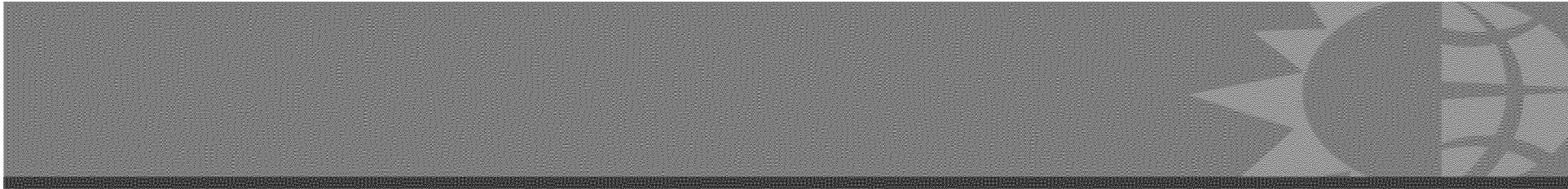


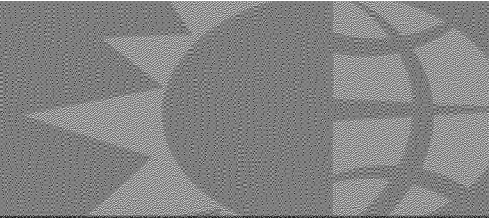
Attachment 2

Evaluation Basics



Why Evaluation?

The Goal of Evaluation:

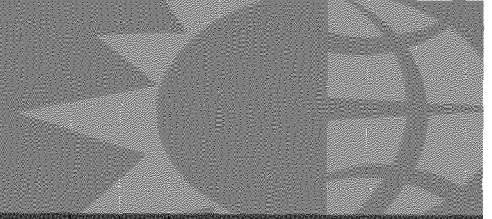


Provide unbiased, independent, empirically-based information to decision-makers.

What Information & Decisions?

Audience	Decisions	Information Needs
Planning & Implementation Staff	<ul style="list-style-type: none"> ffi Allocation of Funding ffi Initiative Strategy & Tactics 	<ul style="list-style-type: none"> ffi Validation of aMW potential ffi Ongoing market characterization ffi Market progress (per indicators) ffi Validation of program theory ffi Recommendations based on empirical data and insights ffi Validation of CE assumptions ffi Target audience & customer research
Management/ Board	<ul style="list-style-type: none"> ffi Annual Budget Approval 	<ul style="list-style-type: none"> ffi MT progress metrics ffi Validation of savings ffi Validation of cost-effectiveness
Funders/Partners Customers	<ul style="list-style-type: none"> ffi Fund NEEA? ffi Partner on an Initiative? 	<ul style="list-style-type: none"> ffi Validation of MT and savings ffi Market information

What is evaluation?



ffi Evaluation is skepticism . . .

ffi . . . Not Cynicism.

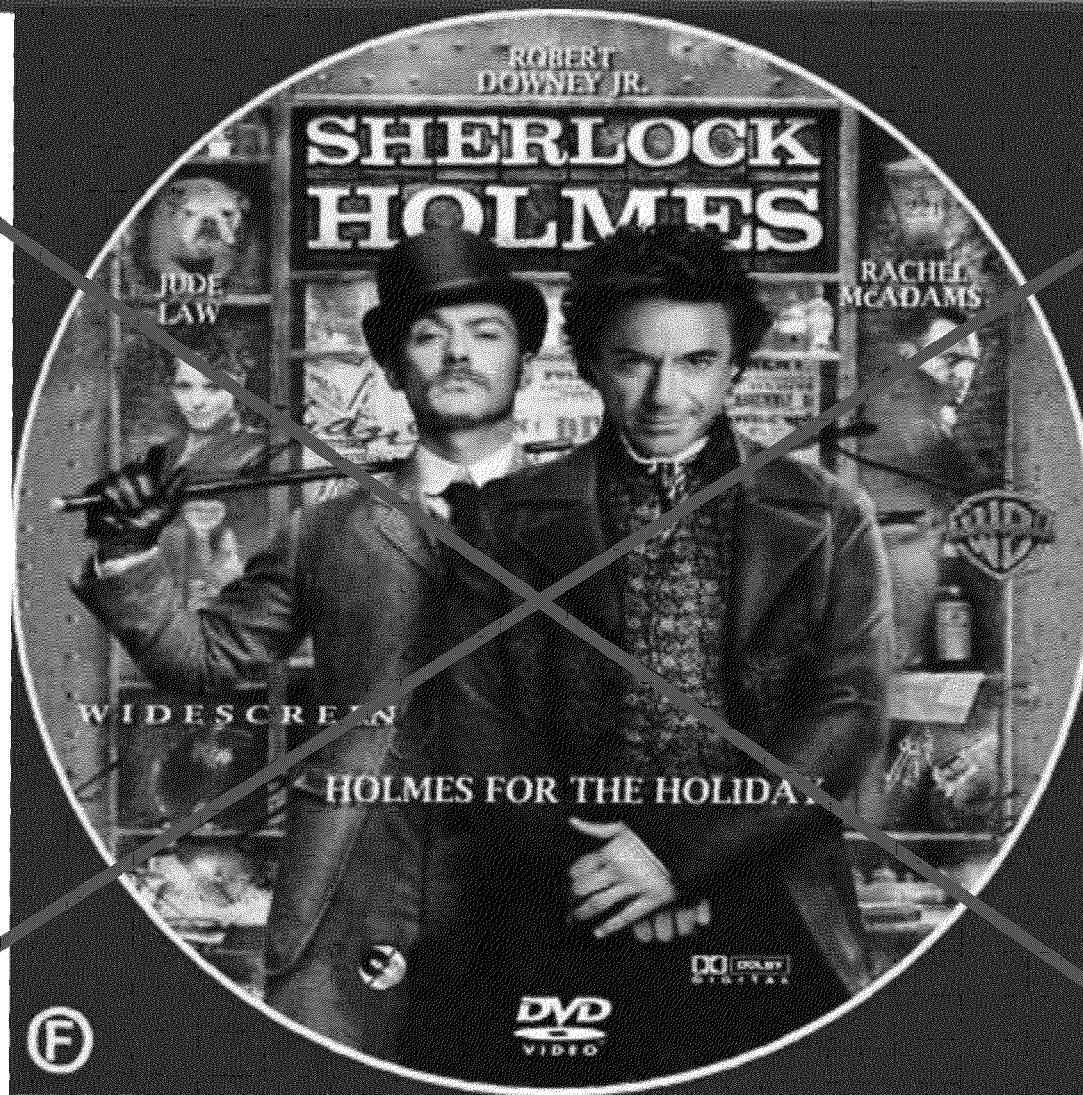
ffi Evaluation is analysis . . .

ffi . . . Not an audit.

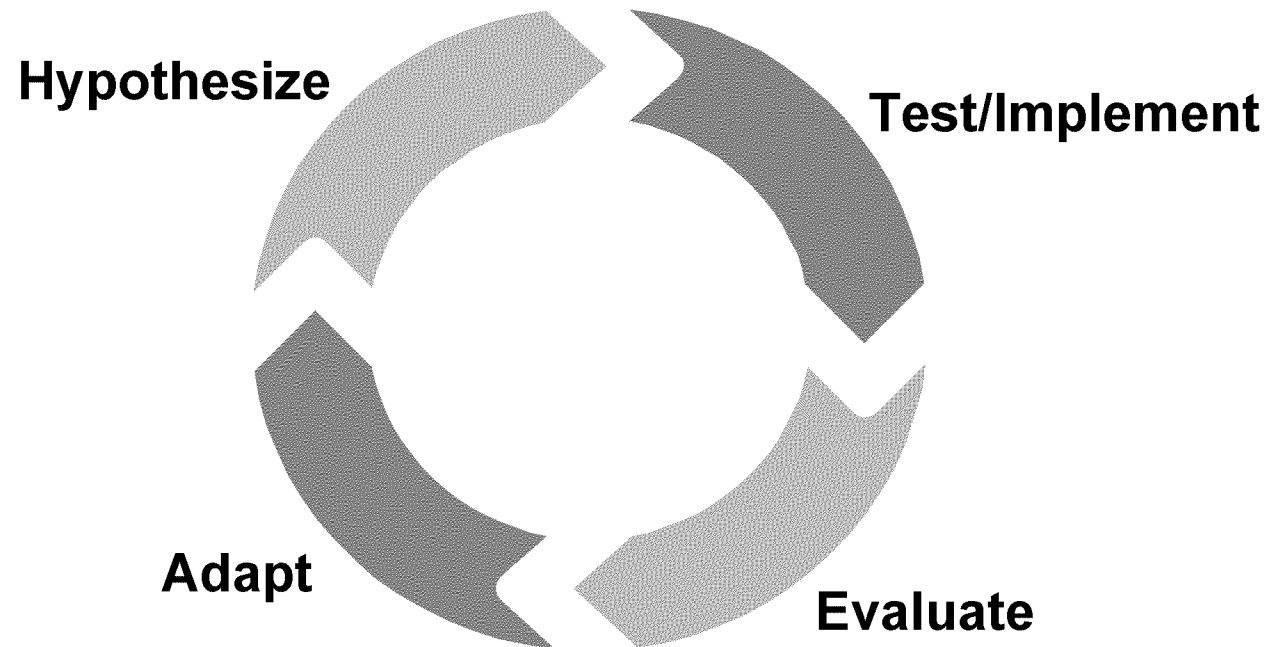
ffi Evaluation is based on data collection . . .

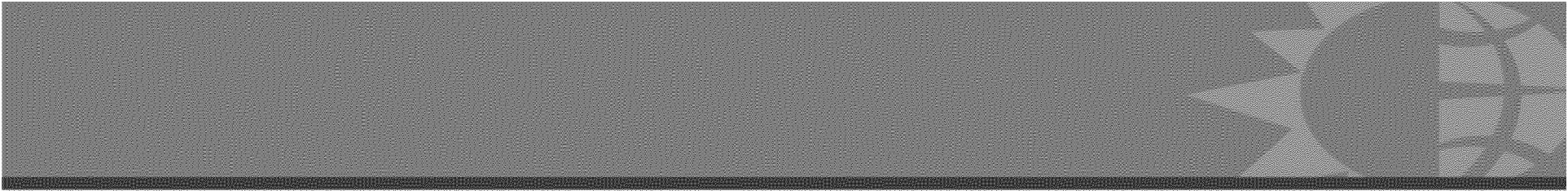
ffi . . . Not detection.

We are not Holmes and Watson



Evaluation Critical for Adaptive Management (a.k.a., Learning Organization; Continuous Improvement)

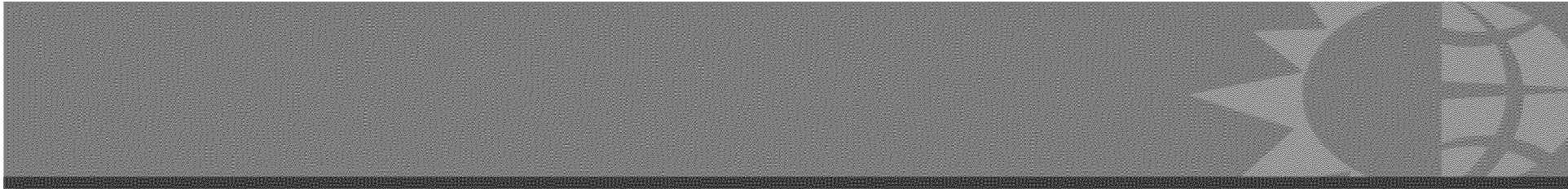




Extraordinary Claims Require Extraordinary Evidence

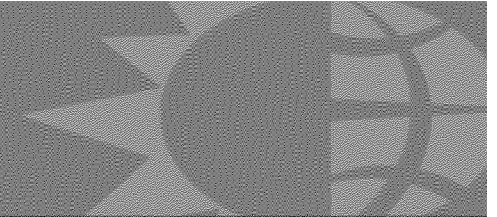


NORTHWEST
ENERGY EFFICIENCY
ALLIANCE



Evaluation Design

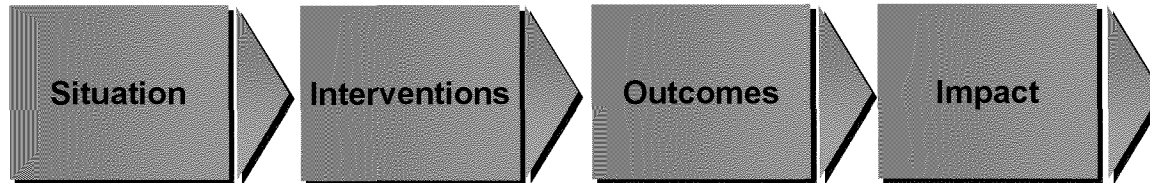
MT vs. Utility Program Evaluation



	Utility Program	MT Initiative
Approach	Save energy via customer participation	Save energy by mobilizing widespread market adoption
End-User Characteristics	Participants/ enrollees are known & recruited directly	Adopters are not known (aside from early partners/ demonstrations)
Savings Estimation	Summation of site-by-site savings	“Deemed”/ average savings value must be calculated in order to project savings to market
Implications	<ul style="list-style-type: none"> ffi All savings based on verifiable results ffi Success of program judged on short-term results, and easily determined. ffi No logic model needed 	<ul style="list-style-type: none"> ffi Savings based on market projections using accepted & replicable techniques ffi Success of initiative based on long-term outcomes. ffi Theory of change with specific market progress indicators required to validate progress

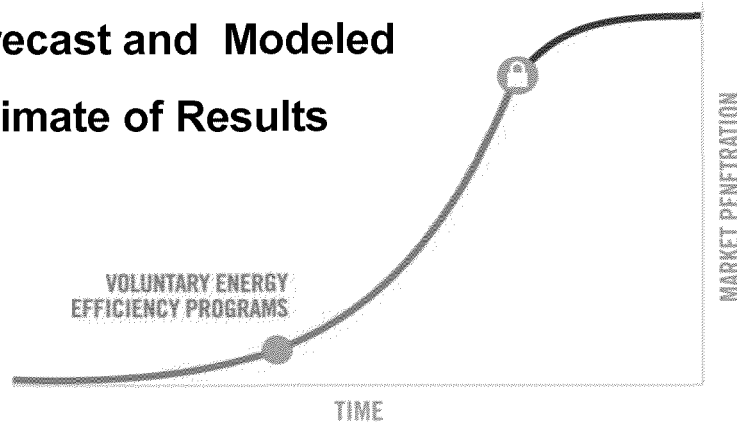
Two Areas of Focus

Program Theory



Evaluation

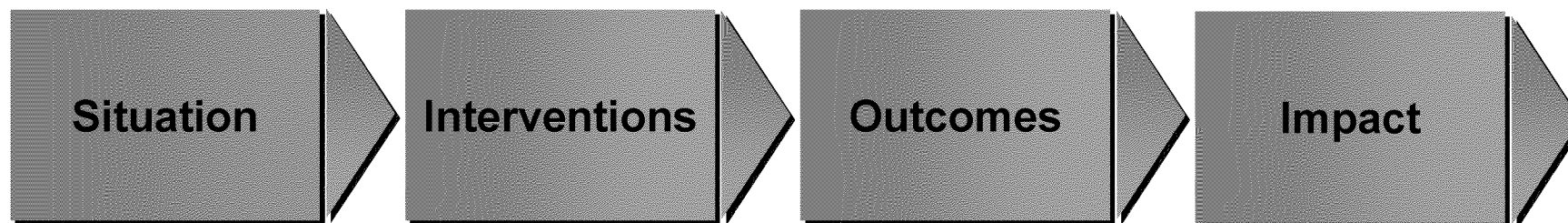
Forecast and Modeled Estimate of Results



Market Research & Evaluation can also support market strategy and tactics

Evaluation Design Follows Program Theory

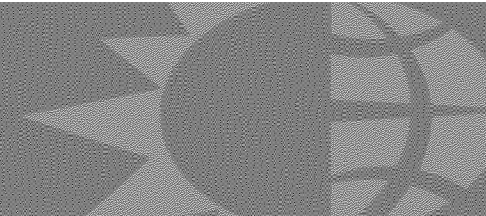
Program Theory



Evaluation Questions

- What is the market situation? Has it changed?
- What is market progress (per agreed upon indicators)?
- If progress lags expectations, why?
- Is the theory valid?
- If not, why not? (Insights for how to adapt)

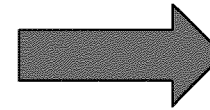
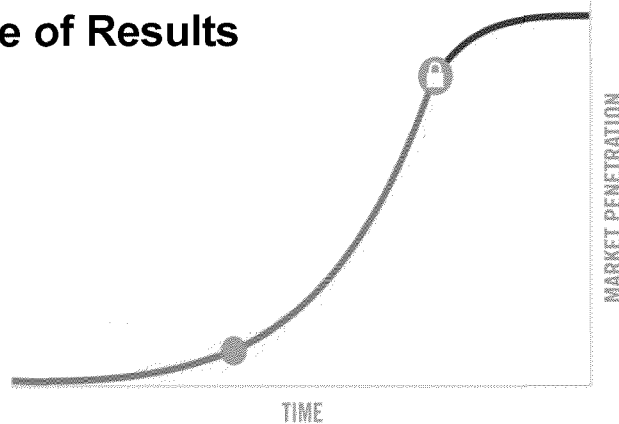
Three Phases of Initiatives



New Product Development	Product Standardization	Product Diffusion
R&D, Pilot Project, Proof of Concept	Operationalization	Broad Market Adoption
Processes are “under construction”	Processes become standard	Processes are transferred to market actors
Evaluation reviews processes	Evaluation confirms initial impacts	Evaluation assesses market adoption
Any energy savings are incidental.	Per unit energy savings become predicable	Per unit energy savings are “deemed”

2nd Area of Focus: Model Assumptions

Forecast and Modeled Estimate of Results



aMW

Evaluation Questions:

Are the assumptions reasonable/correct?

- ffi Baseline
- ffi Market penetration/growth
- ffi Savings per "unit"
- ffi Other C/E factors



**Validates
Assumptions**

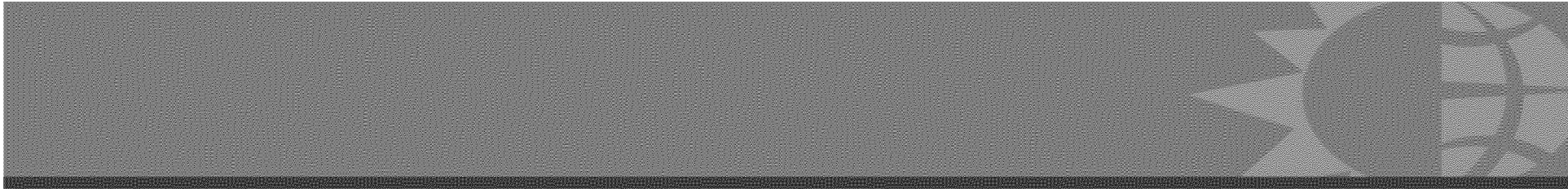


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ALLIANCE

Data Collection Techniques Depend on Learning Objectives

Data Collection Technique	Mkt Char.	Mkt Penetration	Availability, Price	Barriers	Messaging	Causality/ Behavior Change from Intervention	Savings per Unit
On-site Data Collection			1				1
Quantitative Market Surveys	1	1	1		1	1	
Interviews	1		1	1	1	1	
Focus Groups				1	1		
Marketing Collateral/Advertising			1			1	
Automated Energy Consumption Data							1
Energy Consumption Metering							1
Self-reported data (to be validated)							1
Secondary Sources	1	1	1	1	1		1

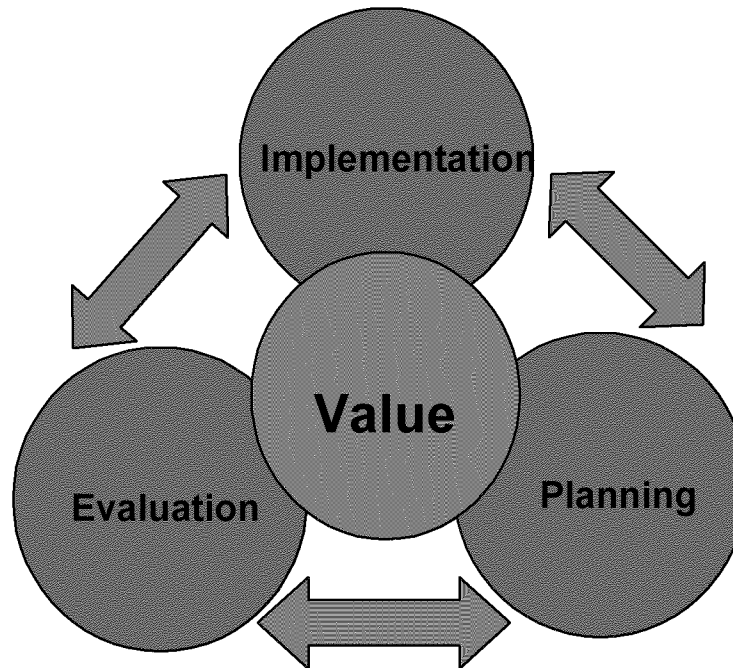




The Planning-Implementation-Evaluation “System”

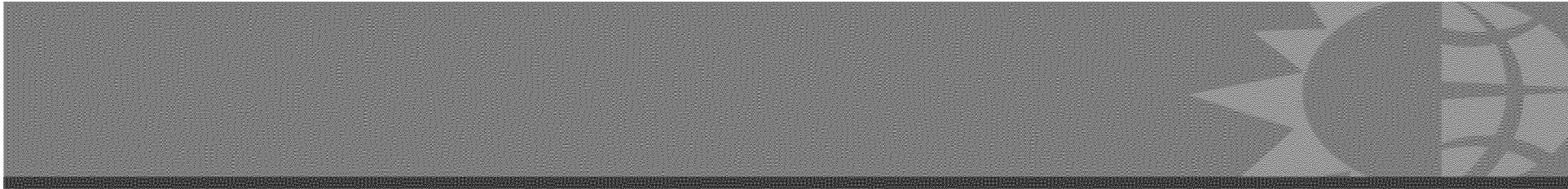
Collaboration Required to Demonstrate Customer Value

- Develop MT Theory & Strategy
- Mobilize Market
- Document Activities + Collect Data



- Develop & Execute Evaluation Plan
 - Market Progress
 - Review Cost Effectiveness Assumptions
 - Research to support strategy & tactics
- Communicate actionable findings to implementation & planning

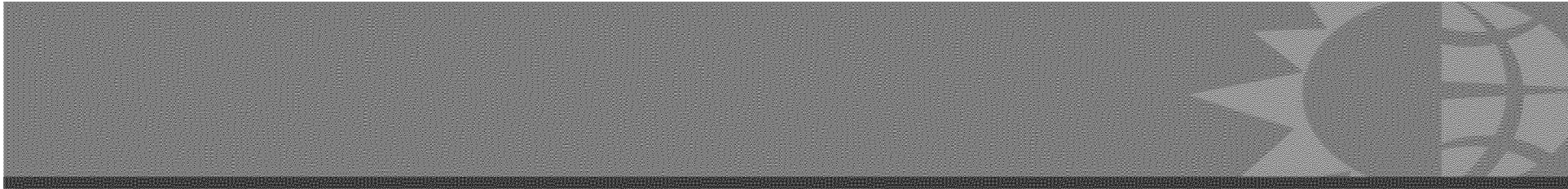
- Develop mathematical model that represents MT Theory & Strategy
- Receive Tracking Data from Implementation
- Update Cost Effectiveness assumptions based on Evaluation Findings



What Makes an MT Initiative Evaluable?

Evaluability Depends on Initiative Design

Design Requirement	Why?	Examples
MT Theory (a.k.a., program theory, logic model)	<ul style="list-style-type: none"> ffi Initiative Roadmap; plausible theory of market mobilization & causality; clear articulation of interventions & outcomes ffi Blueprint for Cost Effectiveness Model & Evaluation 	
Standard “Unit” Definition: Precisely What Is Being Adopted?	<ul style="list-style-type: none"> ffi Required for “scalability” and “transferability” ffi Impossible to evaluate penetration without ffi Mandatory to determine associated savings 	BOC, Compressed Air Challenge; ES Homes; CEI
Defined Target Market	<ul style="list-style-type: none"> ffi To determine market potential and penetration (denominator) 	Hospitals/systems with at least X beds
Documented Interventions; Participant Contact Info	<ul style="list-style-type: none"> ffi Documents value delivery ffi Identifies relevant interviewees for evaluation of outcomes ffi Helps establish causality 	
Partner Data	<ul style="list-style-type: none"> ffi Readily available to partner; least expensive data source of results ffi We know that end-user measurement leads to persistence/sustained change 	
A “Mark” (e.g., Certification, Standard, Label, Brand)	<ul style="list-style-type: none"> ffi Readily identifies standard practice or technology. ffi Substantiates causality 	BOC; ENERGY STAR; LEED; ISO; CEI



Discussion