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Beware the Silver Metric: Marketing Performance Measurement Has to Be Multidimensional

Tim Ambler and John Roberts

Although the pressure for accountability has spawned a variety of proposed "silver metrics," no single measure can adequately summarize marketing performance. Ambler and Roberts explain why, and caution managers about using forecasts of future rewards to assess past marketing efforts.

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Report Summary

Since the accountability spotlight fell on marketing, researchers have been seeking a single indicator, or "silver metric," that can summarize marketing performance in much the way that shareholder value is held by some to be the bottom line for public companies. This paper shows why no silver metric can adequately summarize marketing performance and how firms should best come to terms with the small mix of financial and non-financial indicators that are needed. Firms also need to be wary of the dangers of using *forecasts* of future uncertain rewards in evaluating the performance of *past* marketing activity.

In this paper, marketing is taken to be what the whole firm does to source and harvest cash flow as distinct from what the specialist marketing department (if any) does. Different firms task their marketing departments with different responsibilities toward the firm's overall marketing.

Marketing performance is essentially multidimensional. A firm needs at least as many metrics as it has goals, of which short-term survival and long-term growth are the most common. And even for a single goal, progress may need to be assessed in multiple ways. Reducing multiple metrics to a single index denies the multidimensional nature of the market with which the firm is dealing. The greater the potential for these objectives to move in different directions, the greater is the danger of this simplification.

Some firms brush theory aside and look nevertheless for a popular silver metric such as return on investment (ROI), or one of the discounted cash flow (DCF) metrics such as customer equity, net present value and customer lifetime value, or the Peppers and Rogers' Return on Customer^{SM} (ROC^{SM}). The paper examines each of these in turn. Six objections are made to the use of ROI, generalized to ROX to include variations like return on marketing expenditure. In practice, these measures fail to take account of the longer term and, as a ratio of profits to costs, fail to track profit maximization.

The DCF metric has been confused by different names being given to essentially the same concept, namely the present value of expected future profits. This metric, by what-

ever name, is a valuable tool in strategy and planning. Alternative scenarios and plans can be compared and their sensitivities tested. Future plans are compared using future cash flows. Using a DCF metric for performance assessment, however, uses future cash flows to assess historical performance. What a firm may be able to do tomorrow is an uncertain guide to how well it did yesterday. On the other hand, firms wish to use the same metrics for planning and for performance assessment for the sake of comparison and continuity. And what the firm can achieve in the future is affected by what it has achieved in the past. The argument against the use of a DCF metric in isolation for performance assessment is not as obvious as the case against ROI but it seems compelling overall.

The third silver metric selected for examination is Return on Customer, defined by Peppers and Rogers as "a firm's current-period [net] cash flow from its customers plus any changes in the underlying customer equity, divided by the total customer equity at the beginning of the period." This seems attractive as it brings together the short-term change in cash flow with a long-term indicator, namely customer equity (DCF of earnings on a customer by customer basis). Looking at the algebra more closely reveals that ROC confounds the *accuracy* of last year's forecast of cash flow in the period just ended, with the firm's performance during the period. Therefore, its use for either purpose, forecast evaluation or performance assessment, is limited. We do not know if a greater ROC than expected is a function of cautious forecasting or superior performance.

The pressure for accountability has spawned a variety of proposed silver metrics of which the above are three. If the search for a single indicator is abandoned, marketers have to persuade their colleagues of a better way to assess the firm's marketing performance. The first step is to make the firm's long- and short-term goals explicit. Then the business model, which shows the linkages between inputs, including financial expenditure, competitive activities, and expected results, should be formalized. Some of these linkages would not be normally described as "marketing" but of the remainder, some are key steps toward the firm's goals. Measures of these key steps and/or the goals themselves are the metrics that should be used to monitor performance and, for later comparison, should form part of any plans. Separate research indicates that, for a large firm, 8 to 10 is usually about the right number. A small firm will need fewer. We would expect one of the DCF metrics to be included, not least because, at the end of the day, marketing is the creation of cash flow.

—Tim Ambler and John Roberts ■

Introduction

Marketing can be defined in many ways. After extensive debate, the American Marketing Association defined it thus, "Marketing is an organizational function and a set of processes for creating, communicating, and delivering value to customers and for managing customer relationships in ways that benefit the organization and its stakeholders" (American Marketing Association 2006). That definition describes it as a "function" which may imply it is one functional group amongst many, i.e., what the marketing department does which other corporate functions do not. Different companies, however, set different tasks for their specialist marketers and some have none at all.

Others define marketing according to specific types of expenditure, such as advertising, promotion, or market research, but this narrows "marketing" considerably, especially for firms that do not undertake those functions. In other words, accountability focuses purely on what marketers spend rather than what they do (their function, e.g., pricing or product development). For a review, see Srivastava and Reibstein (2005).

Marketing has long been seen as going to the marketplace with products for sale, selling them, and returning with the resultant cash.

Originally, the term was used the other way about (taking cash and returning with products) but that is archaic. The relationship marketing perspective has shifted attention away from individual market visits (sales transactions) to the long-term effects of multiple transactions over time. The focus is on the customer rather than the transaction. This paper defines "marketing" holistically as the sourcing and harvesting of cash flow as a result of pleasing customers and outdoing competitors. Thus, marketing performance should be judged for the whole firm and specialist marketers should be judged on their contribution to that corporate performance (Ambler 2003).

The productivity of marketing, in this broad sense of inward cash compared with resources consumed, has become a hot topic (Bahadir and Tuli 2002; Bruno, Parthasarathi, and Singh 2005; Debruyne and Hubbard 2000; Morgan, Clark, and Gooner 2002; Rust, Lemon, and Zeithaml 2004), but protagonists seem polarized. One extreme argues that the ultimate purpose of marketing is to improve shareholder value and that marketing performance should therefore be judged by some single ultimate financial indicator. If shareholder value itself is not feasible, perhaps because it is confounded by too many other factors, then discounted cash flow (DCF) or return on marketing investment (ROMI or ROI) should be used.

DCF is regularly reinvented and re-presented variously as net present value (NPV), brand valuation (Perrier 1997), customer lifetime value (CLV; Venkatesan and Kumar 2004; Gupta and Lehmann 2005), and customer equity (Rust, Lemon, and Zeithaml 2004). Rust, Lemon, and Zeithaml (2004), for example, define customer equity as "the total of the discounted lifetime values summed over all of the firm's current and potential customers" (p. 110). In a single brand firm, the brand valuation approach sums the same discounted cash flows as customer equity and the two are thus mathematically equivalent (Ambler et al. 2002). We therefore refer to all these as "DCF metrics." Peppers and Rogers (2005) combine the ideas of DCF and ROI as "Return on Customer" (ROC).

This paper first explores whether a single indicator is feasible for assessing marketing performance and then reviews the suitability of the three classes of single indicator, namely ratios of return to expenditure (ROX), DCF, and ROC. It concludes with suggested ways to reconcile the demand for simple financial indicators with the realities of marketing.

Marketing Performance Measurement Requires Multiple Indicators

Any single bottom line indicator ("silver metric") is attractive for its simplicity but is impractical for a number of reasons. Performance is essentially multidimensional: superior performance against one objective cannot easily be traded off against lack of performance on another. Short- and long-term profits cannot be satisfactorily merged into a single number because adequate short-term profit may be necessary for survival, irrespective of how attractive the long term may be. Conversely, top management will not be respected for taking an early cash harvest that brings the company to its knees. CEOs have to manage for the short term *and* the long term.

Just two indicators could allow for that: short-term cash income and long-term prospects. Unfortunately, as we discuss later in detail, any form of DCF metric, which looks to the future, has dangers for assessing performance to date. Because of the multiple sources of uncertainty in assessing future possible earnings attributable to past marketing activity, such analysis needs contemporary non-financial proxies, e.g., customer satisfaction. Finally, so far we have only spoken in financial terms. There is a strong trend to also look at non-financial performance (Elkington 1998). Customer, employee, and societal imperatives cannot be traded off against profits. In other words, performance needs an eye on the social context within which the company operates.

Firms have multiple goals and therefore need multiple performance measures. And even if a single number gave an adequate rating for the ultimate outcome, management needs to check the performance of each stage of the business model. In other words, firms cannot be treated as black boxes with money going in one end and coming out the other. Top management needs to understand the linkages between expenditure and returns. To achieve that, the levels of the variables that drive those linkages provide the metrics that need to be tracked. In particular, top management needs to understand its market in the sense of how different activities and expenditures affect customer and competitor responses.

Ideally, these multiple measures should be seen by senior management in a clear, integrated, and concise package. Thus, management needs simultaneously to see a range of indicators on what is now known as the "dashboard," a one-page or one-screen easy-to-read summary of key market metrics (McGovern et al. 2004; Reibstein et al. 2004).

The American Marketing Association (American Marketing Association 2005) defines marketing accountability as:

"The responsibility for the systematic management of marketing resources and processes to achieve measurable gains in return on marketing investment and increased marketing efficiency, while maintaining quality and increasing the value of the corporation." (p.1)

The significant part of that definition is the duality of short-term gains and enhancing the quality and value of the corporation, i.e., brand equity, which we define to be the intangible asset created by good marketing (Aaker 1991). Evaluating marketing performance requires both to be considered and brand equity requires multiple measures, as we will see when we review brand valuation later.

Having established the need for multidimensional measurement, we examine three popular forms of measure each of which aims to summarize marketing performance in a single number, what we call a "silver metric."

ROX

Return on investment was devised for comparing capital projects where investments are made once and the returns flow during the following years. ROI is the net return divided by the investment or, more correctly, the incremental profit as a ratio of the incremental expenditure.

The first objection to ROI or return on marketing investment (ROMI) is that marketing expenditure is not an "investment" in the original sense and is certainly not treated that way in company accounts. For capital projects, because cash flows may be some years off, the cost is typically expensed over a period of time. While marketing expenditure may influence later periods, it is generally and mostly directed to the current year. All of it is accounted for in the profit and loss account, not the balance sheet.

Srivastava and Reibstein (2005) drew attention to the second objection to ROI when they noted that it requires the profit to be *divided* by expenditure whereas all other bottom-line performance measures consider profit or cash flow after *deducting* expenditure. Division rather than subtraction creates a conflict between cash flow or profit (subtraction) and the ROI ratio (division). The profit or economic value added or increase in shareholder value from marketing all require the costs to be deducted from sales revenue along with the other costs. Accounting and finance texts suggest that as long as capital (I) is not constrained, residual income rather than ROI is a more appropriate measure (e.g., Peirson and Ramsay 1998). If the denominator of the ROX fraction is constant, then the ratio comparisons are valid but also unnecessary: the alternative returns could be considered alone.

The third objection to ROI is that its pursuit causes underperformance and suboptimal levels of activity. This arises from the law of diminishing returns. After the point of the profit response curve where ROI is maximized, further sales will typically still make profits but at a diminishing rate until the response curve crosses the line into incremental losses. Thus the point of maximum ROI is reached before the point of maximum profit. In calculus terms, ROI is maximized when the *rate* at which new revenue exceeds new costs, while profit is maximized when the *level* of new revenue exceeds new costs.

There are exceptions but they are rare. For example, a seller of ice cream on a beach may find 30% of those present to be on no-ice-cream diets and the remaining 70% happy to buy one each but no more. If marketing costs are low, then both profit and ROI are maximized at 70% penetration since a ceiling has been reached. In general, there is a range of activity for which incremental profit exceeds the cost, so total profit continues to increase, but ROI progressively reduces.

The fourth objection to ROI is that the incremental measures required for the R and I (or X) require the baseline figures, i.e., what would have happened without the expenditure. Apart from direct marketing where matching cells can be left as controls, baselines are hard to determine, likely to be subjective, and able to be manipulated by the marketer. A brand that is regularly promoted will have sub-normal, i.e., sub-baseline, sales in the non-promotional periods as retailers and consumers adjust their inventories and buying habits.

The fifth objection is that ROI has become a fashionable term, the "new black," for marketing productivity and used to describe any type of profit arising from marketing activities. As the director general of the (U.K.) Institute of Public Relations observed, "Ask 10 PRs to define ROI and you'll get 10 different answers" (p.15) (Farrington 2004). The U.S. American Marketing Association White Paper (American Marketing Association 2005) on marketing accountability identifies six "ROI Measures Currently Used" (Figure 8, p.8):

- Incremental sales revenue
- Ratio of cost to revenue
- Cost per sale generated
- Changes of financial value of sales generated
- Cost of new customer [sic]
- Cost of old customer retention

Not one of these six is actually ROI, and thus the fifth objection is that marketers rarely mean ROI when they say "ROI." Of course this is a problem with usage rather than the ratio itself but if usage is so confused that the metric has no consistent meaning, then the adoption of the metric, ROI in this case, is not just meaningless, it can be downright dangerous.

The sixth and possibly most serious objection is that it usually ignores the effect on the marketing asset (brand equity) and the longer term (which we take to be the same issue). In theory it does not have to, but estimating brand equity valuations into the future is not usual ROI practice. If marketing activities have generated a million dollars in extra profit, after marketing costs of half a million, ROI enthusiasts would applaud, especially if no other "investment" would have paid back so handsomely. If, however, the marketing activities had reduced the value of the marketing asset by two million, the story is reversed. This example underlines the value, noted earlier, of separating measures assessing short- and long-term marketing performance. ROI tends to assess only the former.

In summary, ROI metrics promote underperformance and short-termism. For them to be used insightfully in marketing requires so much judgment and so many caveats, perhaps with the addition of other metrics, that their raison d'être as a silver metric is lost.

DCF Metrics Should Not Be Used for Performance Evaluation

Diageo, the world's largest wine and spirits business, decided that using metrics to measure past performance was not especially interesting so it converted its dashboard into more intensive use of metrics as part of the forward planning and plan approval process (Bruno, Parthasarathi, and Singh 2005).

This future orientation has merit: the past cannot be changed and it is only useful to the extent that its review can improve future performance. For that reason, the view that "marketing is an investment and unless you can measure its impact, your money is wasted" is wrong. By the time one can measure its impact, the investment has already succeeded or been wasted. In other words, subsequent measurement does not change history although the way it is measured may change our perception of history or, in this case, performance. Thus, measurement after the event does not change the event. We can learn from the investment and the results for the future but we cannot change what has already happened. Furthermore, estimating the future profit from past investment does not alter performance either, i.e., insure against waste.

The suitability of any tool, be it a spade or a market metric, depends on its intended usage. A spade may be a good spade but it is not much use for raking gravel. When we are looking forward to determine which marketing strategy will perform best, estimating the likely consequential cash flow, and risks, of each strategy is surely good practice. Discounting those cash flows back to NPV, whether in the guise of CLV, customer equity, or brand valuation, aids comparison. Furthermore, the contextual variables such as interest rates or economic growth can be standardized across the alternative strategies to highlight the differences arising from the managerial variables. Better still, a range of scenarios can be applied consistently across all alternatives.

Discounted cash flow analysis has two components: firstly, recognizing the time value of money by use of a suitable discount rate and, secondly, determining the discount rate that is appropriate, allowing for risk and other internal and external environmental factors. When we are evaluating performance we clearly should look at when cash is received. Determining past appropriate discount rates, however, is problematic. The real contextual variables are unlikely to match those used in the plan and so ex post discount factors may not match a priori ones. Variances can be analyzed between those arising from the contextual changes and those from unexpected managerial variable performance but such discussion quickly deteriorates since marketing performance and forecasting performance are totally confounded. Assessing the quality of forecasting is not the same as assessing the performance of marketing. A positive variance over plan may indicate excellent performance and/or cautious planning.

In evaluating past performance we need to assess two components, those revenues that have already been achieved and realized into cash and those for which the foundation has been laid, but the cash flow has not yet been invoiced or banked. To evaluate this latter component, people look to forecasts of future cash flows but their visions are fraught with potential myopia, conflicts of interest, and imponderables. One flaw in using future DCF for to-date evaluation is that we are taking credit for future performance not yet achieved. And there is an infinite number of possible futures. We cannot know which one should be selected. Future changes in the customer base cannot be assessed with any certainty. Customers will be acquired and others lost but disentangling those outcomes that are due to marketing performance to date from future marketing activities is well nigh impossible.

Assume that a characteristic of poor, or at least inexperienced, marketers is that they have inflated expectations of the results of their marketing. In this case, poor marketers will present higher DCFs than their more talented and experienced peers. This demonstrates at a bare minimum the need for some objective standards in judging the reliability of such estimates, given the moral hazard associated with their generation. There is, however, an opposing school of thought which should be considered and for which we have some sympathy. Whatever the theory, managers do, and probably should, try to combine past and future measures when making marketing decisions. The (relatively) known cash flow of the past (which cannot be influenced) differs from the more uncertain and only partially controllable cash flows of the future. Both are important and real. A typical problem is "Is past underperformance best addressed by sacking the manager, or should we retain the existing team to better use the experience?" In looking back and forward we need common metrics or at least a transformation between the past and the future. If the past and future were on the same track, it would be easier to identify progress toward the goal.

We accept that, if a firm had 20-20 foresight, then the long-term improvement in DCF, with suitable controls for the consistency of out-year variables, during the year would be a valid indicator of marketing performance, along with short-term cash flow, but we do not consider that to be realistic.

ROC

The third silver metric reviewed here is that proposed by Peppers and Rogers (2005), namely, Return on Customer. They claim that maximizing ROC, also maximizes both current period and future profits. Larry Kudlow, Host of CNBC's "Kudlow and Company," has offered highest praise for ROC: "Finally! A business metric that can drive better management and a higher stock price. I predict soon you'll be hard pressed to find a company that isn't tracking ROC℠." (Kudlow 2005)

The Peppers and Rogers' definition of Return on Customer is "ROC equals a firm's current-period [net] cash flow from its customers plus any changes in the underlying customer equity, divided by the total customer equity at the beginning of the period" (2005, p.16). Considering both the change in short-term cash flow and the change in the marketing asset is valid and corresponds with our own view of performance measurement. Care must be taken when adding them together because the metrics represent different things. The questions therefore become how the change in the marketing asset is measured and whether ROC provides the assessment of marketing we are seeking. Customer equity is, in line with Rust, Lemon, and Zeithaml (2004), taken to be the NPV of future cash flows, or DCF. Of course, one practical problem is to know who all the future customers will be, and then what cash flows will be contributed in response to the infinite permutation of marketing activities that the firm may undertake in future.

The first problem, already noted for DCF, with using this silver metric to evaluate performance is "crystal-balling" the immeasurable future. As Peppers and Rogers themselves concede in a slightly different context: "No one really knows what any company's discounted cash flow is going to be in the future" (2005, p.19). They may not have noticed that DCF and customer equity are different labels for the same thing.

Peppers and Rogers have defined ROC in various but equivalent ways and one is (Peppers 2005, slide 42):

$$ROC_i = \frac{\pi_i + \Delta CE_i}{CE_{i-1}}$$

where π_i is the cash flow for period i and CE is customer equity.

We can also express this as:

$$ROC_t(\tau-1) = \frac{C_t(\tau-1) + CE_t(\tau) - CE_{t-1}(\tau-1)}{CE_{t-1}(\tau-1)}$$

where $C_t(\tau)$ is cash flow during the period from $\tau-1$ to τ as estimated at time t, $CE_t(\tau)$ is customer equity at time τ as estimated at time t, and $ROC_t(\tau-1)$ is the Return on Customer between $\tau-1$ and τ. Here, τ relates to a time period of evaluation (usually in units of one year and taken as such here), whereas t stands for the moment at which the estimate is made. We only need the different notation to distinguish the point at which the estimate is made, t, from the period for which it is made $\tau-1$ to τ. ROC looks at the cash flow for the period being evaluated (the period ($\tau-1$) takes us to time t) and the customer equity looking forward.

Note that cash flows are in contemporary money: $CE_{t-1}(\tau)$ is the same as $CE_t(\tau)$ except the date of the forecast is a year earlier. Therefore $CE_{t-1}(\tau-1) = C_{t-1}(\tau-1) + CE_{t-1}(\tau)$. That is, the customer equity at time $\tau-1$ (estimated at time t) is the cash flow for period from $\tau-1$ to τ plus the residual customer equity at the end of the period, τ.

Substituting for $CE_{t-1}(\tau-1)$ in the ROC formula above gives

$$ROC_t(\tau-1) = \frac{\{C_t(\tau-1) - C_{t-1}(\tau-1)\} + \{CE_t(\tau) - CE_{t-1}(\tau)\}}{CE_{t-1}(\tau-1)}.$$

In other words, ROC consists of two components or variances. The first is the degree to which short-term cash flow was greater than expected, and the second, the degree to which the year-end customer equity is greater than expected. If the prior forecast of the period's cash flow was accurate and the two estimates of customer equity consistent, ROC is zero, which is hardly the result Peppers and Rogers can have intend-ed. If either component is greater than zero, we cannot distinguish poor forecasting from superior performance.

Thus, ROC does not measure return on the value of the marketing assets so much as the *variance* of the cash flow for the period just ended plus any *change* in forecast cash flows, both taken as a ratio of customer equity. This is directly analogous to abnormal earnings growth used to value performance changes in other equities (see Penman, 2004, p. 201).

A difference is that this formula scales it by taking the ratio to incoming customer equity at time $t-1$, $CE_{t-1}(\tau-1)$. Of course, doing so introduces many of the problems of ROI, not the least of which is that maximizing ROC does not correspond to maximizing the value of marketing to the firm.

ROC is positive when the firm is doing better than was previously expected, but that information is available with less calculation. It does not indicate whether a high value for ROC is caused by inaccurate and inconsistent forecasting or marketing performance. There is something self-defeating about forecasting excellence since it should take into account the brilliance of the firm's marketing. For example, the ROC for a brilliant CMO, who is slightly unlucky, will be lower than that for a low-grade CMO who performs every bit as badly as expected.

This relative performance aspect of ROC indicates that it will be particularly suspect to "gaming,", i.e., low budgeting and/or fattening short-term cash flow at the expense of the longer-term while maintaining the high forecasts for the out-years. This is a problem for all DCF techniques but especially so for ROC.

Competitor performance or other forms of benchmarking would provide useful yardsticks, but they are not considered by ROC.

One final point that deserves note is that we also need to consider differences arising from the technical aspects of net present value techniques, like customer equity, rather than marketing performance. When we time-shift the forecast date, we usually also change the contextual or technical variables such as discount rates and market growth. As noted above, using DCF calculations simultaneously with the same technical variables is more reliable than comparing net present values calculated at different times. ROC shares this difficulty with other applications of DCF to performance measurement.

In summary, ROC measures the *accuracy* of last year's forecast of cash flow in the period just ended, together with the *consistency* of the other two sets of forecasts across the two forecasting dates (last year and this year). While part of the error term may be the unanticipated efforts of a superior manager, that hardly ranks ROC as a finely tuned performance evaluation device.

The Metrics Needed for Assessing Marketing Performance

Perhaps the most surprising conclusion so far is the importance of understanding the difference between metrics for performance evaluation and planning. These activities are functionally different (though plans should yield the metrics to be used for performance assessment once the planned period is over and performance evaluation should inform future plans). We have made some specific criticisms of some specific silver metrics. However, even the best-targeted silver metric cannot provide an adequate report of either performance or plan. While summary measures may provide a series of top-line directions, it is more as a source of focus for drill-down activities, than as a complete description of the business.

Abandoning the search for a silver metric requires marketers to persuade their colleagues of a better way to assess the firm's marketing performance. The first step is to make the firm's long- and short-term goals explicit. For most large firms, this has more significance than may be obvious: by so doing, the CMO is serving notice that marketing contributes to the firm's corporate goals and the marketers wish to formalize that contribution. That is quite different from the convention of seeking a budget to fulfil separate goals set for "marketing" poorly defined, or the marketing department.

Once the goals are clarified and reduced to those where the market, or marketing, plays a major role, it is a short step to agreeing that at least one metric is needed to measure performance toward each goal.

The next stage requires some form of business model to show the linkages between inputs, including marketing actions, financial expenditure, competitive activities, and expected results. One tool for business modeling is strategy mapping (Kaplan and Norton 2000). Some of these linkages would not be normally described as "marketing" but of the remainder, some are key steps toward the firm's goals. More conventionally, the chain of effects from inputs to intermediate variables such as awareness, attitudes, and intention to purchase, to behavioral variables and then financial metrics can be analyzed to determine which measures appear to influence their consequential ones in a credible way (Ambler 2003). Selecting metrics is ultimately a pragmatic matter of selecting those that work, in the sense of being consistently predictive. Some seem to have little predictive ability, possibly due to low variance awareness, for example, whereas others are too volatile to be reliable.

Measures of these key steps and/or the goals themselves are the metrics that should be used to monitor performance and, for later comparison, should form part of any plans. Separate research indicates that, for a large firm, 8 to 10 is usually about the right number (Clark, Abela, and Ambler 2006). A small firm will need fewer. We would expect one of the DCF metrics to be included, not least because, at the end of the day, marketing is the creation of cash flow.

Limitations and Future Research

This paper is at the theoretical level. Empirical research needs to examine the performance of metrics in the context both of evaluating marketing performance to date and planning. While we have argued for the use of multiple metrics generally and against specific silver metrics, we cannot assess the loss of diagnosticity by operating at too summary a level without resorting to particular cases. What we can say, though, is that the more turbulent the environment, the higher the level of heterogeneity in terms of regions, product categories, and channels; and the lower the correlation between different objectives' achievement, the greater the damage that such simplification will cause.

Conclusions

This paper has addressed the selection of metrics for the purpose of assessing marketing performance. Other purposes, for example, planning, may need other metrics. We discussed why any single silver metric is inadequate. We found six objections to the use of ROI in this context and can find no justification for using it or its ROX variants.

The fact that NPV, customer lifetime value, brand valuation, and customer equity are all labels for the same discounted cash flow technique may not be widely appreciated but it allowed us to consider them en bloc. DCF is useful for planning and may well be included in a set of performance metrics but none of the variants should be used as a silver metric in assessing performance.

Return on Customer seeks to bring together short- and long-term performance measured by cash flow for the period and the change in the marketing asset, proxied by customer equity. That has merit but analysis reveals that the formula reduces to the short-term cash flow variance and the consistency of the longer-term cash flow forecasts. If reliable benchmark measures of performance were able to be calculated and used in place of expected values, it could have value, but any simplicity of the tool would be thereby lost.

Like it or not, firms have to accept that assessing marketing performance requires more than one variable. In our final section, we attempted to provide a blueprint for assembling the minimum necessary measures for top management to incorporate into their dashboard. ■

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