

Getting the Right Ingredients: A Framework for Enhancing Marketing Education & Outreach Evaluation

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ABSTRACT

Many program administrators believe that marketing, education, and outreach (ME&O) efforts are critical to program success. However, it is often difficult to measure the effects of ME&O relative to other program interventions on key program metrics like participation. This is due, in part, to insufficient goal setting and data tracking practices for ME&O efforts that can make it difficult to effectively assess how ME&O strategies contribute to program goals. In this paper, the authors will propose data tracking practices that enhance the evaluability of marketing campaigns and enable evaluation teams to provide rapid insights into the effectiveness of marketing strategies, especially when evaluation is done concurrently with marketing implementation.

The authors showcase findings from several ME&O evaluations that demonstrate common data limitations and lessons learned. These issues occur along the entire ME&O implementation timeline, including planning, tracking progress, and recording results. The paper will argue that clearly documenting marketing goals, tracking common marketing metrics, and establishing success criteria for those metrics enhances the evaluability of marketing efforts. Further, the authors will show how improved data tracking and establishing short-term in addition to annual goals can allow evaluation teams to provide rapid feedback and suggest course corrections mid-campaign. These improvements will help pave the way for higher standards for data tracking and a better understanding of the effectiveness of marketing strategies across the industry.

Introduction

Marketing, education & outreach (ME&O) is often a critical component of energy efficiency program implementation designed to achieve a range of objectives. Within the energy efficiency industry, common objectives include increasing awareness of programs, technologies or energy saving actions, educating contractors so that they can effectively promote programs, and changing attitudes towards conservation and energy management practices. ME&O campaigns can take many forms and utilize many different channels, such as paid and digital media, direct mail, community outreach, training events, webinars and others. Given the range of strategies and the crowded market in which they are employed, measuring the effectiveness of ME&O efforts is often challenging. Luckily, the experiences of program administrators around the country provide valuable lessons learned for those seeking to implement ME&O campaigns to support energy efficiency efforts, as well as those who evaluate them. This paper draws on a recent study by Opinion Dynamics to highlight a number of foundational issues related to the design and implementation of ME&O campaigns, which often make it difficult to assess the impact of these efforts.

- **No Recipe** – Early in the planning process, marketing teams work with program teams to understand program goals (e.g., participation and energy savings) and determine what ME&O activities are appropriate to support those goals. However, in many cases, the goals and associated strategies are not formally documented in a marketing plan, the absence of which can make it difficult to establish effective data collection and tracking processes. Further, not building the appropriate progress tracking processes (e.g. lead tracking) into the initial marketing design prevents marketing teams from proving the theoretical link between marketing activities and program achievements.

- **Missing Ingredients** – Metrics are a key component of assessing how well the chosen ME&O activities are performing. Without defined metrics, program implementers and sponsors may collect the wrong data or only a portion of the data they need to know whether the ME&O activities are having their desired effect. As such, establishing metrics through the marketing plan development process is critical, as is determining how success within each metric will be measured.
- **Watching the oven** – Marketing teams often re-assess their marketing strategy throughout a campaign. However, the way that budgets and goals are generally established make it difficult to assess performance midstream and quickly pivot to the strategies that are working the best.

This paper will provide examples of each of these challenges from 2013-2015 marketing campaigns that Opinion Dynamics has evaluated. We will then recommend ways for marketing teams to overcome these challenges by approaching their planning and data tracking practices in a way that ensures their campaigns are evaluable. Specifically, clearly documenting marketing goals, tracking common marketing metrics (e.g., click-through-rate), and establishing success criteria for those metrics will enable marketing teams to better gauge the success of their efforts. Further, establishing short-term (i.e., interim) goals or formal periodic reviews can allow evaluation teams to study campaigns concurrently with implementation and suggest course corrections mid-campaign. Finally, we will discuss the roles evaluators can play in assisting marketing teams to ensure that ME&O efforts are evaluable.

Methodology

The results and conclusions presented in this paper are drawn from the authors’ evaluation of 33 ME&O campaigns implemented in California (Opinion Dynamics 2016), as well as their experience evaluating marketing initiatives in the Northeast. The research included an overarching review of ME&O campaigns implemented by the Investor Owned Utilities (IOUs) and Regional Energy Networks (RENs) in California (referred to as Program Administrators (PAs)) that aimed to increase energy efficiency program awareness and participation. To understand ME&O planning and implementation processes more fully, we selected one or two campaigns from each organization (11 total) for deeper evaluation. For five of the six PAs, we selected two programs: the first was the program with the largest ME&O budget (as a percentage of total program budget) and the second was suggested by the PA as representative of their typical approach to ME&O. The sixth PA, BayREN, only implemented significant ME&O activities for one program. Table 1 summarizes the evaluation approach.

Table 1. Research Approach

Task	Number of Campaigns Covered	Description
Data Review	33	Review of ME&O data including marketing plans, collateral, and budget and expenditures to understand data availability and document activities. In addition, the authors incorporated information from the California Energy Efficiency Statistics website, including budget and expenditures, program implementation plans, and annual narratives describing program goals for ME&O activities.
In-Depth Interviews with Program Administrators	33	In-depth interviews with representatives from each PA regarding the budget allocation and tracking process, as well as the activities conducted with the allocated budget. Interviews focused on specific energy efficiency programs selected in advance.
Develop Program Highlights	11	To develop the program highlights, the authors incorporated the review of ME&O data and in-depth interviews. For each selected campaign, the authors documented activities, budget and spending, and the approaches each organization used to assess performance.

Table 2 summarizes the campaigns reviewed as part of this study.

Table 2. Highlighted Program

PA	Program Name	Brief Description
BayREN	Energy Upgrade California Home Upgrade Program	Offers incentives to customers for completing whole home retrofits. Customers must complete the retrofits through a participating contractor. BayREN also offers the Home Upgrade Advisor service, which provides customers with hands-on assistance with planning and completing a Home Upgrade.
PG&E	Residential Energy Advisor	Uses Home Energy Reports and the Home Energy Check-up online tool to engage customers and encourage participation in energy programs.
	Energy Upgrade California Home Upgrade Program	Offers incentives to customers for completing comprehensive home retrofits. Customers must complete the retrofits through a participating contractor.
SCE	Residential Energy Advisor	Uses Home Energy Reports, mail-in surveys on energy use, and interactive online tools to engage customers and encourage participation in energy programs.
	Home Energy Efficiency Rebates (part of the Plug Load and Appliances Program)	Offers rebates and incentives for purchasing and installing high-efficiency appliances.
SCG	Plug Load and Appliances	Offers rebates and incentives for purchasing and installing high-efficiency appliances; this study focuses on point of purchase rebates only (not Appliance Recycling).
	Energy Hero Campaign	A marketing campaign that promotes three program offerings: Energy Upgrade California Home Upgrade, Plug Load and Appliances, and Energy Efficiency Starter Kits.
SDG&E	Energy Upgrade California Home Upgrade Program	Offers incentives to customers for completing whole home retrofits. Customers must complete the retrofits through a participating contractor.
	Home Energy Advisor	Uses Home Energy Reports, mail-in surveys on energy use, and interactive online tools to engage customers and encourage participation in energy programs.
SoCalREN	Energy Upgrade California Home Upgrade Program	Offers incentives to customers for completing comprehensive home retrofits. Customers must complete the retrofits through a participating contractor.
	Green Building Labeling	Trains and certifies “green” real estate professionals and connects homebuyers with “green home agents” who can advise customers about rebates and financing to undertake energy efficiency upgrades when they purchase a home.

Key Findings

Goal setting and data tracking challenges occur throughout the lifecycle of marketing efforts. Figure 1 provides an example of a typical marketing team’s process for planning and implementing ME&O and where the three key challenges arise (represented in the figure by yellow stars). In this section, we describe each of the challenges in detail and provide real-world examples from recent marketing campaigns.

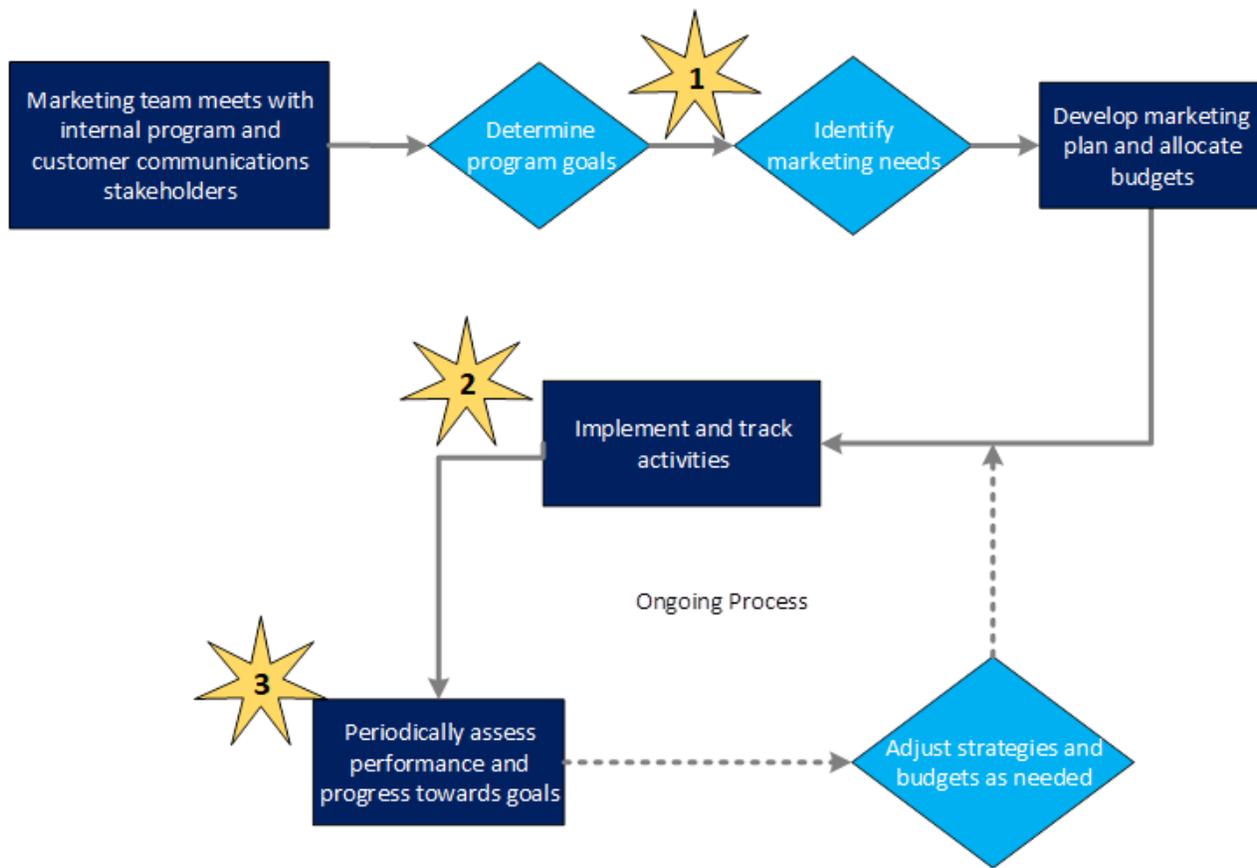


Figure 1: Marketing lifecycle and where challenges occur

Challenge 1: No Recipe

Marketing teams often face challenges attributing customer actions to a single marketing activity or even to a single organization’s campaign. In states like California, with multiple marketing initiatives and organizations implementing them, much of the challenge is due to the inherent nature of a crowded marketing space. This uncertainty is also associated with the difficulty of tracking program objectives (such as enrollment or project completion) based on specific marketing asks. Reasons provided by marketing teams we interviewed for being unable to prove this link ranged from a lack of data on lead generation to large gaps in time between marketing activities and when customers complete program participation. For example, one marketing team reported that the time between exposure to marketing and a decision to participate could be longer than six or even 12 months. Given these challenges, it is critical that marketing teams develop marketing plans that include a clear theory of how marketing efforts will lead to the achievement of program goals. Further, when designing marketing activities, it is important to incorporate ways to test the causal theory by measuring both short-term outputs (“efforts”; e.g., number of mailers sent, click-through rate) and long terms outcomes (“effects”; e.g.; program participation). However, our experience evaluating marketing campaigns shows that marketing teams do not always adhere to this important planning step.

No Marketing Plans – All marketing teams we interviewed as part of 2013-2015 evaluations said that they develop marketing plans as a key step in determining what ME&O activities to conduct, but their availability, timing of development, and content varies across organization and within an organization’s program portfolio. For example, organizations had broad plans describing their general approach to promoting their program portfolios, but often could not provide program-specific marketing plans when requested by the evaluation team (14 of 33 programs’ campaigns had marketing plans available).

Unclear Causal Linkage – Even though marketing plans might provide a general theoretical link between their marketing activities and program outcomes, in many cases marketing teams do not establish ways to track progress that help prove this linkage. Rather, we have found that marketing teams focus more often on measuring efforts rather than measuring effects (Coffman 2002). Measuring an *effort* involves determining what and how much was accomplished (e.g., how many letters have been mailed, how many radio listeners the campaign reached), whereas measuring an *effect* requires assessing the changes that result from a campaign (e.g., an uptick in program participation due to the campaign, behavioral changes made at home). While measuring effects is often the role of evaluators, this requires marketing teams to develop marketing plans and track results in a way that clearly documents the theoretical link between efforts and effects, similar to how implementation teams plan and design programs.

Challenge 2: Missing Ingredients

No Established Metrics – Having metrics for marketing activities, also known as Key Performance Indicators (KPIs), is essential to measuring the performance of ME&O activities. There are a wide range of established metrics that can be utilized in the energy efficiency industry depending on the goals of the marketing team and the broader organization. Examples include click-through-rates for e-mail campaigns, the number attendees at events, and unique page views for websites. However, as shown in Table 3, many marketing teams do not always identify or document the metrics they are tracking. Across all the organizations, three-quarters of the ME&O activities under study had a defined metric, but the practices of each organization varied widely, with some having no defined metrics and others having metrics for all of their ME&O activities.

No Success Criteria – To assess performance, metrics also require success criteria. These success criteria are often quantitative (e.g., a 2% click-through-rate or 1,000 workshop attendees) although in some cases qualitative success criteria are appropriate (e.g., inform trade allies of program changes). Despite the importance of success criteria in defining what it means for ME&O efforts to be successful, they are not often documented, which makes it difficult for marketing teams or evaluators to gauge whether performance met expectations. For example, as shown in Table 3 below, while some organizations had more than others, nearly two-thirds of marketing activities across all organizations did not include success criteria. Notably, in some cases, marketing staff did look to past marketing efforts to determine what they would consider successful (e.g., last year’s click-through-rate compared to this year). However, they did not document these benchmark values in their marketing plans, limiting the transparency of any performance assessment.

Table 3. Metric and Success Criteria Availability Across Six Marketing Campaigns

Organization	Percentage of Activities with Defined Metrics	Percentage of Activities with Defined Success Criteria
ORG1	0%	0%
ORG2	82%	89%
ORG3	87%	22%
ORG4	100%	60%
ORG5	100%	26%
ORG6	64%	0%
All Organizations	76%	36%

Poor Alignment – Even when defined, the extent to which ME&O activities, metrics, and success criteria align with each other can vary significantly. When activities, metrics, and success criteria are properly aligned, each component is directly related (e.g., the metrics for e-mail outreach involve looking at the number of and

open rate for the e-mails sent, and the success criteria are the associated goals for the number of e-mails sent and percent opened).

Table 4 provides a few illustrative examples of alignment across these planning and measurement tools. In the first example, the metric and success criteria are program goals and are thus one-step removed from the marketing activity itself. In other words, it is unclear how success on this metric could be attributed to marketing efforts. In contrast, example three has concrete, quantitative metrics and goals that directly relate to a specific marketing activity.

Table 4. Examples of Metric and Success Criteria Alignment

Example #	Activity Description	Metric	Success Criteria	Alignment Assessment
Examples of Poor Alignment				
1	Multi-media campaign to encourage customers to take steps to conserve electricity in preparation for hot weather temperatures and high bills this summer	Number of rebates	900 Rebates	The metric is not aligned with the marketing activity.
2	Radio advertisement to inform customers of energy efficiency programs and lead to program consideration	Number of radio spots	To connect culturally with audience, deliver reach	The metric is quantitative while the success criteria are qualitative. It is unclear how qualitative success criteria are to be measured.
Examples of Good Alignment				
3	Technician trainings targeted at participating contractors	Number of events, people trained	Attend 12 events and train 130 people	The metrics and success criteria are in alignment and measurable.
4	Email blast to inform participating contractors and customers of any upcoming changes/updates to the program and product offerings	Conduct email blast as needed	Timely communication of program changes	While the metric and success criteria are qualitative, alignment with the ME&O activity is clear.

Challenge 3: Watching the Oven

Marketing teams regularly assess the performance of ME&O activities during a campaign to optimize the allocation of marketing funds. This step is critical for mid-course corrections (i.e., to determine which tactics have been the most successful and to potentially redirect marketing funds and resources to more effective strategies). In some cases, marketing teams bring evaluators in at this stage to recommend strategic adjustments for the remainder of the campaign. Two key data tracking issues often make it a challenge for evaluators to understand progress-to-date and forecast future performance.

Setting Budgets and Tracking Spending at Different Levels – As shown in Table 5, there sometimes is inconsistency in marketing teams’ budget and expenditure tracking. In the example below, expenditures and budgets were typically both tracked at the marketing activity level (i.e., as opposed to tracking for just the campaign as a whole). However, in some cases, budgets were tracked at the program level and, in one case, there was no activity level information at all. Without information about the cost of outreach through specific marketing channels, marketing teams can’t determine the return on investment for those expenditures, which is key to maintaining support for ME&O efforts. Further, we note that while we eventually received activity-level information for most programs, this information was often not readily available in the documentation the

marketing teams initially provided. Acquiring this information required follow-up interviews and time on the part of the marketing teams to estimate budgets and expenditures by activity. This not only created delays in providing rapid feedback on results, but is also evidence that the ME&O teams were not actively using this information to inform their decisions.

Table 5. Example of spending tracking inconsistencies

Organization	Campaign	Reporting Method	
		Budget Information	Expenditure Information
ORG1	1	Whole campaign only	Whole campaign only
ORG2	2	Activity Level	Activity Level
	3	Whole campaign only	Activity Level
ORG3	4	Activity Level	Activity Level
	5	Activity Level	Activity Level
ORG4	6	Activity Level	Activity Level
	7	Activity Level	Activity Level
ORG5	8	Activity Level	Activity Level
	9	Whole campaign only	Activity Level
ORG6	10	Activity Level	Activity Level
	11	Activity Level	Activity Level

Lack of interim goals –Marketing teams often set goals on an annual basis or for the campaign overall. However, most ME&O efforts are episodic in nature (i.e., they do not occur at a constant rate throughout the campaign). Thus, when evaluating efforts mid-campaign, it is difficult to judge whether an activity is on-track to achieve its goal or if a significant ramp-up of efforts is needed. The lack of expenditure or budget information mentioned above can compound this challenge further, making it difficult to determine how much the marketing team invested to achieve the progress-to-date and whether there are enough remaining funds to achieve the activity’s goals.

A Framework for Enhancing ME&O Evaluation

This paper highlights several challenges associated with ME&O planning and implementation:

- Missed opportunities to develop detailed marketing plans
- Unclear connections between ME&O *efforts* and desired program *effects*
- Limited or no metrics and success criteria
- Poor alignment between ME&O activities, metrics, and success criteria
- Budget tracking processes that do not allow for the assessment of cost-effectiveness at the activity or channel level
- Limited interim goals to help gauge the success of ME&O activities mid-campaign

The following sections provide key steps that marketing teams can take to overcome these challenges and enhance the evaluability of their ME&O efforts.

Write Down the Recipe

It all starts with a good recipe. It is critical that marketing teams documents the core theory behind their campaign in a marketing plan. As shown in Figure 2, marketing best practice suggests establishing marketing objectives, defining metrics aligned with objectives, and identifying success criteria for assessing performance of

the activity or campaign. These components should be supported by a tracking system that measures the progress of metrics against their success criteria.

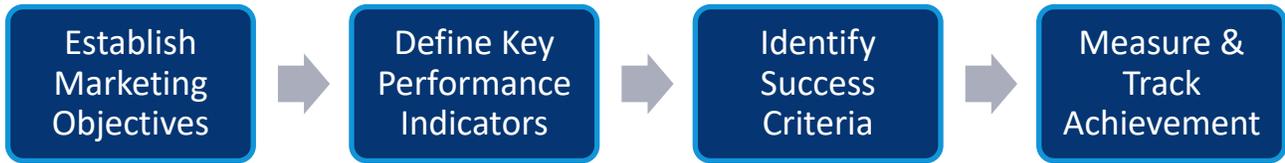


Figure 2. Components of a successful marketing plan

Further, where the opportunities exist, marketing teams should deploy strategies to measure the causal linkage between marketing *efforts* and program *effects* (Coffman 2002). These opportunities tend to vary in their implementation difficulty depending upon the channel used for delivering marketing content. For example, marketing teams could implement “direct results tracking”, where marketing efforts embed a means of tracking individuals’ responses to that activity (e.g., developing a unique web address for links provided in emails). Where this approach is feasible, marketing staff will have a record of those participants who were exposed to the marketing collateral and used that channel to learn about or participate in the program. If funding is available, marketing teams should consider working with evaluators to conduct studies that measure effectiveness through the use of experimental designs or survey fielding efforts to support measurement of program effectiveness.

Gather the Right Ingredients

The best recipes use only the best ingredients. In terms of ME&O campaigns, there are a variety of industry-standard metrics that can be employed for marketing efforts, as well as PA-specific metrics developed based on experience over time. Table 6 provides examples of standard metrics that can be used to assess marketing efforts at a delivery channel or activity level. Metrics vary by channel and there are frequently multiple appropriate metrics for measuring different aspects of channel performance.

Table 6. Example metrics to assess marketing performance

Channel	Definition	Sample Metrics
Digital media	Online advertisements, including videos, banners, and other ads on websites	<ul style="list-style-type: none"> • Number of impressions • Click-through-rate
Direct Mail	Mailings to customers, such as letters, bill inserts or other advertising	<ul style="list-style-type: none"> • Number of mailers sent
Email	E-mails sent to customers	<ul style="list-style-type: none"> • Open rate • Click-through-rate
Events/Workshops	Holding events, workshops, trainings, webinars, or other presentations; tabling or booths at events	<ul style="list-style-type: none"> • Number of events • Number of attendees
In-Store	Advertising in-store at the point of purchase	<ul style="list-style-type: none"> • Number of events • Number of engagements • Number of point of sale rebates
Paid Search and Search Engine Marketing	Paid search advertising, including pay-per-click for selected keywords (e.g., Google AdWords).	<ul style="list-style-type: none"> • Click-through-rate • Cost-per-click
Radio	Radio spots	<ul style="list-style-type: none"> • Number of radio spots • Number of impressions
Social Media	Includes advertising or posts on social media websites like Facebook, Twitter, and YouTube	<ul style="list-style-type: none"> • Number followers, “likes,” shares • Number of impressions • Click-through-rate

Channel	Definition	Sample Metrics
Website	Maintaining a website/landing page specifically for marketing efforts or including messaging on a pre-existing website.	<ul style="list-style-type: none"> • Number of unique visitors • Bounce rate (the percentage of single-page visits) • Number of page views

As discussed throughout this paper, metrics alone are not sufficient to gauge performance. Each metric, clearly linked to an activity, should have its own success criteria, and those success criteria can be based on industry standards (Bendle 2016) or historical performance. Further, not all success criteria must be quantitative. It is often appropriate to have a qualitative metric such as “timely communication of program changes.” Regardless of their form, the best success criteria have clear alignment with the ME&O activity and are clearly documented in a marketing plan.

Don’t Just Leave It in The Oven

The episodic nature of marketing activities can make it difficult to determine how well the activities are performing mid-campaign. Thus, like an oven thermometer and a pair of mitts, two key data-tracking practices can enable rapid performance assessment and the reallocation of funds to support strategies that are the most effective. First, setting interim goals can allow marketing teams to gauge how activities are performing after each “phase” of activity. For example, setting a workshop attendance goal for each round of invitation outreach would help marketing teams understand which channels or messaging are driving the most attendance at particular points in time. Second, there is significant value in tracking budgets and expenditures at the activity-level, as well as at the campaign level. Comparing budget spent with achievements to-date enables marketing teams to understand whether the investments they have made are justified by the results.

Bring In the Culinary Experts

Evaluation teams can be valuable partners in the successful design and assessment of marketing activities. Evaluation teams can help ensure that marketing teams implement the necessary planning and progress tracking processes to provide the data needed to evaluate marketing campaigns. For instance, evaluators can assist by reviewing or developing program theory logic models that clearly document the marketing activities, the outputs of those activities, and how they contribute to the ultimate intended outcome or goal (e.g., program participation, awareness etc.). Evaluation teams can also provide expertise in selecting metrics for marketing activities and setting appropriate success criteria (i.e., helping determine expected click-through-rates for a residential e-mail campaign in California or an expected change in awareness).

Further, moving beyond tracking efforts to measuring effects often requires additional cost, time, and methodological rigor. In addition to traditional survey approaches, evaluation teams are well-versed in experimental or quasi-experimental design approaches that can help attribute program achievements to marketing activities. Potential approaches include restricting marketing efforts to specific groups of consumers (a “treatment” group) and measuring differences in program participation compared to a control or comparison group who did not receive marketing. Experiments can also be used to test the effects of different types of messaging. In any cases where direct response tracking is available (e.g., where marketing staff can keep a record of those participants who were exposed to the marketing collateral and used that channel to participate in the program), marketing teams should incorporate this within the marketing campaign and collect data to assess achievements. When experimental design is not an option, the evaluator should work to develop other methods for determining effects such as latent class discrete choice (LCDC), structural equation modeling, multi-level modeling, or other approaches.

Conclusion: Recommendations for Marketing Teams

Based on the findings presented in this paper, key takeaways for marketing teams seeking to improve their ME&O efforts' data tracking practices and evaluability include:

- Develop strategic marketing plans that include the theory behind the specific ME&O intervention and implement activities in such a way that you can test that theory
- Establish metrics for each ME&O activity
- Set success criteria for each metric
- Ensure metrics and success criteria are directly related to the ME&O activity; set quantitative success criteria for quantitative metrics
- Track budget and expenditures at the activity level where possible
- Set interim (e.g. monthly, quarterly) budget and performance goals in addition to annual goals

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