The Metrics That Marketers Muddle

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BY NEIL T. BENDLE AND CHARAN K. BAGGA

A BIG CHALLENGE for marketing is demonstrating its business value. As the finance function becomes more powerful within companies, some see marketing’s influence as declining. One major reason for marketing’s diminishing role is the difficulty of measuring its impact: The value marketers generate is often difficult to quantify. For example, Target Corp., the Minnesota-based discount retailer, positions itself as fashionable yet affordable. It is difficult to assign a dollar value to the image Target generates in consumers’ minds, and even harder to determine the return on investment (ROI) from a specific advertisement promoting that image.

Although marketing metrics aren’t perfect, they might be more useful if people understood what the different measures actually mean. We have two purposes for this article: First, to clarify marketing metrics so that managers select the right metrics and use them appropriately; and second, to help senior managers understand when marketers are cherry-picking the data or using inappropriate metrics. We believe that marketing’s influence will increase if marketers use metrics more effectively. Fortunately, many marketers are receptive to this view and are doing excellent work in this field, such as new metrics that link customers’ perceptions about products and brands to their actual purchase behavior. Our aim here, however, is not to endorse any new approaches — but rather to encourage appropriate and consistent use of popular marketing metrics.

In this article, we assess five of the best-known marketing metrics: market share, net promoter score, the value of a “like,” customer lifetime value, and ROI. To understand how managers view popular marketing
metrics, we conducted interviews with marketers and administered surveys to managers. (See “About the Research.”) We found that both marketers and nonmarketers agreed that well-defined metrics are critical to effective marketing. However, despite their widely acknowledged importance, popular marketing metrics are regularly misunderstood and misused.

Market Share
Market share is a hugely popular metric. In a survey of senior marketing managers, 67% found market share based on dollars spent “very useful,” and 61% found market share based on units sold “very useful.”

One explanation for why managers value market share so highly probably has to do with well-known research from the 1970s that suggested a link between market share and ROI. However, the linkage may be less clear than most managers would suspect, and studies have found it is often correlational rather than causal. Not surprisingly, there has been substantial academic pushback on the value of market share as a useful performance metric, epitomized in a 1989 article by Boston Consulting Group founder Bruce D. Henderson, in which he proclaimed that “market share is malarkey.”

Nevertheless, many managers continue to pay attention to market share, and some vigorously defend its value. Rather than having an endless debate, many marketers have tacitly agreed to put the discussion aside. Hence, market share remains on management radar and continues to be taught in MBA curricula with little discussion as to whether it is an appropriate marketing objective in any given market.

In our research, we found that there were usually two ways managers used market share: as an ultimate objective or as an intermediate measure of success. Using market share as an ultimate objective is hard to justify. Many managers believe that the primary purpose of a business is to maximize shareholder value, although for some the purpose is also to serve the interests of nonowner stakeholders such as employees and customers. However, increasing market share isn’t a meaningful ultimate objective for either of these groups: If the aim is to maximize the returns to shareholders, increased market share offers no benefit unless it eventually generates profits. Despite this, we found that more marketing managers thought it was more important to prioritize maximizing market share than to prioritize maximizing profitability.

Managers commonly argue that market share is a useful intermediate measure — in effect, a leading indicator of future success. In some markets, market share probably does help increase future profits, but this is not always the case: General Motors Co. was the world’s biggest carmaker before filing for Chapter 11 bankruptcy court protection in June 2009. Therefore, it is critical to understand the expected relationship between market share and profitability in your specific market.

In some markets, bigger can be better; the most obvious examples are markets with economies of scale. Companies in such markets can reduce their cost per unit by selling more — thus increasing overall profits. If you think you are in such a market, you should confirm that the economies of scale you think exist actually do. Economies of scale do not automatically apply to all markets. For example, consulting does not get substantially cheaper per hour to provide at higher volumes. Even when greater size does bring benefits, marketers should still measure size in terms of volume sold, as opposed to market share. Although market share is related to volume, the two are not identical: When the overall market size shrinks, market share can remain stable or even rise as volume falls. For example, Apple Inc.’s iPod continued to have a high share of the market for dedicated MP3 music players, but the size of that market declined sharply with the rise of smartphones. Further, measuring volume is easier to calculate than market share.

In some settings, market share can be a proxy for power. Depending on the setting, relative size can matter, and having a bigger market share can encourage others to treat your company more favorably. For example, when it comes to dealing with retailers, a category leader such as Coca-Cola may be able to negotiate better deals than a weaker brand can; retailers need Coke on their shelves more than they may need a smaller brand. A similar logic applies to network goods, which are products for which the benefit to consumers increases when more people use them. For example, Facebook’s
value to its members increases when more of its members’ friends use it. Overall, though, the research on the relationship between profits and market share is ambiguous. There is no general rule; the importance of market share varies from market to market.

Market share has other complications. For instance, figuring out who your competitors are in a given market can be a judgment call. Consider, for example, the changing product categories offered by computer makers. Do high-end tablets compete in the laptop market? Microsoft Corp. claims that its Surface Pro 4 tablet computer can “replace your laptop.” A company’s market share in a given category depends on how the company defines the market: To increase market share, it can redefine the market to exclude a competitor.

Additionally, because market share is about relative rather than absolute success, market share objectives can drive companies to initiate unprofitable attacks on competitors. Market share has other complications. For instance, figuring out who your competitors are in a given market can be a judgment call. Consider, for example, the changing product categories offered by computer makers. Do high-end tablets compete in the laptop market? Microsoft Corp. claims that its Surface Pro 4 tablet computer can “replace your laptop.” A company’s market share in a given category depends on how the company defines the market: To increase market share, it can redefine the market to exclude a competitor.

Unmuddling Market Share We suggest a simple set of rules to determine the appropriate use of the market share metric. First, don’t use market share as either an ultimate objective or as a proxy for absolute size. Second, consider the perspective of other businesses. Will they behave more favorably toward your company if your market share increases? Next, consider the consumer. If you cannot explain in simple terms how the consumer will benefit from industry consolidation, your product is not a network good, and increased market share will not matter to consumers. Finally, analyze whether market share drives profitability in your industry. For example, does higher market share lead to increased profits? Bear in mind that this is different from assessing whether market share and profits are correlated. Companies with superior products tend to have high market share and high profitability because product superiority causes both. This means that the two metrics are correlated — but it does not necessarily mean that increasing market share will increase profits. (See “Should You Use Market Share as a Metric?”) Using market share as a metric of success simply because other companies do can be counterproductive.

Net Promoter Score Since 2003, the net promoter score (NPS) has become one of the most widely used marketing metrics. Companies in industries as diverse as telecommunications, banking, and car rental have embraced NPS as a way to monitor their customer service operations. Consumers answer a simple question (How likely is it that you would recommend X to a friend or colleague?) on a scale from 0 to 10, with 10 being the most positive. Customers who answer 9 or 10 are considered promoters; those who answer 6 or less are rated as detractors. The score is the percentage of promoters minus the percentage of detractors.

Frederick F. Reichheld, the business strategist who pioneered NPS, has argued that NPS is not just a metric but also a system that allows managers to use the scores to shape managerial actions. Advocates explain that the feedback is the source of many potential benefits. For example, a senior executive we interviewed argued that adopting NPS facilitated cultural shift at his company from one that was highly bureaucratic toward one that was more customer-centric.

One of the strongest selling points of NPS is its simplicity. It’s easy for managers and employees to understand the goal of having more promoters and fewer detractors. However, there are weaknesses in
how the theory has actually been presented to managers. In Reichheld’s original article, NPS was described as “the one number you need to know to grow.” It was associated with “profitable growth” (which implies bottom-line growth). However, the supporting evidence relied on revenue growth (in other words, top-line growth). In another example in the net promoter literature, a customer’s worth to Apple has been described as the customer’s spending, ignoring the costs associated with serving the customer.

Unfortunately, it’s easy to imagine how to increase the net promoter score while destroying even top-line growth. For instance, in product categories where the demand is relatively inelastic (such as utilities), slashing prices will likely increase the net promoter score because customers will be happier and recommend the company. Yet, under this scenario, revenue (as well as profitability) will decline.

Another problem with NPS as a metric is the classification system. The boundaries between scores of 6 and 7 (detractors and passives) and 8 and 9 (passives and promoters) seem somewhat arbitrary and culturally specific. Grouping customers into categories eliminates potentially useful information. For example, a customer who says that the likelihood that he or she will recommend something is 0 is probably a more active detractor than a customer with a rating of 6. By grouping different types of detractors in the same bucket, companies lose the opportunity to explore the differences.

Given these problems, it is difficult to justify the theory of the NPS metric over a simple 0 to 10 scale, or to explain why NPS works any better than other metrics that capture different facets of the customer experience. Academics have been slow to embrace NPS, and many have suggested to us that it is overhyped. So far, we have not seen any rigorous studies that would prove to academics’ satisfaction that NPS is superior to other metrics from the family of customer experience measures. Without a compelling theory supporting the superiority of NPS, its value can only be justified on practical grounds. The argument is essentially: “We are not sure exactly why NPS works, but it seems to work, and that’s good enough for us.”

Interestingly, more than half of the marketing managers that we surveyed thought there was “strong scientific support for the claim that the NPS metric is more effective than all other customer satisfaction metrics.” However, a rigorous examination of NPS’s effectiveness relative to other customer satisfaction scores failed to confirm its superiority. In our view, advocates for NPS have not sufficiently responded to this and similar criticisms. Reichheld and his coauthor have suggested that criticism of NPS comes from consultants and academics wed to traditional satisfaction measures and dismiss the critics as “net pro-moaners.” Still, the basic criticisms remain inadequately addressed. Many managers use NPS in the belief that it’s based on widely accepted academic research, even though the evidence supporting NPS is actively disputed.

One reason for the lack of resolution surrounding NPS is that academics have focused on testing the metric. They have found that it’s much more difficult to test the broader claims of NPS as a system. At the root of the problem is the difficulty of establishing a control group: You can’t have one group of companies that adopts the NPS system and an identical group of companies that doesn’t. Therefore, the question of most interest to managers — “Will implementing the NPS system improve our company’s performance?” — is also the most difficult to answer. Thus, critics of NPS have not been able to definitively show that NPS doesn’t work; nor have supporters definitively shown that it does work.

A customer who says that the likelihood that he or she will recommend something is 0 is probably a more active detractor than a customer with a rating of 6.
Supporters of NPS want it to work and treat it as a viable way to incorporate customer feedback into their companies’ strategies. Opponents bristle at the hype surrounding the metric and think there are better alternatives. How bold claims should be is a debate as old as marketing itself. We might compare NPS to Guinness, the popular Irish stout, which was once marketed as being “good for you.” Guinness and NPS may both have wonderful qualities, but that doesn’t mean one should believe everything said about them.

**Unmuddling NPS** The value of NPS may depend upon whether a manager sees it as a metric or as a system. The metric by itself has limited theoretical or empirical justification, and we see no reason to favor it over other customer satisfaction metrics or combinations of metrics. To be fair, NPS’s advocates agree that the metric itself is not what provides NPS most of its value. Reichheld and Markey themselves write: “Fight the temptation to let it [NPS] become just a score.”16 (See “Should You Use Net Promoter Score?”)

**The Value of a “Like”**

Measuring the value of social media activities is important and challenging. New approaches are being developed all the time, and they have the potential to aid our understanding of how social media creates value. One such metric that is popular among digital marketers is the value of a “like” on social media. This value is typically calculated by determining the average value of customers who are fans on social media (in other words, the value of a customer who publicly endorses your company). Then you subtract the average value of customers who are not fans on social media (in other words, the value of a customer who is not publicly endorsing your company). Of course, there are important differences between fans/follows/“likes,” and so forth, but our recommendations are deliberately broad to accommodate use across many social media platforms. In sum, the metric measures the simple difference in value between two groups of customers: fans on social media versus nonfans.

Marketers seem to assume that the difference in customer value between fans and nonfans is attributable to the company’s social media strategy. An overwhelming majority of marketing managers in our survey saw a link between their social media spending and the value of a “like.” Syncapse, a social media strategy firm, suggests that when assessing the value of a Facebook fan, “marketers must understand the measurable differences between users who have ‘liked’ or Fanned a brand versus those who have not.”17 However useful this is, it does not mean that the cause of the differences in users’ value is attributable to a company’s social media strategy.

**SHOULD YOU USE NET PROMOTER SCORE?**

Although the simplicity of net promoter score (NPS) is appealing, the metric has limited support from academics.

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**Do you expect that simply monitoring your NPS will improve performance?**

- **Yes**
- **No**

**Advice:** The NPS metric alone cannot fundamentally alter performance. NPS advocates recommend that the metric be used as part of a system to change company culture.

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**Are you attempting to change organizational culture to be more customer-centric?**

- **Yes**
- **No**

**Advice:** Implementing NPS or a similar metric as part of a complete system may have value in shifting your organization’s culture. Consider how adopting a clear metric would benefit your organization.

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**Advice:** Consider why you think NPS is the best approach. Other metrics may be more suitable.
The reason that social media strategy shouldn’t be seen as the driver of value difference between fans and nonfans is because customers who are social media fans will differ from nonfans for reasons unrelated to the company’s social media strategy. For example, fans are probably more active on social media, more technologically literate, and typically younger. Our experience suggests that fans are often more favorable toward a brand to start with than nonfans are. Indeed, this is probably what motivated them to affiliate in the first place.

The difficulty here is attributing causation. If consumers “like” a brand on Facebook because of their previous favorable experience with the brand, the company’s social media strategy may have added little; it simply identified higher-value customers, as opposed to increasing the value of any customer. Since social media spending probably didn’t cause the difference, the difference in value between a customer who is a fan and a customer who isn’t a fan shouldn’t be used as a benchmark for marketing spending on social media campaigns.

In addition to the confusion over causation, “value” must be clearly defined in order to calculate the value of a “like.” Marketers often measure customer value based on revenue instead of contribution; our research found that a majority of marketers surveyed made this error. If a marketer is trying to establish the relationship between social media efforts and the value of customers, it is incorrect and misleading to use “average sale price” to measure value. Since revenue ignores costs, such a calculation overstates customer value.

Unmuddling the Value of a “Like” Managers shouldn’t automatically assume that differences in value between two groups of customers were caused by social media marketing activity. When there are differences, managers need to investigate whether they existed prior to the social media marketing effort. Digital marketers can run fairly simple controlled, randomized experiments to understand the impact of their actions. For example, to see how coupons offered on social media can change behavior, marketers could assign different coupons to different customer groups randomly and then study the differences in behavior. (See “Should You Use the Value of a “Like” as a Metric?”)

Customer Lifetime Value Customer lifetime value (CLV), which is the present value of cash flows from a customer relationship, can help managers make decisions regarding investments in customer relationships. For example, a marketer might use CLV to decide whether to spend marketing dollars to acquire new customers or to increase the retention rate of existing customers. CLV can be difficult to calculate because it often relies on the ability to predict future customer retention rates. However, we think one major source of confusion among marketers — whether to include customer acquisition cost in the CLV calculation — can be easily avoided. CLV is easier to understand, and in our view more useful, if marketers don’t subtract the acquisition cost from their calculation of CLV before reporting it. To be sure, customer acquisition costs are a major item in marketing budgets. Such costs should affect decisions as to whether to pursue prospective customers. But this does not mean that acquisition costs need to be subtracted from CLV before the value of the customer is reported.

CLV is often used to measure the value of

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**SHOULD YOU USE THE VALUE OF A “LIKE” AS A METRIC?**

Social media spending should not be justified by an observed difference in customer value that may not have been caused by social media spending.

- **Are you using revenue to measure customer value?**
  - Yes
  - No
  
  **Advice:** Don’t. Instead, also consider estimated costs attributable to serving the customer to ensure you don’t overvalue customers gained.

- **Are you using value of a “like” to help determine social media spending?**
  - Yes
  - No
  
  **Advice:** Don’t. Differences in customer value exist independently of marketing efforts.

- **For all companies**
  
  **Advice:** To understand social media marketing’s impact, run randomized experiments.
customers who have already been acquired. The acquisition costs have therefore already been incurred. Even if the company made a mistake in acquiring a customer and the acquisition costs exceeded the customer’s value, knowledge of this cannot change the earlier acquisition decision. Acquisition costs are “sunk” and should be ignored when making forward-looking decisions.22

Many marketers persist in subtracting acquisition costs before reporting CLV, which results in several ongoing problems. The majority of marketers we surveyed thought that customers with the same value going forward had the same CLV. However, this is not true when acquisition costs are subtracted from CLV before CLV is reported. A highly profitable customer can appear to have the same value as a less profitable customer if the highly profitable customer cost more to acquire.

Most marketers we surveyed also thought that you could calculate the financial value of a company’s customers by adding up the individual CLVs. However, this is not true if acquisition costs are subtracted before reporting CLV. When subtracting acquisition costs before reporting CLV, you do not report the current value of the company’s customers but their value less acquisition cost. To see why this matters, it helps to draw a parallel with other (noncustomer) company assets. Imagine that a company is selling an old machine. In this scenario, the company’s managers would expect to receive the machine’s current value, not the current value less what the company paid to buy the machine when new.

What’s more, when you subtract acquisition cost from CLV before reporting it, the CLV is contingent on other people’s choices. For example, let’s assume that an acquisition campaign costs $100 to target two customers, A and B. If the company only succeeds at acquiring customer A, then the acquisition cost for that customer is the full $100; if the company acquires both customers, the $100 cost can be split ($50 each). Therefore, the reported value of customer A will change significantly based on extraneous factors that have nothing to do with customer A; customer B’s decision to sign on (or not) impacts customer A’s lifetime value. It doesn’t make sense to tie a customer’s value to the marketer’s past success in targeting other customers. (See “How Should You Calculate Customer Lifetime Value?”)

Unmuddling CLV Marketers often use CLV to help them decide whom to target in acquisition campaigns. To these marketers, we recommend basing CLV on the value of the customer relationship — not the value of the customer relationship less the acquisition costs. You can still evaluate customer acquisition campaigns without incorporating acquisition costs into CLV. To do so, calculate the CLV of a prospective customer. Then compare the CLV of the prospective customer to her estimated acquisition cost. All else being equal, the greater the positive difference between the targeted customer’s CLV is easier to understand, and in our view more useful, if marketers don’t subtract the acquisition cost from their calculation of CLV before reporting it.
CLV and that customer’s acquisition cost, the more attractive the acquisition campaign.

**Return on Investment**

Return on investment is a popular and potentially important metric allowing for the comparison of disparate investments.\(^{23}\) A critical requirement for calculating ROI is knowing the net profit generated by a specific investment decision. Most of the marketers we surveyed suggested that it was enough to know total profits and the investment to calculate ROI. However, this is incorrect; to calculate ROI accurately, you need to be able to estimate the fraction of profits attributable to the investment. As it is often hard to find the baseline — that is, what the profit would be if the investment had not been made — it can be difficult to calculate the incremental profit.

What’s more, ROI can be manipulated by cherry-picking the best projects: Being very selective might reduce total profits but increase the average ROI. In order to maximize ROI, you would invest only in the project with the highest return, even though maximizing net profit would require doing multiple projects. To illustrate, consider two potential investments of equal size. The first one has a ROI of 40%, the second a ROI of 30%. The second investment is still highly profitable — just not as attractive as the first. Making both investments would lead to a greater total profit, with an average ROI of 35%. By contrast, choosing only the higher-return project would mean lower total profits, despite its 40% ROI. As logical as this sounds, a large percentage of the marketing managers we surveyed incorrectly said that choosing a portfolio of the highest ROI investments was the same thing as choosing the highest total profits.

We would argue that the biggest challenge with ROI isn’t a technical deficiency but confusion over how it is used. In the 2014 CMO Survey,\(^{24}\) 20% of respondents said they didn’t measure their marketing ROI. However, the responses from top marketers who said they did measure ROI were of greater concern. Fully one-fifth of the top marketers said they measured ROI using customer surveys, even though that’s not possible: Consumers don’t have the data (such as marketing investments and profits) to allow for ROI calculations. Another fifth of the respondents said they measured ROI using managerial judgment. This is also problematic because ROI is not subjective, but a metric with a specific definition.

Our survey also confirmed widespread lack of consensus over whether ROI is indeed a financial metric: More than half of the marketers we surveyed thought that ROI could be calculated using nonfinancial marketing data. When marketers resist using consistent definitions of measures such as ROI, it makes it more difficult to persuade nonmarketing executives that claims regarding marketing’s impact are credible.

**Unmuddling ROI** Although ROI may not be a perfect metric, it is valuable to the extent that it can facilitate communication with nonmarketing colleagues.\(^{25}\) To communicate effectively, marketers must use terms in ways that nonmarketers can understand. Thus, a marketer should not use “ROI” to refer to every activity that has a successful outcome. A campaign to create awareness may have a positive ROI, for example, but marketers can’t prove this simply by pointing to higher levels of awareness. In order to calculate ROI, there must be a return (a profit associated with the investment) and an investment. Unless you have both, you cannot calculate ROI. (See “Are You Using ROI Correctly?”)

**Clarifying the Meaning of Metrics**

If the marketing profession is serious about advancing the marketing discipline’s reputation for
delivering results, marketers need to be prepared to improve measurement. To the extent that metrics are used in marketing, they are often used inconsistently. (See “The Do’s and Don’ts of Common Marketing Metrics.”) The first step in unmuddling metrics is clarifying what the metrics represent and how they can be used.

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6. In this article, we do not aim to definitively show the connection (or lack of connection) between market share and profitability. Our aim is more modest: To show that the causal path is not as clear as managers may believe — making it important to not assume that market share and profitability always go together. For an example of academic pushback, see R. Jacobson and D.A. Aaker, “Is Market Share All That It’s Cracked Up to Be?” Journal of Marketing 49, no. 4 (autumn 1985): 11-22; for “market share is malarkey,” see B.D. Henderson, “The Origin of Strategy,” Harvard Business Review 67 (November-December 1989): 139-143.


F. Reichheld and Markey, “The Ultimate Question 2.0,” 231.

Ibid, 259.


There are many problems with assessing CLV, but we are not able to address all of them here, primarily for reasons of space. In brief, when used as a prediction of the future, CLV measurement is challenging. For example, it can be extremely difficult to project for customers with whom the company does not have a contract or even a regular amount of revenue. It is tough to know whether a customer has been retained but is an irregular purchaser, or whether the customer will never buy again. Discount rates are hard to estimate and, given that they change with risk, should theoretically differ between customers. The problems of calculation can be especially challenging given customer heterogeneity. Further, even if you can calculate CLV, what to do with it can be a challenge, as differentially serving customers can be controversial. For further discussion of these issues, see, respectively, J. Romero, R. van der Lans, and B. Wierenga, “A Partially Hidden Markov Model of Customer Dynamics for CLV Measurement,” Journal of Interactive Marketing 27, no. 3 (August 2013): 185-208; P.S. Fader, B.G.S. Hardie, and K. Jerath, “Estimating CLV Using Aggregated Data: The Tuscan Lifestyles Case Revisited,” Journal of Interactive Marketing 21, no. 3 (2007): 55-71; P.S. Fader and B.G. Hardie, “Customer-Base Valuation in a Contractual Setting: The Perils of Ignoring Heterogeneity,” Marketing Science 29, no. 1 (January-February 2010): 85-93; and C. Homburg, M. Droll, and D. Totzek, “Customer Prioritization: Does It Pay Off, and How Should It Be Implemented?” Journal of Marketing 72, no. 5 (September 2008): 110-130.


There is an active stream of research on sunk costs and the fact that people inappropriately consider sunk costs in their decisions, thus exhibiting sunk cost bias. One of the most popular demonstrations of sunk cost bias involves coaches in the NBA giving more time than players’ performance warrant to players picked earlier in the draft. The argument is that draft pick “cost,” an early pick, is sunk, yet coaches continue to give these players court time to justify that cost. See B.M. Staw and H. Hoang, “Sunk Costs in the NBA: Why Draft Order Affects Playing Time and Survival in Professional Basketball,” Administrative Science Quarterly 40, no. 3 (September 1995): 474-494.


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