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When Art Meets Science: The Challenge of ROI Marketing

These days, there's more pressure than ever to make marketing more of a quantifiable science than an ephemeral art. In response, a new management discipline called ROI marketing is emerging to help businesses attain the highest possible return on their marketing investments.

It's a question as old as business itself: How can a company be sure it's spending the right amount of money on the right kind of marketing so that it can sell more products or services to increase profitability and, ultimately, enhance shareholder value?

To be sure, some marketers, especially those from data-rich consumer packaged-goods companies or direct-marketing firms, are able, with some precision, to determine how much bang they receive for the bucks they spend on a newspaper advertisement or a price reduction. But in general the marketing discipline has always been more art than science; corporations spend untold billions on marketing without any exacting way of determining how much the resulting "brand equity" or "consumer awareness" contributes to the bottom line.

Most marketing executives have always felt that they had little choice but to throw money at the wall and hope that at least some of it would stick. That kind of thinking, however, is changing, according to experts at the University of Pennsylvania's Wharton School and the management consulting firm Booz Allen Hamilton. These days, chief marketing officers and the people who work for them are under increased pressure to make marketing more of a quantifiable science than an ephemeral art. Numbers-driven CEOs and CFOs demand to know how efficiently their companies' marketing dollars are being put to use.

In response, a management concept known as ROI marketing is evolving to help executives better understand how they can spend their dollars to attain the highest possible return on their marketing investments. Interviews with Wharton faculty and Booz Allen Hamilton consultants for this white paper explore how companies in a variety of industries are practicing and rising to the challenge of ROI marketing.

"Some companies use metrics well, especially for things like advertising, reducing prices, or issuing coupons," says Jagmohan Raju of Wharton's marketing department. "When they drop the price or put out a coupon, they know how many extra sales they get. But what's not clear is whether extra sales represent the right metric to look at in the first place. Should a company be looking at increased sales or should they be looking at the profit impact of the price change or the coupon? They should ask how many new customers they got from that marketing campaign and what their lifetime value is. I don't think companies do that."

"Even packaged-goods companies need to know more than they do," says Wharton marketing professor David Reibstein. "Companies can say, 'We can spend this amount of money on an ad campaign and we know what sales it will generate.' But will people buy now or later? Will they stock their shelves now and not buy anything for six months? And how is the competition going to respond to the campaign?"

Moreover, while marketers may declare that customer satisfaction is up, the question CEOs really want answered, says Reibstein, is this: "What does an extra point of customer satisfaction do for my shareholders?"

It's a Tool, It's a Philosophy

In past decades, companies relied in large measure on anecdotal evidence and rudimentary metrics (e.g., a 20 percent discount coupon that generates a 30 percent lift in sales) to develop marketing strategies and tactics, implement them, and assess their effectiveness. By contrast, ROI marketing involves the use of new, sophisticated metrics and computer models to analyze and quantify marketing spending and return on investment. But ROI marketing is much more than a measurement system; it's a marketing management philosophy that requires changes in organizational design and business processes to optimize marketing activities.

"To truly measure marketing effectiveness, companies must engage in a new way of thinking," says Sharat K. Mathur, a principal in Booz Allen's Chicago office, who specializes in customer and business strategy, pricing and trade promotions as well as marketing effectiveness. "The ones that are most successful are those that accept the need for a comprehensive transformation of the way they go to market." This involves not only more sophisticated analytics and systems, but also aligning marketing and promotion processes (e.g., planning and executing promotions, post-promotion analysis, target setting and funding, etc.) around the idea of ROI marketing. Finally, the organization's tasks and incentives need to be aligned around the idea of "planning for profit".

Mathur emphasizes that companies can't overhaul themselves overnight. ROI Marketing is a major change program, and it takes time. "It is important that this program is driven by senior management, and there is a commitment to making it happen at every level in the organization," he says.

"ROI marketing helps executives better understand how to spend their dollars to attain the highest return on their marketing investments."

It is also important to keep in mind that ROI marketing does not attempt to wring the art out of marketing; that would be both unfair and counterproductive, since creativity is essential to effective marketing. Rather, its goal is to bring measurable data to bear on areas that in the past were rarely measured. Within the marketing discipline ROI marketing can be applied across the entire spectrum of marketing techniques — trade and consumer promotions, advertising, pricing and product placements.

"A lot of data have been available to marketing people for a long time, but today more data are available than ever before and we have better computing horsepower," says Leslie H. Moeller, a vice president in Booz Allen's Cleveland office, who advises corporations on growth strategy, in particular consumer-packaged goods and retailing companies. "You put those factors together and the result empowers a much fuller understanding of marketing capabilities."

What follows are examples of ROI marketing applications in the automotive, telecommunications, consumer-packaged goods, electronics retailing, and travel and entertainment industries. Collectively these examples illustrate the broad applicability of ROI marketing across industries, how it can overturn common marketing assumptions, and how it provides new insights into which marketing efforts are most beneficial.

The Auto Industry

A Booz Allen team in the automotive area — Peter Soliman, a partner in Booz Allen's Düsseldorf office, along with New York based partner Scott Corwin and Paris-based senior associate Rich Parkin — are helping a major automobile manufacturer pinpoint the specific marketing tactics that will bring customers into showrooms and give them strong incentives to buy cars. Soliman says an ROI approach to marketing has allowed this manufacturer to tailor its efforts to specific objectives and correct weaknesses in the marketing process at different points in what he calls the "purchase funnel" — which opens with the consumer's awareness of the product, followed by consideration of the product, the intent to purchase the product and, finally, the actual transaction. This particular manufacturer, call it European Auto, looks at all its marketing campaigns at the end of each quarter using the "funnel" perspective to discern what has worked, and what could work better. If consumers are aware of a car but are not considering buying it, European Auto can make adjustments to a campaign to strengthen its influence on purchasing. If a given campaign works in Germany, the company can share that experience with its units in other countries, who will then try the same initiatives and pass along their experience to other parts of the corporation.

Once customers get into a showroom, they are more apt to buy a car if the dealer is willing to give them incentives that help them defray the cost of owning the vehicle. "The deal-closer," says Soliman, "might be two years' worth of free gasoline, an offer by the dealer to pay the valued-added tax (VAT) or registration tax, or an offer of free auto insurance for a period of time. In one instance, dealers offered to pay the VAT by using the slogan, 'get back at your government.'

"The closer you get to the bottom of the funnel, when the consumer is in the showroom, it's price that gets him or her to buy," according to Soliman. "But when I say price I mean price in the broadest sense. Taxes are a big issue. We've found that consumers value things that reduce the total cost of ownership. Consumers are much less interested in incentives unrelated to the car like a free vacation or a free bicycle. We do detailed tracking at the dealer level. So once you get the right mechanisms in place, it's a matter of monitoring the impact various marketing campaigns have, and making continuous improvements."

Auto companies are superb candidates for ROI marketing that aims to reduce marketing costs and increase sales because they spend enormous sums on marketing — much more in aggregate than packaged-goods companies or even consumer goods companies. "All of this is very quantifiable," Soliman explains. "This company can now say, 'Last quarter we had 1,000 people go into showroom X each month. When we ran marketing campaign Y the following quarter, we saw 1,100 people go into the showroom, and those extra 100 people resulted in 20 additional sales.'" ROI marketing has become so ingrained at European Auto that the company eventually plans to use these systems everywhere it does business in Europe.

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Evan R. Hirsh, a Cleveland-based Booz Allen vice president who specializes in marketing issues related to the auto industry, agrees that carmakers could benefit greatly from ROI marketing. "The use of marketing metrics is nowhere near the science it should be among car companies, although these companies are moving in the right direction," Hirsh says. Part of the challenge is complexity, especially in the area of advertising (i.e., measuring vehicle ads compared with ads for diapers and toothpaste). Roughly one-third of every advertising dollar for cars and trucks is spent by the car company itself. The manufacturer has direct control over these ads, which typically exhort consumers to "Buy Brand X." Approximately another third of the ad budget is spent on local advertising by dealer cooperatives. The manufacturer pays the money for these ads, but the ads tout the dealers: Their focus is "Buy Brand X from your tri-state Brand X dealer now." Dealers spend the last third on ads that urge people to "Buy Brand X from our dealership today."

Car manufacturers would like to be better at measuring advertising results. But it is tough for them to exert the kind of control that a savvy consumer goods company like Procter & Gamble does.

Telecom Metrics

Jonathan Harrison, a telecommunications specialist for Booz Allen in Boston, is currently working with a telephone company outside the United States to improve the profitability of its business customer segment. These customers include small- to medium-size businesses with 50 to 200 phone lines. Since Harrison's client — call it XYZ Telecom — is one of the smaller players in its market, it must seek opportunities to make its profit on every customer as high as possible through personalized, targeted marketing.

Harrison and XYZ are conducting an experiment under which some customers are offered specially designed calling plans with unique pricing arrangements. The goal is to encourage customers to renew their contracts so that XYZ does not have to spend large sums to acquire new customers when existing ones switch to other carriers. To assess the success of the experiment, Booz Allen and XYZ are tracking two metrics – the customer's "change-in-spend" and the customer's "churn rate." Customers participating in the experiment are being compared to a control group of customers that are continuing to use existing calling plans.

About 25 percent of XYZ's customers switch to other carriers annually. It would be a major accomplishment if XYZ can reduce the churn rate since it costs at least $500 to acquire each new customer. Assuming that a customer produces a profit of $1,000 over the length of a 12-month contract, XYZ nets $500 (the $1,000 profit minus the $500 acquisition cost). If XYZ can get that customer to sign up for a second year, its net profit on that customer will rise sharply because XYZ incurs no acquisition cost for the second year. This will hold true even if the new, lower-priced calling plan results in somewhat less revenue from that customer.

One key to the success of the test is having sales reps approach the customer with a plan especially developed for them. It's a two-pronged strategy: There's a brand message (our carrier is great for your business); they follow that up with an individual contact from the sales reps so that customers feel the company is working for them. Says Harrison: "The message of this approach is, one, we care about you, two, we're creative, and three, even though we're small, we can be innovative in how we approach the business compared to our larger competitors. It's mostly a price game, but we're trying to be creative.

"We expect revenue to go down slightly with the new plans but we expect churn to go way down," Harrison says. "The strategy is to lower the prices of the calling plans to try to secure the account for another year. But they won't lower prices as much as competitors would. You don't want competitors to take the initiative with ridiculously low prices and be forced to match it."

Once XYZ determines if the plan is working, it will have to constantly refine the calling plans based on competitors' offerings. While the pricing experiment is taking place, XYZ has simultaneously embarked on media advertising and sponsorship of sporting events to strengthen brand awareness. But Harrison stresses that XYZ is not advertising a set pricing structure because it wants to retain flexibility for its customers and does not want to be perceived as the market's low-price player.

> **"Car manufacturers would like to be better at measuring advertising results. But it is tough for them to do this as well as a savvy consumer goods company does."**

Snap, Crackle, Promotion

Les Moeller of Booz Allen describes his experience working on a project to establish a program that revamped the way the Kellogg Company, the venerable American packaged foods giant, uses trade promotions in its overall marketing strategy. In trade promotions, manufacturers make payments to grocers to display, advertise, and offer reduced prices on certain products at specified times.

Kellogg launched its Trade Promotion Excellence program (TPE) in the 1990s to increase the return on the $600 million it was spending annually on trade promotions. Kellogg knew almost nothing about the effectiveness of the thousands of promotions that took place every year. It created TPE under pressure, because at that time it was losing market share.

Booz Allen found that 59 percent of Kellogg's trade-promotion events lost money for the company; the profit generated by the other 41 percent was almost entirely eaten away by the events that lost money. By spending trade promotion money differently, Booz Allen projected Kellogg could save at least $64 million a year.

TPE was a comprehensive program involving structural changes in the sales and marketing organization and business, and the application of new, sophisticated software tools. As a result of TPE, Kellogg shifted a large amount of money from trade promotions into brand building and new-product innovations. The company today continually looks to see whether promotion events truly contribute to sales growth and profitability. Perhaps most important, Kellogg's sales culture has been transformed. A "value mindset" permeates the organization, according to Moeller. Today, hard financial data drives Kellogg's marketing strategy, tactical decisions are decentralized and based on profitable growth, and compensation is tied to value creation.

PCs and Retailing

Wharton accounting professors David Larcker and Christopher Ittner have had several experiences developing ROI marketing metrics for companies. In one case, a manufacturer of personal computers was losing market share. The company had identified two shortcomings that needed to be addressed by fine-tuning its pricing strategy and by improving the quality of its monitors.

Ittner and Larcker, however, conducted a study that showed that the company had made some erroneous assumptions when it came up with this strategy. What customers really wanted was the ability to buy computers that were not going to be obsolete in a matter of months; they wanted computers that had enough features to give the products a longer life. The company responded to consumers' concerns by, among other things, beefing up each computer system's memory and improving its software. The result was increased customer loyalty, word-of-mouth praise and improved earnings.

In consulting for a big-box retailer, the Wharton researchers faced a more complicated situation. The retailer — call it Big Box Inc.— had been using a typical mix of TV, radio and newspaper advertising as well as in-store promotions (old chestnuts such as "buy one, get one free"). However, it had never attempted to assess to what extent its ad dollars were increasing profits. An analysis by Ittner and Larcker found that Big Box obtained more benefits from TV than from radio and newspapers. That was the good news; the bad news was that none of the three ad venues generated enough revenue to offset the cost of the ads.

But for Larcker, the larger point of the study was about the difficulty of measuring marketing initiatives, especially for a large company with stores spreading from Connecticut to south Texas, and whose marketing campaigns were largely regional in nature and overseen by different managers. "The interesting thing for me was the company had employees who did piecemeal marketing analysis, but they had never done a comprehensive analysis before," Larcker says. "We had to link together data from separate parts of the organization on when the company spent money on ads and how much it spent. And we had to track unit sales for each store after the ads appeared."

It turned out to be a major task to pull the data at store level and link that to when the advertising was occurring. People were not sharing data, which made it difficult to make assessments about the return on marketing investments. Larcker says this is typical in organizations.

A Disney Story

Wharton marketing professor Z. John Zhang stresses that companies trying to measure returns on marketing investments need to be careful they do not lose their customer focus. His advice: Do not measure something just to say it can be done; companies should always view metrics as a way to generate business insights and to bolster and invigorate their overall customer-focused strategies.

A good example of a strategic initiative inspired by marketing analysis occurred during Michael Eisner's early years as chief executive at Disney. Instead of asking how a division's profitability could be improved, Eisner asked: How much did a family spend on a vacation and what percentage of that amount could Disney capture? To address that question, Disney had to move from using product-centric metrics to customer-centric metrics. It turned out that Disney was not capturing nearly enough value from vacation spending, even though its theme parks were quite profitable. Disney's theme parks were primary destinations for vacationers, who spent an average of, say, $3,000 on their vacations in Orlando, but Disney was capturing only 25 percent of that spending; the rest went to airlines, taxis, hotels and restaurants.

"This customer-focused metric, the share of vacationers' total expenditure, generated some good business insights that helped Disney to formulate its growth strategies," according to Zhang. From then on, Disney built Disney hotels and Disney stores. Disney teamed up with airlines to offer travel packages to tourists. People were picked up at the airport by a Disney bus and taken to a Disney hotel where they could listen to Disney radio, watch Disney TV and shop in Disney stores. By building so many of what Zhang calls 'toll booths,' Disney was able to increase its share of vacationers' spending dramatically. The result of these steps, according to Zhang, was that vacationers to Orlando began spending about 75 percent of their money on Disney to get the full Disney experience. "That's why Disney stock shot through the roof at that time," Zhang recalls. Zhang also points out that a customer-focused metric can be important in other contexts, such as retailing. In that business, it is quite important for companies to distinguish between "accounting profits" and "marketing profits."

In a 1999 article in the journal Marketing Science, Zhang and three co-authors described how retailers have long known that some product categories are more important than others in determining the choices that consumers make inside stores. The overall profitability of a store requires careful category-level merchandising decisions to pull the most desirable customers into the store. But the traditional accounting measure of category profits — revenue minus costs equals profit — offers imperfect help in making those decisions because it fails to take into account the effect of the marketing of one category on the profits of other categories in the store.

"A profit measure which takes into account these important cross-effects is the most relevant performance metric for category management," the researchers wrote in the article, which focused specifically on the effects of a supermarket company's shelf-space allocations. "We call this new construct marketing profits, as it focuses on consumers and their store choice behavior and is particularly pertinent to the calculus of marketing decision making." In the article, the authors constructed a formal model of marketing profits, which allows retailers to determine profitability with commonly available data.

Zhang explains the concept of marketing profits this way: Imagine a grocery store that sells meat and produce. To find out how the business is doing, the store's owner would look at the sales from each category, subtract the cost, and arrive at a figure for the accounting profits. Assume that the owner finds that produce is the most profitable category. It would be natural for her to spend more money to market produce, but in Zhang's view that may not be the right decision to make. It could be that most customers really come to the store because they want to buy meat and just happen to buy a lot of produce, too. Therefore, devoting a lot of money to marketing produce might not result in more desirable customers coming into the store.

"Our marketing-profit measurement allows retailers to make the marketing decisions that will attract customers who will spend money across product categories," Zhang says. "To implement this metric, you need a statistical model and you have to change your business processes. If you measure across categories, as we're suggesting, you have to go beyond relying on brand managers. Brand managers handle one particular brand and don't care what happens to other brands. What we're suggesting requires a more comprehensive approach."

ROI's Challenges

Wharton marketing professor Peter S. Fader says many companies have yet to grasp the benefits and implications of ROI marketing. "ROI marketing is a legitimate and necessary idea but it's terribly executed in most marketing practices," he says. "It's all talk and, at best, no action, or, what's even worse, actions that do more harm than good." It's not that Fader doesn't believe in the importance of ROI marketing, since marketing managers need to know what they can get out of a given promotional campaign and other initiatives. But he also suspects that the renewed emphasis on ROI marketing, caused largely by the recent weakness in the economy, has done very little in terms of spurring meaningful changes in company practices.

Larcker, the Wharton accounting professor, agrees. "It's very difficult for companies to figure out the return on anything — training, HR practices, marketing, innovation. If you do a marketing initiative and invest a certain amount of money in it, you need to figure out which portion of your cash flow is generated by that investment." To come up with this metric, companies must be willing to spend the time and energy on special studies or projects that zero in on the problem, but few are willing to do so, Larcker says.

Wharton's Fader says that companies should not be discouraged if they have not yet successfully adopted the concept of ROI marketing or if their early attempts at the process have been less than stellar. How to identify and use the right metrics is neither obvious nor simple. "Measurement is inherently more difficult in marketing," Fader says. "If you want to figure out ROI on a new machine for production or mail sorting, it's relatively easy to look at the incremental costs and revenues associated with that machine. With finance, it's relatively easy to compartmentalize investments. But with marketing it's messy. But that doesn't mean you shouldn't try it."

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