

The ROI Methodology[®] in 12 Easy Steps

A step-by-step guide for developing Impact and ROI studies for programs, projects, and solutions in the following areas:

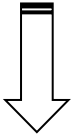
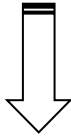
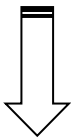

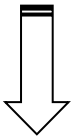
- Human Resources/Human Capital
- Training/Learning/Development
- Leadership/Coaching/Mentoring
- Knowledge Management/Transfer
- Recognition/Incentives/Engagement
- Work Arrangement Systems
- Change Management/Culture
- Talent Management/Retention
- Policies/Procedures/Processes
- Technology/Systems/IT
- Meetings/Events/Conferences
- Marketing/Advertisement/Promotion
- Compliance/Risk Management
- Organization Development/Consulting
- Project Management Solutions
- Quality/Six Sigma/Lean Engineering
- Communications/Public Relations
- Public Policy/Social Programs
- Creativity/Innovation
- Ethics/Integrity
- Safety/Health/Fitness Programs
- Environment/Sustainability
- Healthcare Initiatives
- Schools/Colleges/Universities
- Public Sector/Nonprofits
- Faith-Based Programs

The ROI Methodology[®] is a balanced approach to measurement that generates six types of data:

- Reaction and Planned Action
- Learning
- Application and Implementation
- Impact
- Return on Investment
- Intangibles

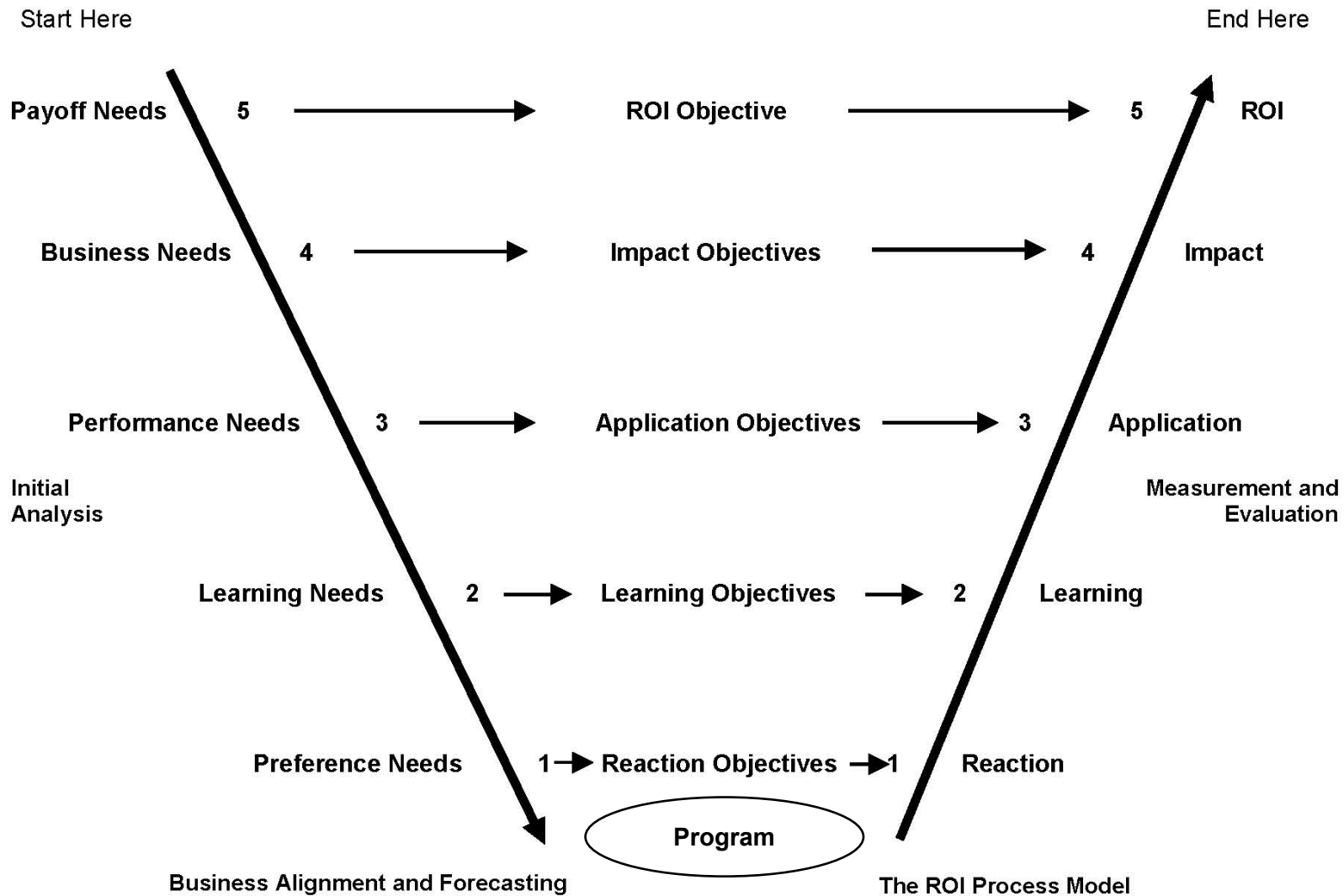
The process includes a step to isolate the effects of the project, program, or solution.

Six Levels of Data

Level	Measurement Focus	Typical Measures
0-Input 	<ul style="list-style-type: none"> Input into programs, including indicators representing scope, volumes, times, costs, and efficiencies 	<ul style="list-style-type: none"> Types of programs Number of programs Number of people involved Hours of involvement Costs
1-Reaction and Planned Action 	<ul style="list-style-type: none"> Reaction to the programs, including participants' perceived value and planned action to make them successful 	<ul style="list-style-type: none"> Relevance Importance Usefulness Appropriateness Intent to use Motivational Recommended to others
2-Learning 	<ul style="list-style-type: none"> Knowledge and skills gained, including learning how to develop concepts and how to use skills and competencies to drive program success 	<ul style="list-style-type: none"> Skills Learning Knowledge Capacity Competencies Confidences Contacts
3-Application and Implementation 	<ul style="list-style-type: none"> Application and use of knowledge, skills, and competencies, including progress made and implementation success 	<ul style="list-style-type: none"> Behaviors used Extent of use Task completion Frequency of use Actions completed Success with use Barriers to use Enablers to use Engagement
4-Impact 	<ul style="list-style-type: none"> The impact of implementing programs and processes expressed as improvement in business measures directly linked to the program or project 	<ul style="list-style-type: none"> Graduation rates Infant mortality Crime rates Productivity Revenue Quality Jobs created Efficiency Incidents of disease Retention Customer satisfaction
5-ROI	<ul style="list-style-type: none"> Comparison of monetary benefits from the program to program costs 	<ul style="list-style-type: none"> Benefit Cost Ratio (BCR) ROI (%) Payback period

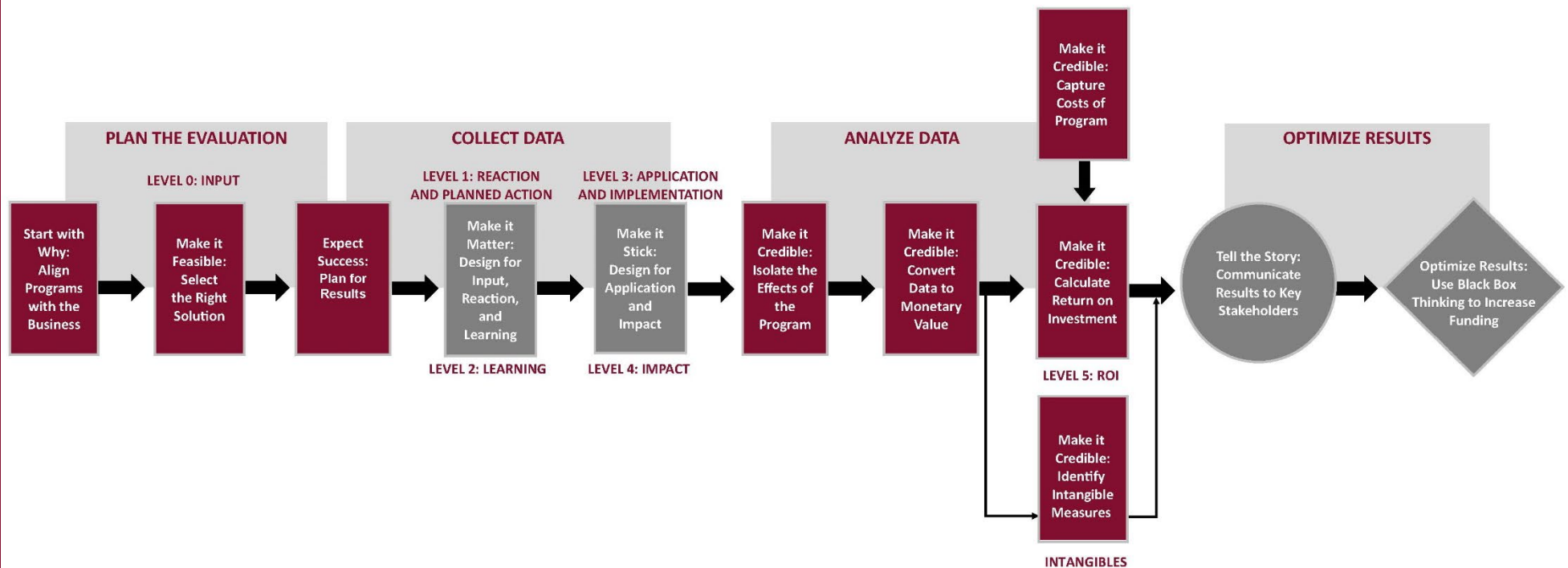
ROI Methodology Model

Program Alignment with the V Model



ROI Methodology Model

The 12 steps in the ROI Methodology are logical and systematic, representing an enhanced logic model.



Step 1

Start with Why: Align Programs with the Business

Starting with “why” is the first step in the ROI Methodology. The “why” of programs is the business need.

Payoff Needs

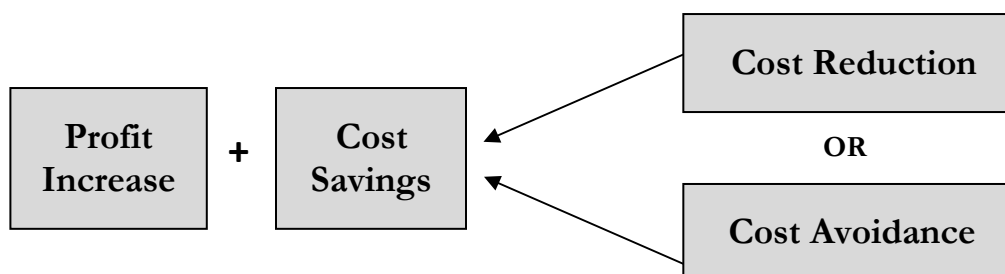
At one extreme, some organizations do not pursue new programs unless there is a direct business connection. A more practical approach is to be selective, making the connection when the request seems to be expensive, critical to the organization, part of a strategy, or important to the management team. The first issue is to address the potential payoff needs. Identifying payoff needs, those opportunities for the organization to make money, save money, avoid cost, or do some greater good, begins with the following questions:

- Is this program worth doing?
- Is this a problem worth solving?
- Is this an opportunity worth pursuing?

Will this new program add enough value to offset its costs?

The answer is clear for programs that address significant problems with high costs or opportunities with potentially high rewards. The questions may be more challenging to answer for lower-profile programs or those for which the potential payoff is less apparent. Regardless of the situation, these questions present an initial opportunity to ensure a program is aligned with the needs of the organization.

The analysis can be simple or comprehensive. A program’s ultimate payoff will be in the form of profit, cost savings, or cost avoidance.



Business Needs

The second issue is pinpointing one or more business measures already in the system that need to improve as a result of the program. Determining specific business needs is directly linked to developing the potential payoff. When determining the business needs, specific measures are pinpointed in an effort to clearly assess the business situation. The term “business” is used in governments, nonprofits, NGOs, and educational institutions, as well as in private-sector organizations. Programs and projects in all types of organizations can lead to monetary value add by improving productivity, quality, and efficiency by saving time and reducing costs.

Step 1

Start with Why: Align Programs with the Business

Examples of Hard Business Data

OUTPUT

Citizens Vaccinated
 Graduation Rate
 Placement Rate
 Units Produced
 Income Increased
 Items Assembled
 Money Collected
 Licenses Issued
 New Accounts Generated
 Forms Processed
 Loans Approved
 Inventory Turnover
 Criminals Prosecuted
 Inspections Made
 Applications Processed
 Patients X-rayed
 Students Graduated
 Permits Issued
 Projects Completed
 Jobs Secured
 Productivity
 Patients Discharged
 Criminals Captured
 Shipments Processed

COSTS

Budget Variances
 Unit Costs
 Unemployment Costs
 Variable Costs
 Fixed Costs
 Overhead Cost
 Operating Costs
 Education Costs
 Accident Costs
 Program Costs
 Incarceration Costs
 Shelter Costs
 Treatment Costs
 Participant Costs
 Cost Per Day

TIME

Length of Stay
 Cycle Time
 Equipment Downtime
 Overtime
 On-Time Shipments
 Project Time
 Processing Time
 Supervisory Time
 Time to Proficiency
 Time to Graduate
 Meeting Schedules
 Repair Time
 Time to Replace
 Work Stoppages
 Response Time
 Late Times
 Lost Time Days
 Wait Time

QUALITY

Readmissions
 Failure Rates
 Dropout Rates
 Scrap
 Waste
 Rejects
 Error Rates
 Rework Required
 Complications
 Shortages
 Product Defects
 Deviations from Standard
 Product Failures
 Inventory Adjustments
 Infections
 Incidents
 Compliance Discrepancies
 Agency Fines
 Accidents
 Crime Rate

Step 1

Start with Why: Align Programs with the Business

Examples of Soft Business Data

<p>LEADERSHIP</p> <p>Teamwork Collaboration Networking Communication Alliances Decisiveness Caring Compassion</p> <p>WORK CLIMATE/SATISFACTION</p> <p>Grievances Discrimination Charges Employee Complaints Job Satisfaction Organization Commitment Employee Engagement Employee Loyalty Intent to Leave Stress</p> <p>INITIATIVE/INNOVATION</p> <p>Creativity New Ideas Suggestions Trademarks Copyrights Patents Process Improvements Partnerships</p>	<p>CLIENT SERVICE</p> <p>Client Complaints Client Satisfaction Client Dissatisfaction Client Impressions Client Loyalty Client Retention Client Value Client Lost</p> <p>DEVELOPMENT/ADVANCEMENT</p> <p>Promotions Capability Intellectual Capital Programs Completed Certifications Held Transfers Performance Appraisal Ratings Readiness Development Assignments</p> <p>IMAGE/REPUTATION</p> <p>Brand Awareness Reputation Impressions Social Responsibility Environmental Friendliness Social Consciousness Diversity/Inclusiveness External Awards</p>
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Notes

Step 2

Make it Feasible: Select the Right Solution

With business needs in hand, the next step is determining how to improve the business measures. This step identifies the causes of problems or explores the various approaches to address an opportunity.

Three questions must be addressed:

- What needs to change to influence the impact measure?
- What can enable this change?
- What is the best solution?

Performance Needs

Some program implementers are moving from request taker to business contributor. This may require a new role and new skills for the team. These individuals are resisting the temptation to say yes to every request for a new program. Instead, they describe the problem or opportunity with business impact measures and identify the solution or solutions that will influence these business needs.

This task has evolved into a performance consulting role where these individuals delve deeper into the analysis, seeking causes of problems or opportunities and uncovering solutions. The skill set for the performance consultant is different than the skill set for needs assessment. It begins with a proactive approach with the requester to:

- Examine the data and records.
- Initiate the discussion with the client.
- Use benchmarking from similar solutions.
- Use evaluation as a hook to secure more information.
- Involve others in the discussion.
- Discuss disasters in other places.
- Discuss consequences of not having business alignment.

Learning Needs

Performance needs uncovered in the previous step often require a learning component to ensure all parties know what they need to do and how to do it as the performance is delivered. In some cases, learning becomes the principal solution, as in competency development, major technology changes, and system installations. For other programs, learning is a minor part of the solution and often involves simply understanding the solution, such as the process, procedure, or policy. For example, when implementing a new ethics policy for an organization, the learning component requires understanding how the policy works and the participant's role in it. In short, a learning solution is not always needed, but all solutions have a learning component.

Preference Needs

The final level of needs analysis is based on preferences, which drive the program requirements. Essentially, individuals prefer certain content, processes, schedules, or activities for the structure of the program. These preferences define how the particular program will be implemented. If the program is a solution to a problem or taking advantage of an opportunity, this step defines how the solution will be implemented and how participants should perceive its value.

Step 3

Expect Success: Plan for Results

Several issues are involved in expecting success: define success for the program, set objectives at multiple levels, define responsibilities of all stakeholders to achieve success, complete the data collection plan, and complete the ROI analysis plan.

Defining the Success of Programs

What's Your Business?

Possible Measures					
Value Description	Rank	Measure Now	Donor/ Sponsor Rank	Percent Measured Now	Best Practice
“Serve the largest number of people with the least amount of disruption and cost.”					100%
“Participants are engaged, enjoy the programs, and see their experience as valuable.”					100%
“Participants are learning the latest information and skills to make this program successful.”					90%
“Participants take action, use the content, and make important changes.”					30%
“Participants are driving important impact measures and having an impact in their work, community, or organization.”					10%
“Participants and the organization have a positive return on the investment of their time and the resources for this program.”					5%

Developing Objectives

Typical Reaction Objectives

At the end of the program, participants should rate each of the following statements at least a 4 out of 5 on a 5-point scale:

- The program is relevant to the needs of the target audience.
- The facilitators/organizers responded to my questions clearly.
- The program is valuable to this mission, cause, or organization.
- The program is important to my (our) success.
- The program is motivational for me (us).
- The program is practical.
- The program contained new information.
- The program represented a good use of my time.
- I will recommend the program to others.
- I will use the concepts and materials from this program.

Step 3

Expect Success: Plan for Results

Learning objectives can have three components:

- Performance—what the participant or stakeholder will be able to do as a result of the program
- Conditions under which the participant or stakeholder will perform the various tasks and processes
- Criteria—the degree or level of proficiency necessary to perform a new task, process, or procedure that is part of the solution

Typical Learning Objectives

After completing the program, participants will be able to:

- Name the three pillars of the new AIDS strategy in three minutes.
- Identify the four conditions for a microfinance loan.
- Successfully complete the leadership simulation in 15 minutes.
- Identify the six features of the new ethics policy.
- List five benefits of healthy living.
- Demonstrate the use of each software routine in the standard time.
- Use problem-solving skills, given a specific problem statement.
- List 7 out of 10 harmful effects of pollution.
- Score 75 or better in 10 minutes on the new-product quiz on the first try.
- Demonstrate all five customer-interaction skills with a success rating of 4 out of 5.
- Explain the five benefits of diversity in a work group in five minutes.
- Follow the steps to secure a job in 30 days.
- Score at least 9 out of 10 on a sexual harassment policy quiz.
- Identify five new technology trends presented at the conference.

Typical Application Objectives

When the program is implemented:

- Within one month, participants will be involved in five job interviews.
- In 15 days, participants will apply for a microfinance loan.
- Ninety-five percent of high-potential employees will complete individual development plans within two years.
- At least 50 percent of participants will join a hiking/walking group in 20 days.
- At least 99.1 percent of software users will be following the correct sequences after three weeks of use.
- Diabetic patients will implement three of the four critical behaviors in 15 days.
- Within one year, 10 percent of participants will submit documented suggestions for saving costs.
- Participants will routinely use problem-solving skills when faced with a quality problem.
- Sexual harassment activity will cease within three months after the zero-tolerance policy is implemented.
- Thirty percent of citizens will start recycling household waste.
- Eighty percent of employees will use one or more of the three cost-containment features of the healthcare plan in the next six months.
- Fifty percent of conference attendees will follow up with at least one contact from the conference within 60 days.
- By November, pharmaceutical sales representatives will communicate adverse effects of a specific prescription drug to all physicians in their territories.
- Customer service representatives will use all five interaction skills with at least half the customers within the next month.
- The average 360-degree leadership assessment score will improve from 3.4 to 4.1 on a 5-point scale in 90 days.

Step 3

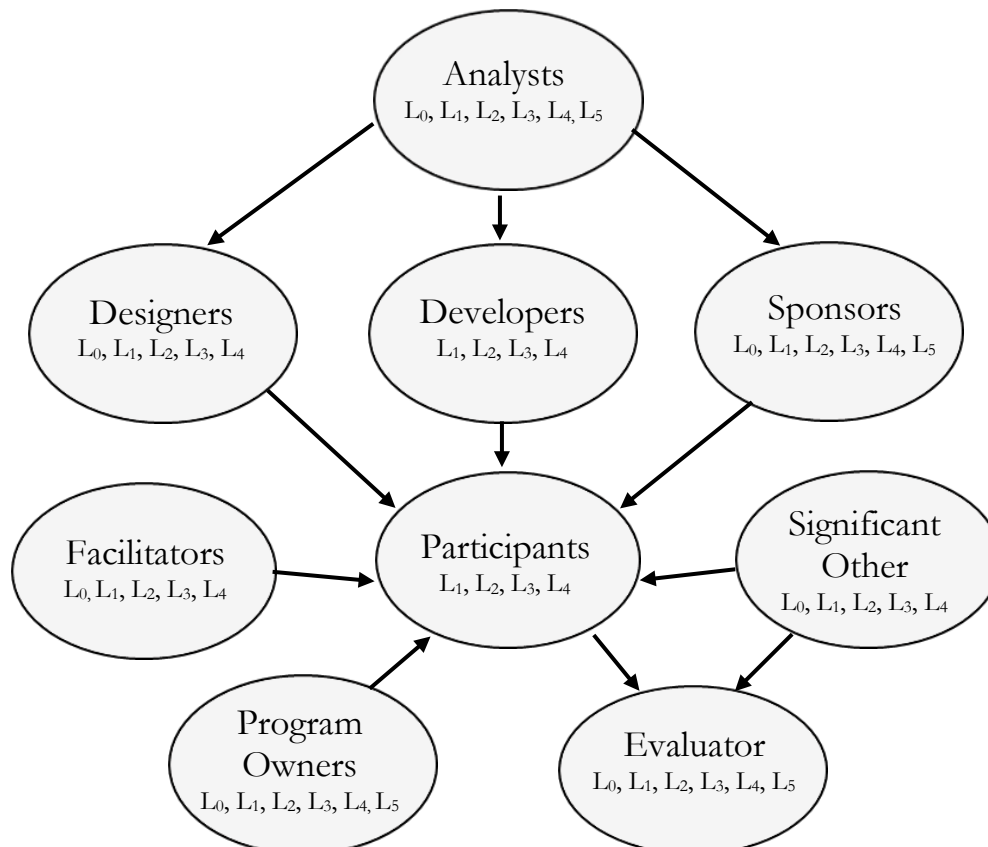
Expect Success: Plan for Results

Typical Impact Objectives

After program completion, the following conditions should be met:

- The infant mortality rate will reduce by 10 percent per year for five years.
- The health status index should improve by five percent during the next calendar year.
- The student debt load should be reduced by 30 percent in three years.
- After nine months, grievances should be reduced from 12 per month to no more than 2 per month at the VA center.
- Incidents of malaria should reduce by 17 percent in one year.
- Turnover of high-potential employees should be reduced to 10 percent in nine months.
- Complaints of abusive force by police should reduce by 10 percent in six months.
- The average number of new accounts should increase from 300 to 350 per month in six months.
- Unplanned absenteeism of call center associates should decrease by 20 percent within the next calendar year.
- At least 90 percent of microfinance loans will be paid back on schedule.
- A 20 percent reduction in overtime should be realized for field staff in the third quarter of this year.
- Citizen complaints should be reduced from an average of three per day to an average of one per day.
- Process time for work visas will be reduced by 30 percent in two months.
- By the end of the year, the average number of product defects should decrease by 30 percent.
- Operating expenses should decrease by 10 percent in the fourth quarter.
- There should be a 10 percent increase in brand awareness among physicians during the next two years.
- Product returns per month should decline by 15 percent in six months.

The Objectives Needed for Important Stakeholders



Step 3 Expect Success: Plan for Results

Data Collection Plan

Data collection planning answers fundamental questions about data collection: What, How, Who, When, Where, and How Much?

Program: Coaching for Business Impact

Responsibility:

Date:

Objectives	Measures/Data	Data Collection Method	Data Sources	Timing	Responsibilities
Level 1 Reaction and Planned Action <ul style="list-style-type: none"> • Relevance and importance to the job • Coach's effectiveness • Recommendation to others 	<ul style="list-style-type: none"> • 4 out of 5 on a 1 to 5 rating scale 	<ul style="list-style-type: none"> • Questionnaire 	<ul style="list-style-type: none"> • Executives 	<ul style="list-style-type: none"> • 2 months • 6 months after engagement begins 	<ul style="list-style-type: none"> • NHLO Staff
Level 2 Learning <ul style="list-style-type: none"> • Uncovering strengths/weaknesses • Translating feedback into action • Involving team members • Communicating effectively 	<ul style="list-style-type: none"> • 4 out of 5 on a 1 to 5 rating scale 	<ul style="list-style-type: none"> • Questionnaire 	<ul style="list-style-type: none"> • Executives • Coach 	<ul style="list-style-type: none"> • 2 months • 6 months after engagement begins 	<ul style="list-style-type: none"> • NHLO Staff
Level 3 Application/Implementation <ul style="list-style-type: none"> • Complete and adjust action plan • Identify barriers and enablers • Show improvements in skills 	<ul style="list-style-type: none"> • Checklist for action plan • 4 out of 5 on a 1 to 5 rating scale 	<ul style="list-style-type: none"> • Action Plan • Questionnaire 	<ul style="list-style-type: none"> • Executives • Coach 	<ul style="list-style-type: none"> • 6 months after engagement begins 	<ul style="list-style-type: none"> • NHLO Staff
Level 4 Impact <ol style="list-style-type: none"> 1. Sales growth 2. Productivity/efficiency 3. Direct cost reduction 4. Retention of key staff 5. Customer satisfaction 	<ol style="list-style-type: none"> 1. A change in monthly revenue 2. Varies with location 3. Direct monetary savings 4. Voluntary turnover 5. Customer impression index 	<ul style="list-style-type: none"> • Action Plan 	<ul style="list-style-type: none"> • Executives 	<ul style="list-style-type: none"> • 6 months after engagement begins 	<ul style="list-style-type: none"> • NHLO Staff
Level 5 ROI <ul style="list-style-type: none"> • 25% ROI 	Comments: Executives are committed to providing data. They fully understand all data collection issues prior to engaging in the coaching assignment.				

Step 3 Expect Success: Plan for Results

ROI Analysis Plan

The ROI Analysis Plan details how improvement in business measures will be isolated to the program and converted to monetary value. Cost categories, intangible benefits, and target audiences for communication are also identified.

Program: Coaching for Business Impact

Responsibility:

Date:

Data Items (Usually Level 4)	Methods for Isolating the Effects of the Project	Methods of Converting Data to Money	Cost Categories	Intangible Benefits	Communication Targets for Final Report	Other Influences/Issues During Application	Comments
<ul style="list-style-type: none"> Sales growth Productivity/operational efficiency Direct cost reduction Retention of key staff members 	<ul style="list-style-type: none"> Estimates from executives <p>(The method is the same for all data items)</p>	<ul style="list-style-type: none"> Standard values Expert input Executive estimates <p>(The three methods are the same for all data items)</p>	<ul style="list-style-type: none"> Initial needs assessment Coaching fees Travel costs Executive time Administrative support Administrative overhead Telecom expenses Facilities Evaluation 	<ul style="list-style-type: none"> Increased commitment Reduced stress Increased job satisfaction Improved customer service Improved teamwork Improved communications 	<ul style="list-style-type: none"> Executives Coaches Senior executives Coaching supplier firm NHLO staff Learning & development Council Prospective participants for CBI 	<p>A variety of initiatives will influence the impact measures including our Six Sigma process, service excellence project, and our efforts to become a great place to work.</p>	<p>Securing commitment from executives to provide accurate data in a timely manner is extremely important.</p>

Evaluation Project Plan

The project plan details each step of the evaluation.

	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
Decide to Conduct ROI Study											
Complete Evaluation Planning											
Design Instruments											
Pilot Test Instruments											
Collect Data from Group A											
Collect Data from Group B											
Summarize Data											
Conduct Analysis											
Write and Print Report											
Communicate Results											
Initiate Improvements											
Complete Improvements											

Step 4

Make it Matter: Design for Input, Reaction, and Learning

Make it matter is a critical concept for program input (who's involved), reaction (how participants perceive it), and learning (what participants will learn).

Topics

Input Topics

This Program Must Be:	Parameter
<ul style="list-style-type: none"> • Conducted with at least 100 participants per month. • Implemented as a pilot project only. • For individuals testing positive for AIDS/HIV virus. • Completed by September 1st. • Completed in less than three months. • Less than \$1,000 in cost per participant. • Cover all micro financing options. • Implemented to support new revenue for the university. • Implemented with blended learning. • Conducted in each West African country. • Implemented without disruption of family activities. • Using virtual reality. • Implemented with no more than 50 percent outsourcing. 	<ul style="list-style-type: none"> Volume/Staffing Scope Audience/Coverage Timing Duration Budget/Efficiency Content Origin Delivery Location Disruption Technology Outsourcing

Reaction Topics

- | | | | |
|---|--|--|---|
| <ul style="list-style-type: none"> • Ready • Useful • Necessary* • Appropriate • Motivational • Rewarding | <ul style="list-style-type: none"> • Leading edge • Important • Enjoyable • Timely • Easy/difficult • Engaging | <ul style="list-style-type: none"> • Intent to use* • Environment • Good use of funds • Information • Facilities • Facilitator | <ul style="list-style-type: none"> • Practical • Valuable • Relevant* • Important to success* • Recommend to others* • Overall evaluation |
|---|--|--|---|

*Usually correlates with application

Learning Topics

- | | | | |
|---|---|---|---|
| <ul style="list-style-type: none"> • Skills • Knowledge | <ul style="list-style-type: none"> • Competency • Readiness | <ul style="list-style-type: none"> • Confidence • Awareness | <ul style="list-style-type: none"> • Networking • Information |
|---|---|---|---|

Data Collection

Data are captured through a variety of measurement processes ranging from formal testing to informal self-assessments. Several methods are used, including:

- **Surveys and questionnaires**—determine the extent to which participants have acquired skills, knowledge, and information
- **Facilitation assessments**—ratings from facilitators or project leaders based on observations during the project
- **Written tests and exercises**—measure changes in knowledge and skills
- **Skill practices**—help assess the degree of applied learning and acquisition of problem-solving skills
- **Performance demonstrations**—provide direct evaluation of the ability to apply knowledge and skills
- **Simulations**—enable assessment of skills and knowledge acquisition
- **Team assessments**—assess the extent of skills and knowledge acquisition
- **Skill/confidence building exercises**—an interactive approach to capturing skill and knowledge levels

Step 5

Make it Stick: Design for Application and Impact

Make it stick focuses on two types of data that are collected after a program is implemented: (Level 3) Application and (Level 4) Impact.

Application and Impact Data

One of the most important challenges is to collect data after the program has been implemented using a variety of follow-up methods. The typical methods are:

	Level 3	Level 4
Surveys	✓	
Questionnaires	✓	✓
Observation	✓	
Interviews	✓	
Focus Groups	✓	
Action Planning	✓	✓
Performance Contracting	✓	✓
Performance Monitoring		✓

- **Surveys**—taken to determine how extensively the participants have used various aspects of the program
- **Questionnaires**—usually more detailed than surveys and can be used to uncover a wide variety of data in open-ended and forced-response options
- **Observation**—captures actual skill application and use. Observations are particularly useful in customer service programs and are effective when the observer is either invisible or transparent
- **Interviews**—conducted to determine how extensively the program is used
- **Focus groups**—conducted to determine the extent to which the program is used
- **Action plans**—developed by participants during the program and are implemented after the program is completed. Follow-up on action plans provides evidence of application and business impact success
- **Performance contracts**—developed by the participant, the participant’s manager, and the facilitator who all agree on performance outcomes
- **Performance monitoring**—useful where various performance records and operational data are monitored for changes

Increasing Response Rates

Improving response rates is a critical issue for post-program collection. When used consistently, the following techniques can achieve 70-80 percent response rate for questionnaires, surveys, or action plans:

- Provide advance communication about the follow-up data collection.
- Review the instrument at the end of the formal session.
- Clearly communicate the reason for the evaluation and how the data will be used.
- Indicate who will see the results.
- Keep the instrument simple and as brief as possible.
- Keep responses anonymous—or at least confidential.
- Provide options that make responding easy: paper (include a self-addressed, stamped envelope), email, or web based.
- Use local managers to distribute the instruments, show support, and encourage response.
- If appropriate, let the target audience know that they are part of a carefully selected sample.
- Use one or two follow-up reminders, using a different distribution channel.
- Have the introduction letter signed by a top executive.
- Enclose a giveaway item with the instrument (pen, money, etc.).
- Provide an incentive (or a chance of an incentive) for a quick response.
- Have a third party collect and analyze the data.
- Communicate the time limit for submitting responses.
- Send a summary of results to the target audience.
- Design the instrument with a professional format to attract attention.
- Let participants know what actions will be taken with the data.
- Add emotional appeal.
- Break the instrument into parts (Reaction, Learning, Application, Impact).

Questionnaire Topics for Application and Impact

- | | |
|--|---|
| <ul style="list-style-type: none"> • Use of materials, guides, and technology • Actions taken by participants • Procedures followed • Application of knowledge and skills • Frequency of use of knowledge and skills • Success with use of knowledge and skills • Change in behavior • Improvements and accomplishments • Monetary impact of improvements | <ul style="list-style-type: none"> • Improvements linked to the program • Confidence level of data supplied • Perceived value of the investment • Linkage with output measures • Barriers to implementation • Enablers to implementation • Support for implementation • Recommendations |
|--|---|

Action Plan Example

Safe Workplace Action Plan

Name: Ellie Hightower Facilitator Signature: _____ Follow-Up Date 2 June
 Objective: Improve workplace safety Evaluation Period: December to May
 Improvement Measure: Monthly slips and falls Current Performance 11/month Target Performance 2/month

Action Steps	Analysis
1. Meet with team to discuss reasons for slips and falls. <i>2 Dec</i>	A. What is the unit of measure? <u>1 slip and fall</u>
2. Review slip and fall records for each incident with safety – look for trends and patterns. <i>18 Dec</i>	B. What is the value (cost) of one unit? <u>\$1750</u>
3. Make adjustments based on reasons for slips and falls. <i>22 Dec</i>	C. How did you arrive at this value? <u>Safety and Health—Frank M.</u>
4. Counsel with housekeeping and explore opportunities for improvement. <i>5 Jan</i>	D. How much did the measure change during the evaluation period? (monthly value) <u>8</u>
5. Have safety conduct a brief meeting with team members. <i>11 Jan</i>	E. What other factors could have caused this improvement?
6. Provide recognition to team members who have made extra efforts for reducing slips and falls. <i>As needed</i>	<u>A new campaign from safety and health.</u>
7. Follow-up with each incident and discuss and plan other action. <i>As needed</i>	F. What percent of this change was actually caused by this program? <u>70%</u>
8. Monitor improvement and provide adjustment when appropriate. <i>As needed</i>	G. What level of confidence do you place on the above information? (100% = Certainty and 0% - No Confidence) <u>80%</u>
Intangible Benefits: <u>Image, risk reduction</u>	

Step 5
Make it Stick: Design for Application and Impact

Step 5

Make it Stick: Design for Application and Impact

Sequence of Activities for Action Planning

Before	<ul style="list-style-type: none"> • Communicate the action plan requirement early. • Require one or more impact measures to be identified by participants.
During	<ul style="list-style-type: none"> • Describe the action planning process. • Allow time to develop the plan. • Teach the action planning process. • Have the facilitator approve the action plan. • With some assistance, require participants to assign a monetary value for each proposed improvement. • If possible, require action plans to be presented to the group. • Explain the follow-up mechanism.
After	<ul style="list-style-type: none"> • Require participants to provide improvement data. • Ask participants to isolate the effects of the program. • Ask participants to provide a level of confidence for estimates. • Collect action plans at the pre-determined follow up time. • Summarize the data and calculate the ROI (optional). • Report results to sponsor and participants. • Use results to drive improvement.

Data Collection Issues

Sources of Information for Program Evaluation

- Participants
- Manager of participants
- Direct reports of participants
- Peer group
- Internal staff
- External group
- Organizational performance records

Factors to Consider when Determining Timing of Follow up

- Availability of data
- Ideal time for application (Level 3)
- Ideal time for business impact (Level 4)
- Convenience of collection
- Constraints on collection

Factors to Consider when Selecting Data Collection Methods

- | | |
|---|---|
| <ul style="list-style-type: none"> • Time required for participants • Time required for participant's manager • Costs of method • Amount of disruption of normal activities | <ul style="list-style-type: none"> • Accuracy • Utility • Culture/Philosophy |
|---|---|

Influencing Application and Impact

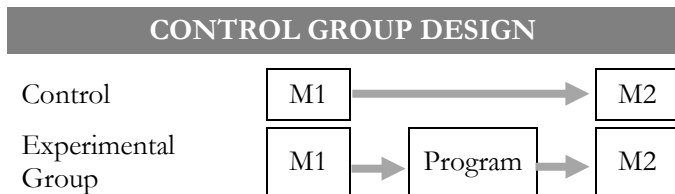
		Time frame		
		Before	During	After
Roles	Manager/ Significant Other	1	2	3
	Participant	4	5	6
	Facilitator/Organizer	7	8	9

Step 6

Make it Credible: Isolate the Effects of the Program

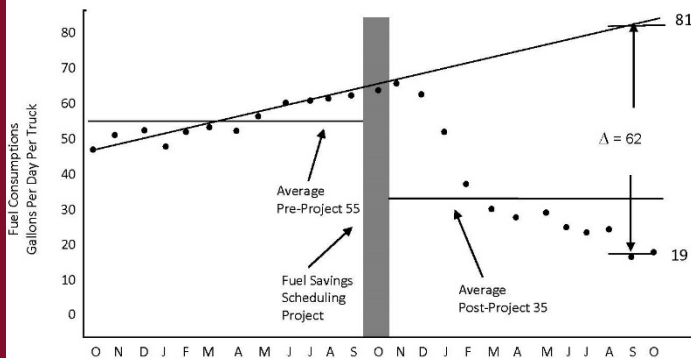
One of the most critical steps in the process is to isolate the effects of the program on impact data. This identifies the amount of impact directly connected to the program.

Control groups are used to isolate the program's impact. With this strategy, one group participates in a program, while another similar group (the control group) does not. Their performance is monitored in a parallel timeframe.



Trend lines are used to show the values of specific output variables as if the program had not been undertaken. The projected trend is compared to the actual data after the program is conducted, and the difference represents the impact of the program, if certain conditions are met.

Fuel Consumption Per Truck



The amount attributed to the program is 62 gallons, if the pre-program trend would have continued and no other new influences entered in the post period.

Mathematical modeling is used when mathematical relationships between other influences and output measures are known.

With this approach, the output measure is predicted using other known influences. After the program is conducted, the actual performance of the measure is compared with the forecasted value, which results in an amount of the impact of the program.

Other influencing factors are identified, when feasible, and the impact is estimated or calculated. The remaining, unexplained improvement is attributed to the program.

Participants estimate the amount of improvement related to the program. Because they are not always accurate, the estimates are adjusted for error, using a confidence percentage.

Fact: Recycling volume has increased by 50 pounds per household per month.

Factor That Influenced Improvement	Percentage of Improvement Caused by Program	Confidence Expressed as a % (error)	Adjusted % of Improvement Cause by Program
Green awareness	60%	80%	48%
Convenience for participation	15%	70%	10.5%
Discounts for participating	20%	80%	16%
Other	5%	60%	3%
Total	100%		

Supervisors or managers estimate the impact of the program on the output variables. Estimates are also adjusted for error.

Experts provide an estimate of the impact of the program on the performance variable, based on previous studies.

Customers estimate how the program has influenced their decisions to purchase or use a product or service.

The credibility of estimates is improved by following these specific steps:

1. Collect estimates from the most credible source.
2. Start with facts (actual improvement).
3. Provide helpful information to the estimators.
4. Collect the estimate in an unbiased and non-threatening way.
5. Remove extreme data items, if applicable.
6. Adjust for the error of the estimates.
7. Report the data with proper explanation.

While isolating the effects of the program with other influences is sometimes difficult, it is necessary for credibility of the study. Without this step, there is no proof that the program is connected to a business measure.

Step 7

Make it Credible: Convert Data to Monetary Value

To calculate the ROI, improvement in business measures must be converted to money.

This step develops a monetary benefit for one or more impact measures linked to the program. It usually follows the step to isolate the impact of the program.

To calculate the monetary value:

1. Identify the unit of improvement, e.g. one first aid treatment
2. Determine the value of each unit (V), e.g. \$300, a standard value
3. Determine the unit performance change (Δ), e.g. 6 incidents per month (experimental vs. control)
4. Determine the annual performance level change (ΔP), $6 \times 12 = 72$
5. Calculate the annual improvement value (V times ΔP), e.g. $\$300 \times 72 = \$21,600$

Several techniques are available to determine the value of a measure:

Standard values are available for most output and quality measures. Output data are converted to profit contribution or cost savings, based on their unit contribution to profit or the unit contribution to cost savings. Quality improvements are directly converted to cost savings. Standard values for these items are available in most organizations. Approximately 80 percent of measures that matter have been converted to monetary values by these functions:

- Finance and Accounting
- Production
- Operations
- Engineering
- IT
- Marketing and Customer Service
- Procurement
- Research and Development
- HR

Participants' wages plus employee benefits are used to develop the monetary value for time where employee time is saved. This is a standard formula in most organizations. The time saved must be legitimate, where the time savings is used on other productive work.

Historical costs, developed from cost statements and reports, are used to calculate the value for a specific measure. In this case, organizational cost data form the basis of monetary cost savings for a unit of measure. This approach often consumes more resources than can be allocated to the task.

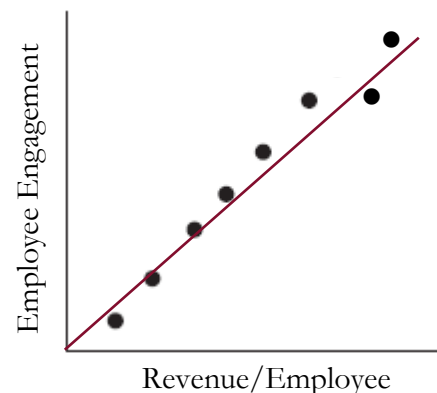
Internal or external experts are used to estimate a value for a unit of measure, based on their:

- Position
- Knowledge
- Experience
- Credentials
- Neutrality
- Publications

External databases provide the value or cost of data items. Research, government, and industry databases—usually available through the Internet—can provide important information for these values. For example, the cost of employee turnover is readily available in a variety of databases accessible through the Internet. The value is expressed in a percent of annual pay for a target job group, e.g. 1.2 times annual pay.

Soft measures are sometimes linked mathematically to hard measures that are easier to convert to money. This approach is used for measures that are very difficult to convert to monetary values but have links to other measures. For example, employee engagement (hard to value) is usually linked to revenue per employee (easy to value):

Positive Correlation



Participants estimate the value of the unit of data. For this approach to be effective, participants must be capable of providing a value for the improvement and adjustments must be made for the error of the estimate.

Supervisors and managers provide estimates when they are capable of assigning values to the data item.

Step 8

Make it Credible: Identify Intangible Measures

Intangible benefits are program benefits that you choose not to convert to money. They are measures that cannot be converted to money credibly with minimal resources.

Identifying Intangibles

1. During needs assessment, the intangibles are sometimes identified as directly connected to the program, and a decision is made not to convert them to monetary values. They are listed as intangibles, but only if they are connected to the program.
2. In the planning phase of the ROI study, intangible measures are often suggested as outcomes.
3. During data collection, participants and other stakeholders may offer additional intangibles, usually unintended, that are connected to the program.
4. Finally, during data analysis, when measures cannot be converted to monetary values credibly with minimum resources, they are listed as intangibles.

Typical Intangibles

- | | | | |
|--------------------|-----------------------------------|-----------------------------|------------------------|
| • Agility | • Complexity | • Grit | • Patient satisfaction |
| • Ambiguity | • Compliance | • Human life | • Poverty |
| • Alliances | • Conflict | • Image | • Reputation |
| • Awards | • Corporate social responsibility | • Intellectual capital | • Risk |
| • Brand | • Creativity | • Job satisfaction | • Social capital |
| • Burnout | • Culture | • Leadership effectiveness | • Stress |
| • Capability | • Customer service | • Loyalty | • Sustainability |
| • Capacity | • Decisiveness | • Mindfulness | • Team effectiveness |
| • Carbon emissions | • Emotional intelligence | • Mindset | • Timeliness |
| • Clarity | • Employee attitudes | • Net promoter score | • Trust |
| • Collaboration | • Engagement | • Networking | • Uncertainty |
| • Communication | • Food security | • Organizational commitment | • Volatility |
| • Compassion | | • Partnering | • Work/life balance |

Connecting the intangibles to the program

The most credible source (usually the participants) provides input about the influence of the program on the intangibles.

Please indicate the extent to which this program has influenced the following measures:

Intangible Measure	Not Applicable	No Influence	Some Influence	Moderate Influence	Significant Influence	Very Significant Influence
Image	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Teamwork	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sustainability	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Engagement	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Stress	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Risk	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Work/Life Balance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

When should data be converted to money?

To decide whether or not to convert a measure to monetary value, use this four-part test:

1. Does an acceptable, standard monetary value exist for the measure? If yes, use it in the ROI calculation; if not, go to question two.
2. Can a method be used to convert the measure to money? If not, list it as an intangible; if yes, go to question three.
3. Can the conversion be accomplished with minimal resources? If not, list it as an intangible; if yes, go to question four.
4. Can the conversion process be described to an executive audience and secure buy-in within two minutes? If yes, use it in the ROI calculation; if not, list it as an intangible.

Step 9

Make it Credible: Capture Costs of Program

When impact studies are conducted, the total costs of the program are needed for the ROI calculation. The costs must be fully loaded, i.e., must include all direct and indirect costs.

Typical Cost Categories

- **Initial needs assessment and analysis**—possibly prorated over the expected life of the program
- **Program design and development**—possibly prorated over the expected life of the program
- **Software or equipment**—purchase allocated in some convenient way
- **Project or program materials**—cost of all materials provided to each participant or consumed in the program
- **Facilities**—use of facilities to execute the program
- **Facilitator/coach/coordinator**—includes preparation time as well as delivery time
- **Salaries plus benefits**—of the participants for the time they are involved in the program
- **Administrative and overhead costs**—allocated in some convenient way
- **Evaluation**—the costs of the impact or ROI study

Proration Example

A leadership development program had an estimated \$50,000 development cost with an anticipated 5-year life cycle. About 400 leaders will participate each year. An ROI evaluation study is undertaken to evaluate 100 participants (4 groups of 25). How much development costs should be included in the ROI study?

-Development cost per participant
5 years x 400 = 2,000 participants

$$\text{Cost} = \frac{\$50,000}{2,000} = \$25 \text{ per participant}$$

-Development cost for ROI study
100 x \$25 = \$2,500

ROI Standards

Twelve Guiding Principles

1. When conducting a higher-level evaluation, collect data at lower levels.
2. When planning a higher-level evaluation, the previous level of evaluation is not required to be comprehensive.
3. When collecting and analyzing data, use only the most credible sources.
4. When analyzing data, select the most conservative alternative for calculations.
5. Use at least one method to isolate the effects of a program.
6. If no improvement data are available for a population or from a specific source, assume that little or no improvement has occurred.
7. Adjust estimates of improvement for potential errors of estimation.
8. Avoid use of extreme data items and unsupported claims when calculating ROI.
9. Use only the first year of annual benefits in ROI analysis of short-term solutions.
10. Fully load all costs of a solution, project, or program when analyzing ROI.
11. Intangible measures are defined as measures that are purposely not converted to monetary values.
12. Communicate the results of the ROI Methodology® to all key stakeholders.

Step 10

Make it Credible: Calculate Return on Investment

Return on Investment (ROI) is a financial metric, representing the ultimate measure of program success. Benefit-Cost Ratio (BCR) is the efficient use of funds. Both are calculated using the program benefits and costs.

Basic Formulas

The **benefit-cost ratio** is the program benefits divided by cost. In formula form, it is:

$$\text{BCR} = \frac{\text{Program Benefits}}{\text{Program Costs}}$$

Below is an example of an ROI calculation for a program designed to reduce turnover and absenteeism in a customer care center. Sixty (60) people were involved in the program.

The **return on investment** calculation considers the net benefits divided by program costs. The net benefits are the program benefits minus the costs. In formula form, the ROI becomes:

$$\text{ROI (\%)} = \frac{\text{Net Program Benefits}}{\text{Program Costs}} \times 100$$

This is the same basic formula used in evaluating capital investments where the ROI is traditionally reported as earnings divided by investment.

The **payback period** compares total investment (cost) to monetary benefits to calculate the number of years (or percent of a year) needed to pay back the investment. The calculation is:

$$\text{PP} = \frac{\text{Program Costs}}{\text{Program Benefits}}$$

Benefits	
Specific Pay Off Measure	First Year Value
Employee turnover reduction	\$ 325,500
Absenteeism reduction	<u>110,800</u>
Total:	\$436,300

Costs	
Initial Analysis (prorated)	\$ 4,500
Development Costs (prorated)	10,500
Materials	18,850
Coordination	6,000
Facilitation (including expenses)	7,200
Facilities/Food/Refreshments	
60 participants @ \$358	21,480
Travel	55,320
Participants Time (lost salaries plus benefits)	
60 participants @ \$1,385	83,100
Evaluation	<u>15,600</u>
Total:	\$222,550

Example Calculation

The **BCR** is calculated as:

$$\text{BCR} = \frac{\$436,300}{\$222,550} = 1.96:1 \text{ } 100$$

Interpretation: For every dollar invested, there is \$1.96 in benefits.

The **ROI** is calculated as:

$$\text{ROI (\%)} = \frac{\$436,300 - \$222,550}{\$222,550} \times 100 = 96\%$$

Interpretation: For every dollar invested, 96¢ is returned after the investment is recovered.

The **Payback Period** is calculated as:

$$\text{PP} = \frac{\$222,550}{\$436,300} = 0.51 \times 12 = 6.12 \text{ Months}$$

Interpretation: The investment will be paid back in 51% of one year, or just more than 6 months.

Step 11

Tell the Story: Communicate Results to Key Stakeholders

Reporting the results of the study is an important step in the ROI Methodology. Properly identifying the audience and providing appropriate information is essential.

Four Audiences Are Essential

1. The participants directly involved in the program who provide data to the evaluators.
2. The immediate managers of the participants who need evidence of the success of the program.
3. The sponsors of the program who need to understand the program's value to the organization.
4. The staff/team members who need to know how the ROI evaluation was developed.

A variety of media can be used to communicate the program success:

Impact Study (50-100 pages)

- Detailed analysis
- Historical document
- Learning tool

Executive Summary (4-8 pages)

- Summarizes impact
- Follows the ROI Methodology

Face-to-Face Meeting (1/2 – 2 hours)

- Usually the first opportunity to see ROI data
- Builds support for the ROI Methodology
- Presents results and improvements

Brochure

- Program description
- Emphasis on results

One Page Summary

- Charts, Tables
- Follows ROI data categories

Newsletter Article

- General interest
- Brief story

Web Site (Social Media)

- Charts, tables
- Blogs
- Videos

Case Study (8-20 pages)

- Published internally or externally
- Tells a story

Impact Study Outline

(Complete Report, usually 50-100 pages)

- General Information
 - Objectives of Study
 - Background
 - Project Description

Explaining the program/evaluation
- Methodology for Impact Study
 - Levels of Evaluation
 - ROI Process
 - Collecting Data
 - Isolating the Effects of the Program
 - Converting Data to Monetary Values
 - Assumptions (Guiding Principles)

Builds credibility for the process
- Results
 - General Information
 - Response Profile
 - Reaction
 - Learning
 - Application of Skills/Knowledge
 - Barriers
 - Enablers
 - Impact
 - Isolation Method
 - Data Conversion
 - Costs
 - ROI Calculation
 - Intangible Benefits

The results with six measures: Levels 1, 2, 3, 4, 5 and Intangibles
- Summary of Findings
- Conclusions and Recommendations
 - Conclusions
 - Recommendations
- Exhibits

Step 11

Tell the Story: Communicate Results to Key Stakeholders

Example of a One-Page Summary

Leadership Development: Precision Manufacturing

The Leadership Challenge

- Four-day workshop with actions plans and support tools
- Each participant selects 2 KPIs to improve using the competencies with his or her team.

Target:
First Level Managers 970
Sample 72
(18 managers, 4 groups)

Reaction – Objectives Met

Relevance	✓
Important	✓
Intent to use	✓

Application Objectives on a 5-point scale

Extent of use	4.3
Frequency of use	4.5
Success with use	3.9

Barriers

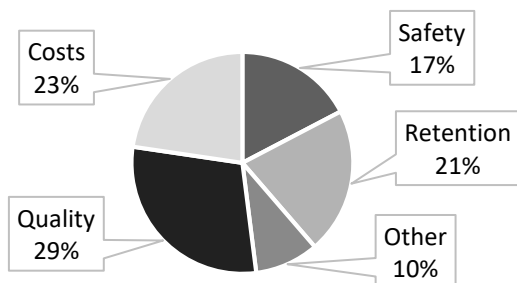
Not enough time	23%
Lack of support	18%
Doesn't fit	14%
Other	10%

Learning Objectives Met Pre- Post-Improvements

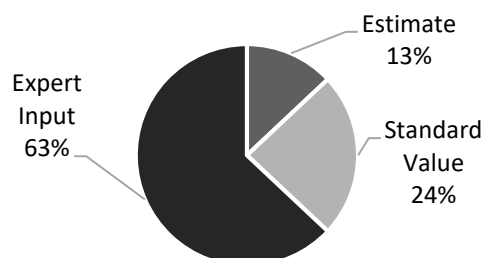
1. Communicate values and beliefs	48%
2. Focus on key values through actions	57%
3. Build collaboration teamwork and trust	42%
4. Strengthen others' abilities to excel	69%
5. Inspire others to share a common vision	53%
6. Recognize the accomplishments of others	67%

Methods of Isolation: Participant Allocation, Adjusted for Error

Impact Objectives Two Objectives Each Participant



Method of Converting Data to Money



Costs – Direct \$355,370
Indirect – Prorated \$9,890
Total \$365,260

Total Monetary Benefits = \$538,640

Intangibles

Engagement

Satisfaction

Stress

BCR = 1.47

ROI = 47%

Step 12

Optimize Results: Use Black Box Thinking to Increase Funding

This is the final step in the ROI Methodology and is designed to sustain or increase funding.

Use of Data

A challenge with evaluation is using the data appropriately. The uses of evaluation data include improving design and delivery processes, enhancing budgets, and building support and commitment from a variety of groups. The following table shows the rationale for using the appropriate level of data:

Use of Evaluation Data	Appropriate Level of Data				
	1	2	3	4	5
Adjust Program Design	✓	✓	✓		
Improve Program Delivery/Implementation	✓	✓	✓		
Influence Program Future			✓	✓	
Enhance Reinforcement for Application			✓		
Improve Management Support for Programs			✓	✓	✓
Improve Stakeholder Satisfaction			✓	✓	✓
Recognize and Reward Participants		✓	✓	✓	
Justify or Enhance Budget				✓	✓
Develop Norms and Standards	✓	✓	✓		
Reduce Costs		✓	✓	✓	✓
Market Programs	✓	✓	✓	✓	✓
Expand Implementation to Other Areas			✓	✓	✓

Optimize Results

With the intense competition for resources, it is important to show key funders and supporters the value of programs. Very credible and unmistakable results make a great case for maintaining or increasing funding. However, it starts with the issue of process improvement, as data are collected and used to make changes to improve the program. Whether the program is delivering the desired results or not, the challenge is to make it even better and increase the ROI. Even in competitive funding situations, you can keep or improve your budget.



Making Adjustments in Programs

The good news is that the causes of failure (or disappointing results) can be identified, and adjustments can be made at different points in the cycle. These adjustments are all aimed at making the program or project more successful and essentially moving it from mediocre or negative results to delivering very positive results. Even if the results are positive, adjustments can still make improvements. This helps to improve funding, but it will also address other important issues, such as increased support, commitment, respect, and involvement.

Step 12

Optimize Results: Use Black Box Thinking to Increase Funding

Adjustment Possibilities

<u>Issue</u>	<u>Level</u>	<u>Opportunity</u>
Audience	0	Moderate
Timing	0	Low
Importance	1	High
Motivation	1	High
Relevance	1, 2	High
Appropriateness	1, 2	Low
Usability	1, 2, 3	High
Design	2, 3, 4	High
Process	3	Moderate
Support	3	High
Transfer Barriers	3	High
Alignment	4	High
Focus	1, 2, 3, 4	High

Influencing Allocation

Fundamentally, ROI is increased by either increasing the monetary benefits of the program (the numerator of the equation) or by decreasing the cost of the program (the denominator). Sometimes, both are necessary.

Addressing Costs

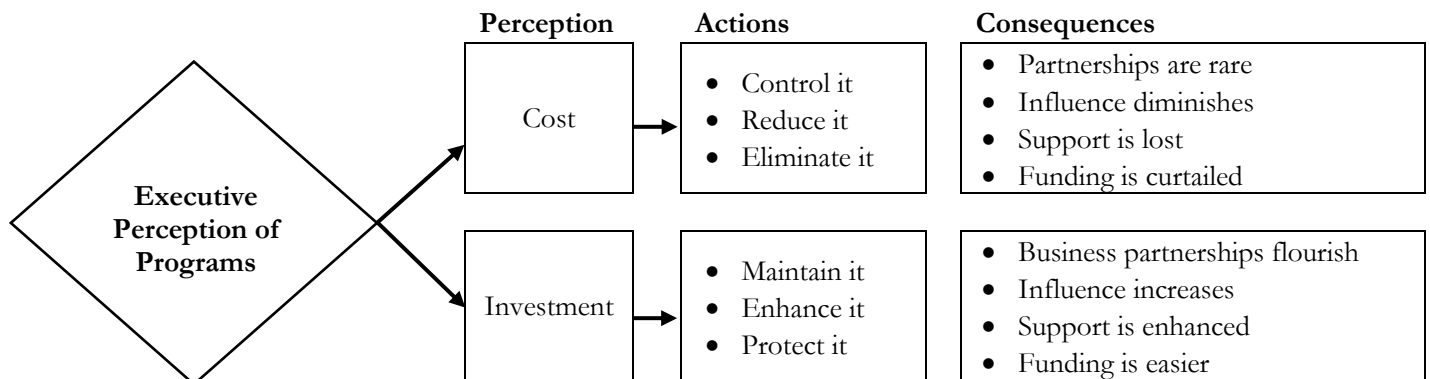
The cost seems a logical place for action, as costs are easily understood. Is there a way to reduce the cost of the program? Some cost reductions are easier to spot than others.

Addressing the Monetary Benefits

When the monetary value isn't what you thought it would be, it could be that the measures that are being influenced are not at the level that was expected. This may require a review of the data conversion process to make sure it is accurate. Also, it could be that there are other measures influenced, or the intangibles that were not converted to money may need to be converted in the future. The challenge is to increase the monetary value, credibly.

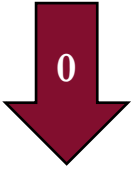

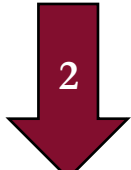
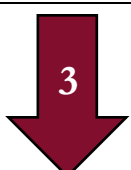


Cost Versus Investment

An organization has many activities that represent costs, and the perception of executives and administrators about these costs becomes critical. If executives see the activity as an investment with a positive ROI, then there is a reluctance to minimize or reduce it. When the activity has no apparent impact, or there are no credible data to show its effects, then there is often a desire to reduce, minimize, control, or even eliminate it.



Status of Measurement and Evaluation

All programs are not evaluated to every level. How does your use of the levels compare to the recommended use?

Level	Measurement Category	Current Status*	Recommended (Percent of programs evaluated at this level)	Your Goal*	Comments About Status
 0	Inputs Measures inputs into programs including number of programs, participants, audience, costs, and efficiencies		100%		This is being accomplished now
 1	Reaction Measure reaction to, and satisfaction with, the experience, ambiance, content, and value of the program		90-100%		Need more focus on content and perceived value
 2	Learning Measures what participants learned in the program — information, knowledge, skills, and contacts (takeaways from the program)		60-90%		Must use simple learning measures
 3	Application and Implementation Measure progress after the program — the use of information, knowledge, skills, and contacts		30-40%		Need more follow-up
 4	Impact Measures changes in business impact variables such as output, quality, time, and cost linked to the program		10-20%		This is the connection to business impact
 5	ROI Compares the monetary benefits of the business impact measures to the costs of the program		5-10%		The ultimate evaluation
*Add your numbers in each box					

Specific Actions

The ROI Methodology® Process Checklist

STEP 1 START WITH WHY: ALIGN PROGRAMS TO THE BUSINESS

The *why* of programs is the business need, expressed as a clear business measure. Pinpoint one or more business measures already in the system that should improve as a result of the program.

STEP 2 MAKE IT FEASIBLE: SELECT THE RIGHT SOLUTION

Determine how to improve the business measure by identifying the cause of the problem or explore various approaches to address an opportunity. The best solution is identified and implemented to address the business need.

STEP 3 EXPECT SUCCESS: PLAN FOR RESULTS

Define success for the program by setting objectives at multiple levels (Reaction, Learning, Application, Impact, and maybe ROI), defining responsibilities of all stakeholders, and completing data collection plan, ROI analysis plan, and evaluation project plan.

<p>Data collection plan answers fundamental questions about data collection What, How, Who, When, Where, and How Much?</p>	<p>The ROI analysis plan details how improvement in business measures will be isolated to the project and converted to monetary value. It also identifies cost categories, intangible benefits, and target audiences for communications.</p>	<p>The evaluation project plan details each step of the evaluation.</p>
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STEP 4 MAKE IT MATTER: DESIGN FOR INPUT, REACTION, AND LEARNING

Develop programs with content that is relevant, meaningful, important to the individuals and the organization, and something they will use. Provide participants with examples, activities, and exercises that reflect what the participants are learning and what they will do with what they've learned and the impact it will have. Two types of outcome data are collected at this step: (1) Reaction and (2) Learning.

STEP 5 MAKE IT STICK: DESIGN FOR APPLICATION AND IMPACT

Collect data to identify and enhance the enablers to the program's success and identify and eliminate the barriers to the program's success. Two types of data are collected at this step: (3) Application and (4) Impact.

STEP 6 MAKE IT CREDIBLE: ISOLATE THE EFFECTS OF THE PROGRAM

One of the most critical steps in the process is to isolate the effects of the program on impact data and identify the amount of impact directly connected to the program.

STEP 7 MAKE IT CREDIBLE: CONVERT DATA TO MONETARY VALUE

Convert the improvement in business measures to monetary value using techniques such as standard values, historical costs, external databases, or expert estimation.

STEP 8 MAKE IT CREDIBLE: IDENTIFY INTANGIBLE MEASURES

Intangible benefits are program benefits that cannot be converted to money credibly with minimal resources, such as image, teamwork, and happiness.

STEP 9 MAKE IT CREDIBLE: CAPTURE COSTS OF PROGRAM

Tabulate the fully loaded costs, including all the direct and indirect costs.

STEP 10 MAKE IT CREDIBLE: CALCULATE RETURN ON INVESTMENT

Calculate the ROI by dividing the net program benefits by program costs. Return on Investment (ROI) is a financial metric, representing the ultimate measure of program success.

STEP 11 TELL THE STORY: COMMUNICATE RESULTS TO KEY STAKEHOLDERS

Properly identify the audiences and provide appropriate information. Report the results using the five levels of outcome data to tell the story.

STEP 12 OPTIMIZE RESULTS: USE BLACK BOX THINKING TO INCREASE FUNDING

Analyze the data with the goal to identify factors that will enhance future program results and use those results to increase funding.

Notes

ROI Implementation and Sustainability

Implementing a comprehensive measurement and evaluation process requires several actions:

- Set specific goals and targets for implementation.
- Determine specific roles and responsibilities for measurement and evaluation.
- Revise procedures and guidelines for different parts of the evaluation process.
- Conduct meetings and formal sessions to develop awareness and capability.
- Establish an internal ROI network for sharing information (if feasible).
- Conduct ROI studies routinely.
- Provide technical support for instrument design, data analysis, and evaluation strategy.
- Establish specific techniques to place more attention on results.
- Use existing tools and templates to make the process easier and more efficient.
- Use technology to reduce costs of data collection and analysis.
- Assess the status of the results-based approach.
- Report progress and adjust tactics.
- Improve management commitment and support for the ROI Methodology.
- Consider measuring the ROI on the ROI implementation.

ROI Origin/Development/Progress

- The ROI Methodology® was developed by Dr. Jack J. Phillips in the 1970s, refined through application and use in the 1980s, and implemented globally during the 1990s and beyond
- First impact study – 1973, Measuring the ROI in a Cooperative Education Program, for Lockheed-Martin
- First conference presentation on the methodology – 1978, ASTD Annual Conference-Chicago
- First book published to include methodology – 1983, *Handbook of Training Evaluation and Measurement Methods*, Gulf Publishing (this was the first book on training evaluation)
- First one-day public workshop – 1991, Birmingham, Alabama
- First two-day public workshop – 1992, Johannesburg, South Africa
- First case study book published – 1994, Measuring Return on Investment, Volume I, ASTD
- First international partnership established – 1994, Indonesia
- First public ROI Certification workshop – 1995, Nashville, Tennessee
- ROI Network organized – 1996
- First ROI Network Conference – 1997, New Orleans, Louisiana
- First international ROI Network Conference – 2002, Toronto, Canada
- First ROI book to win an award – 2002, *Bottomline on ROI: Basics, Benefits & Barriers to Measuring Training & Performance Improvement* by Patricia Pulliam Phillips (CEP Press, 2002) – ISPI Best Book Award
- First ROI in Government Conference – 2003, Gulfport, Mississippi, co-sponsored by The University of Southern Mississippi
- Distinguished Contribution to Workplace Learning and Performance awarded by ASTD to Jack Phillips for his work on ROI – 2005
- Online ROI Certification launched – 2006, University Alliance-Villanova University
- ROI Certification offered as part of masters and Ph.D. degree – Capella University, 2006
- ROI Methodology adopted by the United Nations for system implementation – 2008
- One hundred books published with ROI Institute founders as authors or editors – 2010
- ASTD celebrates 40th book written or edited by Jack and Patti Phillips and published by ASTD – 2012
- *Handbook of Training Evaluation and Measurement Methods*, 4th edition, published by Routledge – 2016
- The International Society for Performance Improvement presents Jack Phillips with its highest award, the Thomas F. Gilbert Award for his contribution to human performance technology – 2018
- Patti Phillips is appointed to the United Nation's Institute for Training and Research (UNITAR) Board of Trustees – 2018
- ROI Institute celebrates 25th anniversary – 2018
- More than 14,000 professionals involved in ROI Certification in more than 70 countries – 2019

ROI Methodology®

- More than 6,000 organizations have implemented the ROI Methodology
- More than 14,000 professionals have attended ROI Certification Workshops
- More than 30,000 professionals have participated in two-day ROI workshops
- International and Local ROI Networks
- More than 75 books translated into 38 languages

Patti P. Phillips, Ph.D.

President and CEO – leads the application and implementation of the ROI Methodology worldwide.

Jack J. Phillips, Ph.D.

Chairman – developed the ROI Methodology in the 1970s and instills it in latest applications for the 21st century.

Plus ...

More than 100 ROI certified consultants provide coaching, consulting, and workshops in more than 70 countries around the world.

Realize the value of programs, projects, and solutions by capturing and measuring data for Reaction, Learning, Application, Impact, ROI, and Intangible Benefits.

Workshops—Learning experiences to meet your needs:

- Five-day certification workshops (Public and Internal)
- One, two, or three-day workshops (Public and Internal)
- Online and self-study options available

Consulting—Working with private businesses and public sector organizations, offering a range of services from developing complete impact studies to coaching organizations through all levels of measurement and evaluation, including ROI.

Publishing—Books and articles are available to practitioners, consultants, academics, and students. We often request contributions of case studies, tools, templates and success stories for inclusion in our books.

Partners—Our strategic partnerships yield mutual and collaborative delivery of services. Our international partnerships foster the implementation of the ROI Methodology around the world.

Website and Internet Activities—www.roiinstitute.net provides information about ROI Institute, the ROI Methodology, ROI Certification workshops, and so much more, including a wealth of resources on accountability, measurement, and evaluation. ROI Institute members, who have completed the ROI Certification workshop, gain access to our members only website with even more information and resources supporting ROI implementation. The ROI Institute website offers books and case studies.

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For additional copies of this document or additional information about the ROI Methodology, please contact ROI Institute. • +1.205.678.8101 • info@roiinstitute.net • www.roiinstitute.net

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