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# Value-based brand measurement and management

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#### Abstract

This paper details a recent breakthrough in how to measure the intrinsic equity in brands and how to relate brand equity to financial value creation. The methodology integrates brand health measures from the BrandAsset<sup>®</sup> Valuator (BAV) database maintained by Young & Rubicam (Y&R) with measures of financial performance from Stern Stewart's Economic Value Added (EVA<sup>®</sup>) database to deliver the first wholly objective approach to brand valuation.

The result is a robust econometric framework for measuring the relationship between brand health and value creation that is based on observable, repeatable data. By eliminating the need for 'expert opinion', the approach delivers results that enjoy high levels of credibility at boardroom level.

Perhaps most importantly, the creation of a framework that explicitly integrates inputs from marketing and financial sources creates the basis for enhanced collaboration between the marketing and finance functions. Input from both functions is vital for the development of value-based brand strategies that harness the full contribution of brand strategy to the overall success and value of a business.

#### Introduction

There is widespread recognition of the important role that brands play in generating and sustaining the financial performance of companies. With excess capacity in virtually every industry, strong brands are vital for getting prospective customers to notice a company's products or services. Without a strong brand to give it traction in the marketplace, a company risks being unable to realise the full value of its other intangible assets — great technology, superior products, world-class production processes and talented employees.

As yet there is no methodology for measuring the financial contribution of brands that enjoys credibility in the boardroom. The brand health metrics traditionally favoured by marketers (such as awareness and customer satisfaction) have no proven relationship to shareholder value, in large part because they focus on the present health of the brand rather than its future potential. At the same time, attempts to use discounted cash flow techniques to value the earnings attributable to brands lack credibility because they ultimately rely on a subjective estimate of the importance of the brand's role in the purchase decision.

What senior management want to know is how significant an economic

#### The business context

asset their brand represents and what causes the value of their brand asset to increase or decline. Answers to these two questions allow them make rational decisions about how much to invest in a brand versus a range of other investment alternatives.

The need for clear guidance in this area has become increasingly acute as the sources of value creation have shifted from physical to intangible assets. The last 20 years have witnessed a dramatic divergence between the book value of companies and their market capitalisation. As Figure 1 illustrates, the aggregate market-to-book ratio of the S&P 500 (a broadbased index of the 500 leading companies in the USA) rose steadily from an average of around 1.4 at the beginning of the 1980s to around 3.5 in the mid-1990s. It accelerated rapidly in the late 1990s to reach a peak of 7.3 at the height of the dot.com bubble in early 2000 before falling back to its current level of around 4.0.

A market-to-book ratio of 4.0 implies that the tangible assets of a business (land, equipment, inventory, net working capital and so on) only account for 25 per cent of the value that investors are placing on a company. Intangible assets such as patents, trademarks, business systems, distribution rights, brands, customer databases and the quality of a company's management and workforce account for the remaining 75 per cent.

In highly branded sectors such as consumer packaged goods, luxury items, media and some types of consumer durables, brands may well represent the single most important form of intangible asset. Even in

# The importance of intangibles

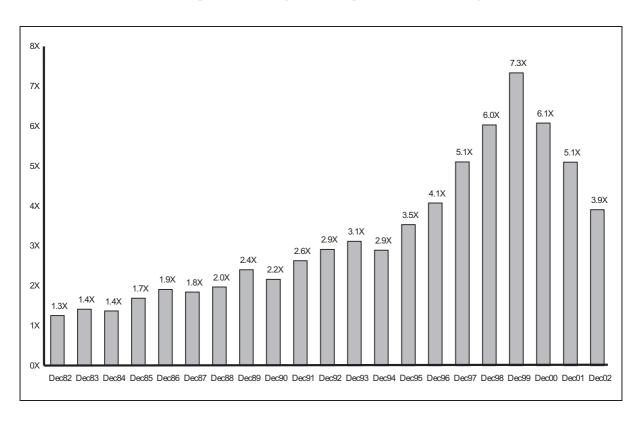


Figure 1: Market-to-book ratio for the S&P 500: End year 1982 to 2002

Combining consumer and financial methodologies

sectors that are driven largely by technology and research, brands play a vital role in translating a company's technical competencies into market success. Effective management of brands is therefore an increasingly important element of business strategy and determinant of the valuation accorded to a business by investors.

The new approach pioneered by the author's company addresses this need for an authoritative methodology for measuring the financial contribution of brands across different industry contexts. The methodology integrates brand health measures from the highly acclaimed BrandAsset<sup>®</sup> Valuator (BAV) database maintained by Young & Rubicam with measures of financial performance from Stern Stewart's Economic Value Added (EVA<sup>®</sup>) database. The BAV database contains data on 20,000 brands across 40 countries over the past ten years. The EVA database is of even greater scale.

The approach is based on a multivariate analysis of the relationships between BAV brand health metrics and the financial performance data. By using standardised market value multiples as the dependent variable, the model aims to explain the relative importance of a brand in determining the value of companies. In aggregate across all industries and years, the model demonstrates that financial factors explain around 55 per cent of the market value of companies, brand explains around 25 per cent and other factors (especially industry context and economic cycle) explain much of the remaining 20 per cent.

The size of the datasets used, combined with the reputable sources of the data, mean that this approach represents a significant step forward in validating the economic importance of brands and in providing a robust methodology for measuring and managing their contribution to financial value creation.

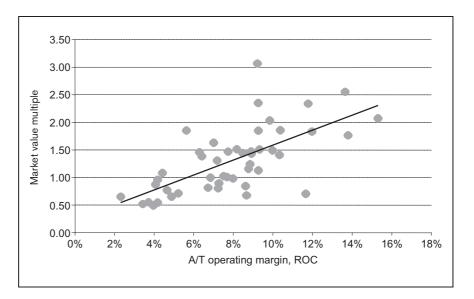
Perhaps most importantly, the approach enjoys the credibility of both the marketing and finance departments, and so provides a basis for enhanced collaboration that ensures that the full value contribution of the brand is harnessed.

# The impact of brand health on the value of companies

The most important finding of the research by the author's company is that brand health explains a significant proportion of the differences in the relative valuation given to seemingly similar companies by investors. Stock prices are forward-looking because they represent investors' expectations about the future performance of companies. Measures of financial performance are historic. As such, they influence market valuations only to the extent that they drive investor expectations about future performance. That is why financial performance measures typically only 'explain' 40-60 per cent of the variations in market values (see Figure 2).

Brand health, in contrast, is a forward-looking measure that reflects a company's ability to command premium prices and market share now and into the future. Evidence indicates that, whether explicitly or implicitly, investors are very sensitive to differences in brand health, and use the information to form their assessments of the likely future profitability of

Explaining differences in valuation



**Figure 2:** Correlation between current financial performance and market value multiples Average correlation = 0.40 to 0.60

businesses. In highly branded sectors, individual measures of brand health correlate anywhere from 30 per cent to 60 per cent with variations in market value (see Figure 3).

Most importantly, valuation models that incorporate both financial measures and brand health measures explain up to 80 per cent of the variance in valuations in some sectors. In other words, these models provide a reliable basis for estimating the relative importance of improvements in the efficiency of your underlying business versus improvements in the health of your brand.

# 3.50 3.00 Market value multiple 2.50 2.00 1.50 1.00 0.50 0.00 0.00 0.20 0.40 0.60 0.80 1.00 Brand health: Differentiation, relevance

**Figure 3:** Correlation between brand health and market value multiples Average correlation = 0.30 to 0.60

**Additive effect** 

**EVA**, brand and value

**Empirical approach** 

Figure 4 shows the results of some analysis in the retail sector in the USA (used only because of the larger population of companies and the greater availability of brand and financial data). It is based on data from a sample of 30 retailers over a ten-year period and monitored their performance on three variables — EVA, brand strength and their intangible value to sales ratio. The objective was to analyse the relative importance of improvements in EVA versus improvements in brand strength in determining changes in the value of these companies.

The observations were divided into four categories based on above/below performance on EVA and brand strength. As the figure shows, if the underlying business is performing poorly (has low EVA), then the improvement in market value that a strong brand provides is relatively small. The capital intensity of retailing explains why valuation multiples are more sensitive to operating efficiency than brand strength. If the underlying business is performing well (has high EVA) then the brand magnifies that performance — resulting in an intangible value to sales multiple twice as high as for companies that had a weak brand.

### The new approach

The author's company uses a top-down approach of estimating the role that brands play in determining business value. The valuation framework combines the BAV measure of a brand's consumer franchise and the EVA model for performance measurement and business valuation. As explained above, the brand valuation framework begins with an empirical calculation of the role of brands in driving business value in specific product and service categories. This allows one to estimate the value of individual brands based on the sectors within which they operate, their strength in those sectors and the scale on which a brand is employed.

Coming at the problem directly from the perspective of value, rather than profits, is an important departure. One is using the impact of differences in brand health (a 'stock' measure) on company value (also a

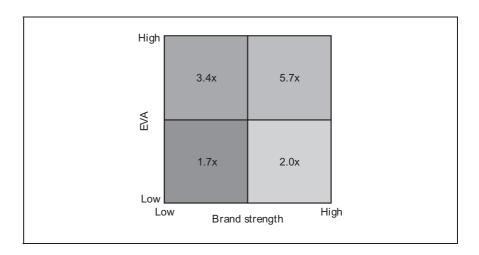


Figure 4: Relative valuation multiples based on high/low EVA and brand strength

## Value-based brand measurement and management

'stock' measure) to deduce the contribution of brand value to total value. This is preferable to the discounted cash flow approach to brand valuation that uses profits (a 'flow' measure) to derive the 'stock' brand value. For one thing, many factors other than brand, including the business cycle, can make short-run profit figures exceedingly difficult to decipher. Equally important, a company may be skilled at creating and managing brands but poor at the operating side of the business. The result can be low or negative profits that mask and squander the underlying brand value but do not destroy it. The recent resurgence of the Gucci and Avon brands and the associated financial success show how this latent value can be unlocked by skilled management.

The valuation process starts by separating a company's total market value (market value of equity plus book value of debt) into two components: tangible capital and intangible value. Tangible capital is the book value of the assets on a company's balance sheet — basically property, plant and equipment and net working capital. It does not include goodwill. Intangible value is total market value minus tangible capital. This definition of intangible value reflects the presumption that tangible assets will simply earn a cost-of-capital return.

The empirical challenge in the top-down valuation approach is to determine the degree to which differences in brand health explain differences in intangible values. The linchpin in the modelling process is brand health as measured by BAV, the world's largest database on consumer perceptions of brands. BAV was selected as the brand health measure for a number of reasons. First, it has used a consistent methodology for ten years and in more than 40 countries, and has produced measures of brand health that are repeatable and reliable. Secondly, BAV measures all brands, regardless of category or country, against the same set of 56 image attributes and summary constructs. This 'universal' approach has several advantages. It makes sense from a pure marketing standpoint because every brand must vie for attention with all other brands, not just direct competitors. From a valuation or strategy perspective, the universal approach makes it possible to isolate the key drivers of brand health within each sector on a basis that remains methodologically consistent across all sectors.

#### The BAV approach to brand health

BAV proposes a theory of brand development that contrasts with the traditional FMCG model.

The traditional view, pioneered by P&G in the 1950s, is that the brand development process begins with creating *awareness*, then focuses on stimulating *interest*, fuelling *desire* and finally prompting *action*. This gave rise to the well-known acronym AIDA.

This framework for brand development worked well for many years and continues to work in less developed consumer markets. Its reliability falters once market competition becomes intense. Under these conditions, simple awareness becomes a poor predictor of interest, let alone action. In the conditions of hyper-competition that now characterise so many markets, consumers are bombarded with advertisements. Given this

BrandAsset® Valuator

**Limitations of AIDA** 

communications overload, the first stage of brand development is to create *differentiation*. The first and most important task of the brand is to get customers to perceive a difference about what is being offered.

Once attention has been captured, the task of brand development shifts to convincing consumers of the *relevance* of the offer — deciding whether it is appropriate to their life. A brand's reputation for quality, popularity and successfully delivering on its implicit and explicit promises feeds *esteem*. Finally, there is the *knowledge* that ultimately comes from the intimacy of using a brand enough to know it well. These four constructs form the 'pillars of brand health' in the BAV framework.

The Y&R research showed that differentiation and relevance can be combined into a single brand strength metric that serves as a highly accurate indicator of the potential of the brand for further development. Equally, esteem and knowledge can be combined into a single brand stature metric that captures the current franchise of the brand and its track record of delivering on its promises.

# Linking brand health to value

As noted above, the market value of companies is acutely sensitive to investors' expectations of the growth and sustainability of their earnings. The BAV metric of brand strength serves as a strong proxy for growth. Differentiation is highly correlated with the brand's ability to maintain premium margins. Relevance describes the size of the audience to which the brand can appeal, and so is highly correlated with potential market size.

The author's company studied approximately 400 observations of 'monobrand' companies across a number of industry sectors, covering the period 1993 to 2000. Monobrands were defined as firms whose principal revenues (in excess of 80 per cent) are derived from products or services sold under the firm's primary brand. By this definition, for example, Coca-Cola is a monobrand while Pepsi is not. Use of this set of monobrands enabled the overall company financial results to be related definitively to the health of the core brand.

All financial data were standardised by the branded sales figures for goods and services in each period so as to enable comparability across sectors that differ widely in operating margins, capital intensities and other financial characteristics. In essence, this allowed a measurement of the impact of an improvement in brand strength in terms of the incremental market value added per dollar of sales.

Figure 5 shows the value of intangibles as a multiple of annual sales for companies with brands in differing stages of development. It was observed that for companies with relatively unknown brands (bottom-left quadrant), the intangible value of the company was equal to around  $0.9 \times$  their annual sales. As brands grow in strength (ie increase their differentiation and relevance), moving from the bottom-left to top-left quadrant, the intangible value of the company increases to  $1.9 \times$  annual sales (note that the sales figure is generally much larger for brands in this quadrant, so there is a geometric increase in the absolute value of the brand). For brands that have both strength and stature, the intangible value

**Proxy for growth** 

Value impact of brand health

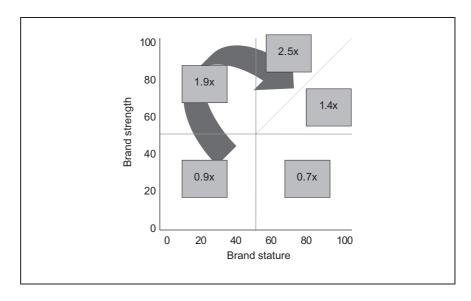


Figure 5: Intangible value multiples for monobrand companies at different stages of brand development

of the company reaches  $2.5\times$  annual sales. But the most dramatic finding is the collapse in intangible value to  $1.4\times$  sales once brand strength begins to fade (most often reflecting declines in differentiation). What this says is that investors are smart — they recognise companies that are 'milking' their brands for current earnings and failing to maintain the distinctive essence on which their franchise with consumers depends, and price them accordingly. This collapse in intangible value multiples reflects the sensitivity of future earnings to any decline in the strength of the brand's franchise.

A number of important findings emerge from the research.

First, the ability of a brand to generate superior financial performance varies dramatically across industry sectors. In fact, the amount of variance of performance explained by brand ranges from more than 75 per cent of the total in some sectors to less than 10 per cent in others. This finding is completely consistent with what intuition would suggest. It seems reasonable that brands play a more important role in the success of food and beverage companies than of B2B technology firms, whose primary intangible assets are likely to consist of proprietary knowledge and technologies.

Secondly, the research shows that in most instances differentiation is the driver of margin: the higher a brand's differentiation, the higher its current margin and future potential. As Table 1 shows, brands that increased their differentiation enjoyed significantly higher profit growth and operating margins. Perhaps more impressive than the 12 per cent differential in profit growth during the boom years of 1997 to 1999 is the protection that strong differentiation has provided in the more difficult environment of 1999 to 2001. Brands with strong differentiation have largely preserved their levels of operating profit.

Thirdly, the research casts light on the perennial trade-off between

**Key findings** 

**Profit and margin** 

Table 1: Impact of differentiation on operating profits and margins

Year	Increasing differentiation		Decreasing differentiation	
	Profit (%)	Margin (%)	Profit (%)	Margin (%)
1997–1999 1999–2001	+35 -4	+11 +7	+23 -24	+8 +5

Source: BrandEconomics study of 115 companies using public financial and BAV brand health data

margins and growth. The findings clearly demonstrate that, in a brand context, you rarely gain in volume what you sacrifice in margin. Brands that grow differentiation at the expense of relevance (ie that sacrifice share to maintain margin) deliver significant levels of incremental EVA. By contrast, increasing market penetration while losing differentiation results in relatively minor value creation. The explanation for this is that no value is created when growth in sales and invested capital occurs at returns equal to the cost of capital.

Fourthly, when brand value was decomposed into a current franchise value (defined as the capitalisation of the contribution of the brand to current earnings) and a future growth value component, it was discovered that future growth value generally accounts for over 70 per cent of the value of most brands. Current franchise value is only above 30 per cent for more mature and declining brands. This indicates that brands are economic assets capable of generating above-average financial returns over long — perhaps even indefinite — periods of time.

This last finding has extremely important implications for the ways in which brands are managed. It highlights the strategic importance of managing brands in a way that strikes the right balance between using the brand to support superior current earnings and ensuring that the distinctive essence of the brand (and hence its ability to generate future cash flows) is preserved. Achieving that balance depends on effective collaboration between the strategic planning, marketing and finance functions.

# Integrating marketing and finance

The relationship between marketing and finance has historically been a difficult one. Marketers generally regard the finance folk as being like Oscar Wilde's cynic — they know the price of everything but the value of nothing. Finance professionals accuse marketers of knowing how to create value for customers, but frequently not for their own employers.

A particular source of friction is their use of the same words to mean different things. Two prominent examples of this are 'brand equity' and 'value'. The marketing professional uses the term 'brand equity' to describe the health of the brand's franchise with its key audiences; the financial professional uses it to characterise the brand as an economic asset. The case is similar with 'value' — both marketing and finance have well-developed ideas about what value is and how it should be measured. Unfortunately, their ideas are very different.

For marketing professionals, value is a customer concept. Value

**Future growth value** 

Different perspectives

# Value-based brand measurement and management

represents the ratio between the perceived benefit that a product or service offers and its cost to the customer. Customer value is determined by answers to the two questions 'what do I get?' and 'how much does it cost?'. Viewed from this perspective, value is a concept *external* to the company and is primarily concerned with *effectiveness*.

For finance professionals, the notion of value is bound up with the concept of value creation. The core issue is whether the price received for delivering a product or service exceeds the full cost incurred in producing it. The key issue is 'does this activity earn a sufficient return on investment?'. Viewed from this perspective, value is a concept *internal* to the company and is primarily concerned with *efficiency*.

The finance perspective understands the true cost of delivering a product or service. The marketing perspective understands that price is irrelevant if there is no utility to the customer. Business success involves satisfying both the marketing and the finance definitions of value.

Integrating the marketing and finance concepts of value reveals the fundamental equation in business:

 $\frac{\text{Customer benefit}}{\text{Price (paid)}} \times \frac{\text{Price (received)}}{\text{Economic cost}} = \frac{\text{Customer benefit}}{\text{Economic cost}}$ 

Business success is built on delivering customer benefit that exceeds its economic cost.

Determining what drives utility for a customer is a complex subject. Brands are an important component of customer value analysis because they represent vehicles for customer meaning. They encompass both rational and emotional dimensions and allow one to select products and services on the basis of both their functional and their emotional utility. They allow a company to respond to the two questions posed by customers: 'what will you do for me?' and 'how will you make me feel?'.

Understanding the relationship of marketing to business performance therefore requires two sets of skills — marketing *evaluation* skills to understand the dimensions that are important to consumers; and marketing *valuation* skills to measure the relationship of these dimensions to the value drivers of a business.

# Towards an integrated approach

As suggested at the start of this paper, a valuable first step is to identify the marketing metrics that have provided a reliable indication of a brand's ability to generate future cash flow (the criterion for regarding the brand as an economic asset). Such metrics provide a measure of a brand's economic potential. Research by the author's company has confirmed that the extent of 'relevant differentiation' provides a leading indicator of a brand's ability to create value. This is an intuitively appealing finding, as differentiation can be thought of as a brand's ability to command a premium margin, while relevance captures the breadth of the audience to which the brand can appeal.

The science of value-based brand strategy is still at an early stage. But the new approach has provided the most robust econometric evidence to date of a consistently positive relationship between a marketing metric

Integrated perspective

#### Value-based strategy

(relevant differentiation) and value creation. The evidence is certainly strong enough to argue that *no* marketing strategy should be funded unless it is explicitly expressed in terms of how it will enhance the brand on the dimensions that are important for differentiation and relevance in that brand's specific industry context.

Given this, marketers should welcome the opportunity to frame the debate around marketing strategy in financial terms. They should avoid the trap of providing a single value forecast and instead focus the discussion around the question 'what do we need to believe about certain key variables in order for this strategy to create value?'. By highlighting the conditions under which value will be created, this approach maintains the financial rigour of value-based analysis but allows key inputs to the valuation model to be estimated with an appropriate degree of certainty (or, more often, uncertainty).

This approach acknowledges that there are multiple variables that can influence the outcome of marketing strategy, and concentrates on establishing the combination of those variables that will produce a 'zone of rightness' in which financial value will be created. It provides a rigorous analytical framework within which to explore the financial implications of different market outcomes, and identifies those market strategies that offer the greatest chance of generating both customer and shareholder value.