

Putting Your Best Foot Forward: A Model for Using Best Practices in Process Evaluations

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ABSTRACT

This paper presents a framework for evaluating energy-efficiency program design and delivery according to established best practices based on a literature review of industry, government, and nonprofit resources. This framework offers a methodology to score various program processes based on: 1) conformity with best practices, as cited in the literature; and 2) performance when compared to similar activities by other utilities. The methodology moves beyond a simple metric comparison by providing an opportunity for in-depth assessments of how well energy-efficiency programs align with exemplary industry practices.

By including a review of approaches used by other utilities, the framework also integrates a real world perspective, which is key to improving and informing program design and delivery. It has applications in areas such as goal setting, program administration, marketing and outreach, participant enrollment and rebate procedures, trade ally networks, data tracking, and verification.

The model is based on a comparative review of six North American utility energy-efficiency portfolios and on an analysis of their alignment with 24 industry-wide best practices in demand-side management programs. The paper also discusses the limitations of the framework and, more broadly, strategies for effectively using best practices in process evaluations.

Introduction

Implemented for over 20 years at some utilities, demand-side management (DSM) programs have evolved to provide cost-effective, results-oriented energy-efficiency offerings. From successful programs, industry best practices have emerged for designing, managing, and administering incentive programs and overcoming market barriers. As with any industry, best practices in energy efficiency may take many forms, depending on the context in which the term is applied. Generally, best practice in DSM means a technique, process, or set of actions within the industry that have been accepted as more effective than others. In 2012, the authors researched best practices for residential and nonresidential utility energy-efficiency programs and then used a sliding scale scoring method to assess how six utilities in the United States aligned with best practices.

Using this research as its foundation, we present a five-step framework for utilities and evaluators to utilize industry best practices as a meaningful and effective process evaluation component to foster program delivery improvements. We also established guiding principles for using best practices in process evaluations and suggestions for avoiding common pitfalls in best practice reviews.

Guiding Principles

The research conducted by the authors highlighted several factors that can be considered guiding principles for using best practices in process evaluations. The resulting framework largely has been based on these core assumptions:

- Identifying and applying best practices to achieve positive results depends on the ability to reflect contextual circumstances and unique goals for a utility and its implementers. This view follows

Bardach's best practice theory in policymaking and problem solving, which asserts: 1) absolute best practices for any problem can very seldom be identified without tailoring practices to a specific situation; and 2) even best practices can fail without adapting to local conditions and when encountering vulnerabilities such as poor management (Bardach 2000).

- Utility practices should not be evaluated against best practices without comparisons to actions taken by other utilities, administrators, and jurisdictions in the same realm. Known as benchmarking, such comparisons prove essential for formulating meaningful conclusions and recommendations in the ever-evolving DSM field. This particularly holds true when topic areas may focus specifically on emerging markets or new challenges. As such, when researching best practices, benchmarking serves a valuable function in assessing comparative performance and actions.
- No universal set of best practices exists for all DSM topics. Although, in identifying a best practice, researchers should first consult published and peer-reviewed literature drawn from established sources the field, available resources may be out-of-date or incomplete. The authors have determined that best practices can and should be formulated in conjunction with careful data collection across a variety of sources, including personal discussions and interviews with experts in the field.

A Framework for Best Practice Research

1. Define the Purpose of the Research

Defining the purpose of the research serves as the first step in aligning expected research outcomes and gaining stakeholder buy-in and engagement. While the purpose of such research may appear obvious, incorporating best practice research into a process evaluation can serve varying needs. Our experience suggests the initial stages of research projects should include an understanding of the fundamental needs of program stakeholders and their goals. These needs will impact the project's scope, the review's methodology, and the appropriate presentation of findings.

Best practice research can serve two primary purposes. First, it can help a utility overcome challenges by transferring information on best industry practices. Second, research presents opportunities to identify areas of excellence and areas for improvement within a utility's program administration, based on how other utilities with similar programs and circumstances perform and operate. Though not exclusive, these two needs remain distinct: conducting research without a clear understanding of its purpose limits a utility's ability to use findings to foster improvements.

2. Establish the Scope

In establishing scope, researchers and program stakeholders choose topics addressed by the research. Problems or challenges can be identified through prior program evaluations, past research, or discussions with stakeholders. Alternatively, research can be tailored to components that most interest program stakeholders relative to established best practices and other utilities and thus may not focus on a particular problem area. Examples of topic areas to include in a best practice review are:

- Program Design and Incentive Structure
- Goal Setting, Management, and Oversight
- Marketing and Outreach
- Delivery Channels

- Enrollment
- Trade Ally Networks
- Evaluation, Measurement, and Verification (EM&V)
- Data Tracking
- Quality Control and Assurance (QA/QC)

Within each topic, the research identifies core best practices, and researchers then assess the utility's alignment with these best practices (see Analyze the Results below). In all cases, the final scope should answer two critical questions: 1) "Which **programs** will the research cover?" and 2) "Which **sectors** will the research cover?" Answers to these questions will determine data collection.

3. Collect Data

Data collection begins by determining best practices within the selected topic areas, a task that largely can be accomplished through consulting literature that addresses energy efficiency and DSM, though such research should not be treated as an exhaustive source of best practices. Literature review can be supplemented by identifying innovative approaches used by other utilities as well as through personal interviews with industry experts.

What are deemed as best practices in the literature range from very specific to broad activities, depending on the scope of the research. A partial list of the topic areas and their associated best practices that were compiled by the authors in their research is found in Table 1. As the scope of this research was aimed at the portfolio level, the best practices tend to be more general.

Table 1. DSM Topic Areas and Best Practices at the Portfolio Level

Topic Area	Identified Best Practice	Applicable Sectors
Program Management	Clearly define the program implementation processes and roles of individual staff	Residential and Nonresidential
Program Design	Leverage outside resources that could increase program uptake	Residential
	Provide technical services for site specific or custom program offerings in the form of an energy assessment, audit, baseline study, or technical study	Nonresidential
	Proactively address market barriers by testing innovative delivery channels for hard-to-reach market segments	Nonresidential

Topic Area	Identified Best Practice	Applicable Sectors
Data Tracking	Develop and maintain a robust program tracking database	Residential and Nonresidential
	Integrate fields on application forms and tracking databases, and extract database services to incorporate complete and consistent data	Residential and Nonresidential
Marketing and Outreach	Include easy-to-find Website material	Residential and Nonresidential
	Use direct outreach by account executives, where cost-effective	Nonresidential
	Leverage trade allies to promote programs	Nonresidential
	Pursue diverse marketing and outreach strategies	Residential

Data collection continues by choosing utilities to assess in the benchmarking analysis. A distinction exists between identifying best practices and assessing utilities against those best practices. Notably, the processes, systems, and practices used by the utilities examined in the study may not necessarily be considered best practices. Rather, the researcher must determine the extent to which they align. Whether a utility is considered to have exemplary practices in place serves as just one factor to consider when determining if the utility should be included in the study.

How the utilities chosen for the study will impact its final analysis and findings also should be considered. The most effective strategy may *not* be to assess the utility (i.e., the client for which the research is being conducted) against all other utilities receiving recognition for exemplary practices. More practically, the utility might be assessed against a representative sample or those with similar programs, service areas, demographics, or program maturity. Adopting a balanced approach in choosing utilities is likely to yield the most effective results to spur positive changes and program improvements.

Utilities with demonstrated best practices do play a role, however, in defining “best practice,” as noted in step one of this section.

4. Analyze the Results

Once the topics, best practices, and utilities have been identified through the research, several options can be used for analyzing and presenting the results. This framework considers two approaches to using a scoring methodology to analyze the results. Developing a score or grade is an effective method for analyzing the utility’s activities and approaches relative to best practices and other utilities; the score communicates the extent to which the utility has adopted the best practice. Two methods, the *Sliding Scale Scoring Method*, and the *Pass/Fail Scoring Method*, are discussed below.

Sliding Scale Scoring Method. In the authors’ research of six utilities, the authors used a simple sliding scale scoring methodology to analyze and present results for each utility. Such scoring offers these core benefits: 1) it distills complex ideas into a recognizable format that the audience can easily understand; 2) it establishes a common metric to compare utilities to one another; and 3) it offers a means for providing a utility with recommendations, which can be framed in the context of achieving a higher score. Table 2 outlines the scoring methodology employed by the authors.

Table 2. Best Practice Alignment Scoring Methodology: Sliding Scale

Score	Description
-	No alignment. There no evidence exists that the best practice is in place, and little to no movement toward the best practice has been demonstrated.
✓-	Room for improvement. Some activity aligns with best practice, but activities are limited and not as advanced as they could be.
✓	The approach aligns with best practice.
✓+	Exceptional practice. The utility exceeds the industry standard (what others are doing) and closely aligns with or exceeds the best practice.

Assessing utility actions using this method offers a powerful approach for incorporating best practices into a larger program evaluation. Of the two methods we discuss, it also relies most on qualitative assessment. To avoid bias, significant effort was taken to score each utility consistently for each topic area, based on predetermined metrics and criteria. This required conducting an in-depth review for each utility included in the study to assess all relevant indicators of best practice adoption and alignment. Types and availability of indicators can differ greatly by utility, even within the same best practice topic area.

Table 3, below, presents a straightforward scoring process for the following commercial program marketing best practice: *Include easy-to-find program descriptions on the Website, including benefits for participants and customer testimonials*. This best practice contains several indicators against which the utility can be assessed, which simplifies the scoring process.

Not all best practices, however, present an equally simple path to scoring. In a significant number of cases, common criteria were developed only after completing an extensive review of evaluation reports, Web material, and program documentation. An example is: *Leverage trade allies to promote programs*. As this broad best practice lacks clear indicators for utility scoring, such criteria must be created.

For *Leverage trade allies to promote programs*, we developed the following criteria:

- Whether the utility provided some marketing resources to trade allies.
- Whether trade allies served as an explicit component of the program implementation strategy.
- How often customers reported learning of the program from trade allies.

Table 4 presents the results.

Table 3. Scoring for “Include easy-to-find program descriptions on the Website, including benefits for participants and customer testimonials”

	Navigability and Ease	Rebate Information	Marketing materials (testimonials or benefits of participating)	Resulting Score
Utility 1	Business rebates difficult to find on Website.	Clear and detailed information on rebate programs.	Website includes customer case-studies or testimonials.	✓
Utility 2	Easy-to-use Website.	Clear and detailed information on rebate programs.	Website includes customer case-studies or testimonials.	✓+
Utility 3	Easy-to-use Website.	Clear and detailed information on rebate programs.	Website includes customer case-studies or testimonials.	✓+
Utility 4	Easy-to-use Website.	Clear and detailed information on rebate programs.	Website includes customer case-studies or testimonials.	✓+
Utility 5	Well-organized Website.	Clear and detailed information on rebate programs.	Website lacks customer case-studies or testimonials, but includes effective collateral such as cost savings information.	✓+
Utility 6	Easy-to-use Website.	Clear and detailed information on rebate programs.	Website lacks case studies, testimonials, and brochures.	✓

Table 4. Scoring for “Leverage trade allies to promote programs”

	Marketing Materials Provided to Trade Allies	Participants Learning about the Program from Trade Allies	Program Reliance on Trade Allies for Promotion	Resulting Score
Utility 1	The program does not have a formal mechanism for training trade allies or sharing marketing materials.	37% of commercial and industrial (C&I) participants report learning of the program from a trade ally	Low	✓-
Utility 2	The program provides trade allies with marketing materials and case studies to assist their marketing efforts.	50% of prescriptive customers learn of the program from trade allies.	High	✓+
Utility 3	Marketing materials are provided to trade allies.	Approximately 55% of program participants learned about the program from a trade ally, vendor, or contractor.	High	✓+
Utility 4	Not all trade allies reported receiving marketing materials. Approximately one-half of the interviewed trade allies who received marketing materials found them adequate.	Unknown	Low	✓-
Utility 5	Unknown	Unknown	High	✓
Utility 6	Marketing materials and trainings are provided to boost promotion.	50% of commercial customers report learning of the program from trade allies.	High	✓+

Using a sliding scale to score utilities based on their adoption or alignment with best practices proves complex, requiring thorough research of all possible factors and diligent documentation of each finding. It does, however, offer a level of granularity not present in the *Pass/Fail Scoring Method*.

Pass/Fail Scoring Method. The second scoring method simply documents whether or not the utility has best practices in place. This high-level approach can provide simplified and unambiguous results, and it largely eliminates the need to create criteria within each best practice category or to assess the superiority of some approaches over others. This reduces possible discord or disagreement among stakeholders. The method works well in assessing best practice topics framed and discussed on specific terms and may prove appropriate when conducting best practice research for a particular DSM program, as opposed to a portfolio- or sector-wide approach.

For example, a documented best practice for retrocommissioning incentive programs is: *Utilize a list of participating, preferred, or preapproved retrocommissioning providers* (TetraTech 2011). This straightforward best practice can be scored as a categorical *Yes* (the best practice is in place) or *No* (the best practice is not in place). Yet, to provide the utility with meaningful information to improve its program, further discussion to expand on the *Yes* or *No* score is required. Simply documenting the existence of a

practice or activity without explaining its function does not inform stakeholders about how their program compares to others (as the sliding scale score does). Table 5 offers a method for analyzing and presenting hypothetical results using the *Pass/Fail Scoring Method*.

Table 5. The Pass/Fail Scoring Method for “Utilize a list of participating, preferred, or preapproved Retrocommissioning (RCx) Providers”

	Utilize List of Preapproved Providers	Notes
Utility 1	X	The utility has a network of eight engineering firms that have been prescreened for the program through a RFQ process.
Utility 2	X	Participants receive a preferred list of RCx providers; the utility offers training on a regular basis and uses a monthly e-newsletter to inform the network of program changes. RCx providers are not pre-screened.
Utility 3		The utility does not maintain a provider network.
Utility 4	X	The utility has a network of 15 engineering firms that have been prescreened for the program through an RFQ process. Providers serve as the main channel for recruiting new customers.

Each utility will have a unique research purpose. Though all utilities can benefit from best practice research and review, a scoring method may not always be appropriate. Where the utility seeks to learn more about approaches to overcome obstacles or challenges through reviewing best practices, but does not necessarily seek to compare their performance with other utilities, discussing findings and providing recommendations may more appropriately facilitate positive results.

5. Provide Actionable Recommendations

Best practice research seeks to spur program improvements. To guide such improvements, the best practice research and subsequent analysis should be accompanied by actionable recommendations. Such recommendations can be classified as: 1) affirmative encouragement to continue implementation of a best practice; or 2) constructive changes suggested to achieve a more satisfactory outcome.

Recommendations prove most effective if developed with an appreciation for a utility’s unique circumstances, changing external conditions, and imperfect information. For example, unique utility circumstances may include unusually low avoided costs, which impact cost-effectiveness and make measure offerings difficult to justify for some market segments. External conditions might include innovations in marketing channels (e.g., social media) that can be very effective but remain relatively new to the marketplace. Imperfect information may present an incomplete understanding of a utility’s past actions, which influence its willingness to pursue various future actions.

Further, meaningful recommendations should be derived from (and be supported by) observations drawn from another utilities. For instance, a recommendation to develop and maintain a trade ally network should be supported by the example of: 1) a utility that has taken this action; 2) a thorough description of those actions, methods, success, and challenges; and 3) the beneficial outcomes achieved. This approach provides a utility with guidance for implementing the recommendation.

6. Avoiding Pitfalls in a Best Practice Review

Conducting successful best practice research and presenting helpful, well-received findings depends on multiple factors. Most challenges can be mitigated (or avoided altogether) by adhering to the following four rules:

- Understand your audience.
- Align the utility's and consultant's expectations regarding the research results.
- Obtain the buy-in necessary for facilitating a comprehensive review.
- Focus on a dialogue, not a scorecard.

Understand your audience. Before beginning the research, one must determine who will receive the results. Audiences may include utility planning or implementation staff, or even external stakeholders. Understanding the audience will guide data collection, reviews, discussions, and recommendations. Misidentifying the audience can result in a deliverable that is, at best, confusing—and, at worst, offensive. Researchers should also consider whether sources outside of the utility may access the information and understand the implications this could have on perceptions about the utility. Asking questions in this regard early in the research process (such as, “*Will the research findings and recommendations be included in regulatory filings?*”) can help avoid future pitfalls.

Align expectations. Deliverables should be tailored to the utility's needs. Some utilities may seek only a high-level comparison of standard metrics, while others may want the assessment to highlight areas of recent or ongoing growth. Misaligned expectations may result in an inefficient use of time and an ineffective research product. By adhering to the first step outlined in the framework—*define the purpose of the research*—utilities and evaluators largely can avoid this pitfall.

Obtain stakeholder buy-in. To ensure findings, conclusions, and recommendations accurately reflect the utility's processes, goals, and outcomes, it will be critical that all relevant utility staff know of the research and have an opportunity to provide information and feedback through interviews, discussions, and provision of program and evaluation materials. Doing so improves the credibility of results by ensuring a comprehensive review and helps increase program stakeholders' receptivity to the findings and recommendations.

Focus on a Dialogue. Beginning a dialogue early and articulating findings early in the process can increase utility stakeholders' receptivity to feedback, ensuring that the review remains focused on program delivery improvements—not just on resulting scores. Specifically, acknowledging the limitations of the research upfront—and being open to making revisions down the line—will help break down barriers and avoid a situation in which the client feels it may have been erroneously scored or judged.

References

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