Loyalty Contribution	Loyalty Contribution (MM)	Equity Share
A	$2,246	28.0%	76%	$1,707	38.36%
B	$2,759	34.5%	57%	$1,545	34.72%
C	$2,994	37.4%	40%	$1,198	26.91%
Category total	$7,999	100.0%	NA[a]	$4,450	100.00%

[a]*Not applicable*

TABLE 5

Leveragability Index*

	Q1P2 Sales (MM)	Q1P2 Loyalty	Q1P2 Loyalty Sales (MM)	Q2P1 Sales (MM)	Q2P1 Loyalty	Q2P1 Loyalty Sales (MM)	Leveragability Index*
A	$437	74%	$323.38	$216	65%	$140.40	70
B	$451	76%	$342.76	$451	63%	$284.13	55
C	$279	74%	$206.46	$558	62%	$345.96	37

**Q1P2 loyalty sales/(Q2P1 loyalty sales + Q1P2 loyalty sales)*

TABLE 6

Summary of Brand Equity Metrics

	Market Share	Equity Share	Loyalty Contribution	Top Box Sales	Leveragability Index
A	28.0%	38.4%	76%	54%	70
B	34.5%	34.7%	57%	30%	55
C	37.4%	26.9%	40%	17%	37

by the black box methodologies promoted by the brand valuation industry. Here is a brief description of the advantages:

- *Provide insights as to the sources of brand strength and direction for improvement*. These metrics provide insights as to where a brand is strong and how it can be made even stronger. By identifying the specific targets and behaviors to be impacted, strategies can be more focused and effective.
- *Easily translated to financial strength and ROI*. As can be seen from the examples, these metrics relate directly to sales and profits. Their evaluative power can be further enhanced by modeling their relationship to market activities over time. Currently, most marketing mix models do not incorporate a brand equity component.
- *Ability to track and diagnose changes over time*. Each of these measures can be tracked over time and, as indicated above, modeled to provide insights as to driving those changes, which can serve as the basis to compute ROI-M.
- *Potential for universal application across categories*. While some adjustments may be required for differences in the length of the purchase cycle or the desired purchase behavior (subscription versus transaction, etc.), these metrics are broadly applicable, raising the possibility at last of a common standard for brand equity measurement.

A last consideration is the desirability of creating a summary measure of equity, a Brand Equity Index (BEI). The appeal of a singular statistic to management or Wall Street is obvious; it could serve as the brand equity equivalent to cash flow or net profits. A BEI would provide management with a simple way to track the impact of marketing *over time* on the less tangible aspect of their business, their brand. For marketers, BEI could be the "holy grail" they seek to evaluate ROI-M and add explanatory power to market mix analyses. Finally, it would create a common basis for cross category evaluation and research.

Now that we have established its value, let us consider how it should be derived. Again, we begin by thinking about what it is we want to measure and how it should be expressed. Following from the earlier logic, BEI should reflect the *value of a brand's loyal customers relative to other brands in the category in financial terms. One way to do this is to w*eight market shares according to their loyalty contribution. We have established that the *loyal* customers in Q1P1 are the most valuable, so they should be weighted most heavily. We have also argued the *loyal* customers in the adjacent cells, particularly in Q1P2 (those who are perceive strong superiority but have more price sensitivity than those in Q1P1) are the next most valuable, which leads to the following order of importance with respect to the brand franchise: Q1P1 > Q1P2 > Q2P1 > Q2P2 > Other (all remaining sales, including nonloyals). Weights can then be assigned, in this case by decreasing integers from 5 to 1, respectively, and then an overall BEI can be computed by norming the index with respect to the category. (Of course, a specific weighting system appropriate for the dynamics of the respective category should be used.)

The resulting BEI scores can be used then to compute the true value or equity of the brand in the marketplace by multiplying them by their market share. In our example, the BEI indices for the three brands—A, B, and C—are 111, 103, and 85, which results in a summary Share Quality Indices (SQI) of 31.1, 35.6, and 32.2, respectively (see Table 7). It is these SQI measures, then, that should serve as the basis to track the real value the brand has in the marketplace. This hybrid measure can be used to assess the effects of marketing activities, which can then serve as the basis to compute ROI-M.

TABLE 7
Brand Equity Index and Tiered Share

Brand	Market Share	Brand Equity Index (BEI)	Share Quality Index (SQI)
A	28.00%	111	31.10%
B	34.50%	103	35.60%
C	37.40%	85	32.20%

COLA BRAND EQUITY EXAMPLE

To demonstrate the equity assessment framework, thereby providing a frame of reference for the relative output one could expect from market data, the cola category was analyzed from a larger, multicategory brand equity study. These self-report data were collected via the internet from a national sample using a professional research service that compensated respondents with reward points. The sample analyzed (N = 342; 75 percent female) was defined by (a) primary grocery shoppers for their household (b) who had purchased cola soft drinks in the last 30 days for home consumption.

Figure 10 summarizes the percentages of the key brand perceptions by the price/quality share tiers. (Note the Unacceptable Quality and Price and as Absolute Barrier are not included due to their inappropriateness with this product category.)

Contrasting the perceptions of Coke and Pepsi in this price/quality framework suggests (at least with this limited sample) that price is more of a barrier to Coke

	Superior Quality	Good Quality	Acceptable Quality
Price Not a Barrier			
Coke	23.4	6.2	0.3
Diet Coke	30.1	4.3	1.9
Pepsi	42.0	6.5	0.3
Diet Pepsi	33.1	7.8	2.3
Price Minor Barrier			
Coke	41.7	17.8	0.1
Diet Coke	30.7	20.9	0.4
Pepsi	32.1	11.5	2.3
Diet Pepsi	25.6	26.1	0.5
Price Significant Barrier			
Coke	4.7	5.9	0.1
Diet Coke	5.5	6.1	0
Pepsi	1.0	4.2	0
Diet Pepsi	0.4	3.4	0.2

Figure 10 Percentage of Brand Sales by Price/Quality Perceptions (Tiers)

	Superior Quality	Good Quality
Price Not a Barrier		
Coke	81.7	30.6
Diet Coke	85.2	48.8
Pepsi	72.1	32.5
Diet Pepsi	81.8	40.4
Price Minor Barrier		
Coke	84.2	50.1
Diet Coke	73.9	34.7
Pepsi	54.1	41.3
Diet Pepsi	54.2	61.4

Figure 11 Percentage of Sales from Loyal Customers by Price/Quality Perceptions (Tiers)

than Pepsi, with the most dramatic difference being seen with the nondiet brands.

Expanding the price/quality framework by considering loyalty (defined by at least four of last five home purchases *and* no negative future purchase trend) yields the *share tier* representation presented in Figure 11. Again, this figure represents the share of user volume commanded by each brand among those who hold a particular price/quality perception of the brand. So while Coke has an 81.7 share of volume among its top box price/quality users, Pepsi only has a 72.1 share among its top box price/quality users. When one compares the decline in loyalty volume across price perception groups among those with the Superior Quality perception (Q1), a significant finding emerges. It appears that even though price is more a perceived barrier for many P1 Coke users, this perception has a much smaller effect on Coke's loyalty volume when compared to the Pepsi brands.

The suggested summary brand equity statistics appear in Table 8. Although the primary focus of this equity analytic methodology is to provide a basis to track changes in these statistics over time with respect to changes in the marketing mix, the equity summary measures reported in this snapshot of the marketplace at one point in time serves to illustrate the types of scores one could expect.

In this example, contrasting market share (volume from all category users) to brand equity share (volume from all loyal category users, regardless of brand), it appears the marketing efforts for Pepsi have been more successful than those for Diet Pepsi. However, that conclusion is not the entire picture. Further comparisons of the two brands on measures of loyalty contribution (volume from the brand's loyal users) and Top Box "L" (volume from P1/Q1 users) indicate greater brand strength for Diet Pepsi over Pepsi. The implication of these apparently contrary findings is that Pepsi attracts loyal category users who tend to purchase multiple brands each and every time they purchase cola (e.g., Diet and Regular or Pepsi and Coke). Diet Pepsi sources more of its volume from its own loyal users. Pepsi users are in fact "loyal" to Pepsi in the sense that they buy it frequently, but disloyal in the sense that they are not devoting as high proportion of their volume to Pepsi as Diet Pepsi users do to their brand.

Turning to Coke and Diet Coke, a different picture emerges. Both brands are similar in regard to most of the measures we just examined for Pepsi and Diet Pepsi. The key difference between Coke and Diet Coke (and indeed between Coke and all other brands) is found in the tiered vol-

TABLE 8
Summary of Brand Equity Metrics*

	Market Share (%)	Top Box "L"	Loyalty Contribution	Equity Share	Leveragability	Brand Equity Index (BEI)	Share Quality Index (SQI)
Coke	26.7	81.7	70.8	27.4	95	107	28.4
Diet Coke	25.0	85.2	66.5	25.8	92	100	24.9
Pepsi	22.5	72.1	57.7	27.5	89	98	22
Diet Pepsi	17.9	81.8	67.3	14.8	82	82	17

**Market Share, Equity Share, and Loyalty Contribution calculations are based on volume from all brand users.*

ume statistics (Figure 10). As noted above, among those who rate Coke as superior in quality (Q1), price is considered more of a barrier than it is for the Q1 raters of any other brand. This is, of course, to be expected from a premium brand. We have already seen that these price perceptions do not affect its loyalty volume to any large degree. What is interesting and unique about the Coke situation is seen in the remaining equity measures, "leveragability," BEI index, and SQI index. In each case, Coke outperforms all other brands. This is vivid testimony to the equity of the Coke brand.

When analyzed on a longitudinal basis, equity analysis can provide helpful insights to the measurement of ROI and the development of brand strategy. For example, it would be instructive to know whether Pepsi's low top box "L" score (volume attributable to loyal users) is unusual or part of a long-term pattern. If it is unusual, it may be attributable to atypically aggressive price or brand promotion by Coke, Diet Coke, or Diet Pepsi. Likewise, Coke's current strength may be due to competitive cutbacks. Including a variety of tiered equity measures as dependent variables in marketing modeling may provide greater insights than modeling changes in absolute sales, market share, or consumer perception alone. Modeling will also help to reveal which of these measures are most important and revealing for any particular category or brand.

SUMMARY

It is useful to return to the fundamental marketing questions posed earlier to determine how the proposed equity measures can help marketers address each key issue beyond the standard measurement of market share.

1. *How is my brand doing versus competition?* Share of equity provides a customer-based understanding of a brand's position in financial terms.
2. *Where does my offering stand in relation to what the customer wants?* Top Box loyalty indicates how many in your franchise believe your brand has the strongest value proposition. It also enables comparisons of your value proposition strength to that of competitive brands.
3. *How are loyal customers defined?* Loyal customers are defined by the strength of their quality and price perceptions, and how those perceptions relate to purchase behavior.
4. *What is the contribution of loyal customers to creating revenue and profits in the category, in general, and for my brand, in particular?* Overall loyalty sales contribution provides a direct estimate of the contribution of loyal customers to sales and profits, for my brand, for competitive brands, and for the category as a whole.
5. *What elements of the marketing mix will make my brand stronger?* Changes in equity measures over time can be related (mathematically or anecdotally) to marketing activities to evaluate their effectiveness in building the brand.
6. *What are the leading indicators for problems with my brand?* Changes in self-perceived purchase trends can identify softening in brand equity before it is manifested in other measures.
7. *How can I optimize my positioning and other strategic marketing decisions?* Customer quality/price tiers can be studied to determine differences in demographic profiles, category and brand attitudes, and purchase habits (e.g., frequency, heaviness of use, situational factors, etc.) that can provide important insights for migrating customers from one loyalty cell to another. Research that uncovers the decision structures of targeted customers, like laddering (Reynolds and Gutman, 1988) to determine what are the relevant discriminating elements (e.g., why superior, why not superior, etc.) can provide strategic guidance for brand building.

By starting with the premise that all share is not equal, and examining the customer mechanism by which this dynamic can be understood, we have demonstrated a way to develop four measures of "true" brand equity and a summary index that represents quality of brand share, Share Quality Index (SQI). Application of these "share tiering" measures, in conjunction with the traditional measures of market share, customer satisfaction, and profitability, etc. can provide more direct, meaningful, and useful measures of brand value than are typically provided by black box methods. Building on the proposed foundational measures of brand resilience and leveragability, marketers will be better equipped to assess return on marketing investment, without the limitations of traditional financial metrics. They will be able to more accurately assess and diagnose brand health. Most importantly, they will be better prepared to prescribe strategic approaches to improving ROI-M and brand health through future marketing actions. JAR

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