MARKETING METRICS: A PUSH FOR TEACHING THE VALUE OF MARKETING AS AN ASSET

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ABSTRACT

The purpose of this article is to assess the value of marketing metrics among the academic community. The authors propose that in order for marketing metrics to gain acceptance in corporate decision making, a focus of the importance of these measures must be made first from within the academic community.

INTRODUCTION

Marketing professionals have always seen the importance of metrics that will measure the value of marketing expenditures as an asset (i.e. brand equity). However, while these are often used within departments at operational levels, they rarely reach the level of the boardroom where they compete with those metrics often accepted in accounting and finance. The authors state that in order for these measures to gain acceptance in upper level corporate decision making, the academic community is going to have to instill the importance of such measures in the marketing managers of tomorrow as they pass through the education system. However, what is not clearly understood is who in the academic community is best responsible for this task. The purpose of this paper is to assess the value of marketing metrics among the academic community. With this information, academics will be better prepared to develop a method of spreading the importance of marketing metrics.

Marketing professionals have for a long time espoused that marketing should be capitalized or treated as an investment on the balance sheet rather than an expense (Simon and Sullivan 1993). However, while accounting practices view the acquisition of new equipment as a cash outlay and a debit to an asset, the expenditure on advertising is looked at as an outlay balanced by a debit to an expense account. Capital expenditures are treated as investments while marketing expenditures are treated as expenses.

While marketing professionals may not like these standards, it is difficult for them to respond to such questions such as; what are we investing in (i.e., what is the asset? and how should we measure the return on the capital employed for the investment?). The Financial Accounting Statements Board (FASB) statement of concepts No. 6 defines an asset as: "Assets are probable future economic benefits obtained or controlled by a particular entity as a result of past transactions or events." Based on this definition an asset that reflects the efficacy of the return to capital employed by marketing is brand equity. The first formal definition of brand equity was provided by David Aaker: "brand equity is a set of brand assets and liabilities linked to a brand, its name and symbol, that add to or subtract from the value provided by a product or service to a firm and/or to that of the firms customers" (1991, p.16).

Board members and corporate officers appreciate the value of strong brands. However, they may be less certain as to a market value of a strong brand or how strong brands are created and maintained (Shultz and Gronstedt 1997). To capture brand equity Aaker (1991) recommends, (in addition to quality and other proprietary assets, such as patents, trademarks, etc.), measures such as: brand loyalty, name awareness, perceived quality, and brand associations. These measures of brand equity and their impact upon shareholder value are different from standard accounting valuation of assets. "Accountants still in their nappies are taught about accruals, but that flies out the window where marketing is about. Good marketing may or may not affect sales: it always increases brand equity" (Ambier, 1998, p. 24).

The Financial and Reporting Standards FRS 10, Goodwill and Intangible Assets, and the International Accounting Standards IAS 38, Intangible Assets, requires companies to report the value of acquired brands on the company's annual accounts. FRS 10 allows companies to amortize these acquired brands over a 20 year period (Bartram, 2000). FRS 10 allows for acquired brands to be treated separately from goodwill but it does not apply to any brands developed internally. Still, it is a step in the right direction to meaningfully account for the intellectual capital of a business (Batchelor, 1999). This advance is not without its cost to marketers. "The standard further stipulates that in such cases annual impairment reviews (in accordance with FRS 11 Impairment of Fixed Assets and Goodwill) must be
carried out; the goodwill or intangible asset in question must therefore be capable of measurement. (Gowthorpe, 2000 p. 74). We return to the ever-present obstacle of measuring the impact of marketing; in this case the market value of the brand.

The marketing metrics research project conducted by the London Business School addressed this issue. Tim Ambler, senior fellow at the London Business School, has summarized a 30-month research project studying marketing metrics in his book Marketing and the Bottom Line. He states: "the brief was to report on best practice in marketing performance measurement, to propose improvements and to put forward a shared language." (Ambler 2000 p. 2).

Leading examples from this study are awareness, market share and relative price. The results indicate that marketing metrics are collected but at best only 50% of the firms report the measures reaching members of the board.

**DISSEMINATION OF INFORMATION**

Thus while many can agree that measures of brand equity should be utilized more often in upper level strategic decision making and that we do indeed have the means to measure these values (Aaker 1991), how should this march to the boardroom be accomplished? We suggest that one begins with a grassroots campaign. Similar to a cohort analysis, the techniques and procedures taught to us in graduate programs shape our views. Mention a "Cash Cow," "The CAPM," Porter's "Five Forces Model," and so forth to practicing managers that received an MBA in the last 20 to 30 years they will know exactly what these are, and why they are important or unimportant to the firm. Another example is why conjoint analysis is often used and accepted by marketing managers. These managers have most likely been exposed to the technique while pursuing their MBA, thus they are comfortable with the technique and believe in its value.

Therefore it may be up to educators to emphasize this knowledge of marketing metrics to students so that it may enter the boardroom as a useful tool. The goal of our research is to assess the value of marketing/brand equity metrics among the academic community; especially for those professors teaching core courses in MBA programs. What are the managers of tomorrow hearing with respect to the value of marketing metrics? The specific question to be addressed by our research is: Do professors teaching MBA students consider marketing measures as being useful for determining the value of a firm?

The next question to answer then is "Who in academia will lead the charge?" Can we expect a unified procession of MBA professors to make this emphasis in their teachings? The following study looks at the belief of using such brand equity measures of MBA professors. It is here where we will find who should be responsible in initiating this push.

**THE STUDY**

The metrics surveyed in our study are a combination of the items used by Brand Finance and those identified by the London Business School's Marketing Metrics Project. Subjects were asked: "In your opinion, how useful are the following measures for determining the value of a firm?" The response categories were: Extremely Useful, Very Useful, Somewhat Useful, Not Very Useful, Not At All Useful, Not Useful and In Fact Misleading, and Not Sure. Items such as brand awareness, brand image, customer loyalty and satisfaction, perceived quality and price premium are considered as measures of brand equity.

A one page questionnaire, along with a prepaid return envelope, was sent to professors, who taught the core course in accounting, finance or marketing at institutions rated as being one of the top 125 MBA programs\(^1\). Two weeks after the initial mailing, a reminder letter with another questionnaire and return envelope was sent to all the professors. A postal coupon was included for all professors residing outside The United States.

Questionnaires were sent to 114 accounting professors, 120 finance professors, and 116 marketing professors: In total, 132 questionnaires were returned for a response rate of 38%. Respondents who returned comments, but did not complete the questionnaire, were culled from further analyses. The sample used for analysis contained 32 responses from accounting (28% response), 33 responses from finance (28% response), and 62 from marketing (54% response).

**Results**

The question of interest is whether there are differences among the three academic areas (accounting, finance, and marketing) regarding the usefulness of the marketing measures. The Brand Finance survey results reported the percentage of top-box and top-two box scores. In an analogous fashion, we re-coded the data. Responses to each item were categorized into one of three levels: very

\(^1\) Our goal was the top 125 programs.
useful, useful, and not useful. Brand Relationships has the largest top box score (57.1%). Price premium and customer loyalty followed brand relationship in importance, with top box scores of 38.7% and 38.1%, respectively. The items receiving the lowest top-box scores were: advertising expenditure (14.4%), and brand awareness (18.5%). The low top-box score for brand awareness was not expected. In Keller's model of brand equity (1993) the two drivers of brand equity are brand awareness and brand associations. Other measures received a top-box score of at least 20%.

As a group, the sample of professors did not rate the marketing metrics as being very useful for determining the value of a firm. Only the one measure, brand relationships had a top box score in excess of forty percent. To assess differences among the academic area with respect to the usefulness of the marketing measures, a chi-square statistic was calculated for the cross-tabulations between the marketing metrics and the academic areas. Statistically significant differences (p<.05) were found for four measures: customer loyalty (p=.000), brand image (p=.029), volume share (p=.045) and brand relationships (p=.053). Except for volume share, the marketing professors were more likely to rate the items as useful. One might expect the marketing professors to rate the brand equity items as more useful; however, even for this group only two items (brand relationships and customer loyalty) received scores in excess of 50% for very useful. We now turn to a categorical clustering procedure, latent structure analysis, to search for groups of people with similar response patterns regardless of academic area.

**Latent Profiles**

The analyses thus far have assessed differences based on an, *a priori*, classification into one of the three academic areas. We now drop the, *a priori*, assignment and use the responses to the brand equity items as input to the LADI program to identify latent profiles of responses. LADI (Dillon and Mulani 1989) is a latent structure (cf Lazarsfeld and Henry 1968) clustering procedure and falls under the heading of Latent Mixture Models.²

The LADI program creates clusters using maximum likelihood estimates of mixing parameters and structural parameters. Factor loadings and goodness of fit heuristics aide in this selection and a four cluster solution was chosen as indicated by using a chi-square difference test. Inspection of the mixing parameters indicates that cluster two is the largest with approximately 44% of the respondents. The sizes of the other clusters are: one = 12.6%, three = 14.96% and four = 28.35%.

The structural parameters estimates for the four cluster solution were used to interpret, or provide meaning, to the latent clusters. These estimates are conditional probabilities; the probability of responding to a specific level of an item given that they are in a latent class. For example, consider the item brand awareness. For the entire sample the probability of responding very useful was 18.55%. The conditional probability of responding very useful given membership in one of the four latent classes ranges from a high of 68.8% for cluster one to a low of 0.0% for cluster four. Consequently, those respondents in cluster one view brand awareness as a very useful metric, whereas those in cluster four do not.

We label cluster one as the "Brand Currency" cluster. By comparing the conditional probability of responding very useful given membership in cluster one to the sample probability of responding very useful we found these people place a greater value on the usefulness of the marketing metrics. People recruited into cluster three are more likely to respond very useful to market share measures. We label this cluster as "Product Currencies."

Cluster four is labeled "skeptics." People in this cluster are more likely to rate the brand equity measures as not useful. The responses from people in cluster one and cluster four are basically contrary; those in cluster one view the marketing metrics as useful, those in cluster four do not. Latent class two is the largest cluster, and therefore, as might be expected, responses are the most similar to the entire sample. People in cluster two are more likely to rate the measures as being useful when compared to the people in cluster three and four but not cluster one.

The means and standard deviations for the recruitment probabilities for the four latent classes are provided in Table 1. These recruitment probabilities reflect how sure we are that the observation was placed in the correct latent class. If the recruitment probability for class one was 80%, then the sum of the probabilities for the other three classes is only a 10%. The results show a very good assignment.

We now look at the crosstabulation between a person’s academic area and assignment into one of the four latent classes (see Table 2). The chi-square

² The Discussion of LADI follows from the work of Dillon and Mulani 1985.
TABLE 1  
Descriptive Statistics  
Latent Class  
<table>
<thead>
<tr>
<th></th>
<th>I</th>
<th>II</th>
<th>III</th>
<th>IV</th>
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<tr>
<td>Mean</td>
<td>.90</td>
<td>.98</td>
<td>.94</td>
<td>.99</td>
</tr>
<tr>
<td>SD</td>
<td>.14</td>
<td>.004</td>
<td>.12</td>
<td>.002</td>
</tr>
<tr>
<td>Number</td>
<td>16</td>
<td>56</td>
<td>19</td>
<td>3</td>
</tr>
</tbody>
</table>

value is $\chi^2 = 10.26$ with 6 degrees of freedom, yielding a p-value of .11. Therefore the null hypothesis of no association is not rejected. The interpretation being that knowledge of academic area does not provide information as to the latent profile of responses to the brand equity items.

In Table 2 the first number in each cell shows the actual count. The second number is the conditional probability of being in a latent class, given an academic area. For example, consider cell (1,1). The actual count is 3; therefore three of the accounting faculty were recruited in cluster 1, the brand currency cluster. The second number (18.75%) indicates that of the 16 people recruited into cluster 1, 18.75% are accounting professors. Although the majority of the "brand currency" class comes from marketing (68.8%), close to one third of the people reporting very useful to the brand equity items are accounting or finance professors. The make up of cluster three, the "product currency cluster" is somewhat different. Here the accounting professors are the majority, while the marketing professors are the minority. Cluster two, the largest cluster, pretty much matches the distribution of the academic areas. Cluster 4, the negative cluster contains approximately the same number from each academic area. However, approximately half of the sample is marketing.

TABLE 2  
Cross-Classification  
Latent Class  
<table>
<thead>
<tr>
<th></th>
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<th>II</th>
<th>III</th>
<th>IV</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
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<td>11</td>
<td>8</td>
<td>10</td>
<td>32</td>
</tr>
<tr>
<td>Finance</td>
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<td>13</td>
<td>6</td>
<td>12</td>
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<tr>
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<td>11</td>
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<td>14</td>
<td>62</td>
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<tr>
<td>Total</td>
<td>16</td>
<td>56</td>
<td>19</td>
<td>36</td>
<td>127</td>
</tr>
</tbody>
</table>

Marketing Accounting Standards Board. If marketers want their beans to count and be counted, they have to develop a standard and universally accepted set of marketing metrics.  \(^3\)  "A metric is a performance measure that top management should review ... Metrics is not just another word for measure: metrics should be necessary, precise, consistent and sufficient (i.e. comprehensive) for review (Ambler, 2000 p.5). Having a set of metrics that is recognized by the board will get the board to spend more time scrutinizing the marketing effort.

The addition of the above suggestion and the advancement of today's brand value measures are great improvements as tools to implement these metrics into the boardroom. However, the mere existence of these tools is not enough to ensure that management will use them beyond their daily operations. The ingrained use of existing financial tools is too entrenched for an immediate change to occur. Perhaps what is needed is a place to plant a seed of appreciation for these metrics in tomorrow's executives in order for the metrics to become more accepted over time. An emphasis from academics is the best means possible for this task. The prominent use of metrics in marketing textbooks and the training of MBA students to utilize measurement tools have a large effect later in their careers. While these students will also face corporate inertia from current boardroom measures, the dissemination of these brand measures will improve the likelihood of use in the future. Unfortunately, as we have seen from our study it appears that the marketing educators will be battling this task alone if only at first as academics from accounting and finance departments do not share similar viewpoint.

\(^3\) MSI has recognized the area of marketing metrics as one of their two gold research areas.