MARKETING SCIENCE INSTITUTE

MSI Reports

2006

WORKING PAPER SERIES

ISSUE THREE

NO. 06-003

MARKETING SCIENCE INSTITUTE

MSI Reports

2006

WORKING PAPER SERIES

ISSUE THREE

NO. 06-003

The Marketing Science Institute supports academic research for the development—and practical translation—of leading-edge marketing knowledge on issues of importance to business performance. Topics are identified by the Board of Trustees, which represents MSI member corporations and the academic community. MSI supports academic studies on these issues and disseminates findings through conferences and workshops, as well as through its publications series.

Marketing Science Institute
1000 Massachusetts Avenue
Cambridge, MA
02138-5396

Phone: 617.491.2060
Fax: 617.491.2065
www.msi.org

Working Paper Series
The articles that appear in *MSI Reports* have not undergone a formal academic review. They are released as part of the MSI Working Paper Series, and are distributed for the benefit of MSI corporate and academic members and the general public.

Subscriptions
Annual subscriptions to *MSI Reports* can be placed online at www.msi.org. Questions regarding subscriptions may be directed to pubs@msi.org.

Single reports
Articles in *MSI Reports* are available in downloadable (PDF) format at www.msi.org.

Past reports
MSI working papers published before 2003 are available as individual hard-copy reports; many are also available in downloadable (PDF) format. To order, go to www.msi.org.

Corporate members
MSI member company personnel receive all MSI reports (PDF and print versions) free of charge.

Academic members
Academics may qualify for free access to PDF (downloadable) versions of MSI reports and for special rates on other MSI print publications. For more information and to apply, go to "Qualify for academic membership" on www.msi.org.

Classroom use
Upon written request, MSI working papers may be copied for one-time classroom use free of charge. Please contact MSI to obtain permission.

Search for publications
See the searchable publications database at www.msi.org.

Submissions
MSI will consider a paper for inclusion in *MSI Reports*, even if the research was not originally supported by MSI, if the paper deals with a priority subject, represents a significant advance over existing literature, and has not been widely disseminated elsewhere. Only submissions from faculty members or doctoral students working with faculty advisors will be considered. "MSI Working Paper Guidelines" and "MSI 2006-2008 Research Priorities" are available in the Research section of www.msi.org.

Publication announcements
To sign up to receive MSI's electronic newsletter, go to www.msi.org.

Change of address
Send old and new address to pubs@msi.org.

Response to Ambler and Roberts' "Beware the Silver Metric"

Don Peppers and Martha Rogers

The only way marketers can effectively communicate with CFOs and CEOs is to use metrics that can be reported in financial terms, say Peppers and Rogers. While it may not represent a "silver metric," Return on Customer offers a useful measure of marketing's "silver goal": to source and harvest cash flow.

Don Peppers and **Martha Rogers** are authors of *Return on Customer: Creating Maximum Value from Your Scarcest Resource.*

The best thing about Ambler and Roberts' treatise "Beware the Silver Metric: Marketing Performance Measurement Has to Be Multidimensional" is the brilliantly succinct definition of marketing, found in the report summary: "What the whole firm does to source and harvest cash flow." This is a truly wonderful definition, specific yet all-encompassing. Frankly, we're jealous. We wish we had written that definition ourselves. And we simply don't understand why they use the rest of their paper to steer clear of this "silver definition" of marketing, rather than simply embracing it and looking for a metric that might actually live up to it.

It seems self-evident to us that if you could measure a company's efficiency at sourcing and harvesting cash flow, then you would indeed have a fairly comprehensive business metric, which could benefit marketing decisions. Instead, the authors appear bent on introducing multiple independent metrics, based on their premise that marketing has such a "multidimensional nature" that only a variety of metrics could possibly suffice to capture its richness and complexity. Our advice: Get real. The only way marketers, as a group, can hope to communicate with financial executives and CEOs is to rely on metrics that can ultimately be discussed and reported in financial terms.

We've heard more than one CFO complain that marketers are all the time adding new and different measures of their success, and that they already rely on too many simultaneous metrics. "Marketing" can be gauged by customer satisfaction *and* day-after recall *and* share of wallet *and* brand preference *and* return on marketing investment *and* ... *and* ... *and*... . Of course a few of these metrics are bound to look good in any situation, but what do they mean to the firm in terms of cash flow? Undoubtedly, it's useful to employ different metrics to track different subsidiary goals, but these subsidiary goals are really nothing more than inputs to the accomplishment of marketing's uber-goal—its "silver goal"—which is to source and harvest cash flow.

The next best feature of Ambler and Roberts' paper is their contention that any valid metric should take account of both long-term and short-term value creation. We couldn't agree more, and this is one of the bedrock principles underlying the Return on Customer[SM] metric, which is based on the idea that customers create value (i.e., cash flow) for a business in two ways. They generate current-period cash flow by buying things and incurring costs today, *and* they change their intent or likelihood of buying in the future, which increases or decreases their expected cash flows in the future, i.e., their lifetime values. When a customer's likelihood of doing business in the future changes, as the result of the customer's experience today, this is an event that actually creates (or destroys) value *today*, even though the cash effects of this event may not be fully realized for weeks or months or even years.

Imagine a CEO announcing publicly that his firm now expects its earnings two years from now to be lower than had been previously forecast. What would happen to his company's stock price? It would go down today, not two years from now—because for investors the firm's value today is a function of its expected cash flows in the future.

In the same way, if a customer calls you with a complaint today but gets no satisfaction, his likelihood of buying from you in the future declines, which sends his lifetime value lower. This *change in lifetime value* represents a value-destroying event that occurs in the current period. It is a loss of value for your firm, and even though the actual cash effect won't be realized until later, that loss of value occurs today, whether or not your firm knows or measures or manages that loss of value.

Inexplicably, Ambler and Roberts almost immediately undermine their otherwise quite healthy short-term/long-term argument, apparently to pursue their attack on what they call silver metrics. Why do they dismiss financial discounting as a suitable tool for comparing the value of expected future cash flows with current cash? It is simply not true, as they maintain, that "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." If the short term is so critical as to be a matter of genuine survival, then the discount rate may in fact be 100%, or even 1,000% or more (Peppers and Rogers 2005, p. 59). And if your objective assessment of risk differs for different future time periods, then different discount rates can easily be applied to the same basic stream of expected future cash flows. Indeed, the whole discipline of economics is based on the straightforward and common-sense principle that cash expected to be received in a future period can *always* be equated to some amount of cash held currently, by applying an appropriate discounting function of one kind or another.

So the two most important and insightful principles introduced by Ambler and Roberts—that marketing is all about cash flow and that both short term and long term matter—become bloodied, apparently for no other reason than to justify the title of their paper. And yet by adding just one additional principle to these first two we can derive the Return on Customer metric itself: All cash flow for an operating business must come from customers, at some point.

Ambler and Roberts remark that "Peppers and Rogers may not have noticed that [discounted cash flow] and customer equity are different labels for the same thing." While this appears to be a criticism of our methodology, it is actually due to an oversight on their part, because all our thinking in *Return on Customer* is based on this exact principle. (Ambler and Roberts may not have noticed that almost immediately following the sentence they cited from our book was this one: "All the firm's current and future customer lifetime values added together (i.e., its customer equity), will equal its total discounted cash flow." See Peppers and Rogers 2005, p. 16.)

The remainder of Ambler and Roberts' critique of Return on Customer is based on the somewhat confusing equations they introduce to take account of the time at which a cash flow forecast is made versus the period for which it is being forecast. But once you penetrate the terminological jungle they construct to make this argument, it's easy to spot a fundamental mistake in their analysis. The assumption underlying their equations is that lifetime values are simply a matter of forecasting, and that nothing you do during the current period can actually *change* your customer's lifetime value. Thus, they argue, since this period's cash flow from a customer is already included in the lifetime value predicted for the customer at the beginning of the period, the numerator of the ROC fraction reduces to a trivial identity function, and all it is measuring is the accuracy of last year's lifetime value or customer equity forecast compared to this year's.

Reaching this conclusion is equivalent to denying that when customer loyalty goes up as a result of a company's actions, no value is created other than what was spent and collected in the current period, or that when a firm allows its service level to slip, reducing the level of customer satisfaction, no value is destroyed other than what profits may be forgone in the current period. It takes us directly back to the land of short-term-only.

Consider a very simple example. Suppose we have a marketing initiative designed to increase customer satisfaction, which increases a customer's likelihood of continuing to do business with us, which increases his lifetime value. The initiative requires us to spend \$10 per customer today, but it increases average top-box willingness to recommend by .5%, which can be expected, based on history, to lead to an increase in retention of 5% per year for three years, which would in turn increase the forecast lifetime value of the customer from \$100 to \$130. Measured by itself, this initiative generates an ROC of 20%:

$$ROC = \frac{\pi_i + \Delta LTV_i}{LTV_{i-1}} = \frac{-\$10 + \$30}{\$100} = 20\%.$$

Ambler and Roberts' complicated equations are based on the notion that any possible increase in the customer's satisfaction must already be "baked in" to the customer's *initial* lifetime value, so the only thing the ROC calculation does is recalibrate the forecast. This is nonsensical on its face. By changing your customer's current-period experience you can *change* his otherwise expected lifetime value, and taking account of lifetime value change is the most financially accurate way to capture the true value created by such things as service improvements.

It's possible that the secret to Ambler and Roberts' misinterpretation of the ROC formula lies in a flawed view of the nature of customer equity. One can add to customer equity simply by acquiring more customers, which has always been the quintessential goal of marketing. But one can also add to customer equity by increasing the lifetime values of the customers already obtained, which would be an outcome of a successful customer retention program, for instance, or an initiative to improve customer service (which is not considered "marketing" at many businesses).

A good example of a firm that added to its customer equity both ways is Verizon Wireless, a joint venture between Verizon and Vodafone. Over the three-year period from 2002 to 2004, this company grew its customer base from 29.4 million handsets in use to 43.8 million, which clearly increased customer equity. During the same period, the company's monthly customer churn rate was reduced from 2.6% to 1.3%, increasing its customer equity even more, because average customer lifetime value increased from about \$330 at the beginning to about \$540 by the end of the period. While Verizon Wireless reported \$13.7 billion in operating earnings during this period, it increased its customer equity by an additional \$13.9 billion—so it actually created more than twice as much value for shareholders as was reflected in its financial statements. Forty percent of the increase in the company's customer equity was attributable to the new customers it acquired during the period, but 60% was attributable to the increase in the value of all its customers due to the increased customer retention rate.

Verizon Wireless generated an average annual Return on Customer of roughly 70% during this three-year period. What this means, actually, is that by focusing on maximizing the value created by its customers Verizon Wireless was able to create shareholder value every year that amounted to about two-thirds of its actual value as a business at the beginning of that year. (We did this calculation from publicly reported financials, using a 20% discount rate. Rather than separately trying to value Verizon Wireless' future customers as a part of the calculation of its existing customer equity, we made the simplifying assumption that the firm's average customer acquisition cost, which is a reduction of current earnings, is more or less equal to the average lifetime value of the customers acquired during the period.)

Clearly, Verizon Wireless' financial performance is due to more than simply revised forecasting of customer lifetime values. The firm was actively engaged in a series of marketing programs to *increase* customer lifetime values, by improving retention. A 70% ROC for three years is an incredible spurt of value creation, but in this case it was also a one-time event. It's highly doubtful that Verizon Wireless can maintain such a high level of value creation from its current and future customers, for the simple reason that monthly churn has already been reduced from 2.6% to 1.3%, and it will be increasingly costly to reduce it further. But many of the company's competitors in the mobile telecoms space are running in the opposite direction—spending wads of money in a mad race to acquire customers to replace the ones they are losing, all the while suffering a decline in average lifetime value.

Finally, in their critique of ROC, Ambler and Roberts overlook entirely one of the most important things this metric can do for a firm's prioritization of its marketing efforts. The problem at most firms is that customers (by this we always mean current and prospective customers) are generally in shorter supply than capital. Most firms run out of customers before they run out of capital to invest. That's why the denominator of the ROC fraction is lifetime value, rather than capital invested.

This doesn't mean that a firm might not face other constraints on its ability to create value, or that ROI and ROMI aren't important metrics. Capital does have a cost, and your marketing programs must have outcomes that exceed this cost. But once you conclude that a marketing initiative will pay a return on investment greater than your cost of capital, the supply of money available to fund it is, for all practical purposes, unlimited. By contrast, there's no bank or secondary market for customers. You can't simply borrow customers from a lending institution or an investor and then repay them with interest. It's therefore important to measure the efficiency with which you "employ" your customers to create value.

We aren't claiming that Return on Customer is a "silver metric" to replace all other metrics. Indeed, it should, as we state more than once in our book, be used in conjunction with ROI, DCF, and other useful business metrics. But at the highest level, based on the most fundamental definition of a business, it should be clear that ROC can measure the efficiency with which a firm sources and harvests cash flows, in both the short term and the long term, from its scarcest resource: customers. ■

Reference

Peppers, Don, and Martha Rogers (2005), *Return on Customer: Creating Maximum Value from Your Scarcest Resource.* New York, N.Y.: Currency.

Report No. 06-114