PROVING THE VALUE OF SOFT SKILLS
measuring impact and calculating roi
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Preface

THE DILEMMA
When we speak at conferences or conduct workshops, we ask the audience whether the statement, “Top executives view hard skills as more important than soft skills,” is true or false. Although it varies, the average response is around 80 percent true.

If executives perceive an activity as a cost, then they will want to control it, eliminate it, pause it, or reduce it. However, if executives perceive the activity as an investment, they are more willing to protect it, enhance it, or increase it, which allows you to have more influence, enjoy better support, build better business partnerships, and, yes, protect the budget.

Ironically, most executives will admit that soft skills programs create the most admired, sustainable, and innovative organizations—the great places to work. Soft skills are critical and often an executive’s top concern regarding the capability of their employees. But, as we write this book, we see soft skills programs facing many challenges. The problem is that most executives aren’t shown the value of the soft skills programs in the terms they appreciate and understand.

The challenge is to evaluate key soft skills programs at the impact and maybe even the ROI levels. Major programs in leadership development, communications, engagement, team building, empowerment, culture, and change management need this accountability. Some learning professionals are reluctant to go down this path because they are concerned that soft skills programs do not deliver a positive ROI. This misconception plays right into the hands of the executives who must control costs and are not sure of the value. However, you can show the ROI of these programs, and the odds are high that the value is greater for soft skills programs than for hard skills programs. We have seen this to be true in hundreds of studies in both areas in our database.

THE APPROACH
With resources being scarce, every expenditure needs to be evaluated to determine its value. Soft skills programs have grown more expensive, and the cost of travel and taking employees away from their jobs only adds to the total cost of the process. Consequently, program value should be clearly understood.

Concerning investment in soft skills programs, we’ve explored three basic bodies of work, as depicted in Figure P-1. At the base of the pyramid are logic and intuition. These are often referred to as the intangibles—necessary soft skills that can be developed and even changed radically within organizations. Logically and intuitively, soft
Skills programs are an essential investment an organization to be successful. For example, executives at a large technology company invest in teambuilding because they want the work to be performed by teams.

Some executives want to see more, which leads to macro studies. These studies examine the relationship between variables; for example, the correlation between investing in people and subsequent outcomes in terms of profitability and productivity, customer satisfaction, and employee turnover. Studies involving soft skills programs typically show that investment in this area will probably reap benefits across the organization. For example, a home furnishing company invests in employee engagement because it correlates with sales growth, customer satisfaction, and retention.

**FIGURE P-1. ANALYSIS OF SOFT SKILLS PROGRAM INVESTMENTS**

Still, many executives want to know about the payoff of a specific internal program, even those initiated by them. They also want to know which methods are most effective and which model or theory works best, which means they need to conduct an evaluation on a program-by-program basis. This leads us to the third level—the ROI analysis, which is a micro-level assessment. For example, a large banking organization is interested in the ROI of an enterprise manager program involving 20,000 participants.

This book does not focus on logic and intuition or macro analysis; other books do that quite well. What makes this book unique is that it details how to show the value of a soft skills program using a microanalysis approach. When every program is evaluated at some level, organizations can see a snapshot of the entire learning and talent development function’s performance.
WHAT THIS BOOK PROVIDES

This book presents the ROI Methodology, which is the most-used evaluation system in the world. It is ideally suited for evaluating soft skills programs because it collects up to six types of data, representing five levels of outcomes, to show program success:

- **Level 1.** Reaction to the soft skills program.
- **Level 2.** Learning the skills and behaviors needed for success.
- **Level 3.** Application of skills and competencies.
- **Level 4.** Impact related to the application of soft skills competencies.
- **Level 5.** Financial return on investment, showing cost versus benefits.
- **Intangible benefits** connected to the program.

Intangibles are the impact measures not converted to money. In today’s climate, the funders, supporters, and sponsors of major soft skills programs need business impact and ROI data, but they may also be interested in the intangibles.

*Proving the Value of Soft Skills* offers a results-based approach. It uses design thinking to advocate processes and steps to design for, deliver, measure, and show the results of soft skills programs. The focus on designing for business results almost guarantees a positive ROI. This book also provides practical tools talent development managers and specialists can use to show the value of soft skills programs. The process moves from evaluation planning to data collection, where data is collected at four levels (reaction, learning, application, and impact). The analysis is next. In this step, the effects of the soft skills program must be sorted out from other influences and the impact data is converted to monetary value. The total costs of the soft skills program are tabulated, and these costs are compared with the monetary benefits to calculate the ROI. Along the way, the process incorporates conservative standards. Following this prescribed methodology ensures that soft skills programs deliver the desired business value.

The first part of the book offers a how-to reference for the ROI Methodology. Part II presents seven detailed case studies that show how to measure and evaluate soft skill programs and initiatives. The real-life case studies in this book show what is being measured, how it is being measured, how the data is used to improve soft skills programs, and how funding is being secured for future programs.

UNIQUE VANTAGE POINT

All three of the authors tackle this subject from a unique vantage point. At ROI Institute, Patti and Jack have taught more than 40,000 professionals and managers how to measure the ROI for their programs, many of which focused on soft skills. More than 15,000 people have participated in ROI Certification and at least 6,000 have completed an ROI study, which gets reviewed and approved by ROI Institute as part of the Certified ROI Professional (CRP) designation. Additionally, through their consulting work, Patti and Jack have independently conducted hundreds of ROI studies; about a third of these studies involved soft skills programs. Through these efforts, they have
seen what makes soft skills programs successful and what causes them to fail to deliver the desired business success.

Rebecca Ray, on the other hand, has put soft skills programs into practice and made them work in well-known organizations. Although she has taught programs at Oxford and New York University and provided consulting for major firms, she has spent most of her time as the senior executive responsible for talent management in organizations. In this role, she has successfully implemented hundreds of soft skills programs, making improvements along the way. Rebecca has also made extraordinary efforts to ensure those programs delivered the success the executives needed to see.

Together, we bring you a wealth of insight into how to show the value of soft skills. We also tapped other experts to share their input through the case studies.

ACKNOWLEDGMENTS
We wish to acknowledge all the great clients we’ve worked with over the years who have helped revise, refine, and implement the ROI Methodology. In our ROI Certification, we’ve been fortunate to see the evaluation of many soft skills programs, taken to the impact and ROI levels. Our success has been built on the work of many others who use the methodology and collaborate with us to make our standards acceptable, realistic, and usable. To name these pioneers would not be practical; some of the best organizations in the world have used the ROI Methodology. More than two-thirds of the Fortune 500 companies, more than 25 central governments around the world, and many nonprofit organizations use this process to show the value of their programs. We owe a huge debt of gratitude to these clients for endorsing this methodology and making it much better.

From Patti and Jack
We are pleased to partner with one of the best talent development executives in the world to produce this book. Rebecca Ray has implemented hundreds of soft skills programs during her career. She understands the value of soft skills programs and the success they bring. We are grateful for her input and willingness to join us for this important contribution.

We also want to thank our entire staff at ROI Institute for enduring the challenges, stresses, and strains of a flourishing global business. We greatly appreciate the efforts of Hope Nicholas, director of publications at ROI Institute, who became the driving force behind this book. Hope has been part of our institute for many years, and we value her continuing contributions.

From Patti
Jack’s constant effort to drive ROI is why the concept has reached ubiquity in disciplines that disregarded it in the past. He is the reason that marketing pieces allude to ROI; why practitioners and their functions are lauded for their efforts to demonstrate ROI; and
why measurement, evaluation, ROI, and accountability are the norms, not novelties. Jack is my inspiration, my husband, and above all else, my friend. Because he laid the groundwork, I, along with many others, have a platform on which to stand and be heard. All I can say is, thank you, Jack, for all you have done and all that you do.

From Jack
Thanks to Patti for being the driving force for ROI Institute. She is a tenacious consultant and outstanding researcher, a keynote presenter with a strong message, and one of the best writers I know. Her facilitation sets the example for all our global facilitators. Above all, she’s my best friend, a lovely spouse, and curious explorer. Thanks for all you do for everyone—family, friends, and professional colleagues.

From Rebecca
I remain deeply appreciative of the opportunity to continue the important discussion about the role of analytics in any conversation, this time about the value of soft skills. Few succeed without mastery of the skills that make us decent human beings and leaders; my hope is that this book helps others articulate the impact of investment in this area to their stakeholders. One of my greatest professional pleasures is to partner with Jack and Patti—their insights make me smarter, their ability to inspire thousands to tackle and master a sometimes daunting challenge is humbling, and their generosity of spirit is boundless. I am very fortunate. How often does one get an opportunity to learn from legends? And, finally, I wish to thank my muse.
PART I

The ROI Methodology: A Credible Approach to Evaluating Soft Skills Programs
The Soft Skills Challenge

SEVEN HABITS IN THE SCHOOL SYSTEM

Stephen R. Covey’s book *The 7 Habits of Highly Effective People* became one of the most important, influential, and bestselling books in history with more than 20 million copies sold (Covey 1989). This book is based on research that defines the journey to effectiveness in seven easy-to-understand habits:

1. Be proactive.
2. Begin with the end in mind.
3. Put first things first.
4. Think win-win.
5. Seek first to understand, then to be understood.
7. Sharpen the saw.

Covey built a business around the book to support the implementation of the seven habits, and, eventually, the company evolved into the FranklinCovey Company. Although Covey expected widespread adoption of the seven habits, he was surprised by how many school systems began adopting them and teaching them to schoolchildren. The process had been adapted for schools as illustrated by Muriel Summers, principal at A.B. Combs Elementary School, the first school to use the seven habits (Covey et al. 2019). As Summers sat among business leaders, she could not help but think, “If children learned the seven habits at an early age, how different their lives might be and how different our world might be.”

The following is a synopsis of the seven habits in kids’ language. See if you come to the same conclusion:

- Habit 1: Be proactive. I am a responsible person. I take initiative. I choose my actions, attitudes, and moods. I do not blame others for my mistakes. I can only be offended if I choose to be.
- Habit 2: Begin with the end in mind. I plan ahead and set goals. I do things that have meaning and make a difference. I am an important part of my classroom and contribute to my school’s mission and vision and look for ways to be a good citizen.
• Habit 3: Put first things first. I spend my time on things that are most important. This means I say no to things I know I should not do. I set priorities, make a schedule, and follow my plan. I am disciplined and organized.

• Habit 4: Think win-win. I balance courage for getting what I want with consideration for what others want. I make deposits in others’ emotional bank accounts. When conflicts arise, I look for options that work for both sides.

• Habit 5: Seek first to understand, then to be understood. I listen to other people’s ideas and feelings. I try to see things from their viewpoints. I listen to others without interrupting. I am confident in voicing my ideas. I look people in the eyes when talking.

• Habit 6: Synergize. I value other people’s strengths and learn from them. I get along well with others, even people who are different than me. I work well in groups. I seek out other people’s ideas to solve problems because I know that by teaming with others we can create better solutions than any one of us alone. I am humble.

• Habit 7: Sharpen the saw. I take care of my body by eating right, exercising, and getting sleep. I spend time with family and friends. I learn in lots of ways and lots of places, not just school. I take time to find meaningful ways to help others.

By 2008, about half a million schoolchildren were using the seven habits and school administrators were experiencing some important outcomes with student grades, behavior, and performance. These amazing results led to more adoptions.

At the same time, school systems faced tremendous budget strains and did not necessarily have extra money to spend on this program. Consequently, FranklinCovey decided to show them the value the program held for the school system. Ideally, the value would be translated into monetary benefits and compared to the cost of the program. In essence, they needed to show the ROI.

Several studies were conducted using the assistance of a major university. School systems that had implemented the program were compared with school systems that had not used the program. The systems were matched by type of school system, population demographics, number of students served, and other factors. The results were quite dramatic, revealing improvements in outcomes such as attendance, grades, test scores, reading levels, promotions to the next grade, student retention, incidents, counseling, and tardiness. Some of these were then converted to monetary values. Intangibles that could not credibly be converted to money were identified and reported.

The study results made the school superintendents’ decision much easier. If they invested in the program, they would be getting the money back and then some. The FranklinCovey team made the business case for using the seven habits in schools by building in all the stakeholders, as shown in Figure 1-1.
An evaluation using the ROI Methodology is a great way to see value and improve support for programs that, on the surface, appear to be important but don’t have the monetary connections required to make the fiscal decision in today’s economic climate.

As this situation underscores, there is a need to have an evaluation system that will serve the needs of all stakeholders, including users and professional evaluators. At the same time, it must have the ability to show the value of a particular program in ways that top executives and funders can understand and assist them in making the decision to continue to invest in the future. Most evaluation models don’t seem to have the capacity to do this. The model presented in the book does.

THE IMPORTANCE OF SOFT SKILLS
Few executives question the importance of effective leaders, collaborative teams, or collegial, supportive, and focused employees. Most would argue that the success of the organization is heavily dependent upon ensuring a strong organization of just such leaders, teams, and employees. However, few executives will champion the expenditure of resources to develop these critical yet often derisively labeled “soft skills.” They are much more likely to champion efforts to develop financial acumen, coding, analytics, or technical skills. There is a pervasive view that hard skills (such as accounting, welding, statistical analysis, or other technical skills) are more valuable than soft skills (such as teamwork, collaboration, or empathy), and that soft skills are either inherent in one’s basic nature or will naturally develop without training, support, or focused action. Some would even argue that as important as soft skills are, they are built over a lifetime and organizations cannot hope to have an impact in the short-term no matter how well designed the learning or talent development program may be. And there
are those who would argue that it is as difficult to articulate success in developing soft skills as it isn’t easy to isolate the impact these efforts make.

As organizations rise to meet the challenges of digital disruption, globalization, changing customer needs and perspectives, technological innovation, demographic shifts, and shifting work arrangements, an organization’s mastery of soft skills will often be the defining difference between thriving and merely surviving. As AI and automation continue to radically shift what work is done, it’s the soft skills that will be in greater demand due to the need for empathy, collaboration, creativity, and a host of critical leadership and communication skills.

A variety of sources suggest the need for an increasing reliance on mastery of soft skills, even in this era of technological advancements and rapid, disruptive change (and perhaps because of those very factors).

In a recent LinkedIn report, 2019 Global Talent Trends: The 4 Trends Transforming Your Workplace, 91 percent of the 5,000 talent professionals in 35 countries who were surveyed believed that the lack of soft skills (in descending order of ranked importance: creativity, persuasion, collaboration, adaptability, and time management) was a key trend influencing the workplace and these skills were especially important to recruiting and HR; the remaining three trends were work-flexibility (72 percent), anti-harassment (71 percent), and pay transparency (53 percent). In that same study, 92 percent said that soft skills were as, or more, important than hard skills. And 80 percent of those surveyed said that soft skills were increasingly important to the success of the organization, with 89 percent citing a lack of soft skills prevalent among bad hires at their organization (Fleming 2019).

McKinsey’s research predicts that as automation transforms the skills companies need, demand for creativity will rise sharply by 2030. Demand for social and emotional skills such as leadership and managing others will rise by 24 percent to 22 percent. Demand for higher cognitive skills will grow moderately overall, but will rise sharply for some of these skills, especially creativity (Bughin et al. 2018).

The World Economic Forum’s The Future of Jobs Report 2018 argues not only for significant reskilling and upskilling of employees but also a growing need for soft skills. By 2022, no less than 54 percent of all employees will require significant re- and upskilling. Soft skills such as creativity, originality, initiative, critical thinking, persuasion, and negotiation will likewise retain or increase their value, as will attention to detail, resilience, flexibility, and complex problem-solving. Emotional intelligence, leadership, social influence, and service orientation will likely also see an outsized increase in demand relative to their current prominence.

In Job Outlook 2018, a report from the National Association of Colleges and Employers (2017), the “ability to work in a team” was the top skill employers wanted from new college graduates. Other soft skills that were highly desired included written and verbal communication skills and problem-solving skills, which were ranked higher than analytical/quantitative skills or technical skills.
Business leaders agree. Google’s often-cited internal study regarding the qualities of its top managers, *Project Oxygen*, found that its most effective managers demonstrated eight key behaviors—seven soft skills and one technical skill (Garvin 2013). The report stated that a good manager:

- is a good coach
- empowers the team and does not micromanage
- expresses interest in and concern for team members’ success and personal well-being
- is productive and results-oriented
- is a good communicator—listens and shares information
- helps with career development
- has a clear vision and strategy for the team
- has key technical skills that help them advise the team.

Billionaire entrepreneurs Bill Gates, Richard Branson, and Warren Buffett were the focus of a recent *Inc.* article on the importance of soft skills. “Communication makes the world go ’round,” Branson said. “It facilitates human connections and allows us to learn, grow, and progress. It’s not just about speaking or reading but understanding what is being said—and in some cases what is not being said. Communication is the most important skill any leader can possess” (Schwantes 2017). In that same piece, Buffet is quoted as giving this advice to an MBA student: “At your age the best way you can improve yourself is to learn to communicate better. Your results in life will be magnified if you can communicate them better. The only diploma I hang in my office is the communications diploma I got from Dale Carnegie in 1952. . . . Without good communication skills you won’t be able to convince people to follow you even though you see over the mountain and they don’t.”

We are witnessing a growing alignment between business leaders and human capital professionals as to the importance of soft skills both now and in the future. The ability to fulfill on the promise of technological advances will be dependent upon those who have a mastery of interpersonal skills and leadership capabilities.

It is our view that soft skills are among the most critically important in any organization, that efforts to articulate their impact can and should be done, and that a proven methodology exists to help practitioners determine the impact of efforts to develop soft skills in their organizations to shift the hearts and minds of stakeholders and secure support for future efforts. Hence, the rationale for this book.

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**Soft Skills History**

Since the beginning of time, people have been trained in the areas of both occupational and personal development. For example, the hard skills training apprentices received from the master craftsmen of the guilds of the Middle Ages; the sewing circle training for daughters of wealthy families; or the soft skills training through traditions, myths,
and sermons. We continue to see training occur for a broad range of skills across the spectrum of approaches, beginning with formal education, certification for technical skills, corporate development programs, military boot camps, executive education programs, and coaching and mentoring programs, to name a few.

When did the term soft skills first come into the lexicon? The first articulation appeared in a U.S. Army document from 1968 called “Regulation No 350-100-1: Systems Engineering of Training (Course Design).” This regulation focused on training military personnel to do key tasks in the modern military. It sparked further thinking and, in December 1972, the U.S. Army’s Continental Army Command held a CONARC Soft Skills Training Conference, to further explore the area. The conference marked the first use of the term soft skills when Paul G. Whitmore delivered two papers: “What Are Soft Skills?” and “The Behavioral Model as a Tool for Analyzing Soft Skills.” The papers delineated the difference between hard skills and soft skills and created a framework for use. In them, Whitmore made the distinction between a “machine operator” and a “people operator,” defining soft skills as:

A tentative definition of soft skills might be formulated as follows: Soft-skills are (1) important job-related skills (2) which involve little or no interaction with machines (including standardized because the situation or context contains a great deal of uncertainty; that is, we don’t know much about the physical and social environments in which the skill occurs and we don’t know much about the consequences of different ways of accomplishing the job function. In other words, those job junctions about which we know a good deal are hard skills and those about which we know very little are soft skills. (Haines and Hunt 1972).

TYPES OF SOFT SKILLS
In our profession, there is no set list (or definition) of soft skills that everyone embraces, but there are a few that are commonly found in any discussion of soft skills or, more broadly, competencies.

Definition
For the purposes of this book, we will think of soft skills as a subset of the overall competencies (a cluster of related behaviors) necessary for success either as an individual contributor or as a leader. More precisely, the way we think of skills needed in the workplace today centers on two distinct groups:

• Hard skills are technical, profession specific, or job related (the “what”).
• Soft skills are transferable, personal, and interpersonal related (the “how”).

We need to make a distinction between character traits—such as integrity, kindness, generosity, and loyalty—which are innate and not usually developed through
learning programs. Once that happens, hard and soft skills can be learned and enhanced through learning and talent development.

Types of Skills
One of the best-known sets of competencies is that of Lominger, now part of Korn Ferry, which was developed in 1991 by Michael M. Lombardo, former director of leadership development research at the Center for Creative Leadership, and Robert W. Eichinger, former practitioner at PepsiCo and Pillsbury. Their original Leadership Architect Competency Library of 30 factors, clusters, and competencies at the individual contributor, manager, and executive levels forms the basis for a framework to support a wide range of talent-related processes and programs. The original library has since been revised and is now called the Korn Ferry Leadership Architect; it forms the basis of any integrated talent management system (Figure 1-2).

### FIGURE 1-2. KORN FERRY LEADERSHIP ARCHITECT LIBRARY

<table>
<thead>
<tr>
<th>Factor I: Thought</th>
<th>Factor II: Results</th>
<th>Factor III: People</th>
<th>Factor IV: Self</th>
</tr>
</thead>
<tbody>
<tr>
<td>Understanding the Business</td>
<td>Taking Initiative</td>
<td>Building Collaborative Relationships</td>
<td>Being Authentic</td>
</tr>
<tr>
<td>Making Complex Decisions</td>
<td>Managing Execution</td>
<td>Optimizing Diverse Talent</td>
<td>Being Open</td>
</tr>
<tr>
<td></td>
<td></td>
<td>34. Builds Effective Teams</td>
<td></td>
</tr>
<tr>
<td>Creating the New and Different</td>
<td>Focusing on Performance</td>
<td>Influencing People</td>
<td>Being Flexible and Adaptive</td>
</tr>
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<td></td>
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<td>24. Persuades</td>
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<td></td>
<td></td>
<td>37. Drives Vision and Purpose</td>
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<td></td>
<td></td>
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<td>31. Situational Adaptability</td>
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</tbody>
</table>

Adapted and used with permission from Korn Ferry.

There are many competency models (commercially available as well as internally developed by organizations) and all have been created or selected to enhance the human capital–related initiatives at an organization, taking into account the culture and values of the organization as well as the readiness of its people for adoption of a framework that will permeate all people-related processes. While the actual competencies an organization uses may be defined somewhat differently, most sets of
competencies will look familiar to anyone who has studied the Leadership Architect Library.

OUTLOOK FOR SOFT SKILLS

Even in this age of digital disruption, many traditional soft skills will be even more critical to acquire. For example, *Global Leadership Forecast 2018*, a study completed by DDI, EY, and The Conference Board, discussed leadership capabilities that will be important for success in the digital era (Dettmann et al. 2018). As might be expected, digital literacy was a key soft skill but so were driving execution, inspiration, adaptability, empathy, and identifying and developing future talent (see Figure 1-3).

**FIGURE 1-3. KEY DIGITAL-ERA LEADERSHIP CAPABILITIES**

<table>
<thead>
<tr>
<th>There are five key leadership capabilities in the digital era:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Drive digital by leveraging technology to modernize business strategy and operations.</td>
</tr>
<tr>
<td>• Navigate a complex digital landscape by embracing disruption with clarity of purpose and resilience.</td>
</tr>
<tr>
<td>• Connect people and possibilities in an increasingly dispersed and ecosystem-driven working world.</td>
</tr>
<tr>
<td>• Relate to others on a human level by balancing people and technology, and lead with true empathy and inclusivity.</td>
</tr>
<tr>
<td>• Think differently, focusing on holistic situational understanding and seeking creative and innovative possibilities.</td>
</tr>
</tbody>
</table>

Adapted with permission from DDI, The Conference Board, and EYGM (Dettmann et al. 2018).

Soft Skills and AI

There’s no question that automation and AI will radically reshape the workplace and the skills workers will need; to some degree, it is already happening in nearly every occupation. However, rather than predicting a diminished importance for soft skills from leaders and managers, McKinsey’s research finds that the need for finely tuned social and emotional skills will rapidly grow. Accompanying the adoption of advanced technologies into the workplace will be an increase in the need for workers with finely tuned social and emotional skills—skills that machines are a long way from mastering. In aggregate, between 2016 and 2030, demand for social and emotional skills will grow across all industries by 26 percent in the United States and 22 percent in Europe. While some of these skills, such as empathy, are innate, others, such as advanced communication, can be honed and taught. The rise in demand for entrepreneurship and initiative taking will be the fastest growing in this category, with a 33 percent increase in the United States and a 32 percent rise in Europe. The need for leadership and managing others will also grow (Arellano et al. 2018).

Further, this same research points to the increase in social and emotional skills across five industry sectors (healthcare, manufacturing, retail, banking and insurance, and energy and mining), citing a growing demand for customer interaction and management skills for those in banking and insurance; advanced communication and
negotiation, leadership, management, and adaptability skills for those in manufacturing; and customer service and management skills for those in retail.

**Critical Soft Skills**
As the workplace evolves to reflect the changing needs of today’s workers, soft skills learning programs are expanding to include mindfulness, work-life balance (or more accurately, work-life integration), unconscious bias, and mental health and well-being. An expert in this field, Bruce Tulgan (2012) believes that there are 12 critical soft skills:

- **Self-evaluation.** Assessing your own thoughts, words, and actions against clear meaningful standards. Also assessing your performance against specific goals, timelines, guidelines, and parameters.
- **Personal responsibility.** Staying focused on what you can control directly—principally yourself—and controlling your responses in the face of factors outside your control.
- **Positive attitude.** Maintaining and conveying a positive, generous, and enthusiastic demeanor in your expressions, gestures, words, and tone.
- **Good work habits.** Maintaining wellness, self-presentation, timeliness, organization, productivity, quality, follow through, and initiative.
- **People skills.** Listening, observing, and reading; perceiving and empathizing; effective use of words, tone, expressions, and gestures (verbal, written, and otherwise); one-on-one and in groups; and in person and remotely.
- **Proactive learning.** Keeping an open mind, suspending judgment, questioning assumptions, and seeking out information, techniques, and perspective. Also, studying, practicing, and contemplating information and skills to build your stored knowledge base, skill set, and wisdom.
- **Problem solving.** Mastering established best practices as a way to avoid reinventing the wheel. Using repeatable solutions to improvise when addressing decisions that are new but similar.
- **Decision making.** Identifying and considering multiple options, assessing the pros and cons of each and choosing the course of action closest to the desired outcome.
- **Respect for context.** Reading and adapting to the existing structure, rules, customs, and leadership in an unfamiliar situation.
- **Citizenship.** Accepting, embracing, and observing not just the rights and rewards but also the duties of membership, belonging, and participation in a defined group with its own structure, rules, customs, and leadership.
- **Service.** Approaching relationships in terms of what you have to offer—respect, commitment, hard work, creativity, and sacrifice—rather than what you need or want.
• **Teamwork.** Playing whatever role is needed to support the larger mission, including coordinating, cooperating, and collaborating with others in pursuit of a shared goal, and supporting and celebrating the success of others.

**WHY NOW?**

During the past decade, a variety of forces have driven additional focus on measuring the impact of soft skills programs, including the financial contribution and ROI. These forces include program failures, budgets and costs, measurement beyond the impact level, evidence-based management, benchmarking limitations, and executive appetite for monetary value. All told, they have challenged the old ways of defining program success.

**Program Failures**

The opening story in chapter 3 highlights a major failure—Scotland Yard “wasted” £10 million on leadership training. When the indirect costs of the program are included, that number reaches about $30 million U.S. dollars, which is a devastating blow. Almost every organization encounters unsuccessful projects—projects that go astray, cost far too much, and fail to deliver on promises. Project disasters occur in business organizations as well as in government, NGOs, and nonprofit organizations. Some are legendary, while others are swept into closets and covered up; but they are there, and the numbers are far too large to tolerate (Bogdanich and Forsyth 2018). The endless string of failures has generated increased concerns about measuring program success—before, during, and after implementation.

**Budgets and Costs**

In times of uncertainty, budgets are scrutinized and reduced. The key is to keep as much of the budget as possible or increase it in the face of uncertainty. To do this, you need to show the value of your programs using credible data. The challenge for us is to create the conditions under which this is possible. This is the most urgent task of our time.

The costs of projects and programs continue to grow, and as costs rise, the project budgets become targets for others who would like to have that money for their own projects. What was once considered a mere cost of doing business should now be considered an investment, and one that is wisely allocated.

**Measurement at the Impact Level Is No Longer Optional**

A consistent and persistent trend in accountability is evident in organizations around the globe: Almost every function, process, project, or initiative is judged based on higher standards than in the past. Some functions attempt to show their worth by capturing and demonstrating the value they add to the organization. They compete for funds; therefore, they have to show value. For example, the TD function must show
its value in monetary terms to compete with mainstream processes, such as sales and production, which have shown their value in direct monetary terms for more than a century.

Sponsors need to know whether programs are really producing change or just trying to change. “I don’t know” becomes an expensive proposition when people are attaching economic value to actual results. Organizations will no longer be able to duck the measurement question by citing the complexity of their work.

**Evidence-Based or Fact-Based Management**

Recently there has been an important trend toward fact-based or evidence-based management. Although many key decisions have been made using instinctive input and gut feelings, more managers are now using sophisticated, detailed processes to show value. Smart decisions must be based on more than gut feelings, and by using a comprehensive set of measures—including financial ROI—it’s possible to make better decisions regarding people, projects, and processes.

When taken seriously, evidence-based management can change how every manager thinks and acts. It is a way of seeing the world and thinking about the craft of management. Evidence-based management proceeds from the premise that leaders can do their job better by using better, deeper logic and facts to the extent possible. This idea is based on the belief that facing the hard facts about what works and what doesn’t and understanding and rejecting the total nonsense that often passes for sound advice, will help organizations perform better (Pfeffer and Sutton 2006). Fortunately, the move to fact-based management makes expanding measurement to include ROI easier.

**Benchmarking Limitations**

Executives and managers are obsessed with benchmarking; they want to use it to compare every type of process, function, and activity. Unfortunately, benchmarking has its limitations. First, the concept of best practices can be an elusive issue. Not all participants in a benchmarking project or report necessarily represent the best practices. In fact, they may represent the opposite, because benchmarking studies usually involve organizations that are willing to pay to participate. Second, the measures could be the wrong measures—what is needed by one organization may not always be needed by another. A specific benchmarked measure or process may be limited in its actual use. For example, attempting to benchmark impact measures that are normally connected to soft skills, which some have attempted, is usually a fruitless exercise. Those measures vary based on the programs, individuals, and organization, among other factors.

Finally, benchmarking data are often devoid of financial aspects, reflecting few, if any, measures of the actual financial contributions with ROI values. Therefore, managers have asked for more specific internal processes that can show these important measures.
Chapter 1

The Executive Appetite for Monetary Value

Showing the value of organizational programs is receiving increased interest in the executive suite. Top managers who watch as budgets grow without appropriate accountability measures are frustrated, and they are responding to the situation by turning to ROI. Top executives now demand ROI calculations and monetary contributions from programs and services where they were not previously required. For years, managers and department heads convinced executives that soft skills could not be measured and the value of these programs should be taken on faith. Unfortunately, executives no longer buy that argument; they demand the same accountability from these functions as they do from the sales and production areas of the organization. These major forces are requiring organizations to shift their measurement processes to include the financial impact and ROI.

SOFT SKILLS: ONE FIX FOR ALL THAT’S WRONG?

Over the past few years, the U.S. economy has benefited from historically low employment, brisk spending, an aggressive tax stimulus, and technological advancements. This combination of factors has produced growth rates in the 3 percent range. That’s not bad, considering many economies are challenged around the world, but it is not an historic high. For nearly 30 years, economists have been trying to map a path back to the days of 7 percent growth. So far, the only point they agree on is that we must be doing something wrong (Walker 2019). Could the problem be a lack of expertise in the soft skills area, such as uninspiring managers, unfulfilling work, active disengagement, a negative culture, or unsupportive teams?

Five years ago, the Gallup organization began one of the most ambitious research endeavors it has ever conducted: an analysis of the future of work based on a decade of input from nearly 2 million employees and more than 300,000 business units. The results revealed something Gallup had seen before: An organization’s productivity depends, to a high degree, on the quality of its managers. The research showed that managers didn’t just influence the results their teams achieved; they could be attributed to a full 70 percent of the variance. Essentially, if you desire a superior team, hiring the right manager is nearly three-quarters of the battle (Clifton and Harter 2019). No other single factor, from compensation levels to the perception of senior leadership, even came close.

Gallup’s best metric for rating business teams is engagement, or a belief among employees that they’re doing meaningful work in a climate that supports personal growth. While employee engagement in the United States is improving, still only a third of employees are highly engaged. But Gallup found that figure could be 68 percent or more in successful businesses. This isn’t surprising given that many companies have started measuring engagement and tinkering with programs and initiatives to increase their scores. Gallup and others have shown that highly engaged teams have significantly lower turnover, higher productivity, lower accident rates, higher sales,
improved quality, better customer satisfaction, and, more recently, increased innovation (Phillips, Phillips, and Ray 2016).

Nearly 20 years ago, when Gallup began asking people to order their priorities, the respondents ranked family, having children, owning a home, and living in peace above having a good job. Today, Gallup found that having a rewarding job ranked first with respondents. Essentially, having a great job now means having a great life. Thus, some portion of the large number of respondents feeling disengaged at work are experiencing an inspiration gap. While many jobs have stayed the same, the expectations we bring to them each day have changed.

A shortage of good jobs and inspiring bosses might explain, in theory, why some organizations struggle to recruit and retain purpose-driven Millennial talent. This could also explain why amazing perks don’t always influence engagement. It’s also possible that this inspiration gap may explain America’s stagnant level of worker productivity and why the economic growth rate isn’t better.

One questionable tradition is the persistent practice of promoting superstars into management roles. The growing body of evidence suggests there is little correlation between an employee’s isolated skill level and their leadership ability. With that, an organization’s quiet, selfless, average performer often would be a better choice for the role. Gallup advises organizations to seek out managers who infect their teams with a sense of purpose and function more like coaches than conventional top-down bosses (Walker 2019).

Finally, there’s the challenge of culture. It’s one thing for organizations to embrace a set of values and impose a culture of positive engagement. But for most workers, the real company they work for is the team they’re on. Making a positive culture stick involves retaining middle managers who will transfer this positive culture to their teams.

The answer to these concerns is not more science, technology, engineering, and math (STEM) skills or more compliance or operator training. It points directly to the need for a variety of traditional soft skills programs, such as leadership development, coaching, team building, communications, onboarding, empowerment, and engagement to enhance productivity and increase economic growth.

What sort of financial return can organizations anticipate from these soft skills programs? According to Gallup, the top 10 percent of organizations, ranked by engagement, posted profit gains of 26 percent through the last recession, compared with a 14 percent decline at comparable organizations.

DEVELOPING SOFT SKILLS AND ARTICULATING IMPACT

While determining impact can be a daunting task, it can be done. Look no further than to those named to Training magazine’s annual list of exemplars in learning and talent development who are making a difference by developing employees, managers, and leaders. Each year, the “Training Top 125” winners are selected against specific
criteria; several of the awardees on the 2018 and 2019 lists were specifically highlighted for their work in developing soft skills and articulating the impact of that work:

- Sonic Automotive changed its general manager candidate training curriculum seven years ago and developed leadership training to drive its strategic goals and culture change. As a result, Doug Bryant, vice president of talent management at Sonic Automotive, said, “associate turnover was reduced to the lowest in our peer group (as low as 26 percent), and a culture change has taken place, resulting in a Customer Service Index (CSI) as high as 93 percent and an average market share increase as high as 17 percent” (Freifeld 2018).

- Dollar General Corporation focused on educating employees about the organization’s core customers through a training called Know Your Customer. When they complete the training, employees become empowered to make a difference to serve customers and ultimately live the mission of serving others. As a result, customer satisfaction scores rose 790 basis points over the year before, and total sales improved by 7.9 percent for fiscal year 2016 versus the prior year (Freifeld 2020).

- Nationwide Mutual Insurance Company has committed to the connections between associate health, productivity, and career success. The My Health journey begins with a self-assessment that creates customized learning plans. Online learning provides self-paced coaching, followed by optional face-to-face wellness coaching, curated information, and social networking with communities. My Health professionals have designed and delivered innovative learning programs focused on brain health and mindfulness (2016 and 2017, respectively). Results from the brain health program include a significant improvement in associates who were identified to have low productivity—overall productivity increased by 27 percent and relative absenteeism decreased by 18 percent, resulting in an additional 7.23 hours per week of previously missing time. Overall, the average medical cost trend was 25.6 percent lower than the financial industry benchmark (Training magazine 2018).

For many companies committed to articulating the impact of their work in terms of business results, similar results can be seen in terms of retention, customer satisfaction levels, market share growth, worker productivity, and managerial skills.

One notable example of impact on worker productivity comes from India. Achyuta Adhvaryu, assistant professor of business economics and public policy at the University of Michigan’s Ross School of Business, wanted to determine if the influence of soft skills training for female employees in India would improve workplace outcomes. She and several colleagues partnered with Shahi Exports—a Bengaluru-based firm that’s the single largest private employer of unskilled and semi-skilled female labor in the country—to provide learning content in a broad variety of soft skills, including
communication, time management, financial literacy, problem solving, decision making, and legal literacy. The employees enrolled in a lottery and participants were chosen at random; those who were not chosen became the control group.

“We found that despite a high overall turnover rate in the industry, more [trained] workers are retained,” Adhvaryu said. “And [trained] workers are 12 percent more productive than those who did not receive the training in soft skills.” Nine months after the program ended, Adhvaryu was able to determine a 256 percent net return on investment due to productivity gains and an increase in-person days due to retention changes even with a slight (0.5 percent) rise in wages (Guest 2017).

**CHALLENGES ALONG THE WAY**

The journey to increased accountability and the quest to show monetary value, including ROI, are not going unchallenged. This movement represents a tremendous cultural shift for individuals, a systemic change in processes, and often a complete rethinking of the initiation, design, development, delivery, and maintenance of processes in organizations.

**Preparation and Skills**

Although interest in showing the value and measuring ROI is now heightened and much progress has been made, most TD professionals don’t know how to measure their soft skills programs at the impact and ROI levels. The problem often lies in the lack of preparation and skills that are needed to conduct these types of analyses. The preparation for most talent development roles lacks the required skill building. Rarely do the curricula in degree programs or the courses in a professional development program include processes and techniques to show accountability at this level. Consequently, these skills must be developed by the organization using a variety of resources.

**Fear of ROI**

Few topics stir up emotions to the degree that ROI does. Some TD professionals suggest that the conclusion behind the ROI value is simple: If it is negative, executives will kill the program; if it is extremely positive, they do not believe it. The potential for this response causes some to avoid the issue altogether, and thus a familiar reaction emerges: “If my project or program is not delivering value, the last thing I want to do is publish a report for my principal sponsor.”

Unfortunately, if the project is not delivering value, the sponsor probably already knows, or at least someone in the organization does. The best thing to do is to be proactive and show the program’s value using a systematic, credible process. The fear of ROI can be minimized when the individuals involved understand the process, how it is designed and delivered, and the value it can bring from a positive perspective.
**Time Commitment**

Thorough analysis takes time. Some TD professionals and sponsors are restless and do not want to take the time to do the appropriate analyses. In a fast-paced work environment where decisions are often made quickly and with little input or data, some executives question the time and effort involved in this type of analysis. They want to know that the effort is necessary and appropriate and will ultimately pay off. When the process is implemented, the individuals involved are usually able to see that the value of the increased effort and activity far outweighs the cost of the time.

**Misleading Hype**

Claims abound about success and the use of data to support an idea, project, or program. When the facts are examined, however, they often reveal something completely different. For example, some use return on expectations (ROE), suggesting that this is an impact. Further analysis reveals that this is usually only reaction data. Others use social return on investment (SROI) as a substitute for ROI. Unfortunately, many times this is only intangible data that carries no financial information.

Projects and programs are evaluated in a variety of ways, and few accepted standards, rules, and processes exist with which to validate those assumptions and claims. Following a systematic process with conservative, accepted standards (such as those presented in this book) can create a credible story of program success.

**Sustainability**

The final challenge is sustaining such a radical shift in accountability. The implementation of the ROI Methodology must consist of more than just conducting one or two studies to show the value of the project or program. It must represent a complete change in processes so that future projects and programs focus on results. This change will require building capability, developing consistent and compelling communication, involving stakeholders, building the process into projects, creating expectations, and using data for process improvements. This is the only way to sustain any change for the long term; otherwise, it becomes a one-shot or short-term project opportunity.

**QUICK SUMMARY**

This opening chapter explored the concept of soft skills and made the argument for their rightful place in the world of work, both now and in the future. These critical soft skills are not simply a nice to have—they’re a need to have. Determining the business impact of work in this area is key to gaining executive support and properly developing an organization’s TD team to successfully execute the strategy. Their importance will only grow in the coming years despite (or perhaps because of) a rapidly transforming digital world. As with most important processes, developing an organization with employees who have mastered critical soft skills begins with alignment to the business
and ends with measuring the impact on the business in a logical, rational way. The
next eight chapters outline the necessary and relevant steps to using the ROI Method-
ology to clearly show the impact and ROI of soft skills programs.
Why Evaluation Matters

OPENING STORY
Nations Hotel, a well-respected global hotel chain, has survived and thrived in a highly competitive industry. To be one of the leaders in this field requires the executive team to constantly focus on client satisfaction, operational efficiency, revenue growth, and talent retention. To achieve these ambitious annual goals, the TD team makes available several learning processes that focus on soft skills development and process improvement. Leadership and management development programs are offered to help drive improvement, along with a variety of technology and productivity tools. The company also has a successful coaching process called Coaching for Business Impact. This process, designed by a prestigious external coaching firm, focuses on business improvement and includes learning goals spanning such soft skills as feedback, collaboration, teamwork, communication, and personal effectiveness (Phillips 2012).

As part of this coaching process, individuals focus on measures under their responsibility in areas that represent challenges. Specific business measures are the beginning point of this process, and objectives for the program are developed at four different levels (reaction, learning, application, and impact). Participating in the coaching process is voluntary, and almost 200 of the 500 eligible managers want to participate. Thus, the executive team suggested that the talent development group show the business value of the program.

The TD group agreed and began working with the coaching provider to make sure that the program was focused on business needs. They developed objectives and built data-collection tools into the program. The team designated the first 25 participants who signed up for the program as the sample they would use to measure the actual ROI. Effort was made to ensure that this group was representative of the entire group of candidates for the program (such as tenure and job roles).

The coaching engagement process was altered slightly to ensure that each participant focused on at least three business measures to improve as a result. An action planning module was added to support a built-in data collection process, which began with the end in mind (a business measure), and to show the action steps that would be taken to improve those measures with the support, guidance, and collaboration
with the coach. Three action plans were developed as part of the process, and the objectives for all five levels, including ROI, are listed in Figure 2-1.

**FIGURE 2-1. OBJECTIVES OF COACHING FOR BUSINESS IMPACT**

<table>
<thead>
<tr>
<th>Level 1. Reaction Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>After participating in this coaching program, the managers being coached will:</td>
</tr>
<tr>
<td>• Perceive coaching to be relevant to the job.</td>
</tr>
<tr>
<td>• Perceive coaching to be important to their performance.</td>
</tr>
<tr>
<td>• Perceive coaching to be value-added in terms of time and funds invested.</td>
</tr>
<tr>
<td>• Rate the coach as effective.</td>
</tr>
<tr>
<td>• Recommend this program to other managers and executives.</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Level 2. Learning Objectives</th>
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</thead>
<tbody>
<tr>
<td>After completing this coaching program, the managers being coached should improve their skills for each of these:</td>
</tr>
<tr>
<td>• Uncovering personal strengths and weaknesses</td>
</tr>
<tr>
<td>• Translating feedback into action plans</td>
</tr>
<tr>
<td>• Involving team members in projects and goals</td>
</tr>
<tr>
<td>• Communicating effectively</td>
</tr>
<tr>
<td>• Collaborating with colleagues</td>
</tr>
<tr>
<td>• Improving personal effectiveness</td>
</tr>
<tr>
<td>• Enhancing leadership skills</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Level 3. Application Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Six months after completing this coaching program, managers being coached should:</td>
</tr>
<tr>
<td>• Complete the action plan for application and impact.</td>
</tr>
<tr>
<td>• Adjust the plan as needed for changes in the environment.</td>
</tr>
<tr>
<td>• Show improvements on these items:</td>
</tr>
<tr>
<td>» Uncovering personal strengths and weaknesses</td>
</tr>
<tr>
<td>» Translating feedback into action plans</td>
</tr>
<tr>
<td>» Involving team members in projects and goals</td>
</tr>
<tr>
<td>» Communicating effectively</td>
</tr>
<tr>
<td>» Collaborating with colleagues</td>
</tr>
<tr>
<td>» Improving personal effectiveness</td>
</tr>
<tr>
<td>» Enhancing leadership skills</td>
</tr>
<tr>
<td>• Identify barriers and enablers to success.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Level 4. Impact Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>After completing this coaching program, managers being coached should improve at least three specific measures in these areas:</td>
</tr>
<tr>
<td>• Sales growth</td>
</tr>
<tr>
<td>• Productivity/operational efficiency</td>
</tr>
<tr>
<td>• Direct cost reduction</td>
</tr>
<tr>
<td>• Retention of key staff members</td>
</tr>
<tr>
<td>• Customer satisfaction</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Level 5. ROI Objective</th>
</tr>
</thead>
<tbody>
<tr>
<td>The ROI value should be at least 25 percent.</td>
</tr>
</tbody>
</table>
With this in mind, the project began and the rest, as they say, is history. The project generated a positive ROI of 221 percent.

This true story reinforces the importance of setting expectations for success early. The participants (executives) knew that success was necessary and possible all the way to the business value. Objectives were set to push the program through all the way to the impact and financial ROI levels. The coaches connected the engagement to business impact, and the designers built tools into the process to facilitate completing the actions and documenting the business impact to show the success at the end. Essentially, the program was designed to drive success. The coaches expected business success, the participants were willing to deliver business success, the designers and developers designed for business results, and the executives expected success. There was no mystery about what this program should achieve.

This case study can create anxiety among some practitioners. The typical worry might be “Do we need all these levels of objectives for every program?” The short answer is no. You have to take a sensible approach. From its beginning, this program was designed to drive the business impact level. Even the name, Coaching for Business Impact, implies that it should affect business impact. Because executives wanted to see the financial ROI, this shifted the focus from behavior change, the typical target for coaching, to business results and on to ROI. With the focus on impact and ROI, the engagement became “What specific measures need to change, and what should I do differently with my team to change them?”

But not every program should be positioned this way. This level of analysis is reserved for those programs that are important, strategic, expensive, and involve a lot of people. Some would argue that a business focus is needed, even if success is not measured at the higher levels. That may be true, but a sensible approach that includes tackling one program at a time will increase the chances of a program’s success and long-term value.

THE SUCCESS AND FAILURE OF SOFT SKILLS PROGRAMS

By reviewing and cataloging the barriers to and enablers of effective soft skills programs, you can identify which factors determine success or failure. While success is always the ideal, much can be learned from failure. And in this case, failure does not necessarily mean the program did not deliver a positive return on investment or influence significant business impact measures; a program can fail if it did not live up to its expectations—at any level of outcome. It simply means that the program could have been more successful if adjustments or changes were made, and it will achieve success if those changes go into effect.

The data in this chapter are identified in a variety of sources, but the most important are the ones conducted by officers, consultants, associates, and partners of ROI Institute. Each year this team is involved with approximately 200 soft skills studies, which come primarily from our global ROI Certification. Each study reveals important
issues about failure and success factors, and, in the case of disappointments, the data often show the cause, which helps identify what must change in the program to generate more success.

When properly designed and implemented, soft skills programs can deliver considerable ROI, sometimes reaching 100 to 500 percent. Consider the impact created when a leader changes their behavior after participating in a soft skills for leaders program. The change affects the entire team. For example, the impact for a first-level team leader in a customer care center with 15 direct reports would be the improvement of the team. If productivity (in this case, call volume) improves because of the program, you can measure that improvement. When the monetary value from the team’s improvement is compared with the cost of the formal training for one individual, the ROI value can be significant. In our experience at ROI Institute, when this leverage or multiplicative effect is explained to chief financial officers, they get it. Consequently, we should expect high returns on investment from soft skills; if the expected returns are not there, we should determine what can be done to improve them.

This section presents the common reasons soft skills programs fail (or demonstrate a lack of success), leading to a specific success factor, which is presented in italics.

**What Results? (Lack of Business Alignment)**
Based on ROI Institute’s review of soft skills studies, the number one reason for lack of business results is that the program was not aligned to business needs in the very beginning. Most soft skills programs begin with behavior that should be developed and give little consideration for the business impact. The assumption program designers make is that changes in behavior will positively affect the business. Unfortunately, that assumption is not always valid; executives want a clear path between an investment in behavior and the business impact. It is possible to connect leadership development to a business need at the beginning of the program, as chapter 3 will describe. However, not every program should be evaluated at the business impact or ROI level. There must be a connection to the business if there is a desire and need to evaluate at that level.

*Success Factor 1: Align the program to business measures in the beginning.*

**Who Wouldn’t Need This Behavior? (Not Assessing Current Behavior)**
Too often, a new soft skills program is based on a new book, a popular model, or a successful program, and these behaviors may not be appropriate for your organization. Who could resist *Seven Habits of Highly Effective People*, *Critical Conversations*, the meditation in a mindfulness program, or a change management program? A clear understanding of the behaviors needed is critical.

*Success Factor 2: Identify specific behavior changes needed for the target audience.*
Don’t They Know That Already? (Not Assessing Learning Needs Properly)
The talent development field has a perpetual problem with learning solutions: They may not be needed. Just because a behavior is not in place does not necessarily mean that the target audience does not know how to use the effective behavior. A learning solution may not be needed to force behavior change. Instead, it is sometimes a matter of expectations, role modeling, rewards, or any number of other solutions to drive the particular behavior. This issue can be pinpointed by asking proponents of the program if the target audience knows how to do this now. If the answer is yes, a learning solution is not needed.

Success Factor 3: Identify learning needs for the target audience.

Who Should Be Involved? (Not Including the Right Participants)
A soft skills program is a popular topic, and several factors may cause individuals to want to be involved. For many of these programs, it can be argued that everyone needs to participate, which can cause confusion about need versus want and the target audience. When the target participation group is vague and broad, all types of individuals may attend. The challenge is to ensure that the appropriate individuals are available at the right time and are motivated to learn and apply the content.

Success Factor 4: Involve the right people at the right time.

Do Participants Know What They Must Accomplish? (Failure to Create Application and Impact Objectives)
The talent development profession generally has excellent capability for developing learning objectives. Learning objectives are written from a performance perspective, which suggests that participants should be able to perform in some way, often under certain conditions and even with a criterion representing quality, accuracy, or time. Regrettably, when it comes to soft skills programs, learning objectives are often left unclear. Even worse, application and impact objectives are almost nonexistent. Application objectives define what participants are expected to do with what they learn, while impact objectives describe the consequences of application, expressed as a business measure.

Success Factor 5: Establish application and impact objectives for soft skills programs.

Is the Program Designed Properly? (Improper Program Design)
Sometimes the design of the program is the problem. Participants have different styles, and they learn in different ways. Their experiences, needs, and levels of performance vary. While the lack of proper content can be a design issue, problems often arise when the design is dysfunctional in terms of convenience, support, expectation, delivery, and facilitation. The facilitator must gain participants’ respect to inspire them to learn and apply. The program must meet schedule needs while addressing how people learn. Sometimes participants want to learn in pieces or modules. “Just for me,” “just enough,” and “just in time” are the requests.

Success Factor 6: Design soft skills programs for successful learning and application.
What Expectations? (Failure to Secure Commitment From Participants)
Several issues are involved in setting expectations. Participants do not want surprises, so they must be made aware of the requirements and expectations for the program early and often. Also, they want to know what they must do to make the program successful. Program designers must provide the details, let participants know what they should do with what they learn, and define ultimate success. This means taking the mystery out of the process to avoid misunderstanding.

With proper business alignment, the mystery of application and impact can be removed, and participants are often reminded of those issues when application and impact objectives are developed. However, without these objectives, it is not unusual for participants to struggle with expectations. Without the business connection, the desired success probably won’t occur.

Success Factor 7: Create expectations to achieve results and provide data.

This Won’t Work in My World!
(Failure to Remove or Minimize Barriers to Application)
One of the most important causes of failure is barriers to the transfer of the learning to the job. While this has been a classic issue in talent development for decades, it becomes critical for soft skills, as there are many reasons why participants do not use the skills back on the job. Typical reasons for lack of application include that it does not fit in their world, they do not have time, it was not supported by their team, it was not applicable to what they do, or they prefer their current approaches. These barriers can bring any use of new skills to a halt.

The challenge is to address these barriers early—even during the initial needs assessment—to determine what would prevent newly learned behaviors from transferring to the job. Also, these barriers must be revisited often to address any problems as they are uncovered.

Success Factor 8: Address the learning transfer issue early and often.

My Manager Didn’t Support This!
(Failure to Secure Management Support for the Program)
With even the best designed programs, lack of management support will impede new knowledge from transferring to the place where it will be used. A participant’s immediate manager is the number one enabler if they support it and the number one barrier if not.

New soft skills represent change, and applying any new skills or competencies often involves extra steps and effort. Behavior change requires a very supportive environment from the immediate manager, who must be involved and encourage, support, and sometimes even require the application of skills. To prevent a barrier from arising, the next level manager must be kept in the loop and ideally given an active role, not only in the expected changes but also in the expected results. The most critical step for ensuring the application of soft skills to the job is to have the immediate
Why Evaluation Matters

manager set specific goals prior to the program participation. The second most critical item is ensuring follow-up from the immediate managers to determine if those results were achieved (Broad 2005).

*Success Factor 9: Establish supportive partnerships with key managers.*

**They Won’t Give Me the Data! (Not Building Data Collection Into the Process)**

Perhaps one of the greatest problems with evaluating soft skills is not being able to secure the appropriate amount and quality of data. Participants are perhaps the most credible individuals to provide the data, and the challenge often involves building data collection into the program and positioning it as an application tool.

With soft skills, an action planning process is one of the best methods to measure application and impact and collect the data necessary for an ROI evaluation. This process gives participants the opportunity to identify specific actions they will take to improve a selected business impact measure. During the program, they can develop these plans, which are positioned as application tools for them to chart the success of using what they have learned. It provides a way to guide their application in an efficient manner and see the results achieved in terms of business impact and even monetary value. (An example of this process is presented in chapter 4.) Data collection becomes an easy task when properly built into the process. Participation, completion, and return rates of the action plans are greatly enhanced when this occurs.

*Success Factor 10: Build data collection into the process and position it as an application tool.*

**Summary**

The top 10 success factors for soft skills are presented in the order in which they normally occur in the learning program design process. Facilitators, developers, organizers, and supporters can use these factors to ensure the proper processes are in place for success. Most of the success factors need to be addressed, and three to six are usually missing from any given program design. This is often critical enough to inhibit the results. The success factors are addressed systematically in the ROI Methodology, as described in the remainder of this chapter.

**TYPES OF DATA**

An attempt to summarize what’s needed in the soft skills area brings into focus some key issues that must be considered from perspectives of principal sponsors of programs, as well as the need for the various stakeholders who are involved. Add to this the need to have a systematic, logical flow of data for an evaluation system, and you have the data set in Figure 2-2, beginning with input into the process. The system has five levels of outcome data arranged in a logical chain of value, including the financial ROI as the fifth level.
FIGURE 2-2. SIX CATEGORIES OF DATA

<table>
<thead>
<tr>
<th>Level</th>
<th>Measurement Focus</th>
<th>Typical Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>0. Input</td>
<td>Input into programs, including indicators representing scope, volumes, times, costs, and efficiencies</td>
<td>• Types of programs</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Number of programs</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Number of people involved</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Hours of involvement</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Costs</td>
</tr>
<tr>
<td>1. Reaction and Planned Action</td>
<td>Reaction to the programs, including their perceived value and planned action to make them successful</td>
<td>• Relevance</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Importance</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Usefulness</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Appropriateness</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Intent to use</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Motivational</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Recommended to others</td>
</tr>
<tr>
<td>2. Learning</td>
<td>Knowledge gained, learning how to develop concepts and use skills and competencies to drive the program</td>
<td>• Skills</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Learning</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Knowledge</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Capacity</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Competencies</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Confidences</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Contacts</td>
</tr>
<tr>
<td>3. Application and Implementation</td>
<td>Application and use of knowledge, skills, and competencies, including progress made and implementation success</td>
<td>• Behaviors</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Extent of use</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Task completion</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Frequency of use</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Actions completed</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Success with use</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Barriers to use</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Enablers to use</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Engagement</td>
</tr>
<tr>
<td>4. Impact</td>
<td>The impact of the programs and processes expressed as business impact measures</td>
<td>• Graduation rates</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Infant mortality</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Crime rates</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Productivity</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Revenue</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Quality</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Jobs created</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Efficiency</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Incidents of disease</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Retention</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Customer satisfaction</td>
</tr>
<tr>
<td>5. ROI</td>
<td>Comparison of monetary benefits from the project to project costs</td>
<td>• Benefit-cost ratio (BCR)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• ROI (%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Payback period</td>
</tr>
</tbody>
</table>
Input
In any program, there is input. This is usually the people who are involved, both in terms of number and time they put into the activity, and the cost of the process. This is important because having the right people is critical. Ideally, you want people who want and need to be involved in an engaged way. Therefore, the starting point for knowing, showing, and proving the value of soft skills is having the right people involved at the right time with the right amount of time available and in the right program. Input is important but doesn’t speak to the outcomes or results.

Reaction and Planned Action
Participants must see value in the program. It can be easy to falsely assume this already exists. The key is to collect data at this level to make sure that participants see the program as relevant to their situation, important to their individual success, and necessary to the success of others. Reaction data should show that the program is useful, helpful, and appropriate—with participants intending to make the program successful because they are motivated to do it. Perhaps they would even recommend involving others.

Without this proper reaction, their efforts will be minimal at best. Some of the participants may see the program as a waste of time or money. Others would see these efforts as additional, unnecessary work. Still others may see the program as misguided and inappropriate. In these cases, the results may not materialize. Reaction data is a very important first outcome level.

Learning
The next logical step is learning, and this is closely related to reaction. Reaction will be influenced by what participants in the program are learning about the content, the tips to make the program successful, and how to overcome the barriers. The more they know, the more the resistance decreases and motivation increases.

In most situations, soft skills programs are about learning new skills, processes, or situations by exploring, experimenting, and adjusting. Learning is critical, and you must measure it. Learning measurements ensure that the knowledge, skills, and competencies are there, and that people have the confidence to make it work and the contacts to make it successful. Learning measurement is necessary but is still a long way from the end game.

Application and Implementation
For some stakeholders, the challenge of measuring program success is at this level. Participants are doing something— they’re applying new skills, testing new concepts, completing tasks, exploring options, and identifying possibilities. They are mobilized, making progress, and taking action. This is helpful because at this level of outcome, resistance has been reduced to a certain extent and you’ve overcome the inertia of getting people to do something. It’s also critical because programs must
follow certain procedures and processes. Application and implementation include all processes and procedures necessary to make the program successful, such as tasks, actions, behaviors, checklists, and policies. This is powerful and can only be accomplished when participants learn how to make the program successful.

**Impact**

This level is critical to sponsors and program funders. The impact is the consequence of actions and includes improvements in measures such as productivity, quality, and time. These are in the system and define the organization. In governments, NGOs, and nonprofits, impacts include patient outcomes, jobs secured, students graduated, infant mortality rates, addictions, crime rates, and auto accidents. The impacts will make the difference. In addition to these tangible impacts, there are also intangible ones, which usually include customer satisfaction, image, stress, patient satisfaction, teamwork, collaboration, quality of life, and alliances. Intangible impacts are important but may not easily be converted credibly to money. In that case, they are left as intangibles.

**Return on Investment**

The return on investment is needed in some programs, and this can be measured in two common ways. One is the benefit-cost ratio (BCR), which is the monetary benefits from the program divided by the cost of the program. Benefit-cost analysis has been used for centuries and is meaningful to many executives, particularly those in nonprofits, governments, and NGOs.

Next, there’s the ROI, expressed as a percentage, which is the net benefits divided by the cost multiplied by 100. The net benefits are the monetary benefits minus the project costs. Derived from the finance and accounting field, the ROI formula is a common measure in businesses and may even be understood by consumers, as they can clearly see ROI when they invest their money in a savings account with a financial institution. ROI measures keep the CFO and the CEO informed and satisfied. And it’s the ultimate accountability. For most executives, it shows the efficient use of funds. Just getting the impact is one thing but seeing how this could be achieved with less cost is another. The higher your ROI, the more efficient the use of the funds.

So, there you have it. Six categories of data that are necessary and arranged in a logical flow so that one level acts as a precondition for the next. This foundation is critical for the material in this book, but there’s more.
USING DESIGN THINKING TO DELIVER AND MEASURE RESULTS

It is useful to think about using an innovation technique to deliver the value from a program or project and capture the data. One popular concept in innovation is design thinking, which assumes that the entire team designs for a clearly delineated definition of success. If you want higher graduation rates, everyone works toward that level of success. If you want low costs, everyone is focused on cost control. If you want to reduce crime rates, the focus is there for every stakeholder. For most programs, success is achieved when the impact has occurred. This can mean higher graduation rates, lower costs in a new product, or less crime.

With that success defined, the team works through a series of steps, using design thinking principles to reach the desired success. Although design thinking had its beginnings a few decades ago (the first book about it was written in 1987), the concept really gained popularity with Tim Brown’s 2009 book Change by Design. A few years later, Design Thinking for Strategic Innovation seemed to broaden the scope and the flexibility of the process. Design thinking features 10 common principles, although they’re not the same from one author to another:

1. a problem-solving approach to handle problems on a systems level
2. a mindset for curiosity and inquiry
3. a framework to balance needs and feasibility
4. a way to take on design challenges by applying empathy
5. a culture that fosters exploration and experimentation
6. a fixed process and a toolkit
7. a storytelling process to inspire senior executives
8. a new competitive logic for business strategy
9. a means to solve complex or wicked problems
10. a means to reduce risks (Mootee 2013).

We took the first eight principles and placed them into the steps for implementing a soft skills program, creating a model to design for results, capture the data, and make the case for more investment (P.P. Phillips and J.J. Phillips 2017). The process for this model, shown in Figure 2-3, fully describes each step and highlights the design thinking principle used. These steps form the structure for the ROI Methodology, which is an enhanced logic model.
### FIGURE 2-3. DESIGNING FOR RESULTS

<table>
<thead>
<tr>
<th>Steps for Designing for Results</th>
<th>Design Thinking Principle</th>
</tr>
</thead>
</table>
| **1. Start With Why:** Aligning Programs With the Business  
  • Alignment is the key  
  • Is it a problem or opportunity?  
  • Need specific business measures | A problem-solving approach to handle problems on a systems level |
| **2. Make it Feasible:** Selecting the Right Solution  
  • What are we doing (or not doing) that’s influencing the impact measure?  
  • How can we achieve this performance? | A mindset for curiosity and inquiry |
| **3. Expect Success:** Designing for Results  
  • Set objectives at multiple levels  
  • Define success  
  • Expand responsibilities | A framework to balance needs and feasibility |
| **4. Make It Matter:** Designing for Input, Reaction, and Learning  
  • Focus on the objectives  
  • Think about ROI  
  • Make it relevant  
  • Make it important  
  • Make it action oriented | A way to take on design challenges by applying empathy |
| **5. Make It Stick:** Designing for Application and Impact  
  • Focus on objectives  
  • Ensure transfer of learning to the program  
  • Design application tools  
  • Collect data | A culture that fosters exploration and experimentation |
| **6. Make It Credible:** Measuring Results and Calculating ROI  
  • Isolating the effects of projects  
  • Converting data to money  
  • Tabulating costs  
  • Calculating ROI | A fixed process and a toolkit |
| **7. Tell the Story:** Communicating Results to Key Stakeholders  
  • Define the audience  
  • Identify why they need it  
  • Select the method  
  • Move quickly  
  • Consider a one-page summary | A storytelling process to inspire senior executives |
| **8. Optimize Results:** Using Black-Box Thinking to Increase Funding  
  • Measure  
  • Improve  
  • Fund | A new competitive logic of business strategy |

*Phillips and Phillips (2017).*
THE ROI METHODOLOGY

The challenge for many program leaders is to collect a variety of data along a chain of impact that shows the program’s value. Figure 2-4 displays the sequential steps that lead to data categorized by the five levels of outcomes using the design thinking concepts. This figure shows the ROI Methodology, a step-by-step process beginning with the why and concluding with optimizing the results (J.J. Phillips and P.P. Phillips 2017).

Plan the Evaluation

As with all talent development practices, the ROI Methodology starts with planning the evaluation. The first step is determining business impact by connecting the soft skills program to important impact measures—the start with why. The next step is to select the proper solution to improve the impact measure, or make it feasible. This is followed by expect success, in which you define success, set objectives, clarify stakeholder roles to deliver success, plan data collection and analysis, and outline the details of the project. These first three steps are explored in chapter 3.

Step 1. Start With Why: Align Programs With the Business

In this step, the design thinking principle uses a problem-solving approach at the systems level. Here we clearly define why we’re pursuing the program, which is usually one or more impact measures, as described earlier. For some proposed programs, the impact is clearly known. For soft skills programs, the impact is often unknown. In some programs where new issues are tackled, the impact may not be clearly known, but the general impact categories should be identifiable. Essentially, this requires the program evaluator to ask if it is a problem worth solving or an opportunity worth pursuing.

Step 2. Make It Feasible: Select the Right Solution

In this step, the design thinking principle is to adopt a mindset for curiosity and inquiry as you develop the right solution. If you need to reduce work mistakes, what is the most feasible solution? Do you need a communication program? A problem-solving routine? This defines what people will be doing or not doing to influence the business measure. If you are changing an existing process, is there a clear indication that what you’re doing now isn’t working? Or, are you not doing something now that would improve the impact measure? For example, if the team is making too many errors, what is needed to stop that from happening? The solution may be a team-building program.
Step 3. Expect Success: Design for Results

We address four issues here while building the framework to balance needs and feasibility. First, this step requires defining what success looks like, particularly for the participants in the program; this is usually at the impact level. The second issue is to make sure objectives are set for the program along the levels of outcomes mentioned in the previous data categories. The objectives at the application and impact level indicate what the individuals involved in the program will be doing to make it successful and realize the impact. The third issue is that this definition of success is provided to all the designers, developers, and other team members who are supporting the program. These stakeholders can all clearly see what will be achieved and their role in making it successful. They will also design for the outcome. The fourth issue is to complete the planning documents, including the data collection plan, the ROI analysis plan, and the project plan.
Collect Data

Data collection is central to the ROI Methodology. Two steps are involved to verify success at various levels, which are covered in chapter 4. Make it matter measures success at Levels 0, 1, and 2 (input, reaction, and learning); make it stick involves data collection to measure success at Levels 3 and 4 (application and impact). Both hard data (output, quality, cost, and time) and soft data (satisfaction, happiness, and image) are collected using a variety of methods, including surveys, questionnaires, tests, observations, interviews, focus groups, action plans, performance contracts, and business performance monitoring.

The important challenge in data collection is to select the method or methods appropriate for the setting and the specific program, within the organization’s time, budget, and accuracy constraints.

Step 4. Make It Matter: Design for Input, Reaction, and Learning

In this step, the design thinking principle takes on design challenges by applying empathy. Here, members of the design team place themselves in the position of the people who will use and support the soft skills program. It is important to understand
the role of the participant with their challenges, priorities, and distractions. It is also important to understand the role of the participants’ manager, including their own demands, stresses, and deadlines. This step focuses on making sure that the program is relevant, important to the parties involved, and action oriented.

**Step 5. Make It Stick: Design for Application and Impact**

The design thinking principle applied here creates a culture that fosters exploration and experimentation. In this process, the designers and developers must do what’s necessary to achieve success. The participants must follow through on the plans and use soft skills to accomplish the end goal: impact. Designers and developers need to explore what works and what doesn’t, and experiment with different approaches. Essentially, this step focuses on transferring the skills to the environment where they are needed, whether that’s the workplace, community, or organization. This requires collecting data to make sure the program is operating smoothly, and ensuring built-in tools are available to measure and influence the success at the application and impact levels.

**Analyze Data**

Once you’ve collected data, the next stage is to analyze it, which is covered in chapter 5. The design thinking principle here uses a fixed process and a toolkit, which are represented by the steps in the ROI Methodology. These steps produce data that are important to all stakeholders, especially those who fund the program. There are five steps that connect the actual business impact to the financial ROI:

- Isolate the effects of the program.
- Convert data to monetary values.
- Identify intangible measures.
- Capture costs of the program.
- Calculate return on investment.

The focus of all five steps is credibility—thus, make it credible. The results have to be credible enough to be supported by the CFO.

**Step 6. Make It Credible: Isolate the Effects of the Program**

An often-overlooked issue in evaluation is the process of isolating the effects of the program. In this step, specific techniques are explored to determine the amount of impact directly related to the program. This is essential because many factors can influence impact data. The specific technique pinpoints the amount of improvement directly related to the program, resulting in increased accuracy and credibility of ROI calculations. These techniques can be used to tackle this issue: control group analysis, trend line analysis, mathematical modeling, participant estimates, manager estimates, senior management estimates, expert input, and customer input. Collectively, these techniques provide a comprehensive set of tools to isolate the effects of the program.
Step 7. Make It Credible: Convert Data to Monetary Value

To calculate the ROI, impact data are converted to monetary values and compared with program costs. This requires placing a value on each unit of impact data that’s connected with the program. Many techniques can be used to convert data to monetary values, depending on the type of data and the situation:

- Use the value add of output data as standard values.
- Use the cost of quality as a standard value.
- Convert time savings to wage and employee benefits (standard value).
- Calculate the value using an analysis of historical costs.
- Use internal or external experts to provide value.
- Search external databases for the value.
- Use participant estimates.
- Use manager estimates.
- Locate soft measures that are mathematically linked to easily value measures.

This step in the ROI model is absolutely necessary to determine a program’s monetary benefits. The process can be methodically accomplished using one or more of these strategies.

Step 8. Make It Credible: Identify Intangible Measures

In addition to tangible monetary benefits, you’ll need to identify the intangible benefits—those not converted to money. Intangible benefits include:

- enhanced work-life balance
- improved image
- less stress
- increased engagement
- improved quality of life
- increased brand awareness
- improved teamwork
- improved networking
- enhanced patient satisfaction
- improved service
- fewer complaints
- reduced conflict.

During data analysis, an attempt is made to convert data to monetary values. It’s typically possible to convert all hard data—such as output, quality, and time—to monetary values. However, the same can’t be said of converting soft data—if the process used to convert soft data is too subjective or inaccurate, the resulting values lose credibility in the process. When this happens, the data are listed as intangible benefits with
an appropriate explanation. For some programs, intangible benefits are extremely valuable and can often carry as much influence as hard data.

**Step 9. Make It Credible: Capture the Costs of the Program**

An important part of the ROI equation is the denominator, which is how program costs are calculated. Tabulating the costs involves monitoring or developing all the program’s related costs targeted for the ROI calculation. Among the components to include are:

- initial analysis costs
- cost to design and develop the program
- cost of program materials
- costs for the program team
- cost of the facilities for the program
- travel, lodging, and meal costs for the participants and team members
- participants’ salaries (including employee benefits)
- facilitator costs (if appropriate)
- administrative and overhead costs (allocated in some convenient way)
- evaluation costs.

The conservative approach is to include every cost so the total is fully loaded.

**Step 10. Make It Credible: Calculate the Return on Investment**

You calculate ROI using the program’s benefits and costs. The benefits-costs ratio (BCR) is calculated by dividing the program benefits by the program costs. In formula form:

\[
BCR = \frac{\text{Program Benefits}}{\text{Program Costs}}
\]

The return on investment is based on the net benefits divided by program costs, where the net benefits are calculated by subtracting the program costs from the program benefits. In formula form, the ROI becomes:

\[
\text{ROI (\%)} = \left(\frac{\text{Net Program Benefits}}{\text{Program Costs}}\right) \times 100
\]

This same basic formula is also used when evaluating other investments, in which the ROI is traditionally reported as earnings divided by investment.

**Optimize Results**

The next stage in the ROI Methodology is reporting and optimizing—two critical steps that are often neglected. The reporting step involves developing appropriate information through impact studies and other brief reports—tell the story. In most ROI
studies, several audiences are interested in and need the results. Improvements are made that lead to program optimization. This section also includes the process of using results to increase future program funding—optimize results. Chapter 6 focuses on these two areas.

**Step 11. Tell the Story: Communicate Results to Key Stakeholders**

In this step, the design thinking principle uses storytelling to inspire senior executives. Even with the results in hand, your efforts are not finished. You must still communicate the results to the stakeholders as quickly as possible to tell them the success of the program. If the program wasn’t successful, the data will show what needs to improve to make it better. Use storytelling when delivering the message to engage senior executives and other key stakeholders in the process and with the results. Audiences love stories, and now the story can be told using six different levels of data. This makes a more powerful story because stakeholders can clearly see how the dramatic events, interesting anecdotes, and insightful comments are backed up with proof that the program has made a difference. Narrative and numbers are essential.

**Step 12. Optimize the Results: Use Black Box Thinking to Increase Funding**

The design thinking principle here applies a new competitive logic of business strategy. The key is making sure that programs are properly supported and funded. This step uses the concept of black box thinking to analyze results and make improvements. This is prominent in the aviation industry where black boxes (voice and data recorders) are used to reveal the cause of airline crashes. The data are then used to make improvements.

Black box thinking focuses on making serious process improvements when a failure is identified. Even with success, you can make improvements to deliver more value. Ultimately, you are optimizing the ROI, which leads to the allocation of more funds. This builds the case for increased investment (instead of less investment) in the program because of the positive return on the investment.

This series of events is powerful: Design for the needed results, capture data to tell a compelling story, use data to improve the program and optimize ROI, and then make the case for more funding. It’s a novel way to think about the power of soft skills.

**OPERATING STANDARDS AND PHILOSOPHY**

To ensure consistency and replication of impact studies, operating standards must be applied when the process model is used to develop ROI studies. The results of the study must stand alone and must not vary with the individual conducting the study. The operating standards detail how you handle the steps and issues of the process. The ROI Methodology’s operating standards are based on 12 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 project.
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 the use of extreme data items and unsupported claims when calculating ROI.
9. Use only the first year of annual benefits in an 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.

These guiding principles serve to not only consistently address each step, but also provide a much-needed conservative approach to the analysis. A conservative approach may lower the actual ROI calculation, but it will also build credibility and secure buy-in and support from sponsors.

IMPLEMENTING AND SUSTAINING THE PROCESS
A variety of organizational issues will influence the successful implementation of the ROI process. These issues must be addressed early to ensure success. Specific topics or actions include:

- a policy statement concerning results-based programs and projects
- procedures and guidelines for the different elements and techniques of the evaluation process
- formal meetings to develop staff skills with the ROI process
- strategies to improve management commitment to and support for the ROI process
- mechanisms to provide technical support for questionnaire design, data analysis, and evaluation strategy
- specific techniques to place more attention on results.

The ROI Methodology can fail or succeed based on these implementation issues. Your organization should periodically review the ROI Methodology. You might consider annually reviewing your process to determine the extent to which it is adding value. This final element involves securing feedback from the process and determining
how well it is understood and applied. Essentially, this review follows the process
described in this book to determine the ROI of the ROI Methodology.

**BENEFITS OF THIS APPROACH**
The methodology presented in this book has been used consistently and routinely by
thousands of organizations worldwide during the past 25 years. In some fields and
industries, it is more prominent than in others. Much has been learned about its suc-
cess and the benefits the methodology can bring to organizations.

**Aligning With Business**
The ROI Methodology ensures alignment with business impact at three points in the
evaluation. First, even before the program is initiated, the methodology ensures that
alignment is achieved upfront, at the time the program is validated as the appropriate
solution. Second, by requiring specific, clearly defined objectives at the impact level,
the program focuses on the ultimate outcomes, which essentially drives the business
measures by its design, delivery, and implementation. Third, when reviewing the fol-
low-up data—after the business measures may have changed or improved—a method
is used to isolate the effects of the program on that data, which then supports the
connection to that business measure. (For example, showing the amount of improve-
ment directly connected to the program and ensuring there is business alignment.)

**Validating the Value Proposition**
It might seem obvious, but organizations undertake most soft skills programs to deliver
value. But the definition of value may be unclear or may not be what the program’s
sponsors, organizers, and stakeholders desire. Consequently, shifts in value often
occur. When the values are finalized, the program’s value proposition is detailed. The
ROI Methodology can forecast the value in advance; and if the value is delivered, it
verifies the value proposition agreed to by the appropriate parties.

**Improving Processes**
The ROI Methodology is a process improvement tool by design and by practice. It col-
lects data to evaluate how things are or aren’t, working. When things are not where
they should be—such as when programs are not proceeding as effectively as expected—
data are available to indicate what must be changed to make the program more effec-
tive. When things are working well, data can show what else could be done to make
them better. As you conduct a program, you collect results, and thus can provide
feedback to stakeholders for improving specific actions. These changes drive the pro-
gram to better results, which are then measured while the process continues. This
continuous feedback cycle is critical to process improvement and is inherent in the
ROI Methodology approach. In essence, it uses design thinking principles to design for
the results needed.
Enhancing the Image and Building Respect
Soft skills programs are criticized for being unable to deliver what is expected. Consequently, their image suffers. The ROI Methodology is one way to help build the needed respect, because it can make a difference in any function, and not just those under scrutiny. Many executives have used ROI to show the value of a program, perhaps changing the perception of it from one based on activity to one that credibly adds value. This methodology shows a connection to the bottom line and the value it delivers to stakeholders. This also removes issues about value and a supposed lack of contribution to the organization. Consequently, this methodology is an important part of the process of changing a program’s image and building respect.

Improving Support
Securing support for programs and projects is critical, particularly with organizations. While many programs enjoy the support of top-level executives who allocated the resources that made them viable, some middle-level managers and administrators may not support them if they can’t see the value they deliver in terms they appreciate and understand. Having a methodology that shows how a program is connected to important business goals and objectives can change this perception. When middle managers and significant others understand that a program is helping them meet specific performance indicators, they will usually support the process, or at least resist it less. In this way, the ROI Methodology can improve needed support.

Justifying or Enhancing Budgets
Some organizations have used the ROI Methodology to protect their current soft skills budgets or support proposed budgets. Because the methodology shows the impact or ROI expected or achieved by specific programs, the data can often be leveraged into budget requests. When a program is budgeted, the amount is often in direct proportion to the value that program adds. If little or no credible data support the contribution, budgets are often trimmed—or at least not enhanced. Bringing accountability to this level is one of the best ways to secure future funding.

Building Productive Partnerships
Almost every organization attempts to work with partners and other key managers in the organization or community. Unfortunately, some managers may not want to be partners because they don’t want to waste time and effort on a relationship that won’t help them succeed. They only want to partner with groups and individuals who can add value and help them in meaningful ways. Showing program results can enhance the likelihood of building these partnerships by providing the initial impetus for making the partnerships work.
QUICK SUMMARY
This chapter explored the success factors for soft skills and introduced the ROI Methodology, which underlies the approach to evaluate soft skills. The chapter briefly presented the different elements and 12 steps in the ROI Methodology, as well as the 12 standards necessary to understand how the ROI Methodology works in practice. The chapter concluded by discussing the benefits of this approach. It serves as a quick reference guide to the ROI Methodology and may be useful for clients, sponsors, or donors. The next seven chapters provide more details on the 12 steps of the ROI Methodology.
Align to Business Results

OPENING STORY
For the supporters of soft skills, the headline on the front page of the *Sunday Telegraph* was a nightmare. “Scotland Yard ‘Wasting’ £10M on Leadership Training” became a major story about this hidden expenditure (Dixon 2018). Despite a requirement for the Mayor’s Office for Policing and Crime to publish all expenditures exceeding £500, the details of Scotland Yard’s £10 million outlay had been kept secret until the story broke in the *Telegraph*.

The Concern
In 2018, the Metropolitan Police was accused by its officers of “wasting” £10 million on a leadership training program, even as crime rates in the city soared. Officers who had recently completed the course were said to have confronted their bosses, questioning why the money could not have been used to recruit new police officers, provide police cars, or enhance operational training. The program’s £10 million budget would fund roughly 1,000 police cars, at a time when the fleet was being reduced to save money, or the yearly salary of more than 400 police officers.

Additionally, the course—for which staff were taken off duty for a total of more than 50,000 days—was implemented amid soaring crime levels in the capital; 2018 saw more than 60 murders and the monthly homicide rate was overtaking that of New York City. It also came at a time when, as the *Sunday Times* reported in a front-page story, less than 5 percent of all burglaries and robberies had been solved (Ungoed-Thomas 2018).

The Program
The program, which a spokesman said cost £5 million a year over two years, was a five-day leadership training program. In total, more than 10,000 officers and staff at the rank of sergeant and above attended. The official summary of the program said it was designed “as a lever to drive positive behaviours and to empower our staff to communicate and engage more effectively” (Dixon 2018).

It was a classic blend of soft skills tools, including 50,000 hours of one-to-one coaching, five days of full workshops per person, two 360-degree feedback processes
per person, and one 4D personality profile per person. The profile test, which cost £17 per person, revealed whether the person had a blue, red, yellow, or green personality—yellows, for example, are talkative, expressive, light-hearted, sociable, flamboyant, and enthusiastic. At the end of the course, participants were asked to come up with personal pledges, such as to do more exercise.

The training was facilitated by Lane4, a management consultancy company founded by British swimmer and Olympic gold medalist Adrian Moorhouse. The company said that its leadership program will help people with “self-development (their identity, self-reflection, their behaviours, their impact on others)” as well as “creating meaning through shared identity” (Dixon 2018).

The Reaction
Reaction to the program was, as you might expect given the situation, mixed. A source who went through the course told *The Sunday Telegraph*: “Everyone was angry as they felt it was a waste of money and it took us out of borough for two days at a time when we have so much work to do.”

Metropolitan Police Federation Chairman Ken Marsh said that all officers wanted to do was to get on with their jobs. “We are on our knees,” he continued. “Crime is going up, and that is serious crime going up as well, the public are concerned, and we haven’t got the resources that we need.”

On the other side, a Met spokesman said this in favor of the program: “As London’s single biggest employer, we absolutely must support our leaders by giving them the skills they need to do their jobs. Well-led and well-trained people deliver better, and ultimately that means Londoners get a great service.” In addition, a representative from Scotland Yard said it was “confident this investment is worthwhile” and it had received positive feedback from many attendees.

A spokesman for the mayor of London also offered support for the program, saying, “As outlined in the Mayor’s Police and Crime Plan, the Met’s most valuable asset is its people and so it is important that staff have the right training and support to lead the organization.”

Who, Ultimately, Was Responsible?
The *Sunday Telegraph* and other newspapers published these articles about the program in an effort to share information about its success (or lack of success) to those who were funding the program—the citizens of London.

We thought this would be a good case study to review during an ROI Certification session, so we shared it with the participants and asked them to discuss and draw conclusions on several issues. The nearly 100 TD professionals said that, unfortunately, the situation was typical. And a vast majority (91 percent) suggested that the program was a waste. The others didn’t know.

The problem, according to the certification participants, was that the program wasn’t aligned with business measures. Crime rates and the number of crimes solved
are the business measures the funders (the London public) wanted to see addressed. It also appears that no analysis was done to determine if leadership development would be a solution (or at least part of it). Additionally, there weren’t any objectives for application and impact.

The group unanimously agreed that the provider also shared some responsibility for the failure, because a responsible provider would insist that the solution be connected to key performance measures, which in this case should have been crime rates and crime rates solved. That’s a must for a program with this much cost, importance, visibility, and commitment of time.

**IMPACT MEASURES ARE CRITICAL**

Most soft skills programs, like that of the Metropolitan Police program, do not connect directly to business measures. Instead, they often start at the suggestion of someone on the team or as a specific request from senior executives or requirements from a sponsor. Sometimes, the talent development team will initiate programs it believes are necessary to make improvements. For example, who could resist programs that focus on managing a global team, keeping families together, leading confidently, improving female empowerment, influencing others when you’re not in charge, communicating effectively in a digital workplace, building high-performance teams, gaining respect for police officers, fostering employee engagement, listening with empathy, or providing social skills for low-income families?

If the business need is unknown when a program is launched, it may be difficult to make that connection later in the process. This goes against most sound corporate advice. “Begin with the end in mind” is an old adage popularized by Stephen R. Covey in *The 7 Habits of Highly Effective People*. Simon Sinek urges leaders to “start with why.” In the context of most soft skills programs, the end is improved business measures. Clarifying these measures up front helps answer the question, “Why this particular program at this time?”

This chapter presents how to use the first three steps of the ROI Methodology to transform soft skills programs into a business-contributing process (Figure 2-4). Whether you are in a business enterprise, government, NGO, nonprofit, or university, business needs exist and are often expressed in terms of output, quality, time, and costs. Defining business needs clearly and early avoids inefficiencies and the problems that usually permeate the process and produce disappointing results. This chapter starts by presenting the challenge of alignment and why it’s a change from TD professionals’ standard operating procedure. Then it explains the five levels of needs assessments:

- addressing payoff needs
- defining business needs
- analyzing performance needs
- determining learning needs
- uncovering preference needs.
From the identified needs, an appropriate solution is determined. Then, the objectives are developed and planning is set in motion.

**THE CHALLENGE OF ALIGNMENT**

Based on the approximately 5,000 ROI evaluation studies that ROI Institute has conducted or reviewed, the main cause of program failure is a lack of business alignment. If programs are not aligned to the business, it’s difficult (if not impossible) to determine their impact, which is the top measure category executives, sponsors, and donors request. Stakeholders want to see how programs connect to important business measures. After impact, they find the most value in the financial ROI—comparing the monetary benefits of a program to its cost. When the proposed program exceeds thresholds of costs, importance, and strategic and operational implications, you must explore the alignment between the program and the business. However, four challenges tend to stand in the way.

**It’s a Change**

The process of connecting programs to a business need, including a specific business measure, represents a change that has evolved in recent years. Although it seems logical to start with why, many soft skills programs actually start with a solution before trying to find a precise reason for that solution. Consequently, before they can focus on why, they first have to change the way soft skills programs are initiated in the organization to ensure the connection exists prior to making an investment. Some people will resist the change, but it is necessary to ensure the delivery of business value.

**It Requires Discipline**

Proper analysis requires discipline and determination. A structured, systematic process will enhance credibility and allow for consistent application. This requires focus and thoroughness, leaving little room for major shortcuts.

While the process described in this book is necessary, not every soft skills program should be subjected to a detailed analysis. Some business needs are obvious and require little more than simply developing the program. However, additional analysis may be needed to ensure the program is the right solution or to fine-tune it for future application. The amount of analysis required often depends on the stakes involved.

**It Causes Paralysis by Analysis**

Whenever a needs analysis is proposed, many individuals respond with concern and, at times, resistance. Some worry about paralysis by analysis, fearing that requests and directives may place them in a cycle of additional analyses. This can be a dilemma for many organizations because analysis must occur to ensure that programs are appropriate. Unfortunately, analysis is often misplaced, misunderstood, and misrepresented,
and individuals imagine the worst—complex problems, confusing models, and an endless array of data requiring complicated statistical techniques to ensure that all bases are covered. In reality, analysis does not have to be so difficult. Simple techniques may uncover the cause of the problem or the need for a specific program.

It’s Often Misunderstood
To understand alignment, it is helpful to understand the model shown in Figure 3-1. This chapter explores the left side of the model, beginning with payoff needs and progressing to preference needs. The objectives derived directly from these needs are defined, which makes a strong case for having multiple levels of objectives that correspond to specific needs. The right side of the model is essentially the measurement of success, as presented in the rest of this book.

**FIGURE 3-1. THE ALIGNMENT MODEL**

**PAYOFF NEEDS**
Identifying payoff needs—those opportunities for the organization to add money, reduce costs, or do some greater good—begins with these questions:

- Is this program worth doing?
- Is this a problem worth solving?
- Is this an opportunity worth pursuing?
- Is the proposed solution feasible?
- Will this new program add enough value to offset its costs?
The answer is clear for programs that address significant problems or opportunities with potentially high rewards. However, the answers may be more challenging for lower-profile programs or those for which the possible payoff is less apparent. Regardless of the situation, they present an initial opportunity to ensure a program is aligned with the needs of the organization. The analysis can be simple or comprehensive. The program’s ultimate payoff will be in either profit or cost-avoidance.

Training programs can improve sales, increase market share, introduce new products, open new markets, enhance customer service, or increase customer loyalty, and will likely generate improvements in profit by increasing sales revenue. Other revenue-generating measures include increasing memberships, increasing donations, obtaining grants, and generating tuition from new and returning students—all of which, after taking out the administrative costs, typically result in a profitable benefit.

However, most programs will pay off with cost savings, which occur through cost reduction or cost avoidance. Cost savings programs improve quality, prevent talent turnover, reduce cycle time, increase productivity, decrease crime rates, avoid hospital readmissions, and minimize delays. When the goal is solving a problem, monetary value is often based on cost reduction.

Cost-avoidance programs sometime aim at reducing risks, avoiding problems, or preventing unwanted events, such as system downtime. While some may view cost avoidance as an inappropriate measure for developing monetary benefits and calculating ROI, if the assumptions are correct, avoiding costs (such as compliance fines) can be more rewarding than reducing an actual cost. Preventing a problem is often more cost-effective than waiting for it to occur and then needing to correct it.

Determining the potential payoff, the first step in the needs analysis process, is closely related to the next step, determining the business need, because the potential payoff is often based on one or more business needs. Determining the payoff is a function of two factors: the potential monetary value of improving an impact measure and the approximate program cost. Determining these monetary values in detail usually yields a more credible forecast of a program’s potential to add value. However, this step may be omitted if the issue (business need) must be resolved regardless of the cost or is an obviously high-payoff activity. For example, if the problem involves a safety concern or a regulatory compliance issue, then a detailed payoff analysis may not be needed.

The extent of the analysis detail may also hinge on securing program funding. If the potential funding source does not see value in the program but clearly understands the potential costs, including more detail in the forecast can provide a more convincing case for funding. For example, you may want to provide greater detail under these circumstances:

- **When minimal support for the proposed program exists.** The payoff analysis can provide an estimated value of the improvement (or cost avoidance) and the potential contribution to business goals.
• **When the proposed program is anticipated to be expensive.** It’s important to estimate the potential payoff before spending significant resources on a program.

• **When additional funding is needed for a program.** This is particularly true if the funding comes from external resources or there is serious competition for internal funding sources.

• **When a key sponsor wants more analysis before the program moves forward.** Although a sponsor may support the proposed program enthusiastically, more analysis may solidify their confidence in it and provide the needed information to secure final approval.

Knowledge of the potential payoff is not needed if most of the stakeholders agree that the program payoff will be high or if the problem in question must be resolved regardless of cost.

**Key Questions to Ask**

Begin the analysis with several questions, such as those shown in Figure 3-2. The answers will help make the case for proceeding with or without analysis. They may also indicate there is no need for the program. Understanding the implications of moving forward (or not) can reveal the legitimacy of the proposed program.

*FIGURE 3-2. KEY QUESTIONS TO ASK ABOUT THE PROPOSED PROGRAM*

<table>
<thead>
<tr>
<th>Questions</th>
<th>Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Why is this an issue?</td>
<td>Are there multiple solutions?</td>
</tr>
<tr>
<td>What happens if we do nothing?</td>
<td>Who will support the program?</td>
</tr>
<tr>
<td>Is this issue critical?</td>
<td>Who will not support the program?</td>
</tr>
<tr>
<td>Is this issue linked to our strategy?</td>
<td>How much will the solutions cost?</td>
</tr>
<tr>
<td>Is it possible to correct it?</td>
<td>How can we fund the program?</td>
</tr>
<tr>
<td>Is it feasible to improve it?</td>
<td>Are any important intangible benefits involved?</td>
</tr>
<tr>
<td>How much is the issue costing?</td>
<td>Is there a potential payoff (positive ROI)?</td>
</tr>
<tr>
<td>Who is absorbing this cost?</td>
<td>Do we need to forecast outcomes, including ROI?</td>
</tr>
<tr>
<td>Can we find a solution?</td>
<td></td>
</tr>
</tbody>
</table>

The good news is that answers to these questions may be readily available, because the need was already realized and the consequences were validated. For example, many organizations face a retention issue for a critical talent group and have a standard value for the cost of employee turnover, which is usually expressed as a percent of annual pay. Whether this cost comes from internal analysis or from published studies, it will tell you the impact of the problem. For a program designed to reduce recidivism (convicted felons returning to prison), the cost of incarceration is known, so the impact of the problem can be quickly calculated. The proposed program’s cost can usually be estimated, even if the specifics are not fully developed, and that number can be compared with the problem’s cost to get a sense of added value.
Obvious Versus Not-So-Obvious Payoffs

The potential payoff is obvious for some programs but not-so-obvious for others. These opportunities are obvious payoffs:

- Sexual harassment complaints per 1,000 employees are the highest in the industry.
- System downtime is double last year’s performance.
- Excessive turnover of critical talent: 35 percent above benchmark data.
- Very low market share in a market with few players.
- Inadequate customer service: 3.89 on a 10-point customer satisfaction scale.
- Excessive product returns: 30 percent higher than the previous year.
- Excessive absenteeism in call centers: 12.3 percent versus 5.4 percent for industry.

Each item is a serious problem that executives, donors, administrators, or officials would want to address. For these situations, moving straight to the specific business needs level would be safe.

In other circumstances, however, the issues might be unclear—especially when they arise from intuition, political motives, biases, or perceptions of a problem. For these opportunities, the payoff may not be as obvious:

- Implement a teambuilding project.
- Provide counseling at the food bank.
- Improve leadership competencies for all city managers.
- Provide empowerment training for seventh- and eighth-grade students.
- Implement mindfulness sessions with team members.
- Provide unconscious bias awareness for all associates.
- Offer marriage counseling sessions for potential newlyweds.
- Create a great place to work.
- Implement career counseling for prison inmates.
- Implement stress reduction sessions for new parents.
- Create a wellness and fitness center.
- Build critical thinking skills.
- Create an engaged workforce.

These not-so-obvious opportunities need clarification. Some requests are common, such as when executives and administrators suggest using a different process to change a dysfunctional situation or achieve vague or nonspecific goals. They can deliver value, but only if they are focused and clearly defined at the start. In fact, some of the more vague opportunities can pay off tremendously. In our work at ROI Institute, we have seen most of these opportunities lead to valuable programs. Sometimes, overlooking a vague request may not be appropriate, because that request may have valuable consequences. The key is to define, approve, and focus on the desired business impact of the programs.
BUSINESS NEEDS
Determining specific business needs is directly linked to developing the potential payoff. When determining the business needs, you can pinpoint specific measures 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, as well as saving time and reducing costs.

A business need is represented by a business measure. You can measure any process, item, or perception, which is critical for this level of analysis. If the program focuses on solving a problem, something clearly established in the minds of program initiators, the measures are often obvious. If the program prevents a problem, the measures may also be clear. The same can be said of programs that take advantage of a potential opportunity. Otherwise, how will the opportunity or value proposition be defined? The important point is that measures are in the system, ready to be captured for this level of analysis. The challenge is to identify and find these measures swiftly.

Hard Data Versus Soft Data
To help focus on the desired measures, clarification between hard data and soft data is needed. Hard data are primary measures of improvement presented in rational, undisputed facts that exist somewhere in the organization’s system. They are easy to measure and quantify and are relatively easy to convert to monetary values.

The ultimate criteria for measuring the effectiveness of an organization rests on hard-data items such as revenue, productivity, profitability, cost control, and quality assurance. Governments have output, quality, costs, and time. Even NGOs and nonprofits have many hard-data items such as students placed, patient outcomes, crime rates, and jobs created. Hard data are objectively based and represent common, credible measures of an organization’s performance. Figure 3-3 shows how hard data can be grouped into categories of output, quality, cost, and time.

Hard data may lag behind organizational changes and conditions by many months. Therefore, supplementing hard data with soft data—such as attitude, motivation, and satisfaction—may be useful. For example, customer dissatisfaction leads to lost customers, and employee dissatisfaction leads to employee turnover. However, soft data are often more difficult to collect, analyze, and convert to monetary values because they’re often subjective. Soft data are often seen as less credible for performance measurement, but they’re still important. Figure 3-4 shows a few common examples and types of soft data.
### FIGURE 3-3. EXAMPLES OF HARD DATA

<table>
<thead>
<tr>
<th>Output</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Citizens vaccinated</td>
<td>• Cycle time</td>
</tr>
<tr>
<td>• Graduation rate</td>
<td>• Overtime</td>
</tr>
<tr>
<td>• Units produced</td>
<td>• On-time shipments</td>
</tr>
<tr>
<td>• Money collected</td>
<td>• Project time</td>
</tr>
<tr>
<td>• Licenses issued</td>
<td>• Processing time</td>
</tr>
<tr>
<td>• New accounts generated</td>
<td>• Supervisory time</td>
</tr>
<tr>
<td>• Forms processed</td>
<td>• Time to proficiency</td>
</tr>
<tr>
<td>• Inventory turnover</td>
<td>• Repair time</td>
</tr>
<tr>
<td>• Inspections made</td>
<td>• Work stoppages</td>
</tr>
<tr>
<td>• Projects completed</td>
<td>• Wait time</td>
</tr>
<tr>
<td>• Shipments processed</td>
<td>• Time to hire</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Costs</th>
<th>Quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Unit costs</td>
<td>• Readmissions</td>
</tr>
<tr>
<td>• Costs by account</td>
<td>• Failure rates</td>
</tr>
<tr>
<td>• Variable costs</td>
<td>• Rework required</td>
</tr>
<tr>
<td>• Fixed costs</td>
<td>• Complications</td>
</tr>
<tr>
<td>• Overhead cost</td>
<td>• Product defects</td>
</tr>
<tr>
<td>• Operating costs</td>
<td>• Deviations from standard</td>
</tr>
<tr>
<td>• Program cost savings</td>
<td>• Inventory adjustments</td>
</tr>
<tr>
<td>• Accident costs</td>
<td>• Compliance discrepancies</td>
</tr>
<tr>
<td>• Program costs</td>
<td>• Accidents</td>
</tr>
<tr>
<td>• Participant costs</td>
<td>• Crime rate</td>
</tr>
</tbody>
</table>

### FIGURE 3-4. EXAMPLES OF SOFT DATA

<table>
<thead>
<tr>
<th>Leadership</th>
<th>Client Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Teamwork</td>
<td>• Client complaints</td>
</tr>
<tr>
<td>• Collaboration</td>
<td>• Client satisfaction</td>
</tr>
<tr>
<td>• Networking</td>
<td>• Client loyalty</td>
</tr>
<tr>
<td>• Communication</td>
<td>• Client retention</td>
</tr>
<tr>
<td>• Decisiveness</td>
<td>• Client value</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Work Climate and Satisfaction</th>
<th>Employee Development and Advancement</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Grievances</td>
<td>• Promotions</td>
</tr>
<tr>
<td>• Discrimination charges</td>
<td>• Intellectual capital</td>
</tr>
<tr>
<td>• Job satisfaction</td>
<td>• Transfers</td>
</tr>
<tr>
<td>• Employee engagement</td>
<td>• Performance appraisal ratings</td>
</tr>
<tr>
<td>• Stress</td>
<td>• Readiness</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Initiative and Innovation</th>
<th>Image and Reputation</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Creativity</td>
<td>• Brand awareness</td>
</tr>
<tr>
<td>• Suggestions</td>
<td>• Reputation</td>
</tr>
<tr>
<td>• Trademarks</td>
<td>• Social responsibility</td>
</tr>
<tr>
<td>• Copyrights and patents</td>
<td>• Environmental friendliness</td>
</tr>
<tr>
<td>• Process improvements</td>
<td>• Diversity and inclusion</td>
</tr>
</tbody>
</table>
Using Tangible Versus Intangible Data: A Better Approach

The critical issue with soft data is the difficulty of converting it to monetary values. While some of the measures listed in Figure 3-4 could be converted to money, considering most of them as soft-data items is more realistic and practical. The definition of an intangible measure (based on the standards of the ROI Methodology) is something that cannot be converted to money credibly or with minimum resources. If a soft data measure can be converted to money, it becomes tangible.

To avoid debates over what should be considered soft or hard data, this book will typically use the terms *tangible* and *intangible*. This is the best approach for program evaluation because the data classification can be specific to the organizational setting as the organization determines whether a measure is tangible or intangible. For example, in some organizations it’s easy to determine a monetary value for customer satisfaction, so it costs little time to obtain. Therefore, customer satisfaction is tangible, because it can be converted to money. However, in other organizations where customer satisfaction is not connected to money, the measure is usually left as intangible due to the amount of effort needed to credibly convert it to money.

Finding Sources of Impact Data

The sources of impact data, whether tangible or intangible, are plentiful. They come from routine reporting systems in the organization or externally in governments, private databases, or search engines. In many situations, these items have shown the need for the program or project.

Some TD professionals may think organizational data sources are scarce if the data are not readily available or within easy reach through database systems. However, with a little determination and searching, the data can usually be identified. In our experience, more than 80 percent of the measures that matter to a specific program or project have already been developed and are easily available in databases or systems. Rarely do new data collection systems or processes have to be developed.

Identifying All the Measures

When searching for measures to connect to the program and pinpoint business needs, it’s helpful to consider all possible measures that could be influenced. Sometimes, collateral measures move in harmony with the program; for example, efforts to improve safety may also improve productivity and increase job satisfaction. Thinking about the adverse impact on certain measures may also help; for example, when cycle times are reduced, quality may suffer, or when sales increase, customer satisfaction may deteriorate. Finally, program team members must prepare for any unintended consequences and capture them as other data items that might be connected to or influenced by the program.
What Happens If You Do Nothing?

When settling on the precise business measures for the soft skills program, several “what if” scenarios can be examined. If the organization does nothing, understanding the potential consequences may be beneficial. In these cases, these questions may help show the consequences of inaction:

• Will the situation deteriorate?
• Will operational problems surface?
• Will budgets be affected?
• Will we lose influence or support?
• Will we miss the opportunity?

Answering these questions can help organizations settle on a precise set of measures with a hint of the extent to which the measures may change or improve. When examining the full context of the situation, you may be able to identify other measures that could influence the program. This is a way to see the complete process and pinpoint any measures that may be connected to the project or program.

PERFORMANCE NEEDS

With business needs in hand, the next step is determining how to improve business measures. This step identifies the causes of problems and explores various approaches to address the opportunity. For some program owners, this may require developing a new role and skill set for the team.

Some who implement soft skills programs are moving from being request takers to being recognized as business contributors. They are resisting the temptation to say yes to every request for a new program. Instead, they’re taking that request, connecting the proposed program to business impact measures, and identifying a solution that will meet the business needs.

In the past, an analyst might have pinpointed needs that translate into program implementation. However, this process has evolved into a performance consulting role, where the analyst delves deeper into the analysis to look for the causes of problems or opportunities and to uncover solutions. The skill set for the performance consultant is different than that of a typical analyst (Gaines Robinson et al. 2015). It begins with the ability to have a productive dialogue with the program requestor.

THE PERFORMANCE DIALOGUE

Performance dialogue is something that program requestors often prefer to avoid, which means it might be difficult for you to initiate. After all, the requestor is usually an executive, sponsor, donor, or supporter, who was perfectly clear about the problem and its solution. It’s hard to turn them down. If you ask the requestor too many questions, they may perceive you as an unwilling partner and take the request elsewhere.

Don’t let this deter you! Here are a few tips to open the conversation that should create improved alignment with the business.
Examine the Data and Records
Sometimes, a request is connected to particular documents, such as organizational records. It might be helpful to review the records and explore any trends before starting the dialogue. The cause may be evident in the data. For example, in one organization, a senior executive requested a leadership program for managers to control talent retention. However, exit interviews showed that employees were leaving for higher pay. If the data from those interviews are credible, then a leadership development solution may not correct the problem.

Initiate the Discussion
The alignment model (Figure 3-1) is a perfect guide to initiating this conversation. In an ideal world, the requestor identifies the payoff and business needs, and asks for help identifying the other levels of need, which should point to a solution. Reality, however, is often different. The requestor will typically begin by requesting a program—a solution—and the conversation may move up the left side of the model as a result. In doing so, the performance consultant can clarify preference, learning, performance, business, and payoff needs.

Case Study
A senior executive in a large nonprofit organization requests a team building program to teach her team to work together. In response to the request, the performance consultant asks, “What is occurring (or not occurring) in your team that led you to conclude you need team building?”

This harmless question receives the following response: “They are working in silos, they don’t communicate very well, they don’t seem to want to help each other, they won’t share information, and they see others make mistakes without helping them.”

These are critical behaviors that point toward a solution that will embed new behaviors in the team—they are performance needs. Next, the consultant validates the learning needs with another question, “Do they know how to work this way now?”

The quick response was no, which can be validated with a few interviews, if necessary.

Then, the performance consultant asks, “How is this affecting your key performance indicators (KPIs) or other important measures?” She responds with, “We don’t really have a problem with our KPIs. I just don’t want this behavior, so please implement the program.”

The performance consultant, with this new information in mind, explains the situation using the alignment model as a guide. “We can implement the program, but there are no business needs for it, except maybe intangible measures of teamwork and collaboration. Is that OK with you?”

This makes the executive think about her request, and base her decision on whether to pursue it further on intangibles.
Use Benchmarking From Similar Solutions
Perhaps there are similar programs with business outcomes that can help you assess the situation when speaking with the requestor. If the requestor suggests a well-documented program but has no clear idea of the outcomes they seek in terms of business impact, refer to measures in a case study from the program provider. Case studies and benchmarking data from suppliers are excellent tools that show how other organizations have tackled an issue with a similar solution. This helps keep the conversation going.

Use Evaluation as the Hook
If the discussion is going nowhere on the left side of the alignment model, maybe it’s time to move to the right. This leads to a simple question, “What levels of evaluation do you expect to achieve as a result of the program?” Then take the requestor through the different outcome levels that can be captured at each. The typical requestor would like to see the impact, and some may be intrigued with the concept of ROI. If they indicate interest in these two levels of evaluation, remind them that you don’t see impact objectives that form the basis of evaluation. Objectives are derived from the business needs. So, provide examples of business needs, and ask them to elaborate on the business measures that matter to them and how the requested program could influence those impact measures. In this situation, the focus of the conversation is more on evaluation and less on analysis. The potential evaluation is a hook to have more analysis or discussion.

Involve Others
If the request is coming from the senior executive, top administrator, or a high-profile sponsor, there are likely other individuals who understand the issues in more detail. Engaging them in the conversation may lead to some interesting discussions regarding the cause of the problem and potential solutions, including the one requested. Sometimes, individuals who are closest to the work being done will suggest something that’s completely different than those who observe the situation at a distance. The day-to-day context is an advantage.

Discuss Disasters in Other Places
Sometimes it is helpful to bring out examples of programs that went astray in other organizations or even within the same organization. Disasters happen. Implementing programs for the wrong reasons and failing to deliver results is not an isolated concept. It may be helpful to discuss a suggested program’s previous failings, if they are known, and what it would take to avoid these failings in the future. This can help you assess the risks and consequences of pursuing a program that may not be the right solution. Have the requestor consider the time, resources, and costs associated with implementation. That may be enough for the requestor to allow more analysis and discussion or to consider alternatives.
Use Analysis Techniques

Determining a performance need is essentially solving a problem. When a business measure is not where it should (or could) be, the question is “What’s causing this problem or opportunity?” Another approach to assessing performance needs is to use one or more analytical techniques, which often use tools from problem solving, quality assurance, and performance improvement. These techniques include:

- brainstorming
- problem analysis
- cause-and-effect diagram
- force-field analysis
- mind mapping
- affinity diagrams
- simulations
- diagnostic instruments
- focus groups
- probing interviews
- job satisfaction surveys
- engagement surveys
- exit interviews
- exit surveys
- nominal group technique
- statistical process control

Searching for multiple causes and solutions is important because impact measures are often inhibited for several reasons. However, multiple solutions must be considered in terms of implementation—deciding whether to explore them in total or tackle them in priority order (Rothwell, Hohne, and King 2017).

Keep It Sensible

It’s important to consider the resources needed to examine records, research databases, and observe situations and individuals. Analysis takes time, and performance needs can vary considerably. These needs may include ineffective behavior, inadequate systems, disconnected process flow, improper procedures, unsupportive culture, insufficient technology, and unsupportive environment. Uncovering them through either conversation or using the analytical techniques listed above may seem like a daunting task. And it can be, especially when considering the number of factors that could be causing business measures to perform at the current level. Thus, the risk of overanalyzing the situation is great—take a sensible approach to assessing the performance gaps that need closing. Consider the value of improving the targeted business measures and balance the analysis investment with the benefits of solving the problem.

LEARNING NEEDS

The performance needs uncovered in the previous step will require a learning component to ensure all stakeholders know what they need to do to achieve a change in performance. In some cases, learning becomes the principal solution; in others, learning plays a minor part and often involves simply understanding the process, procedure, or policy. For example, when implementing a new ethics policy, the learning component requires understanding how the policy works and the participants’ role in it.
A variety of approaches are available to measure specific learning needs. Because multiple tasks and jobs are frequently involved in any program, each should be addressed separately. Sometimes, the least useful way to find out what skills and knowledge are needed is to ask the participants, because they may not be sure of what is needed or may not know enough to provide adequate input.

**PREFERENCE NEEDS**
The final level of needs analysis is based on preferences, which drive the program requirements. Essentially, individuals prefer certain processes, schedules, venues, or activities for the structure of the program or project. These preferences define how the program should be implemented. If the program is a solution to a problem, this step defines how the solution will be implemented and how participants should perceive its value. If the program addresses an opportunity, this step outlines how participants should see value in the program.

Figure 3-5 shows the typical preference needs from the participant’s perspective. These statements define the parameters of the program in terms of value, necessity, and convenience. Implementation is based on the input of several key stakeholders. For example, participants involved in the program (those who must make it work) may have a preference, but it could exceed the available resources, time, and budget. The immediate manager’s input may help minimize the amount of disruption and maximize resources. Those who support or own the program often place preferences around the program in terms of urgency and importance. Because this is a Level 1 need, the program structure and solution will directly relate to the reaction objectives and the initial reaction to the program.

**FIGURE 3-5. TYPICAL LEARNER PREFERENCE NEEDS**

<table>
<thead>
<tr>
<th>This program should be:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Relevant to my work</td>
<td>• Easy to use</td>
</tr>
<tr>
<td>• Relevant to the community</td>
<td>• Convenient for me</td>
</tr>
<tr>
<td>• Important to my success</td>
<td>• New to me</td>
</tr>
<tr>
<td>• Important to the organization</td>
<td>• A good investment of funds</td>
</tr>
<tr>
<td>• Valuable to me</td>
<td>• Implemented without disruption of work</td>
</tr>
<tr>
<td>• Valuable to society</td>
<td>• Seamless with our systems</td>
</tr>
<tr>
<td>• Action-oriented</td>
<td>• Something I will recommend to others</td>
</tr>
<tr>
<td>• Necessary for our organization</td>
<td>• Something I will use</td>
</tr>
</tbody>
</table>

**DEFINING THE SUCCESS OF PROGRAMS**
While it is important for the organization to clearly articulate and understand the business, it is also helpful to understand the business of the TD programs it implements.
What one-sentence description represents the current definition of success for all your soft skills programs? Here are six possibilities:

- “Serve the largest number of people with the least amount of disruption and cost.”
- “Participants are engaged, enjoy the programs, and see their experience as valuable.”
- “Participants are learning the content, information, and skills to make this program successful.”
- “Participants take action, use the content, and make important changes.”
- “Participants are driving important impact measures and having an impact in their work, community, or organization.”
- “Participants and the organization have a positive return on the investment of their time and the resources for this program.”

These six statements represent the input (Level 0) and five levels of outcomes: reaction, learning, application, impact, and ROI. The typical conclusion from this exercise is that the program implementation team needs to change its definition of success, because most teams reveal that their definition hovers around Level 0, 1, or 2. The goal is to change the definition of success to focus on outcomes at Level 3 or Level 4 and occasionally Level 5.

By defining success at these higher levels, commitment to achieving that level of success increases. The expectations are greater for program owners, sponsors, executives, and administrators, who want to see impact (and maybe ROI) for programs. However, the dilemma is that commitment and achievement are not the same. If the commitment is to drive business impact, then it is important to achieve business impact. When the program achieves this, sponsors will perceive the program as a true business contributor and recognize the program as an investment, not a cost.

Definitions of success at the business impact and ROI levels drive the process described in this book. The definition will appear in field handbooks, policy guides, opening statements, and maybe even in the program’s name (such as Coaching for Business Impact).

**DEVELOPING OBJECTIVES AT MULTIPLE LEVELS**

To cover all the outcome levels, you must set program objectives for receiving a positive reaction from stakeholders, ensuring participants have learned what’s required, completing what’s expected of them, improving impact measures, and achieving the minimum ROI. Objectives are powerful because they provide direction, focus, and guidance.

Setting higher levels of objectives keeps business alignment on track during the program and positions them to achieve business results. However, to have impact, objectives also need to be set at the reaction, learning, and application levels. When performing an ROI calculation, an objective at the ROI level must be set. Figure 3-6
summarizes these levels. Ideally, objectives should be specific, measurable, achievable, relevant, and time-based (SMART). The precision is important.

**FIGURE 3-6. MULTIPLE LEVELS OF OBJECTIVES**

<table>
<thead>
<tr>
<th>Levels of Objectives</th>
<th>Focus of Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 1. Reaction</td>
<td>Defines specific measures of reaction to the program as it is revealed and communicated to the stakeholders</td>
</tr>
<tr>
<td>Level 2. Learning</td>
<td>Defines specific measures of knowledge, information, contacts, and skills as the participants and other stakeholders learn how to make the program successful</td>
</tr>
<tr>
<td>Level 3. Application</td>
<td>Defines specific measures of actions that define success with application and implementation of the program</td>
</tr>
<tr>
<td>Level 4. Impact</td>
<td>Defines the specific impact measures that will change or improve as a consequence of the program’s implementation</td>
</tr>
<tr>
<td>Level 5. ROI</td>
<td>Defines the minimum return on investment from the program, comparing program costs with the program’s monetary benefits</td>
</tr>
</tbody>
</table>

**Reaction Objectives**

For any program to be successful, stakeholders must react favorably—or at least not negatively. Ideally, they should be satisfied with the program, because the best solutions offer win-win outcomes for all. Reaction objectives are necessary to maintain proper focus. Unfortunately, many programs do not have specific objectives at this level because the designers and developers assume a particular reaction. However, it’s best to drive that reaction with specific objectives, such as:

- At the end of the program, participants rate each of these statements at least a four out of five on a five-point scale:
  - The program is relevant to my (our) situation.
  - The facilitators and organizers were effective.
  - The program is valuable to this 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 an excellent use of my time.
  - I will recommend the program to others.
  - I will use the concepts and materials from this program.

**Learning Objectives**

Every program will involve learning. In some cases, the learning component is significant, such as major skill-building solutions or large change projects. To ensure that stakeholders have learned what’s required for the program to be successful, learning objectives
are developed. The best learning objectives are measurable, clearly worded, specific, and necessary for success with the program. They can have three components:

- **Performance**—what the participant or stakeholder will be able to do to make the program successful.
- **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 program.

These are typical learning objectives:

- After completing the program, participants will be able to:
  - Resolve conflicts within 24 hours.
  - Complete the leadership simulation in 15 minutes.
  - Identify the six features of the new ethics policy.
  - List five benefits of an effective team.
  - Use problem-solving skills when given a specific problem statement.
  - List five benefits of meditation.
  - Score 25 or better in 10 minutes on the unconscious bias quiz on the first try.
  - Demonstrate all five customer-interaction skills with rating of four out of five on a five-point scale.
  - Explain the five benefits of diversity in a work group in five minutes.
  - Follow the five steps of critical conversations.
  - Score at least nine out of 10 on a sexual harassment policy quiz.
  - Follow an onboarding process to become fully competent in 90 days.

**Application Objectives**

Program implementation should be guided by application objectives that clearly define what is expected and to what level of performance by reflecting the action desired from the program. They should also involve milestones that indicate when steps or phases of the process are completed. Application objectives are critical because they describe the expected outcomes in the intermediate area between learning what is necessary to make the program successful and the actual impact that will be achieved because of it. Application objectives also describe how participants should perform, the process steps that should be taken, or the technology that should be used as the program is implemented. The emphasis of application objectives is on behaviors, tasks, actions, or activities.

The best application objectives identify behaviors or action steps in a process that can easily be observed or measured. They specify what stakeholders will change or have changed as a result of the program. As with learning objectives, application objectives may have three components: performance, condition, and criteria. Sometimes application objectives are included in projects to a degree, but aren’t as specific as they could be or need to be. To be effective, application objectives must clearly define an
environment where the program is successfully implemented. These are typical application objectives:

- When the program is implemented:
  - Within one month, participants will conduct five critical incident interviews.
  - Within two years, 95 percent of high-potential employees will complete their individual development plans.
  - At least 50 percent of participants will join a hiking or walking group in 20 days.
  - Diabetic patients will implement three of the four critical behaviors in 30 days.
  - Within a year, 10 percent of participants will submit documented innovative suggestions.
  - Participants will take steps to engage team members each day.
  - Sexual harassment activity will cease within one month after the zero-tolerance policy is implemented.
  - 80 percent of employees will use one or more team building actions each week.
  - 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.

**Impact Objectives**

Most programs should have impact objectives, even in governments, nonprofits, and NGOs. Business impact objectives are expressed in terms of the key business measures that should be improved as the application objectives are achieved. These are critical to measuring business performance because they place an emphasis on achieving the impact results key stakeholders expect and demand. They also ensure business alignment throughout the program. The best impact objectives contain data that are easily collected and well-known to the client group. They are results-based, clearly worded, and specify what the stakeholders have accomplished as a result of the program. These are examples of impact objectives:

- After program completion, these conditions should be met:
  - 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.
  - Operating room errors will reduce by 10 percent per month in two months.
  - The student debt load should be reduced by 30 percent in three years.
  - Incidents of noncompliance should reduce by 17 percent in one year.
- Unplanned absenteeism of call center associates should decrease by 30 percent within the next calendar year.
- At least 10 new projects will be completed in the first quarter.
- At least 90 percent of microfinance loans will be paid back on schedule.
- Process time for work visas will be reduced by 30 percent in two months.
- 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.

**Return on Investment (ROI) Objectives**

The fifth level for program objectives is the ROI, which defines the minimum payoff from the program and compares its cost with the monetary benefits from the program. As a reminder, ROI is calculated by the formula:

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

Using the ROI formula essentially places program investments on a level playing field with capital investments by using the same formula and similar concepts. Key management and financial executives already understand ROI because they regularly use it with other investments.

Specific ROI objectives should be developed before an evaluation study is undertaken. While there isn’t a generally accepted standard, there are four strategies for establishing a minimum acceptable ROI objective for a program:

- Set the ROI using the same values used to invest in capital expenditures, such as equipment, facilities, and new companies. For North America, Europe, and most of the Asia-Pacific region (including Australia and New Zealand), the cost of capital is quite low, and the ROI objective is usually in the 10 to 15 percent range.
- Set it slightly higher than the percentage required for other types of investments. The rationale is that the ROI process for programs is still relatively new and often involves subjective input, including estimations. For most areas, this value is usually set at 20 to 30 percent.
- Set the ROI value at a break-even point. A 0 percent ROI represents break-even, where the benefits equal the costs. The rationale for this approach is an eagerness to recapture the cost of the program and a realization that additional program benefits come through intangible measures (those that are not converted to monetary values). This is the ROI objective recommended for many public-sector organizations, with the philosophy that they are not attempting to make a positive return from a program.
- Let the client or program sponsor set the minimum acceptable ROI value. In this scenario, the individual who initiates, approves, sponsors, funds, or
supports the program establishes the acceptable ROI. Almost every program has a major sponsor or donor, and that person may be willing to offer the acceptable value. This links the expectations of financial return directly to the minimum expectations of the individual sponsoring the program.

The Power of Objectives

Objectives are powerful. In addition to creating expectations, they provide direction, focus, and guidance to all stakeholders. They also create interest, commitment, satisfaction, and excitement, making them a necessity, not a luxury. All levels of evaluation help stakeholders clearly and specifically understand the program. They don’t just need to know why the program is being developed; they also need to know about participant reaction, what the participants have learned, what actions they will take, and, ultimately, what they will accomplish with impact (and maybe ROI). While the power of objectives at the reaction and learning levels may be evident, objectives at higher levels require additional explanation. Application and impact objectives:

- **Drive programs.** Objectives at application and impact levels are sometimes omitted from programs. Ironically, they are the most powerful because of their focus on success. More specifically, they fuel a program or project by providing focus and meaning, direction to the stakeholders, and definitions of success.

- **Enhance design and development.** Sending vague objectives to a program designer or developer isn’t a risk worth taking. Designers are creative and they use their imaginations to build program content. Without clear and specific direction, they will insert their own assumptions about the program.

- **Improve facilitation.** Objectives are the first things to be reviewed, and they define the facilitator’s approach in teaching the project or program. They also provide guidance to the facilitator for how to present, what to present, and the context in which to present. More specifically, they:
  - Show the end result and provide the focus to achieve it.
  - Focus the discussions on application and impact.
  - Ensure that the participants have the capability to reach the impact.
  - Enable participants to succeed with the program.

- **Help participants understand what is expected.** Participants need clear direction as to why they are involved in the program and what they are expected to do. Application and impact objectives remove the mystery from the program and the roles within it, allowing participants to see that there is an expectation for them to apply what they learn and reap results, which is the impact.

- **Excite sponsors and donors.** The people who are funding the program often request to see data that show whether goals were achieved and how well. Impact measures resonate with them because they:
Connect the program to the business results.
• Connect the program to key performance indicators.
• Show the business value.

**Simplify evaluation.** These high-level objectives provide the focus and details needed for the evaluator to collect and analyze results. From an accountability perspective, higher levels of objectives:
• Identify data to be selected.
• Define specific measures reflected in the data.
• Suggest the appropriate data collection method.
• Suggest the source of data.
• Suggest the timing of data collection.
• Suggest responsibilities to collect data.

**PLANNING THE EVALUATION**

A final part of expecting success is evaluation planning. This phase involves several procedures, including understanding the purpose of the evaluation, determining the desired levels of evaluation, planning data collection and analysis, and outlining the project schedule.

**Evaluation Purpose and Evaluation Level**

Evaluations are conducted for a variety of reasons, including to:
• Improve programs and their outcomes.
• Determine whether a program has accomplished its objectives.
• Identify strengths and weaknesses in the process.
• Enable the cost-benefit analysis (ROI).
• Assist in the development of programs in the future.
• Determine whether a program was the appropriate solution.
• Establish priorities for program funding.

The purpose of the evaluation should be considered before developing the planning document because it often determines the scope of the evaluation, the types of instruments used, and the type of data collected. As with any project, understanding the purpose will provide focus and help gain support from others.

Another important planning consideration is determining the levels at which the program will be evaluated. Some evaluations stop at Level 3, where the data determine the extent to which participants are using what they have learned. Others will be evaluated through Level 4, where you monitor the consequences of application and measures linked directly to the program. If an ROI calculation is needed, the evaluation will proceed to Level 5. To reach this level of measurement, it will be necessary to convert the Level 4 impact data to monetary values, as well as capture the program’s costs. Evaluation at Level 5 is intended for projects that are expensive, high profile, and linked directly to business needs.
Data Collection Plan

The data collection plan (Figure 3-7) provides a place to capture the major elements and issues regarding data collection:

- Broad objectives are appropriate for planning; later (before the program is designed) specific, detailed objectives will be developed.
- The measures column defines the specific measure for each objective.
- The method/instruments column describes the technique used to collect the data.
- The sources column identifies the data source.
- The timing column indicates when the data are collected.
- The responsibilities column identifies who collects the data.

You’ll find the information needed to complete this plan in the next chapter.

ROI Analysis Plan

Figure 3-8 shows a completed ROI analysis plan for the coaching program, using the information outlined in the data collection plan (Figure 3-7). This planning document captures information on key items that are necessary to develop the actual ROI calculation:

- The first column lists significant data items. Although these are usually Level 4 impact data from the data collection plan, they will also be used in the ROI analysis and calculation.
- The second column lists the methods employed to isolate the program’s effects.
- The third column includes the methods used to convert data to monetary values for those impact measures that will be converted to money.
- The next column outlines the cost categories that will be captured for the project; these are typically consistent from one program to another.
- The fifth column lists the expected intangible benefits. This list is generated from discussions with sponsors and subject matter experts.
- The sixth column outlines the communication targets.
- Other issues or events that might influence program implementation and its outputs are highlighted in the last column. Typical items include the capability of participants, the degree of access to data sources, and unique data analysis issues.

The ROI analysis plan, when combined with the data collection plan, provides detailed information for calculating the ROI, while explaining how the evaluation will develop from beginning to end.
**FIGURE 3-7. SAMPLE DATA COLLECTION PLAN**

Program: Coaching for Business Impact

<table>
<thead>
<tr>
<th>Level</th>
<th>Objective(s)</th>
<th>Measures/Data</th>
<th>Data Collection Method</th>
<th>Data Sources</th>
<th>Timing</th>
<th>Responsibilities</th>
</tr>
</thead>
</table>
| 1. Reaction | • Relevance to job  
• Importance to job success  
• Value add  
• Coach’s effectiveness  
• Recommendation to others | • 4 out of 5 on a 1 to 5 rating scale | • Questionnaire | • Executives | Six months after coaching | NHLO Staff |
| 2. Learning | • Uncovering strengths/weaknesses  
• Translating feedback into action  
• Involving team members  
• Communicating effectively  
• Collaborating with colleagues  
• Improving personal effectiveness  
• Enhancing leadership skills | • 4 out of 5 on a 1 to 5 rating scale | • Questionnaire | • Executives  
  • Coach | Six months after coaching | NHLO Staff |
| 3. Application | • Complete and adjust action plan  
• Identify barriers and enablers  
• Show improvements in skills | • Checklist for action plan  
• 4 out of 5 on a 1 to 5 rating scale | • Action Plan  
  • Questionnaire | • Executives  
  • Coach | Six months after coaching | NHLO Staff |
| 4. Impact | • Sales growth  
• Productivity/efficiency  
• Direct cost reduction  
• Retention of key staff members  
• Customer satisfaction | • Monthly revenue  
  • Varies with location  
  • Direct monetary savings  
  • Voluntary turnover  
  • Customer satisfaction index | • Action Plan | • Executives | Six months after coaching | NHLO Staff |
| 5. ROI | 25 percent | | | | | |

Comments: Executives are committed to providing data. They fully understand all the data collection issues prior to engaging into the coaching assignment.
FIGURE 3-8. SAMPLE ROI ANALYSIS PLAN

<table>
<thead>
<tr>
<th>Program: Coaching for Business Impact</th>
<th>Responsibility:</th>
<th>Date:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Items (Usually Level 4)</td>
<td>Methods for Isolating the Effects of the Program</td>
<td>Methods of Converting Data to Monetary Values</td>
</tr>
<tr>
<td>• Sales growth</td>
<td>• Estimates from executive</td>
<td>• Standard Value</td>
</tr>
<tr>
<td>• Productivity/operational efficiency</td>
<td>(Method is the same for all data items)</td>
<td>• Expert input</td>
</tr>
<tr>
<td>• Direct cost reduction</td>
<td>• Executive estimate</td>
<td>• Travel costs</td>
</tr>
<tr>
<td>• Retention of key staff members</td>
<td>(Method is the same for all data items)</td>
<td>• Executive time</td>
</tr>
<tr>
<td>• Customer satisfaction</td>
<td>• Administrative support</td>
<td>• Administrative overhead</td>
</tr>
<tr>
<td></td>
<td>• Communication expenses</td>
<td>• Facilities</td>
</tr>
<tr>
<td></td>
<td>• Evaluation</td>
<td></td>
</tr>
</tbody>
</table>
Project Plan
The final plan to develop during the evaluation planning phase is a project plan (Figure 3-9). The project plan consists of a project description (including brief details of project implementation) and the project timeline (from the planning through final communication of the results). This becomes an operational tool to keep the project on track.

Collectively, these three planning documents provide the direction necessary for the impact and ROI study. Most of the decisions regarding the process are made while these tools are developed. Thereby, the remainder of the project becomes a methodical, systematic process of implementing the plans. This is a crucial step in the ROI Methodology, where valuable time allocated to planning will save precious time later.

FIGURE 3-9. SAMPLE PROJECT PLAN

<table>
<thead>
<tr>
<th>Decision to conduct an ROI study</th>
<th>F</th>
<th>M</th>
<th>A</th>
<th>M</th>
<th>J</th>
<th>J</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaluation planning complete</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Data collection instrument designed</td>
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</table>

QUICK SUMMARY
This chapter shows what must change to design for success. The first step is to start with why, connecting the proposed program to the business. Next, the proposed solution must be confirmed as the right solution. Finally, the success of the program is defined and used to ensure that the program is designed for application and impact. This pushes success beyond having a great reaction and acquiring the knowledge and skills, all the way to actually applying the information in the proper situation and having an impact. Expectations must be created with objectives at each level of outcome. The objectives are SMART statements that define success. Ideally, they are needed for reaction, learning, application, and impact. If the ROI is pursued in a program, then an ROI objective is needed as well.

Detailed evaluation planning is necessary for data collection, ROI analysis, and project scheduling. These steps represent the most powerful parts of the ROI Methodology. The next chapter focuses on data collection.
OPENING STORY

Sarah Robertson provides counseling services at food banks in Canada. As a counselor for the Catholic Family Services, she helps individuals who are having financial problems and cannot afford to pay for food.

Sarah helps them understand their situation and plots a path for improvement. Sometimes the citizens need a job or their spouse needs a job or perhaps one of them needs a better job. Maybe the person has a serious medical problem preventing employment, which requires care through the provincial health system. Although the government provides healthcare, citizens still have to pay some fees; medical problems also take time away from work. A family member may have an addiction that they need help to overcome. Or perhaps a spouse is currently or is headed for incarceration. Perhaps the family needs legal assistance. Any of these situations can mean disaster for a low- to middle-income family. Sarah provides essential counseling for these citizens, with the aim of resolving their “presenting issue.”

Sarah was somewhat surprised when a representative of the provincial government that funds her program visited her and asked about results. When she asked for clarification on the kind of results desired, she was asked directly, “Could you show the ROI of the counseling?” Sarah responded, “What’s ROI?”

The government representative explained, “It is return on investment. We are investing in this counseling program, and we want to know how your program is adding value to the provincial government. Is it reducing cost? Is it avoiding cost? Is it adding tax revenue? If so, can you tell us how much? Then we can compare it to the cost of your counseling to see if it is a good investment for us.” Sarah responded that she had no idea but would find out.

The government representative continued, “We know this is a valuable and needed service. However, because we are having a budget shortfall related to a reduction in oil prices, we must cut some things. We are trying to understand which ones to reduce. Although we would like to fund every program, we cannot. We want to fund the
programs that represent a good investment for the province. If you can show data to support this, it would help us justify continuing to fund your program.”

Sarah was shocked and somewhat dismayed by the request. She quickly looked for information on ROI. Unfortunately, she had almost no data about the program except for what she provided to the government indicating how many people were counseled, the type of counseling provided, and the number of counseling sessions conducted. She also provided an invoice for her services, but beyond that, she had nothing. However, she was optimistic—perhaps she could find a way to do this. Luckily, she found an ROI certification near her in another province; she enrolled and began to develop her skills.

Once Sarah attended the ROI Certification, she began to understand the ROI process more completely, and after some discussions with her colleagues, she began to reach some conclusions. First, she needed to send the government some reaction data. Fortunately, she already had an existing data collection process in which she asked participants detailed questions, such as “Why are you involved in these sessions? Are the counseling sessions helpful? Are the sessions useful? Is the information important to your survival? Is this something that you will use?” This valuable information helps show the value of Sarah’s counseling from the participant’s perspective.

Sarah also realized that she needed to detail her learning measures. As they take part in their counseling sessions, participants learn two major points. First, they must understand clearly how they got into the present situation. (What caused them to need to come to the food bank for food?) Second, they must know what to do to improve the situation and ultimately find a path to independence. Sarah can easily capture this data by the end of the first two sessions: Session 1 covers what got them into the process and session 2 helps them develop a plan to address the issues.

Sarah also began to realize that she needed follow-up information on participant actions. As part of the process, she always develops an action plan with each person that details what they have to do to overcome their problem. Each case includes specific actions that participants must take, advice they should seek, other agencies they need to visit, or employers they should try to interview with. The important point is that an action plan is in place. With some improvements and adjustments, she can easily use this information for application data, which she thinks the government would view as important.

But action is not enough; Sarah needed the impacts. Every case has a potential positive impact coming from the counseling while individuals are securing jobs (or a better job), being released from jail (or prevented from going to jail), getting their child off an addiction, correcting a medical problem, or resolving a legal issue. Whatever the situation, there is a consequence with a major impact on the person and the government system. Sarah thought that if there was an impact, the success could also be caused by many other factors. For example, even if she helps with tips, advice, coaching, contacts, or appointments, if a participant gets a job, there are many factors that may have contributed. However, part of their success in getting that job goes to
Sarah’s program, and that is the important point. What she learned during the ROI certification program is that there is always a way to isolate the effects of the program on the impact data. She felt comfortable that she could do this credibly with some help. She also believed that the data would be available directly from the individual, system, or some agency. This would be extremely valuable information for the government, particularly if she could isolate the effects of her counseling on the impact data.

Recognizing that this was not what the government had asked for, she moved to the next level, ROI, which requires converting impact data to money. After some discussion and questioning, she realized that for almost every consequence there was either a cost prevented or money added. For example, if someone got a job, that person now had a reduction or elimination of unemployment benefits, which is a cost avoidance. That individual will also now pay taxes, which will become revenue for the province. If a person is prevented from going to jail (or if they get out of jail earlier), those days of nonincarceration can be attributed to this program and represent a standard cost that is available from the province. When someone has a medical problem, the provincial government pays for almost all of it. If it is corrected, a cost is avoided. If addiction is stopped, a cost is avoided. In almost every one of the outcomes, there is some cost avoided to the provincial government. She felt comfortable that these values were available and could be obtained with minimal effort.

The fees the government pays for counseling represent the cost to the government, but she quickly realized that it was not the whole cost. It also included the cost of the counseling room, because the government furnished the facility. All the costs, indirect and direct, would need to be included, which she did not think would be not that difficult to calculate. Then she could calculate the benefit-cost ratio and the standard ROI, which was the data the government requested.

Sarah was a little concerned because she believed that the benefit of the counseling wasn’t just the money, but the program’s impact on the lives of the families. If the counseling works, they regain their self-esteem and dignity, family relationships are improved, quality of life is enhanced, and they feel good about their government helping them in a time of need. “These are the kinds of measures you cannot convert to money,” she said. “And they are important intangibles.” The key is to connect them to this program, which is easily accomplished.

Sarah concluded that she could have a complete set of data, measuring reaction, learning, application, impact, ROI, and the intangibles. This would provide the data the government needed.

Unfortunately, before Sarah Robertson could complete her study, she received notice from the provincial government that her program had been canceled. She explained to the representative that she was working on an ROI study that should be completed in a month. The representative explained, “It’s too late. The decision has been made. It was difficult, but we have to cut budgets. We just don’t have the revenue, and we don’t have any data about the success of this program.”
Sarah was upset and angry. “How could the government be so cruel?” she asked. “Is everything about money?” She planned to challenge the decision but thought it would probably be a waste of time.

In addition to this frustration was the reality that she would now have to find another job. As a contract employee, she needed to replace this lost contract with another one, which would be difficult in this environment. She was also worried about the people who came to the food bank. “Will someone be there to help them? Probably not,” she concluded.

This sad, but true, story reveals several issues about the value for money question. This is sad because the counseling program was probably driving some important impacts, according to Sarah. If she had reported those impressive stats, including what the ROI was, the value for money request would probably not have come up.

There are lessons for the funder and the recipient. Funders need to push the evaluation value chain to a higher level, probably to the impact level instead of simply the number of people served and the costs, which are input. The recipients of funds should be proactive and push the evaluation to the level that the client needs, which is usually the impact level.

**MAKE IT MATTER: DESIGN FOR INPUT, REACTION, AND LEARNING**

When the Nobel Prize–winning physicist Richard Feynman was still working on his graduate degree at Princeton University, he was asked to oversee a group of engineers who were tasked, without much context, to perform an endless series of tedious calculations. The math wasn’t especially difficult for an engineer, but the work was slow and full of errors. Growing more frustrated with the team’s performance, Feynman made a critical discovery that would dramatically alter the course of events. He realized the problem wasn’t the math but that the engineers were totally disengaged. So, he convinced his superiors to let the engineers in on what he already knew—why they were performing the calculations, and why they were sweating their tails off in the New Mexico desert—specifically, in Los Alamos (Mautz 2015).

It was at that time that Feynman’s boss, Robert Oppenheimer, pierced the veil of secrecy that had surrounded the work and let the engineers in on the enormity of what they were doing. They weren’t simply doing routine math for some inconsequential lab exercise. They were performing calculations that would enable them to complete the race to build the atomic bomb before the Germans did. Their work would win the war.

The workplace, the work, and the workers’ performance completely transformed when the task was imbued with meaning. From that point forward, Feynman reported that the scientists worked 10 times faster than before, with fewer mistakes and fierce commitment.

As the Feynman story illustrates, meaning matters. Obviously, not every workplace has a backdrop as meaningful as a global conflict. However, when meaning-rich experiences are facilitated, and the resultant energy is channeled toward work that
truly matters, engagement and productivity will know no limits—and that’s something needed more than ever.

“Make it matter” is a critical concept for soft skills program input (who’s involved), reaction (how participants perceive it), and learning (what participants will learn). The first part of this chapter will show how to make it matter and communicate that to the individuals who will achieve success.

In the early stages, people must believe that the program is meaningful, memorable, and motivational—it must matter to them. The issues involve a variety of ways to communicate expectations, decide whom to involve and where to involve them, define the value of the program from participants’ perspectives, and design the learning to deliver the results needed.

Designing for results throughout the cycle of delivering results ensures that the focus at every phase of the program and the tools, templates, and processes are in place to ensure achievement of those results.

COMMUNICATING WITH RESULTS IN MIND

A chain of communication begins when initiating and designing a soft skills program. These communications describe the expectations of those involved in the program. The principal audience is the participants, who will make the program successful. The participants’ managers who are expecting results in return for the participants’ involvement are also a target for information. In nonprofits, instead of the participants’ managers, it’s often a sponsor who provides support, encouragement, and reinforcement. At least five areas of communication are important.

Announcements

The initial communication for the program—whether an announcement, online blurb, email, text message, or blog—should include expectations of results. No longer should the focus be on describing the program in terms of its content or learning objectives. The focus is now on clearly articulating what participants will accomplish with the program and the impact it will deliver. Answering the question, “What’s in it for me or my organization?” is more important than “what you will learn.” This clearly captures the results-based philosophy of the program.

Brochures

If the program is ongoing or involves a significant number of participants, brochures may be appropriate. Brochures are typical for most programs and are often engaging, attractive, and cleverly written from a marketing perspective. As an added feature, they could include a description of the program results that will be or have been achieved, with details of specific outcomes at the application level (what individuals will accomplish) and the impact level (the consequence of application).
**Communicating Through Case Studies**

For some programs, you may develop case studies and provide them in advance of participating in the program. The case study shows how others have used the content of the program to drive impact (and sometimes ROI). For example, the Employers Council in Denver holds an Intentional Leader program in which participants are given an ROI case study showing how leadership competencies are used to drive impact and a positive ROI. Then, each participant is asked to plan a similar one. The Intentional Leader program includes a special module, Results Mastery, that focuses on planning how to evaluate the program they’ve created.

**Routine Communication**

Memos, emails, and instructions to prospective participants should outline the results described in the announcements and brochures and focus on what individuals should expect when they participate in the program. Preparation, if appropriate, should focus on results, which gives purpose not only to the program, but also to the actual pre-work activities. Sometimes, participants are asked to bring specific examples, case studies, problems, measures, or challenges. Communications should be consistent with the results-based philosophy, underscore the expectations and requirements, and explain what must be achieved and accomplished. In addition, the request to provide feedback and document results is explained to participants, emphasizing how they will benefit from responding.

**Workbooks and Participant Guides**

Workbooks and guides need to have higher levels of objectives in mind. Application and impact objectives influence the design of exercises and activities because they emphasize results. Application tools are spaced throughout workbooks to encourage and facilitate action. Impact measures, and the context around them, appear in problems, case studies, learning checks, and skill practices.

**CHANGING THE ROLE OF PARTICIPANTS**

There is no one more important to achieving a program’s business success than the participant. The participant is the person who is learning the skills and knowledge that will be used to drive business performance. Sometimes, this begins with changing the person’s role, more clearly defining expectations, and expanding expectations beyond traditional requirements.

Most programs fail because those involved did not do what they were supposed to do. While there are many barriers to achieving success, including those in the workplace, perhaps the most critical is that the person involved didn’t want it, didn’t have time, or didn’t see any reason to do what was necessary to achieve success. While they may blame others, the participant may be the problem. Their efforts must change,
which requires clearer definition and documentation of their role and an explanation of the impact if they use the program properly.

The first issue is to define the roles of the participant by clearly outlining expectations. For formal programs, participants should always understand their specific roles. They should:

• Be prepared to take advantage of the opportunity to learn how to make the program successful, seeking value in any type of program.
• Attend (or log on), be on time, engage fully, and be productive.
• Seek the positives in the program and focus on how the content can be implemented.
• Meet or exceed the learning objectives, knowing what is expected.
• Share experiences and expectations freely, recognizing that others are learning from them.
• Plan to apply what is learned in their setting.
• Remove, minimize, or work around barriers to application and impact.
• Apply what they learned in their situation, making adjustments and changes as necessary to be successful.
• Follow through with application to achieve the program’s impact.
• Provide data that shows success, and the barriers and enablers to success, when requested.

These expectations establish the participants’ role as fully engaged in the program’s success with a focus on impact improvement through application of knowledge and skills gained in the program. Additionally, and more importantly, the role requires participants to provide data. It is only through their efforts and subsequent information that others will recognize their success.

**DESIGN INPUT FOR RESULTS**

Although input is usually classified as volume (how many people are involved), costs (direct and indirect costs of the program), and time (the time that they are involved), there can be many variations and breakdowns within these measures.

### Define the Target Audience

The target audience is important for delivering impact and ROI. It is important to select the right participants for a program. In some cases, it is immediately clear— aspiring female leaders need to be involved in a female empowerment program, refugees in a refugee integration program, or convicted felons in a recidivism program. However, some audiences are not so clear. For example, a stress management program is relevant to a wide variety of audiences, as is a creativity or mindfulness program.
General target audience categories also need to be defined. The key is to clearly communicate this information to potential participants, the managers of those participants, and anyone else with influence in their careers. Participants should be in a position to use the program’s content. The wrong audience lowers benefits and raises costs, which has a dramatic impact on the ROI of the program.

**Determine the Need, Timing, and Duration**

Do participants really need the program? Although this seems obvious, it is still a persistent problem for some soft skills programs. While the program may be designed for an audience who needs it, some individuals may not need it and others may need only parts. This can be difficult to sort out from a process perspective. Perhaps the best way to tackle this is to determine who needs the program in advance using a self-test, assessment, or interview. More organizations are having potential participants demonstrate that they need the program. If they are involved in the program when they don’t need it, it adds to the costs with little or no extra benefits, which minimizes the ROI.

Timing of participation is another important opportunity that can influence the program’s benefits and costs. Timing refers to when participants should be involved in a program, relative to their need for it. Problems develop when a participant needs the program but they haven’t participated in it yet, or when they participated in it too early to be successful.

This is a challenge when developing new team leaders. Some organizations don’t frequently offer development programs for new managers because of convenience, scheduling logistics, or number of candidates. For example, they may offer only one program per year for all new managers promoted in the last year. New managers may flounder while waiting for the program or develop bad habits that must be changed. This challenge can often be handled with the help of technology, coaches, and mentors. It is important to realize that placing employees into a new role without training can be inefficient and ineffective, which lowers the ROI.

The amount of participant time devoted to the program can be a tricky issue regarding the effectiveness (monetary benefits) and efficiency (costs of program). If the duration is too short, the participant may not be successful, which lowers the impact and ultimately lowers the monetary benefits and ROI. If the duration is too long, it adds to the cost of the program, increasing the denominator and reducing the ROI. Duration should be set from the perspective of maximizing the ROI.

**Trigger Motivation and Ensure Readiness**

Motivation is important because it spans what participants do before the program (input), how participants see value in the program (reaction), and the program content (learning). Sometimes, they are not motivated to participate in the program, which means that their odds of delivering impact are very low. Without motivation, there will be no positive ROI. So what causes participants to be motivated? While there are many factors, here are a few keys to motivation (Allen 2016):
• Build on anticipated impact.
• Expect success from participants.
• Select the right content for the target audience.
• Use an appealing context.
• Have the participants perform multistep tasks.
• Provide intrinsic feedback.
• Delay judgment.

Readiness means that participants are fully prepared for the program, have been informed of the expectations, have completed all the necessary prerequisites, and are in a role to complete the program. If they are not ready, the impact will be diminished, and the monetary benefits (effectiveness) will be minimized. If they are ready, the likelihood of success is enhanced.

DESIGN REACTION FOR RESULTS

Reaction, the first level of outcome measurement, is often the most measured level of outcome. Yet, it is the one that program sponsors desire the least. So, does it have value? The short answer is “yes,” because it is the first indicator of success or failure. When collecting data at this level, the potential for program success comes to light immediately and potential roadblocks are identified. An adverse reaction is a good indicator that participants will not be engaged.

Case Study

Gram Vikas, which literally means “village development,” is a successful nongovernmental organization (NGO) that works with rural communities in India and Africa. The NGO partners with rural communities to address critical needs—education, health, safe drinking water, sanitation, livelihoods, and alternative energy—in a manner that is sustainable, socially inclusive, gender equitable, and empowering.

Founded by Joe Madiath, this NGO has a reputation for being innovative with their solutions. In a recent interview, the founder reflected on the need for a proper reaction to innovation programs:

I think with most of the innovations, because I took the initiative, I had an advantage. I happen to be the boss. The boss can innovate and fail. So, there was the feeling, “OK, let Joe do it. Then if it fails, it would be he who fails.” But it’s very, very difficult initially to cut through the resistance in the organization. For example, the first idea for a gravity flow. I asked my colleagues and the engineers to implement it. But they were not convinced, and they would not do it. They said: You are wasting the organization’s money, which is a big challenge. So, I said: OK, if it does not work, I will pay for the entire thing, and I will slowly pay it back to the organization. At least on the moral ground, you cannot now refuse to work with me. (Seelos and Mair 2017)

The proper reaction to a program is critical to its success. As this story illustrates, the founder of this NGO went to extreme measures to develop the desired reaction.
While having the right reaction is critical, it often gets less attention from executives, administrators, and donors. Let’s review some of the key issues of measuring at this level.

**Topics to Measure**

Figure 4-1 shows potential topics that could be measured to capture reaction. It is helpful to divide the topics into experience and content. The experience is what makes participants feel good about the program, and includes service, comfort, surroundings, communications, facilities, and the coordinator. While experience makes people feel good about the program, unless the experience is horrible, it will have limited effect on the outcomes.

**FIGURE 4-1. TOPICS FOR REACTION**

<table>
<thead>
<tr>
<th>Content</th>
<th>Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Useful</td>
<td>• Motivational</td>
</tr>
<tr>
<td>• Necessary*</td>
<td>• Good use of funds</td>
</tr>
<tr>
<td>• Intent to use*</td>
<td>• Facilities</td>
</tr>
<tr>
<td>• Practical</td>
<td>• Facilitator</td>
</tr>
<tr>
<td>• Valuable</td>
<td>• Enjoyable</td>
</tr>
<tr>
<td>• Timely</td>
<td>• Rewarding</td>
</tr>
<tr>
<td>• Engaging</td>
<td>• Overall evaluation</td>
</tr>
<tr>
<td>• Relevant*</td>
<td></td>
</tr>
<tr>
<td>• Important to success*</td>
<td></td>
</tr>
<tr>
<td>• Recommend to others*</td>
<td></td>
</tr>
</tbody>
</table>

*Usually correlates with application

Content is more important than experience. We suggest about 80 percent of the questions on a feedback survey relate to content and only 20 percent relate to experience. It’s the content and the use of the content that will drive the necessary impact. The focus should be on content questions, such as relevance to your situation, importance to your success, and intent for use. Experience is also important, but only in how it influences the content’s relevance and usefulness. Even then, if the experience is not going well, adjustments can be made on the fly.

Content questions are important to the organization. Some measures are more meaningful than others because of their predictive capability. The items marked with an asterisk in Figure 4-1 have a significant correlation with application. This means that on a classic five-point scale, a four on reaction should correspond to a four on extent of use, where one is not at all likely to use and five is very significant use.

**Measuring Reaction**

Reaction is usually measured on a four-, five-, seven-, or 10-point scale. The challenge is to keep it simple, limit the number of questions, and use forced-choice questions with space for comments.
Most organizations use technology to measure reaction, and that’s important because it allows for easy data collection, analysis, and reporting. The downside is that technology adds costs. We recommend 100 percent measurement at this level, which can create a massive amount of data for a larger organization. The key is to make the data easy to collect and use.

One issue to consider when measuring reaction is the timing of data collection. The measurement could occur before the program, during the program, after the program, or all three. This is an interesting issue, because reactions often change. Even before they come to the program, participants can provide their initial reaction to the issue of concept, which may be interesting and useful. Typically, data collection at this level occurs at the end of the formal learning session after the learning has influenced the reaction. Programs are designed to influence reaction so participants see the content as relevant, important to their success, and easy to use. But the desired reaction may not be fully developed until application and impact several weeks or months after the program. This timeframe may be necessary to capture the desired reaction.

Using Reaction Data
The reaction data must be used because it indicates what is working and what is not working, which should lead to action. On a typical scale, upper and lower numbers serve as markers for action. For example, if you are using a five-point scale, you may want to know what causes reaction to go beyond four and what causes it to drop below three.

A variety of reasons exist for scores to be more or less than the target. The actions to change may include adjusting objectives, redesigning content, modifying pre-work, shifting expectations, or counseling the facilitator or program coordinator. The changes may involve several stakeholder groups, including analysts, designers, developers, facilitators, program owners, or coordinators. The important point is to monitor the critical data reflecting reaction measures that link to application data.

Forecasting ROI at This Level
It may be important to have participants forecast improvement in business impact measures, including the financial ROI. This requires participants to consider how they will apply the concepts from the program and achieve the impact benefits. A supplemental form in addition to the standard feedback questionnaire provides space for participants to list planned actions and potential impacts. If possible, they can explain their estimates of impact measurement and the monetary values. This activity should be reserved for those participants who understand the connection between the program and its impact. In addition to collecting planned actions and a forecast impact, participants may estimate monetary value, describe their basis for arriving at these numbers, and provide a level of confidence in their estimate on a scale of 0 to 100 percent (where 0 percent is no confidence and 100 percent is certainty). Figure 4-2 illustrates a version of this supplemental form.
FIGURE 4-2. FORECASTING ROI WITH REACTION

<table>
<thead>
<tr>
<th>Planned Improvements</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Please indicate the specific actions you will take as a result of this program. (Please be specific.)</td>
</tr>
<tr>
<td>a. __________________________________________________________</td>
</tr>
<tr>
<td>b. __________________________________________________________</td>
</tr>
<tr>
<td>c. __________________________________________________________</td>
</tr>
<tr>
<td>2. Which specific impact measure will improve? _________________________________</td>
</tr>
<tr>
<td>3. How much will it improve in one year? _________________________________</td>
</tr>
<tr>
<td>4. (Optional) As a result of your actions and subsequent changes in impact, please estimate (in monetary value) the benefit to you, your community, or your organization over a period of one year.</td>
</tr>
<tr>
<td>a. What is the basis of this estimate? _______________________________________</td>
</tr>
<tr>
<td>b. What confidence, expressed as a percentage, can you put in your estimate?</td>
</tr>
<tr>
<td>(0%=No Confidence; 100%=Certainty) ____________________ percent</td>
</tr>
</tbody>
</table>

DESIGN LEARNING FOR RESULTS

Every program involves learning and some will include the acquisition of serious knowledge and skills. A part of designing for results is to make sure that the program is designed for proper learning. As the program is designed for participants to learn the content, the focus ultimately shifts to the business results. Several areas need attention.

Sometimes, it is helpful to understand the learning style of the participants for particular age groups. For example, programs that support Millennials and Generation Z can (and should) incorporate technology. Boomers, and most members of Generation X, on the other hand, generally prefer face-to-face participative approaches. Taking inventory of learning styles can help ensure the program is suitable for everyone.

Sequencing the materials from easy to hard or for the natural flow of the learning is also helpful. Advanced material should be placed near the end. Small quantities of information should be presented sequentially, keeping a balance to prevent too much content from being offered, while still making sure there is enough to keep participants challenged.

The materials for learning should come at the right time for the participant; ideally, this is just before they need to use it. If content is presented too early, it will be forgotten; if it is too late, they will have already learned another way to do it.

All activities should focus on situations that define the application of what participants are learning, the consequences of their learning, or both. Breakout sessions, working groups, individual programs, and any other assignments should focus on the actions participants will be taking on the job to achieve business success.

MAKE IT STICK: DESIGN FOR APPLICATION AND IMPACT

Most programs break down at Level 3, application. When application is not there, impact does not materialize, and the program fails to be successful. Unfortunately, there are many barriers to success, most notably a lack of support from the direct
manager or other influencers. At the same time, there are many enablers to success, most notably the support of the manager or other influencers. Unfortunately, barriers and enablers are not addressed in a systematic way in many programs, certainly not before program implementation. The challenge is to address these at the beginning, during, and after the program.

For too long, program designers, developers, and facilitators have not fully adjusted to their role in driving application and impact. In the past, they worked to create engaging programs that, for the most part, only interested and excited participants, but that role has changed. Designers and developers can now make a difference as to whether participants use the program material and the extent to which it has an impact in their lives, work, and community. However, they must step up to their responsibilities before they can drive application and impact. Making it stick is an important step in the ROI Methodology.

**BUILT-IN APPLICATION TOOLS**

Building application and data collection tools into the program is perhaps one of the most important steps in designing for results. This is particularly helpful for programs where data collection can easily be incorporated into the program. Ranging from simple action plans to significant job aids, these tools come in a variety of types and designs. Action plans are discussed further in Chapter 5, and their success depends on having them built into the process. Figure 4-3 shows how to ensure the action plan is incorporated into the process and becomes an integral part of achieving business success.

**FIGURE 4-3. SEQUENCE OF ACTIVITIES FOR ACTION PLANNING**

<table>
<thead>
<tr>
<th>Before</th>
<th>During</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Communicate the action plan requirement early.</td>
<td>• Describe the action planning process.</td>
</tr>
<tr>
<td>• Require participants to identify one or more impact measures.</td>
<td>• Allow time to develop the plan.</td>
</tr>
<tr>
<td></td>
<td>• Teach the action planning process.</td>
</tr>
<tr>
<td></td>
<td>• Have the facilitator or organizer approve the action plan.</td>
</tr>
<tr>
<td></td>
<td>• Require participants to assign a monetary value for each proposed improvement.</td>
</tr>
<tr>
<td></td>
<td>• Provide any necessary assistance.</td>
</tr>
<tr>
<td></td>
<td>• If possible, require action plans to be presented to the group.</td>
</tr>
<tr>
<td></td>
<td>• Explain the follow-up mechanism.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>After</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Require participants to provide improvement data.</td>
</tr>
<tr>
<td>• Ask participants to isolate the effects of the program.</td>
</tr>
<tr>
<td>• Ask participants to provide a level of confidence for estimates.</td>
</tr>
<tr>
<td>• Collect action plans at the pre-determined follow-up time.</td>
</tr>
<tr>
<td>• Summarize the data and calculate the ROI (optional).</td>
</tr>
<tr>
<td>• Report results to the sponsor and participants.</td>
</tr>
<tr>
<td>• Use results to drive improvement.</td>
</tr>
</tbody>
</table>
**Improvement Plans and Guides**

Sometimes, the phrase “action plan” is not appropriate; for example, some organizations have created an unsavory impression by using it to refer to many other projects and programs. When this happens, other terms can be used. Some prefer the concept of improvement plans, recognizing that a business measure has been identified and improvement is needed. The improvement may involve the entire team or just an individual. There are many types of simple and effective designs for the process to work well. In addition, “application guide” is another term that can be used—it can include a completed example, as well as what is expected from the participant, and tips and techniques to make it work.

**Templates and Job Aids**

Moving beyond action and improvement plans brings a variety of application tools, such as simple forms, technology support to enhance an application, and guides to track and monitor impact improvement. Templates and tools can be used to keep the process on track, provide data for those who need it, and remind participants of where they are going.

Job aids represent a variety of designs that help an individual achieve success with application and impact. A job aid illustrates the proper way of sequencing tasks and processes and reminds the individual what must be achieved, with the aim of improving a business measure.

**INVOlVING THE PARTICIPANTS’ MANAGER OR OTHER INFLUENCER**

A final area of design involves creating a role for the participants’ managers or other influencers. As mentioned earlier, this is a powerful group, so having specific items, activities, tools, and templates for them can make a tremendous difference in business results.

**The Most Influential Group**

Research consistently shows that participants’ managers (or other influencers) are the most influential element—apart from their own motivation, desire, and determination—in helping participants achieve application and impact objectives. No other group can influence their use of the program. Figure 4-4 shows how the program is transferred to the workplace, organization, community, or present situation by involving three important groups of stakeholders: the participants, the participants’ other influencers, and the facilitator (Broad 2005). The facilitator may be the project organizer. Three timeframes are possible: prior to the program, during the program, and after the program.

This matrix creates nine possible blocks of activities to translate what is learned from a program into action. The transfer involves the behaviors, steps, and actions...
that must be taken by the participant (application) that will improve the impact measures. For example, the participants can be involved in pre-project activities to set specific goals that they want to achieve before the program is implemented (block number 4). During the program, the participants will plan specific actions to improve an impact measure (block number 5). After the program is conducted, the participants will apply the material, achieve the impact improvement, and report it to interested stakeholders (block number 6).

**FIGURE 4-4. TRANSLATING THE PROGRAM INTO ACTION**

<table>
<thead>
<tr>
<th>Timeframe</th>
<th>Before</th>
<th>During</th>
<th>After</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manager/ Other Influencer</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Participant</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Facilitator</td>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
</tbody>
</table>

In another example, the manager or other influencer can meet with the participant and set a goal before attending the program (block number 1). During the implementation, they observe part of the program or provide input for the content. In some cases, the manager may teach part of it (block number 2). After the program is conducted, they follow up to make sure the program is operating properly and the impact has been achieved (block number 3). The process continues until activities are identified for every block.

Research on this matrix shows that the most powerful blocks for achieving transfer are one and three. Unfortunately, managers and other influencers do not always see it that way—they underestimate their influence. They must be reminded of their influence and given tools to ensure the information from the program is used and drives the business results. This is one of the most powerful areas to explore for improving business results (Freifeld 2016).

**Preprogram Activities**

At the very least, managers should set expectations for participants involved in any type of program. It only takes a matter of minutes, and the results can be powerful. Preprogram activities can range from the formal process of a performance contract, described earlier, to an informal two-minute discussion that takes place just before the program. A full array of short activities should be provided; even a script could be helpful. The important point is that these managers must be reminded, encouraged, or even required to do step.
During the Program Activities
Sometimes, it is important for the manager or other influencer to have a say in the program’s design and development. Possible activities include having managers (or at least someone representing the manager group) help design the program content. For example, a specific interest group, spouses of alcoholics, may provide input into the design of a program at Alcoholics Anonymous. They could also review the content and serve as subject matter experts to approve it. They could be involved in the program, teach sections of the process, provide one-on-one coaching for participants needing help with specific parts, or just observe the program (or a portion of it). Or they could serve on an advisory committee for the program or review the success of others in the program. The key is to connect the manager or other influencer to the design and content of the program. Their involvement will help focus the program on business results, which they will find extremely important.

Post-Program Activities
The most basic action a manager or other influencer can take is to follow up to ensure the content of the program is being used properly. Suggesting, encouraging, or even requiring application and impact can be powerful. They should be available to provide assistance and support as needed to make the program successful. Just being available as a sounding board or to run interference to ease the application may be enough. Although it is not necessary, post-project activities can take place on a more formal basis, where the managers actively participate in follow-up evaluations. They may sign off on results, review a questionnaire, follow up on action plans, collect data, or help present the results. In each case, they make a difference.

Reinforcement Tools
Some programs may offer a brief workshop to show managers and other influencers how to reinforce and guide the behaviors needed to achieve a desired level of performance in business measures. Reinforcement workshops usually range from two hours to half a day, but can be extremely valuable. In addition, programs may provide a variety of tools—checklists, scripts, key questions, resources, and contacts—so managers and other influencers can help keep the focus on results.

Sometimes, they may volunteer to assist the participants with a formal coaching process. In this scenario, the manager is given details about coaching, how to make it work, and what is required of them. In programs that are more formal, they will receive some coaching training. It is extremely powerful for a participant’s manager or other influencer to serve as a coach to help them accomplish impact results.
QUICK SUMMARY
This chapter addresses effectiveness and efficiencies of programs through a design approach. “Make it matter” covered designing for success at the first three levels: input, reaction, and learning. Data are collected at these levels with a focus on examining each measure or potential measure and making adjustments for improvements, which is discussed in more detail in chapter 5. Each adjustment will add monetary benefits, lower costs, or both. An important part of the process is to design for maximum ROI by increasing impact, which is converted to monetary benefits, or by reducing the cost of the program. This is how impact is maximized, even in the early stages of implementation and data collection. The chapter also focuses on what to measure for input, reaction, and learning, as well as how to collect data at these levels.

“Make it Stick,” step five in the ROI Methodology, focuses on what is necessary to achieve business results from a design perspective—at Levels 3 and 4 (application and impact). Tools, templates, and job aids are important to ensure that a participant is fully involved and delivers results, making it stick on the job. Participants explore the use of the lessons learned from the program and increase their ability to implement the tools and techniques. This approach provides the readiness, motivation, commitment, and tools needed to help achieve the business impact.
Collect Data

OPENING STORY

Some of the most ambitious soft skills projects occurred at Sears Roebuck & Company. Faced with serious difficulties due to poor financial performance, Sears underwent a transformational project that changed the culture of the company. Led by the CEO with 100 top-level executives at Sears, the organization developed a business model that tracked the success of management behavior through employee attitudes, customer satisfaction, and financial performance.

This connection was made evident through multiple linkages and was referred to as the Employee-Customer-Profit Chain. In this model, employee attitudes were directly correlated with customer satisfaction. For example: 10 questions from their 70-question employee survey correlated with a 1.3-point improvement in customer satisfaction measured on a 10-point scale. The survey demonstrated that job satisfaction drives customer satisfaction. The 1.3-point improvement in customer satisfaction was shown to drive a 0.5 percent increase in revenue growth.

Applying the store-level profit margin to this revenue growth showed the profits achieved from investing in employee attitudes, a classic soft skills area.

At the heart of this project were five task forces collecting a massive amount of data:

- A customer task force reviewed customer surveys for several years and conducted 80 videotaped customer focus groups in the United States so every member of the task force could watch.
- An employee task force conducted 26 employee focus groups and studied all the data on employee attitudes and behavior, including a 70-item opinion survey given to employees every other year.
- The values task force collected 80,000 employee surveys and identified six core values that Sears employees thought strongly about.
- The innovation task force conducted external benchmarking, undertook a research project on the nature of change, and suggested an initiative to generate 1 million ideas from employees.
- A financial task force built a model for the drivers of a total shareholder return over a 20-year period and drew emphasis about what Sears would
have to do to be in the top quartile of Fortune 500 companies. A large quantity of data involved a variety of sources, and when combined with the appropriate analysis, developed the model described earlier.

The project was the cornerstone of the transformation that dramatically improved the financial results at Sears, turning around a loss of $3.9 billion (Rucci, Kim, and Quinn 1998). Although this project had a positive effect for some years, the ultimate fate of Sears is still to be determined as the organization has seemingly been overcome in recent years by larger changes in market forces and consumer preferences.

Although every soft skills evaluation involves data collection, the Sears project was one of the most extensive. This story underscores the point that data must be collected from a variety of sources, using a variety of techniques, sometimes at different time frames. These methods become an important part of the overall planning for data collection described in this chapter.

Having established soft skills needs and objectives that are aligned with the business or organization, we are ready to begin collecting data along the chain of impact that shows the project’s value. The first step in this phase of the analysis is to develop the Data Collection Plan, which tabulates the broad program objectives, measures, data collection methods, data sources, timing, and responsibilities. Essentially, data are collected at four different levels (reaction, learning, application, and impact), following the process outlined in chapter 2.

This chapter presents the methods of data collection that span all levels. The list is comprehensive, including surveys, questionnaires, interviews, focus groups, tests, simulation, observation, action plans, performance contracts, and monitoring business performance data from the system and records. We will examine each technique in detail, with an eye toward effective application at one or more of the four levels. The chapter concludes with tips on selecting the data collection methods to use on specific projects (Phillips and Phillips 2017).

**DATA COLLECTION FOR INPUT, REACTION, AND LEARNING**

The methods of data collection for all levels are comprehensive, including surveys, questionnaires, interviews, focus groups, tests, simulations, observations, action plans, performance contracts, and monitoring business performance data from the system and records. This chapter examines the typical data collection methods for input, reaction, and learning.

**Questionnaires and Surveys**

Questionnaires are the most common data collection method, ranging from short surveys to detailed instruments. They can be used to obtain subjective data about participant reaction and learning, as well as to document data for use in a projected impact study. With this versatility and popularity, it is important for questionnaires and surveys to be designed properly to satisfy both purposes.
Collect Data

Five basic types of questions or statements are available. Depending on the purpose of the evaluation, the questionnaire may contain any or all of the following types of questions:

- **Open-ended question.** Has an unlimited answer. The question is followed by ample blank space for the response.
- **Checklist.** A list of items. A participant is asked to check those items that apply to the situation.
- **Range of response question.** Has alternate responses, a choice between yes and no, or other possibilities. This type of question can also include a range of responses from disagree to agree, or varying degrees such as a five- or seven-point scale.
- **Multiple-choice question.** Has several choices. The participant is asked to select the most appropriate.
- **Ranking scales.** Requires the participant to rank a list of items.

Questionnaire design is a simple and logical process. An improperly designed or worded questionnaire will not collect the desired data, and may be confusing, frustrating, and potentially embarrassing. A valid, reliable, and effective instrument should be developed (Phillips, Phillips, and Aaron 2013).

**Tests**

Testing is important for measuring knowledge gain in program evaluations. It’s common to use baseline and post-program comparisons—an improvement in test scores shows the change in skill, knowledge, or capability of the participant attributed to the program. While questionnaires and surveys can be used in testing for learning, other techniques are available. More information on test design is available online and in other publications (Phillips and Phillips 2016).

**Simulations**

Another growing technique for measuring learning is the simulation, which is sometimes labeled as virtual. This method involves the construction and application of a procedure or task that simulates application situations in the program. Participants try their performance or experience a situation in the simulated activity and are then evaluated based on how well the task is accomplished. Simulations are typically used during the program’s learning sessions.

For example, there’s a VR simulation program that allows HR professionals to practice letting go a longtime employee. The program uses a 3-D scan of a real actor and recordings of a variety of gestures, facial expressions, and lines of dialogue. Artificial intelligence, speech recognition, and language processing features ensure that the simulated employee understands what is said and responds appropriately. The program provides feedback to help users learn what went well in the practice
interaction and what aspects need improvement. The program’s gamified scoring system even tracks the users’ progress (Hines 2020).

Role playing or skill practices are other forms of simulations, and they may be helpful to gauge learning soft skills. Participants practice a newly learned skill and are observed by other individuals. They are given their assigned role with specific instructions, which sometimes include an ultimate course of action. The participants then practice the skill with other individuals to accomplish the desired objectives. This scenario is intended to simulate the real setting to the greatest extent possible.

For example, a nonprofit offers a program for parents of newborn babies. The program is aimed at reducing stress. During the program, participants (the parents) are placed in several role-play situations to practice stress reduction techniques. The difficulty sometimes arises when other participants involved in the skill practice make the practice unrealistic by not reacting in the same way that individuals would in an actual situation. To help overcome this obstacle, trained role players (nonparticipants trained for the role) may be used in all roles except that of the participant. This can possibly provide a more objective evaluation.

Another form of simulation is the case study, which is often part of a training program. Case studies rely on documented real-life situations that illustrate the desired success and should be selected based on relevance to the program. When developing the case study, it’s important to scatter application issues and success measures throughout and include a focus on results and recommendations for changes. This reminds the audience of the impact that should be driven by the program.

Case studies can range from one page to 25 pages, depending on the details needed to address the point. They are typically used in formal sessions in the early stages of the program. Case studies may be read and discussed by participants, or they may be presented by participants. The evaluation of knowledge gained from the case studies can be done through self-assessment, peer assessment, or facilitator assessment. Sometimes a simple text can assess learning.

DATA COLLECTION FOR APPLICATION AND IMPACT

Before tackling strategies for making it stick, it’s helpful to review data collection methods that measure success for application and impact. Data collection is necessary throughout the program cycle, both for reaction and learning data during the program and to confirm the effectiveness of the program via application and impact data in the follow-up. This chapter explores data collection methods, principles, and timing, with emphasis on application and impact, where the issue of making it stick is a concern. Data collection also reveals areas where the program isn’t working and opportunities for improvement.
Questionnaires and Surveys

As mentioned earlier, the questionnaire is the most common method of data collection. Ranging from short reaction forms to detailed follow-up tools, questionnaires are used to obtain subjective information about participant action and objective data to measure business results and ROI analysis. With its versatility and popularity, the questionnaire is the dominant method for capturing all levels of data (reaction, learning, application, and business impact). Surveys are a specific type of questionnaire that capture attitudes, beliefs, and opinions. The principles of survey construction and design are similar to questionnaire design (Phillips, Phillips, and Aaron 2013).

The areas of feedback used on questionnaires depend on the purpose of the evaluation. Some forms are simple, while others are detailed and require considerable time to complete. When a comprehensive evaluation is planned, and impact and ROI are being measured, a comprehensive list of questions is necessary. This feedback can be useful in making adjustments to a program and documenting performance after the program. Typical examples for application and impact include:

- 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
- improvements linked to the program
- confidence level of data supplied
- linkage with output measures
- barriers to implementation
- enablers to implementation
- support for implementation
- recommendations.

Given the wide range of potential issues to explore in a follow-up questionnaire or survey, asking each potential question can reduce the response rate considerably because the questionnaire becomes too long. The challenge, therefore, is to approach questionnaire and survey design and administration for maximum response rate. This is critical when the questionnaire is a key data collection activity, and much of the evaluation hinges on questionnaire results.
These actions—which also apply to surveys—can be taken to increase the response rates with questionnaires:

- **Provide advance communication.** If appropriate and feasible, program participants and other stakeholders should receive advance communications about the questionnaire or survey.

- **Communicate the purpose.** Stakeholders should understand the reason for the questionnaire, including who or what initiated this specific evaluation.

- **Explain who will see the data.** It is important for respondents to know who will see the data and the results of the questionnaire.

- **Keep the questionnaire as simple as possible.** A simplified approach should always be kept in mind when questions are developed and the questionnaire is finalized.

- **Simplify the response process.** To the extent possible, it should be easy to respond to the questionnaire whether it’s on paper (in which case, a self-addressed stamped envelope should be included), through email, or posted on the Internet.

- **Use local management support.** Management involvement at the local level is critical to response-rate success. Managers can distribute the questionnaires themselves, reference the questionnaire during internal meetings, follow up to see if questionnaires have been completed, and show support for completing the questionnaire.

- **Have an executive sign the introductory letter.** For maximum effectiveness, ask a senior executive who is responsible for a major area where the participants work to sign the letter.

- **Let the participants know they are part of the sample.** If the program is large and a sampling process is used, participants should know they are part of a carefully selected sample and that their input will be used to make decisions regarding a much larger audience. This action often appeals to the participants’ sense of responsibility increasing the likelihood they’ll provide usable, accurate data.

- **Consider incentives.** A variety of incentives can be offered, usually involving three categories: in exchange for the completed questionnaire, to make participants feel guilty about not responding, or to obtain a quick response.

- **Use follow-up reminders.** A follow-up reminder should be sent a week after the questionnaire is received and two weeks after that. Depending on the questionnaire and the situation, these times can be adjusted.

- **Send the results to the participants.** Even if it is an abbreviated report, show participants the results of the questionnaire. More important, participants should understand that they will receive a copy of the impact study when they are asked to provide the data.
Collect Data

- Send a list of actions taken. After the results are presented and recommendations are approved, send a summary of actions taken to participants to show them what changes are being made based on their input.

- Provide an estimate of the amount of time needed to complete the questionnaire. Make sure the estimate is realistic. Purposely underestimating the time can do more harm than good.

- Explain the timing of the planned steps. This provides some assurance that the process is well-organized and professional, and that the length of time it will take to receive a data summary will not be too long. Another word of caution: The timetable must be followed to maintain the confidence and trust of the individuals.

- Make it appear professional. While this should not be an issue in most organizations, it’s important to ensure the questionnaire is developed properly, appears professional, and is easy to follow and understand.

- Explain the questionnaire during the program meetings. When feasible, review the questionnaires question by question so participants understand the purpose, the issues, and how to respond.

- Collect data anonymously or confidentially. Participants are more likely to provide frank and candid feedback if their names are not on the questionnaire, particularly if the program is not working. If anonymity is not possible, use a confidential data collection method. In this situation, provide the specific names of the people who will be collecting the data, along with their specific commitment to protect the names of the respondents.

Collectively, these items help boost response rates of follow-up questionnaires. Using these strategies can result in a 70 to 90 percent response rate, even with lengthy questionnaires that might take 30 minutes to complete.

A 95 Percent Response Rate On an 11-Page Questionnaire?

Collecting post-program data from participants in a soft skills program can present quite a challenge. This is what Accenture faced when attempting to collect data from a group of 120 partners who had participated in a relationship selling course. The program, a part of a new sales platform for Accenture, was designed to help consultants develop key relationships that would ultimately translate into new contracts and increased revenue.

The method of collection selected for obtaining Level 3 (application) and Level 4 (impact) data, was a questionnaire. As can be imagined, the group of consultants designing the questionnaire had many issues to explore in the follow-up evaluation, resulting in a questionnaire that was approximately 11 pages long and would take 25 to 30 minutes to complete. The true concern was not the number of pages, but the time it would take to complete the questionnaire.
When the partner in charge of the program inquired about the expected response rate for this detailed questionnaire, he was told that it would be about 10 percent. Obviously, this was too low. Because the questionnaire was working with impact data, and that data would ultimately lead to the ROI calculation, an important standard had to be followed—Guiding Principle 6 of the ROI Methodology states that “if no improvement data are available for a population or from a specific source, assume that little or no improvement has occurred.” This addresses the type of data collected, which has high variance; it would be impossible to make a statistically significant inference about the missing data for a sample size of 120 participants using common statistical parameters. Consequently, every missing questionnaire would lower the actual ROI of the soft skills program. With this in mind, the pressure was on to obtain the highest possible response rate.

The team used several creative techniques to improve the response rate. For example, the 120 partners selected to participate in the pilot were told in advance that they would need to provide data a few months after the program, and that the questionnaire would take about 30 minutes to fill out. The good news to participants, as it was communicated, was that the questionnaire gave them the chance to see the value of the program, the success they achieved, and to identify any issues and concerns to make it better. In essence, completing the questionnaire was a good way to see their success unfold.

At the end of the program, the facilitator reviewed the 11-page, follow-up questionnaire with the participants to ensure everyone understood completely what was needed. Additionally, they were reminded that the questionnaire was part of the process, although it would not be sent for several months. The facilitator then asked that anyone not willing to provide the data let them know now. No one came forth.

The need for the data was clearly illustrated. Participants were shown why it was needed, how it would be used, and who would see it, and who would be involved in making the final decision of whether to continue the program.

The evaluation team stayed in touch with the participants. When it was nearly time to send out the questionnaire, they reminded them that it would be arriving soon and would help them summarize what successes they had as a result of participating in the program. This would then help to show Accenture the program’s value. The memo that accompanied the questionnaire was signed by the company’s CEO, a gesture that brought the importance of their responses clearly into focus.

Participants received a summary of the results three weeks after they’d submitted the questionnaire, which meant they could quickly see the success the program was generating for the entire group. In addition, three weeks after sending out the summary data, the team sent participants a list of actions it was taking to make the program better. Essentially, this provided closed the survey-feedback-action loop for the participants, which was necessary for many of them to respond. They were able to see clearly that their input made a difference.

In addition to all the steps outlined thus far, two more follow-up actions were implemented to significantly boost the response rate. The first involved the program’s facilitator, the author of a bestselling book on relationship selling, who the participants
identified with and had tremendous respect for. He personally called each participant, reminding them that the program’s value would only be known to the company, and even themselves, if they completed the questionnaire. These personal phone calls meant a lot to the participants.

A second action was more of an emotional appeal from the chief financial officer. The statement, written by the evaluation team with the CFO’s approval said, “You have asked for more training, and a new sales platform that included relationship selling, and we are offering this to you. You are part of the group selected to provide this data. If you want this relationship selling program to be part of the sales platform, we want you to vote. You vote yes by completing the questionnaire. You vote no by ignoring it.” He went on to explain that they were using a conservative methodology that is based on no response indicates no value. Essentially, a missing questionnaire lowered the ROI. If this program didn’t generate a positive ROI, then it would be difficult to move forward. This appeal focused on a sense of responsibility—recognizing that while the participant may not want to complete the questionnaire, ignoring it was actually a decision. They were communicating that it had no value to them. This message had a tremendous effect on the audience.

When all these actions are taken together and planned throughout the data collection process, participants usually support the effort with quality data. In this case, a dozen techniques were used, resulting in a 95 percent response rate.

If you are relying on questionnaires to provide this type of data in an ROI calculation, you have to be perceptive, focused, and determined to collect quality data. You have to position the questionnaire as different, something special—separate from all the clutter that people are pushed to complete routinely. The reaction should be, “There is no way I can avoid this, it needs to be done, it is my responsibility to do it, and I must make the time.” If it is important to the participants, they will complete the questionnaire.

**Interviews**

Another helpful data collection method is the interview. The program evaluation team or a third party usually conducts the interview, which can be used to collect data not available in databases or that may be difficult to obtain through questionnaires or observations. Interviews may also uncover success stories that can be useful in communicating evaluation results. Participants may be reluctant to describe their results in a questionnaire, but may be willing to volunteer the information to a skillful interviewer who uses probing techniques. Interviews are particularly useful when collecting application data. However, one major disadvantage is that they are time-consuming, because they require one-on-one data collection and interviewer preparation to ensure the process is consistent.

Interviews are categorized into two basic types: structured and unstructured. A structured interview is much like a questionnaire. The interviewer asks specific questions that allow the participant little room to deviate from the menu of expected
responses. Structured interviews offer several advantages over the questionnaire, however. For example, the interviewer can ensure that the questions are answered, and the responses supplied by the participant make sense. The unstructured interview, on the other hand, has built-in flexibility, allowing the interviewer to probe for additional information. This type of interview uses a small number of core questions that can lead to more detailed information as important data is uncovered. At Levels 3 and 4, the interviewer must be skilled in interviewing a variety of individuals and using the probing process to uncover barriers and enablers and explore success stories. Interview design and steps are similar to those of the questionnaire.

**Focus Groups**

Much like interviews, focus groups are helpful when in-depth feedback is needed. A focus group involves a small group discussion conducted by an experienced facilitator, who solicits qualitative feedback on a planned topic. Group members are all invited to provide their thoughts because individual input builds on group input.

Focus groups have several advantages over questionnaires, surveys, and interviews. The basic premise of using focus groups is that when credible perspectives are subjective, several individual perspectives are better than one. The group process, where group members stimulate ideas in others, is an effective method for generating qualitative data or validating the connection to impact data.

Focus groups are less expensive than individual interviews and can be quickly planned and conducted. They should be small (eight to 12 individuals) and should consist of a representative sample of the target population. Focus group facilitators should have expertise in conducting focus groups with a wide range of individuals. The flexibility of this data collection method makes it possible to explore organizational matters before the program as well as to collect unexpected outcomes or application after the program.

Focus groups are particularly helpful when there is a need for qualitative information about program success. For example, focus groups can be used to:

- Gauge the overall effectiveness of program application.
- Identify the barriers and enablers to a successful implementation.
- Isolate the impact of the program from other influences.

Focus groups are helpful when evaluation information is needed but cannot be collected adequately with questionnaires, interviews, or quantitative methods. However, for a complete evaluation, focus group information should be combined with data from other instruments.

**Observations**

Another potentially useful data collection method is observation. The observer may be a member of the program evaluation team, an immediate manager, an influencer, a member of a peer group, or an external third party. The most common observer, and probably the most practical, is the immediate manager or other influencer.
To be effective, observations need to be systematic and well-developed, minimizing the observer’s influence and subjectivity. Observers should be carefully selected, fully prepared, and knowledgeable about how to interpret, score (if relevant), and report what they see.

This method is helpful for collecting data on programs, where gaining a precise set of actions or skills is expected as part of program application. For example, observation is used to provide 360-degree feedback to evaluate the application of leadership development. Behavior changes are solicited from direct reports, colleagues, internal customers, immediate managers, and even self-input. This is considered a delayed report method of observation. This feedback process can be the actual program, or it could be used before participating in another development initiative.

For observation to be successful, it must also be invisible or unnoticeable. Invisible means that the person under observation is not aware that it is taking place. For instance, Starbucks uses secret shoppers to observe its employees and their customer service skills. A secret shopper goes to one of the stores and takes note of how long orders take to process, the demeanor of the server and professionalism of interactions with the customers, and even whether the server is familiar with new drink offerings. The observation continues immediately following the visit, when the secret shopper checks the temperature of the drink order. All of this activity is invisible to the server.

Unnoticeable observations are situations in which the person may know they are being observed but doesn’t notice because the observation occurs over a longer period of time or randomly. Examples of unnoticeable observations include listening in on customer service calls (“this call may be monitored for quality assurance purposes”) or a 360-degree feedback process.

**Action Plans**

Impact data is readily available for many programs. However, it won’t always be easily accessible to the program evaluator. Sometimes, data is maintained by the participant, in the community, or in a work unit and may not be accessible to anyone outside that area. Tracking down the data may be too expensive, time consuming, or simply impossible. In these cases, action plans and performance agreements may be helpful for capturing data.

While action plans traditionally capture application data, this method can also be a useful way to collect impact data. For impact data, the action plan is more focused and often deemed more credible than a questionnaire. This can be a powerful process that drives tremendous results; it is appropriate for soft skills programs where there is a need to document improvement.

The basic design principles involved in developing and administering action plans keep the focus on application and impact data. The following steps are recommended when an action plan is developed and implemented to capture business
impact data and to convert that data to monetary values. The adjustments needed to convert action plans to performance agreements are described at the end of the section.

**Set Objectives**

As shown in Figure 5-1, an action plan can be developed with a direct focus on business impact data. The figure uses an example from a program on teambuilding that was designed to reduce errors, transfers, and voluntary turnover, as well as improve work output. Participants were team leaders who learned how to improve teamwork in their particular unit. Each team leader could choose one or more measures to improve using the skills and competencies in the program. The participant in Figure 5-1 selected transfer as the measure. She planned to reduce transfers from her business unit to another business unit, which were occurring due to a lack of team spirit and the team environment. The plan had an objective, which is usually the participant’s primary objective. In some cases, an organization may have more than one objective, which requires additional action plans. The improvement measure was then defined, along with the current and target levels of performance and a timeframe to achieve the target. This information requires the participant (a team leader, in this case) to anticipate the application of skills and set goals for specific performances that can be realized.

The action plan is completed during the program, often with input and assistance from the program team. The practitioner then approves the plan, indicating that the action steps meet the SMART requirements. Each plan can be developed in a 20- to 30-minute timeframe, and often begins with action steps related to the program. The action steps are Level 3 activities that detail the application and implementation of program. They build support for and are linked to business impact measures.

**Define the Unit of Measure**

The next step is to define the actual unit of measure. In some cases, more than one measure may be used and will subsequently be contained in additional action plans. The unit of measure is necessary to break the process into the simplest steps to determine the ultimate value. The unit may be output data, such as one unit produced. In terms of quality, it can be one reject, one error, or one rework. Time-based units are usually measured in minutes, hours, days, or weeks, such as one hour of process time.

Other units are specific to the type of data, such as one complaint, one day of incarceration, one incident of noncompliance, one absence, or one new job. Here, simplicity rules the day; we are breaking down impact data into the simplest terms possible.
FIGURE 5-1. SAMPLE ACTION PLAN FOR TEAM BUILDING

<table>
<thead>
<tr>
<th>Name: Jacquelyn Robertson</th>
<th>Facilitator Signature:</th>
<th>Follow-Up Date:</th>
<th>Objective: Reduce Internal Transfers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaluation Period:</td>
<td>Improvement Measure:</td>
<td>Current Performance:</td>
<td>Target Performance:</td>
</tr>
<tr>
<td>February to August</td>
<td>Requested Transfers</td>
<td>3 per quarter</td>
<td>1 per quarter</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Action Steps</th>
<th>Target Performance</th>
<th>Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Review reasons for transfers with HR</td>
<td>February 15</td>
<td>A. What is the unit of measure? 1 employee transfer</td>
</tr>
<tr>
<td>2. Sort out items under our control</td>
<td>February 20</td>
<td>B. What is the value (cost) of one unit? $7,500</td>
</tr>
<tr>
<td>3. Identify high risk team members</td>
<td>February 25</td>
<td>C. How did you arrive at this value? HR team</td>
</tr>
<tr>
<td>4. Make a plan for high risk team members</td>
<td>March 1</td>
<td>D. How much did the measure change during the evaluation period? (monthly value) 2 per quarter</td>
</tr>
<tr>
<td>5. Have team sharing sessions each week to focus on complaints</td>
<td>March 1</td>
<td>E. List the other factors that have influenced this change: Employee Engagement Initiative</td>
</tr>
<tr>
<td>6. Provide team feedback when necessary for members who need help</td>
<td>Daily</td>
<td>F. What percent of this change was actually caused by this program? 60%</td>
</tr>
<tr>
<td>7. When a team member complains, explore and address within one day</td>
<td>March 1</td>
<td>G. What level of confidence do you place on the above information? (100% = Certainty and 0% = No Confidence) 80%</td>
</tr>
<tr>
<td>8. Delegate more to the team</td>
<td>April 15</td>
<td>H. Monetary value (B x D x F x G x 4)</td>
</tr>
<tr>
<td>9. Celebrate monthly successes</td>
<td>April 30</td>
<td></td>
</tr>
<tr>
<td>10. Have three-month review and adjust as necessary</td>
<td>May 15</td>
<td></td>
</tr>
</tbody>
</table>

Intangible Benefits: Employees Engage

Comments: Building trust was key
**Place a Monetary Value on Each Improvement**

During the program participants are asked to locate, calculate, or estimate the monetary value for each improvement outlined in their plan. The unit value is determined using a variety of methods, such as standard values, expert input, external databases, or estimates.

The process used to arrive at the value will be described in the instructions for the action plan. When the actual improvement occurs, these values will be used to capture the plan’s annual monetary benefits. The facilitator must be prepared to discuss values and reasonable methods in the session.

In this case, the participant used expert input from the HR team. However, in the worst-case scenario, those participating in the program may be asked to estimate the value. When estimates are necessary, it is important to collect the basis of the calculations, so space to record this information should be provided. The methods of converting data to money are described in more detail in chapter 7.

**Implement the Action Plan**

Ideally, the action plan will be implemented after the program. The participants follow the action plan steps (Level 3), and subsequently achieve and document business impact improvements (Level 4). At the end of the specified follow-up period—usually two, three, four, or six months—group members indicate specific improvements they’ve made. This determines the actual amount of change that has been observed, measured, and recorded in values that are typically expressed as a daily, weekly, monthly, or quarterly amount. In most cases, only the changes are recorded because those amounts are needed to calculate the monetary values linked to the program. In other cases, before and after data may be recorded, which allows the evaluator to calculate the differences.

**Isolate the Effects of the Program**

Although the action plan is initiated because of the program, it’s possible that the reported improvements may have been influenced by other factors as well. The program usually shares the credit for the improvement gained. For example, an action plan to implement leader competencies for department managers could only be given partial credit for a business improvement, because other variables in the work unit may have influenced the impact measures.

There are several ways to isolate the effects of a program, but participant estimation is often used in the action planning process. In this method, participants are asked to estimate the percentage of the improvement directly related to the soft skills program. It’s beneficial to precede this question with a request to identify all the other factors that may have influenced the results. This allows participants to think through the possible relationships before allocating a portion to program. Additional detail on methods to isolate the effects of soft skills programs is presented in the next chapter.
Provide a Confidence Level for Estimates
Identifying the amount of improvement directly related to the program is not a precise process—it is an estimate of the allocation. As a result, it’s important to include an error adjustment. To do so, participants indicate their level of confidence in their estimates using a scale of 0 to 100 percent, where 0 percent means no confidence and 100 percent means absolute certainty. The confidence estimate is used as a multiplier and serves as an error discount factor, reducing the allocation by the amount of assumed error.

Collect Action Plans
A high response rate is essential, so several steps may be necessary to ensure that the action plans are completed and returned. Participants usually see the importance of the process and develop their action plans during the program. Some organizations use follow-up reminders by email. Others call participants to check on their progress. Still others offer assistance in developing the final plan. These steps may require additional resources, which need to be weighed against the importance of having data that is more precise. Specific ways to improve response rates were discussed earlier in this chapter.

Summarize the Data and Calculate the ROI
If developed properly, each action plan will have annualized monetary values associated with improvements. Additionally, each individual will indicate the percentage of the improvement that is directly related to the program. Finally, group members provide a confidence estimate, expressed as a percentage to reflect their uncertainty with the estimates and the subjective nature of the data they provided.

This process may not appear to be accurate because it involves estimates; however, several adjustments during the analysis make it credible and more accountable than other research-focused methods, such as experimental versus control groups and mathematic modeling. More information on the credibility of estimates is presented in the next chapter.

These adjustments reflect the guiding principles of the ROI Methodology:
• For those group members who do not provide data, the assumption is that they had no improvement to report. This is a conservative approach.
• Each value is checked for realism, usability, and feasibility. Extreme values are discarded from the analysis.
• Because improvement is annualized, the assumption is that a short-term talent development program had no improvement after the first year. Some programs are longer term and will have multiple years of value.
• The improvement is adjusted by the percentage that is directly related to the program using multiplication, which isolates the effects of the program.
• The improvement from step 4 is then adjusted using the confidence estimate multiplied by the confidence percentage. For this example:
As shown in Figure 5-1, the program reduced transfers from three per quarter to one per quarter, for a change of two per month. The cost of a transfer—provided by HR and accepted by executives—was estimated to be an average of $7,500.

The annual amount of improvement was $2 \times 4 = 8$ transfers.

The participant (team leader) estimated that 60 percent of the improvement was caused by the program. Thus, $8 \times 60\% = 4.8$.

The participant indicated 80 percent confidence, reflecting a 20 percent error possibility ($100 - 80 = 20$). To reduce the estimated amount of improvement by 20 percent, it was multiplied by 80 percent. Thus, $4.8 \times 80\% = 3.84$. With an 80 percent confidence factor, the participant suggested the value could be in the range of 3.84 to 5.76 (20 percent less to 20 percent more). To be conservative, the lower number, 3.84, was used. This is determined by Guiding Principle 4.

The annual monetary value was $3.84 \times $7,500 = $28,800.

- The monetary values determined in these steps are totaled for all measures and participants to arrive at the final program benefit for all participants. Since these values are already annualized, the total becomes the program’s annual benefit. This value is placed in the numerator of the formula to calculate the ROI.

### Performance Contract

Perhaps the most powerful tool is the performance contract, which is much like an action plan. This is essentially a contract for performance improvement between the participant in the program and their immediate manager or other influencer. Before a program is conducted, the participant meets with the manager and they agree on the specific measures that should be improved and by how much. This contract can be enhanced if a third party enters the arrangement (this person would normally be the program facilitator or a coordinator for other types of projects).

Performance contracts are powerful because they represent a contract for performance change that the participant will achieve through the use of the program’s content, information, and materials. They have the added bonus of support from the immediate manager and the facilitator or program manager. When programs are implemented using a performance contract, they deliver significant changes in the business measure.

### Monitoring Business Performance Data

Data is available in every organization to measure business performance. Monitoring performance data enables management to measure performance in terms of output, quality, costs, time, engagement, and customer satisfaction. If a measure is important to an organization, it is collected, reported, and analyzed internally. Data is also available in government, community, and private databases. When determining the source
of data in the program evaluation, the first consideration should be whether there are any existing databases or reports. Most organizations can provide performance data suitable for measuring improvement from a program. If not, additional recordkeeping systems will have to be developed for measurement and analysis. This brings up the question of economics. Is it economical to develop the record-keeping systems necessary to evaluate a project? If the costs are greater than the expected return for the entire project, then it is pointless to develop those systems.

**SELECTING THE APPROPRIATE METHOD FOR EACH LEVEL**

This chapter presented several methods to capture data. Collectively, these methods represent a wide range of opportunities for collecting data in a variety of situations. Eight specific issues should be considered when deciding which method is appropriate for a situation or evaluation level.

**Type of Data**

One of the most important issues to consider when selecting the method is the type of data to be collected. Some methods are more appropriate for Level 4, for example, while others are best for Levels 3, 2, or 1. Figure 5-2 shows the most appropriate methods of data collection for each of the four levels. For example, follow-up surveys, observations, interviews, and focus groups are best suited for Level 3 data, sometimes exclusively. Performance monitoring, action planning, and questionnaires can readily capture Level 4 data.

**FIGURE 5-2. COLLECTING APPLICATION AND IMPACT DATA**

<table>
<thead>
<tr>
<th>Method</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surveys</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Questionnaires</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Observation</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Interviews</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Focus Groups</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Tests</td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Simulations</td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Action Planning</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Performance Contracting</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Performance Monitoring</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Participants’ Time for Data Input**

Another important factor in selecting the data collection method is the amount of time participants must spend with data collection and evaluation systems. Time requirements should always be minimized, and the method should be positioned so that it is
seen as a value-added activity (that is, the participants should believe that this activity is something valuable, so they won’t resist). This requirement often means that sampling is used to keep the total participant time to a minimum. Some methods, such as performance monitoring, require no participant time, while others, such as interviews and focus groups, require a significant time investment.

**Manager Time for Data Input**
The time that a participant’s direct manager or other influencer must allocate to data collection is another important issue in the method selection. This time requirement should always be minimized. Some methods, such as performance contracting, may require much more involvement from the supervisor, before and after the initiative. Other methods, such as questionnaires administered directly to participants, may not require any supervisor time.

**Cost of Method**
Cost is always a consideration when selecting the method. Some data collection methods are more expensive than others. For example, interviews and observations are expensive. Surveys, questionnaires, and performance monitoring are usually inexpensive.

**Disruption of Normal Work Activities**
Another key issue in selecting the appropriate method—and perhaps the one that generates the most concern among managers and administrators—is the amount of disruption the data collection will create. Routine work processes should be disrupted as little as possible. Some data collection techniques, such as performance monitoring, require little time and distraction from normal activities. Questionnaires generally do not disrupt the work environment and can often be completed in a few minutes, or even after normal work hours. On the other extreme, some items such as observations and interviews may be too disruptive to the work unit.

**Accuracy of Method**
The accuracy of the technique is another factor to consider when selecting the method. Some data collection methods are more accurate than others. For example, performance monitoring is usually very accurate, whereas questionnaires can be distorted and unreliable. If actual on-the-job behavior must be captured, observation is clearly one of the most accurate methods.

**Utility of an Additional Method**
Because there are numerous methods to collect data, it is tempting to use too many. Leveraging multiple data collection methods adds to the time and costs of the evaluation and may result in little additional value. Utility refers to the added value of the use of an additional data collection method. If using more than one method is being
considered, this question should always be addressed: Does the value obtained from the additional data warrant the extra time and expense of the method? If the answer is no, the additional method should not be implemented.

Cultural Bias for Data Collection Method

The culture or philosophy of the organization may dictate which data collection methods are used. For example, some organizations are accustomed to using questionnaires and find the process fits well with their culture. Some organizations will not use observation because their culture does not support the potential invasion of privacy often associated with it.

Addressing Biased or Fake Data

In March 2019, Duke University agreed to pay $112.5 million to settle a whistleblower suit claiming it had submitted fraudulent applications for federal grants that brought in more than $200 million for that school and other nearby universities (Korn 2019). The suit alleged the university was aware biologist Erin Potts-Kant included fraudulent data in several grant applications and reports. An internal investigation of more than 50 grants determined that Potts-Kant had indeed falsified or fabricated data. This settlement, which was one of the largest ever for such fraud under the False Claims Act, put to rest a six-year dispute over alleged grant fraud.

When collecting data for soft skills programs, the possibility of biased or fake data is always an issue. Fortunately, the consequences are typically not as dire as those brought by the fake data in the grants at Duke University. Still, this is an important concern and may lead to some very disappointing or inaccurate results if the data provided by program participants is either wrong data or exaggerated. Let’s examine what can be done to address this concern for collecting application and impact data.

Application

With application data, the actions of participants are tracked. This includes detail about the extent of use, frequency of use, and success of use, along with the barriers and enablers to use. Is it possible that a participant would exaggerate or fabricate data? Yes, it can happen, but here are four precautions to help minimize or even eliminate the issue:

- Collect the data anonymously or confidentially, if possible. Anonymous data collection is ideal at this level. However, anonymity is not always possible, or the participant may not believe it is anonymous. In this case, data collection should be confidential—explain who will see the data (give specific names if possible) and how the participants’ identities are being protected.
- Remind the participants that the program’s performance is being evaluated, not their individual performance. That message needs to be underscored routinely throughout the process to remove any temptation for participants to exaggerate because they think their performance is on the line.
• To further remove the data from a performance review, offer participants reasons not to use what they have learned. From a practical perspective, this list identifies the barriers to application. Using a forced-choice option format, the typical barriers are listed, and an individual will select the ones that are getting in their way. Participants will rarely, if ever, claim responsibility for not using the soft skills, because they think it’s a reflection of their performance. Any attempts to hold them accountable, in the form of performance review or assessment, could result in fake or biased data. This is a trade-off. Ignoring the true reason why participants exaggerate may be necessary to obtain more accurate data.

• Remind participants that they are the only ones who know how well the program works. They are the experts. Without their input, you will never know for sure if the program is successful. You are appealing to their sense of accountability and responsibility. If it’s not working, it’s not because of their performance.

These techniques, with some routine reinforcement, can help you obtain accurate data in ample quantities to make conclusions.

Impact
It is less likely that Level 4 data (the actual impact) will be exaggerated or fabricated. Impact data should be found in the records and databases. If the program begins with the end in mind, with clearly defined business measures, participants are unlikely to fabricate improvement, if it did not occur. This is good news. However, there are a few things we can do to ensure accuracy:

• When asking for specific data, request actual amounts and be specific in terms of monthly or weekly data. Also, ask where the data is located and how can it be accessed, leaving the possibility that it may be verified.

• When feasible, let participants know that there will be some audits of the data, just to make sure everyone clearly understands the data that is needed.

• Sometimes it is helpful to involve the participant’s manager. A business impact measure for a participant (referred to as a key performance indicator), often rolls up into one of the manager’s key performance indicators. As a result, the manager will likely have a lot of interest in that measure. Bringing in the manager immediately eliminates any possibility of exaggerated or fabricated data.

These simple techniques help ensure that fake data, biased data, and exaggerated data don’t enter the process.

TIMING OF DATA COLLECTION
The timing of data collection revolves around the events connected to the program. Any topic, event, or activity is an appropriate time to collect data, beginning with pre-program data collection and progressing to end-of-program collection.
Sometimes, collecting pre-assessment data is helpful for finding out who should participate in the program. In addition to determining eligibility (Level 0), pre-program assessments are a way to gauge the current attitudes toward the program (Level 1). Pre-assessments may also involve learning assessments, which can be used to understand how much participants currently know about an issue (Level 2).

As discussed previously, the detailed feedback collected during the early stages of implementation is critical. For the most part, this feedback may validate the decision to go forward with the program and ensures that alignment exists. Noting problems at this point means that adjustments can be made early on in the program. In practice, however, this early feedback is often not taken with a comprehensive approach; waiting until significant parts of the program have been implemented, when feedback may be more meaningful. However, early feedback can help spot problems and save a tremendous amount of time if adjustments are made.

Collecting data during programs that occur over multiple days is important. Several approaches may be taken to do this. First, feedback about the content is taken at periodic intervals, including the flow, degree of involvement, and other important issues surrounding the program. Another approach is to collect data immediately after each milestone, giving the participants the opportunity to judge key issues and steps about the module while it is fresh in their minds.

Still another approach is to evaluate different components separately. For example, in a comprehensive leadership program involving e-learning, classroom training, coaching, mentoring, and a learning portal, each component may need to be evaluated separately. Perhaps participants are involved in a separate networking event and given an opportunity to provide quick feedback the next day. Even with daily or event-based feedback, capturing the end-of-program data is still important because it reflects the entire program experience.

Finally, some programs have multiple parts spread over a long time period. In these cases, each individual part should be evaluated for reaction data. For example, to show the impact of a master’s degree program inside a government agency, the participants’ reaction data were collected at several different times: after the program’s introductory meeting, at the end of each course in the program (for reaction about the course), and at the end of each semester (for reaction about program progress). It’s important to have multiple data collection points for these kinds of programs (Phillips and Phillips 2018).

One of the advantages of the ROI Methodology is that it provides specific guidelines for when to collect data for application and impact. This is often a mystery in many evaluations, which can cause evaluators to wait too long to collect the data or to collect it too soon. If data is collected too late, participants may not be able to make the connections between the program and its application and impact. If it is collected too soon, it will have to be collected again. Here are a few basic guidelines.
Collecting Application Data

The issue for application is identifying how long to wait so that participants are routinely using what they are supposed to be using or doing what they should be doing. Sometimes, the required action is just a one-time process, such as completing a conflict of interest questionnaire. At other times, the action needed may be systematic behaviors that must be followed, such as the behaviors of a new leader to manage the team’s success.

First, the definition for success for application is documented, usually using the application objectives (such as the routine use of information, skills, knowledge, or contacts). Next, at least two types of subject matter experts (SMEs) are identified. The first SME knows the content of the programs and what participants are expected to do. The second SME knows the participants’ situation; where they are located, their stressors, their environment, and the barriers that naturally exist while trying to make the project successful.

These two SMEs indicate how long it will take the participants to be successful with application, considering two issues: The first is the complexity of what a participant is being asked to do; the second is the opportunity to do it. If it is a simple process that individuals will do every day, then it is just a matter of days until they are routinely using the process. However, if it is a complex task or they only use that task once a month, it will take longer for them to become successful. Those two factors—complexity and opportunity for use—are important for determining the timing of Level 3 data collection.

The good news is that Level 3 evaluation should occur quickly. If this level (application) does not occur soon, then the participant will not know how to do the task or will forget it quickly. Learning retention is an important issue.

Collecting Impact Data

Impact is a consequence of the application. This is the data that is in the records in the system, such as crime rates, health status, productivity, mistakes, errors, infections, and readmissions. It is the “why” for implementing the program. The timing to capture impact is the length of time between the routine use of the content and the impact. The two subject matter experts (who know the content of the program and the context of the situation) who helped define application success can indicate how long it should take for the impact to occur.

Sometimes, this happens quickly; for example, when using simple customer service skills in a retail store, the impact is reflected by the amount of sales while the customer is in the store. That impact will occur quickly, most likely within a few minutes after using the skills. However, advanced negotiations may take several months for impact to show.

Other times, the ultimate impact may take much longer to manifest. For example, a diabetes education program should prevent the serious adverse health outcomes from diabetes, such as hospitalization, surgeries, emergency room visits, and even
amputations or death. Those consequences can be prevented, but it generally takes a long time before that impact occurs. However, there are surrogate measures that can often be used—certain behaviors might correlate with these adverse outcomes, so it’s possible to suggest that “Doing this will save the healthcare system this much money.” Most long-term impact outcomes have early indicators, predictors, or surrogate measures that allow you to evaluate the program early in the process. Adjustments can then be made at that time, instead of waiting to see the long-term impact, which may not happen for five or 10 years.

**QUICK SUMMARY**

This chapter covers how to collect data at the input, reaction, learning, application, and impact levels. The input, reaction, and learning levels include questionnaires, surveys, tests, and simulations. For the application and impact levels, you may collect data using questionnaires, surveys, interviews, focus groups, and observations, as well as information found in action plans and performance contracts. Additionally, this chapter shows how to select the appropriate data collection method for the evaluation level you’re measuring. Finally, it addresses when is the right time to collect data at the different levels.

The next chapter begins the first of several steps to “Make it Credible,” isolating the effects of the program on the impact data.
Isolate the Effects of the Program

OPENING STORY
In July 2017, an unlikely group convened at Birmingham Southern College to learn how to show the value of what they do. Although the task was not all that unusual, you may be surprised by the audience. The United Methodist Endorsing Agency (UMEA), a division of the General Board of Higher Education and Ministry, hosted this return on investment workshop for 57 senior chaplains, spiritual care managers, and faith community leaders. The following is an excerpt of an article about the program published by the United Methodist Church (GBHEM.org 2017).

Over the last several years, a major paradigm shift has occurred in how organizational systems understand and value spiritual care. For many organizations, value and relevance are primarily centered on the bottom line. Although monetary value is a critical concern, it is the comparison of this value with the program/project costs that captures the attention of stakeholders—translating into ROI.

“Show me the money” is the familiar response from many business leaders and investors. Sometimes this is an appropriate response. At other times, it is misguided, especially when it comes to understanding the impact and value of chaplaincy and spiritual care. As Jeffrey Parkkila, senior chaplain at Westminster Retirement Community, Winter Park, Florida, stated, “I have struggled to find the language to communicate with the corporate world the needs of ministry and the value of spiritual care. This ROI training gives me a platform to communicate our value.”

Realizing that measures not subject to monetary conversion are also important, if not critical to most programming and projects, participants learned that a balanced profile of success is required, which must include qualitative and quantitative data as well as financial and nonfinancial outcomes.

John Callanan, senior chaplain with United Methodist Homes of the Greater New Jersey Conference, reflected, “My CEO has been pleading with me to demonstrate value. Now I have a process to demonstrate the impact of pastoral care and bring the pastoral care department into greater accountability.”
Stephen Brinkley, senior chaplain of the Trauma Center at Orlando Regional Medical Center commented, “Business language is a new language for me—yet, my health system is challenging me to translate the value of ministry in a new way. Failure to do so on my part jeopardizes the future of chaplaincy.”

Workshop participants learned a new language by embracing the ROI Methodology. When chaplains and spiritual care leaders engage the process, the ROI model provides alignment, connecting needs assessment with evaluation and thereby empowering the translation of ministry’s value and impact within organizational systems.

Invigorated by what she was learning, Linda Stetter, director of spiritual care, St. Mary Corwin Medical Center, Pueblo, Colorado, stated, “I can now quantify my ministry. This methodology empowers spiritual care to not be perceived as a cost center—but an organizational contribution center! This is great news!”

Jeffrey Uhler, chaplain at the Aurora Medical Center, Milwaukee, Wisconsin, added, “Last evening I received a message from my supervisor about a conversation she was having with management pertaining to the addition of chaplaincy staff. Management’s feedback to her, ‘You’ll need an ROI plan.’ Today, chaplaincy received good news—we have learned a methodology to give management just what they asked for, the ability to demonstrate ROI. I am excited!”

Bruce Fenner, endorsing agent for the United Methodist Church and director of endorsement at UMEA noted that the evaluations of this leadership development workshop were the highest of any program ever offered by the endorsing agency for its constituents. He attributes this to the outstanding leadership, clarity of vision, practical instruction, and applicability of the material for this time of our lives. “We were fortunate to have Jack and Patti Phillips bring their leadership. They are world-renowned experts in the field of measurement,” noted Fenner. “If we, as clergy working in specialized ministry, are to be relevant in this increasingly secular culture and workforce, there is a pressing need to learn a new language in ministry—the language of business. Business leaders do not typically understand the pastoral care world, nor are they going to learn our language. Rather, we must become bilingual if spiritual care is to have value and impact in broader organizational systems. There is nothing better suited to get us on our way than what we experienced from ROI Institute.”

This program underscores how the need for results has shifted, even in unexpected settings. No organization, or profession within an organization, can escape the need for accountability and business results. When it comes to soft skills, it doesn’t get any softer than chaplaincy and spiritual care.

In this situation, the challenge was to sort out the effects of the chaplain from other influences. Chaplains working in the healthcare industry quickly point out that they make a difference in patient outcomes, unwanted readmissions, patient satisfaction, length of stay, and employee turnover.

Doug Stewart, manager of chaplains at several hospitals, conducted a case study to determine the impact of chaplains working in intensive care units (ICU). He then
compared his results with those of similar ICUs to see the effects of the chaplaincy; there was a significant difference in length of stay. When this length of stay was converted to money, he found a tremendous cost avoidance resulting in a positive ROI when compared to the cost of providing the chaplains. Doug won an ROI Institute award for innovation for his work with this study in February 2019.

The challenge with any study like this is to make the results credible by sorting out the effects of the program, converting data to money, and comparing that to the cost of the program. These issues are covered in this chapter.

The good news about this group is their attitude about this task and the progress they are making. Chaplaincy groups are showing the impact of their work, and a publisher has agreed to publish their case studies and stories. An important professional community had stepped up to this challenge.

* * *

While “show me the money” is not a new request for business, top leaders of all types of organizations want value for their investments. Organization leaders also recognize that value lies in the eye of the beholder; therefore, the method used to show the money must also show the value as perceived by all stakeholders—it must be credible. Just as important, organizations need a methodology that provides data to help improve investment decisions. This book presents an approach that does both: it captures the value that organizations receive for investing in programs and projects, and it develops needed data to improve those programs in the future.

Chapters 6–8 present the next five steps in the ROI Methodology, which leads to the ultimate value, return on investment:

• Step 6. Make It Credible: Isolate the Effects of the Program (chapter 6)
• Step 7. Make it Credible: Convert Data to Monetary Value (chapter 7)
• Step 8. Make It Credible: Capture Costs of Project (chapter 8)
• Step 9. Make It Credible: Calculate Return on Investment (chapter 8)
• Step 10. Make It Credible: Identify Intangible Measures (chapter 8)

This chapter addresses the first of these steps: isolate the effects of the program. The next two chapters cover the other steps.

MAKE IT CREDIBLE: ISOLATE THE EFFECTS OF THE PROGRAM

In almost every program, multiple factors influence the impact measures targeted by the program. Determining the effect of the program on the impact is absolutely necessary. Without a step to isolate the effects of the program from other influences, its success cannot be validated. Moreover, the effects of the program will likely be overstated if the change in the business impact measure is attributed entirely to it. If this issue is ignored, the impact study may be considered invalid, inconclusive, and
certainly not credible. This places pressure on evaluators and program leaders to demonstrate the effects their programs have on business improvement.

The cause-and-effect relationship between a program and performance can be confusing and appear difficult to prove, but it can be demonstrated with an acceptable degree of accuracy. The challenge is to develop one or more specific techniques to isolate the effects of the program early in the process, usually as part of an evaluation plan conducted before the program begins, as discussed in chapter 3. Upfront attention ensures that appropriate techniques will be used with minimal cost and time commitments. Two important issues should be considered before getting started.

**Review Chain of Impact**
Before we present isolation methods, it is helpful to reexamine the chain of impact implicit in the different levels of evaluation. Measurable results from a program should derive from the application of the program (Level 3). Successful application of the program should stem from program participants learning to do something different and necessary to implement the program (Level 2). Successful learning usually occurs when participants react favorably to the program’s content, purpose, and objectives (Level 1). The proper reaction will only be realized if the right people are involved in the program at the right time (Level 0). Without this preliminary evidence, isolating the effects of a program is difficult.

To be sure, if the wrong people are involved or if there is an adverse reaction, no learning, or no application, it cannot be concluded that any impact improvements were caused by the program. From a practical standpoint, this requires data collection at four levels for an ROI calculation (Guiding Principle 1). Although this requirement is a prerequisite to isolating the effects of a program, it does not establish a direct connection, nor does it pinpoint the extent of the improvement caused by the program. It does show, however, that without improvements at previous levels, making a connection between the ultimate outcome and the program is difficult or impossible.

**Identify Other Factors**
As a first step in isolating a program’s impact, all key factors that may have contributed to the impact improvement should be identified. This step communicates to interested parties that other factors, such as a new marketing program, may have influenced the results, underscoring that the program is not the sole source of improvement. Consequently, the credit for improvement is shared among several possible variables and sources—an approach that is likely to garner the respect of the client.

Taking the time to focus on outside variables that may have influenced performance adds accuracy and credibility to the process. Program team leaders should go beyond this initial step and use one or more of the following techniques to isolate the program’s impact.
QUANTITATIVE AND RESEARCH ISOLATION METHODS

Just as there are multiple methods available for collecting data at different levels, discussed in chapter 5, a variety of methods are also available to isolate the effects of a program. It is recommended that multiple methods be considered and pursued to tackle this important issue.

Experimental Design

Perhaps the most accurate approach for isolating the impact of a program is an experimental design with control groups. This approach involves the use of an experimental group that implements the program and a control group that does not. The two groups should be as similar in composition as possible and, if feasible, participants should be randomly assigned for each group. When this is achievable, and the groups are subjected to the same environmental influences, any difference in performance between the two groups can be attributed to the program.

As illustrated in Figure 6-1, the control group and experimental group do not necessarily require pre-program measurements. Measurements can be taken during the program and after the program has been implemented, with the difference in performance between the two groups indicating the amount of improvement that is directly related to the program.

FIGURE 6-1. USE OF CONTROL GROUPS

![Diagram of control group and experimental group](image)

The experimental control group approach involves several actions to apply it in practice. The first task is the selection of the groups. From a theoretical perspective, having identical control and experimental groups is next to impossible. Dozens of factors can affect performance, some individual and others contextual. On a practical basis, it is best to select the two to five variables that will have the greatest influence on performance. Essentially, this involves the 80/20 rule or the Pareto principle. The 80/20 rule is aimed at selecting the 20 percent of factors that may account for 80 percent of the difference. The Pareto principle requires working from the most important factor down to cover perhaps four or five issues that capture the majority of the influential factors.
Another task is to make sure that the control group process is suited for the situation. Sometimes withholding the program from one group while implementing it with another isn’t appropriate. This is particularly true where critical solutions are needed immediately; leaders are typically not willing to withhold a solution from one area simply to see how it works in a different one.

Another task is to prevent contamination, which can develop when participants involved in the program group (experimental group) communicate with people in the control group. Or, it’s possible that members of the control group will model the behavior or actions of the experimental group. In either case, the experiment becomes contaminated as the program’s influence is carried over to the control group. This hazard can be minimized by ensuring that the control and program groups are at different locations, on different shifts, or occupy different floors of the same building.

The duration of the experiment must be managed. The longer a control versus experimental group comparison operates, the greater the likelihood that other influences will affect the results; more variables will enter into the situation, possibly contaminating the results. However, enough time must pass to allow a clear pattern to emerge distinguishing the two groups. Thus, the timing of control group comparisons must strike a delicate balance between waiting long enough for impact differences to show, but not so long that the results become contaminated.

Because the use of control groups is an effective approach for isolating impact, it should be considered when a major ROI impact study is planned. In these situations, isolating the program impact with a high level of accuracy is essential, and the primary advantage of the control group process is accuracy.

Figure 6-2 shows an experimental and control group comparison for a motivational program designed to reduce production costs.

**FIGURE 6-2. EXPERIMENTAL VERSUS CONTROL GROUP COMPARISON FOR MOTIVATIONAL PROGRAM**
The setting is a large construction aggregates company with more than 300 crushed stone plants (rock quarries). The program involved the motivational forces of team development, employee engagement, and gainsharing. Both groups were experiencing about the same production costs before the program was implemented with the experimental group. The control group did not participate in the program. The criteria used to select the two groups included the size of plant, the age of plant, and staffing level. Two similar groups were selected, with each group representing six plants. The control group experienced a 5-cent reduction—from $3.22 to $3.17. The experimental group moved from $3.19 to $2.88, a 31-cent improvement. Thus, the improvement connected to the program was $0.31 − $0.05 = $0.26 per ton. This program produced a positive ROI of 967 percent (Phillips, Phillips, and Ray 2016).

**Trend Line Analysis**

Another useful technique for approximating the impact of a program is trend line analysis. In this approach, a trend line is drawn to project the future, using previous performance as a base. When the program is fully implemented, actual performance is compared with the trend line projection. Any improvement in performance beyond what the trend line predicted can be reasonably attributed to program implementation, as long as certain conditions are met. Even though this process is not precise, it can provide a credible analysis of the program’s impact.

Figure 6.3 shows a trend line analysis from a program to increase motivation and reduce absenteeism for bus drivers in a city bus system. The vertical axis reflects the unplanned absenteeism. The horizontal axis represents time in months. Data reflect conditions before and after the program was implemented in June.

**FIGURE 6.3. TREND LINE ANALYSIS FOR UNPLANNED ABSENCE REDUCTION PROGRAM**

As shown in the figure, an upward trend for the data existed prior to program implementation. However, the program apparently had a dramatic effect on the unplanned absenteeism, because the trend line is much greater than the actual.
Program leaders may have been tempted to measure the improvement by comparing the six-month average prior to the program to the one-year average after the program. However, this approach understates the improvement because the measure in question is moving in the wrong direction and the program turns the unplanned absenteeism in the right direction.

A more accurate comparison is looking at the actual value after the program impact has occurred (the last three months) versus the trend line value for the same period. Using this measure increases the accuracy and credibility of the process in terms of isolating the program’s impact.

To use this technique, two conditions must be met:

- It can be assumed the trend that developed prior to the program would have continued if the program had not been implemented to alter it. In other words, had the program not been implemented, this trend would have continued on the same path. The process owner should be able to confirm this assumption. If the assumption does not hold, trend line analysis cannot be used. If the assumption is valid, the second condition is considered.
- No other new variables or influences entered the process during the program implementation and evaluation period. The key word here is new; the understanding is that the trend is based on the influences already in place, and no additional influences have entered the process beyond the program. If this is not the case, another method will have to be used. Otherwise, the trend line analysis will present a reasonable estimate of the program’s impact.

In addition, pre-program data that shows a reasonable degree of stability must be available for a trend line analysis to work properly. If the data variance is high, the stability of the trend line will be an issue. If the stability cannot be assessed using a direct data plot, more detailed statistical analyses can be used to determine whether the data is stable enough to allow a reliable projection. The trend line can be projected directly from historical data using a simple formula that is available in many calculators and software packages, such as Microsoft Excel.

The primary advantage of this approach is that it is simple and inexpensive. If historical data is available, a trend line can quickly be drawn, and the differences estimated. Although not exact, it does provide a quick general assessment of program impact.

**Mathematical Modeling**

A more analytical approach to trend line analysis is the use of mathematical modeling to predict a change in performance variables. This approach represents a mathematical interpretation of the trend line analysis when other variables enter the situation at the time of implementation. A mathematical model has been developed to link the other variables to the measure in question, the impact measure. With this approach, the impact measure targeted by the program is forecast based on the influence of
variables that have changed during the implementation or evaluation period for the program. The actual value of the measure is compared with the forecast value, and the difference reflects the contribution of the program.

An example from the VA Hospital’s program to decrease the length of stay will help illustrate the effect of the forecasting with the model. In June, the VA implemented a new program, which involved collaborative teams working together to make the healing process faster, with various ways to recognize improvement quickly and make decisions and adjustments accordingly. These actions were aimed at reducing the average length of stay. Figure 6-4 shows that the length of stay prior to the change in medical procedures saw a significant downward improvement in the 10 months following program implementation.

**FIGURE 6-4. MODELING EXAMPLE**

![Diagram showing change in length of stay](image)

However, two important changes also occurred around the time the new program was implemented. A major healthcare provider issued a maximum length of stay that they would reimburse for specific illnesses. This influence likely caused organizations to focus harder on getting patients discharged as quickly as possible. At the same time, the severity of the influx of patients had slightly decreased. The types of presenting illnesses dramatically affects the length of stay. The analysts in the business process improvement department developed a forecast showing the effects of the provider reimbursement process and the change in the illnesses of the patients upon admission. They were able to develop a multiple variable analysis to forecast the length of stay, as shown in Figure 6-4. The data from June shows the difference in the forecasted
value and the actual value. That difference represents the impact of the new medical procedures, because they were not included in the forecasted value.

A major disadvantage emerges when several variables enter the process. The complexity multiplies, and it becomes necessary to use sophisticated statistical packages designed for multiple variable analyses. Even with this assistance, however, a good fit of the data to the model may not be possible.

The good news is that some healthcare organizations have developed mathematical relationships for output variables as a function of one or more input items, making forecasting possible (Strome 2013). If your organization relies on analytics to inform decision making, there’s a good chance you’ll have the requisite data to perform mathematical modeling.

**Calculating the Impact of Other Factors**

It is sometimes possible, although not always appropriate, to calculate the impact of factors (other than the program) that account for part of the improvement and then credit the program with the remaining part. That is, the program assumes credit for improvement that cannot be attributed to other factors.

This method is suitable when the other factors can be easily identified, and the appropriate relationships are in place to calculate their impact on the improvement. In many cases, the impact of other factors is not mathematically linked to the impact of the program, limiting this approach’s applicability. However, the results can be reliable if the procedure used to isolate the impact of other factors is sound.

**QUALITATIVE ISOLATION METHODS**

In real world applications, the quantitative approaches of research design and modeling will not always work. In our experience, about a third (or more) of studies must use other approaches.

A common technique for isolating the effects of a program is to use qualitative analysis involving estimates from a group of expert individuals. Although this is potentially the weakest method, it is credible in most, if not all, situations, and can greatly enhance the credibility of the analysis if adequate precautions are taken to make it more credible. The first step when using this method is to ensure that the estimates are provided by the most credible source, which is often the participant—not a higher-level administrator or executive removed from the process. The individual who provides this information must understand the different factors driving the impact and, particularly, the influence of the program on the impact.

Essentially, there are four categories of potential input for these estimates: The participants directly involved in the program are the first source considered. Managers (or other influencers) are another possible source. The customers you and your program participants serve can sometimes provide credible estimates, and internal or
external experts may provide insight into causes for improvement. These sources are described in more detail next.

**Participants’ Estimate of Impact**

An easily implemented method of isolating the impact of a program is to obtain information directly from participants during program implementation. However, the usefulness of this approach rests on how capable participants are of determining or estimating how much of the impact improvement is related to the program implementation. Because their actions have led to the improvement, participants may provide accurate data. Although an estimate, the value they supply is likely to carry considerable weight with management because they know that the participants are at the center of the change or improvement. The estimate is obtained by defining the improvement, and then asking participants a series of questions:

- What is the link between these factors and the improvement?
- What other factors have contributed to this improvement in performance?
- What percentage of this improvement can be attributed to the implementation of this project?
- How much confidence do you have in this estimate, expressed as a percentage? (0 percent = no confidence, 100 percent = complete confidence)
- What other individuals or groups could provide a reliable estimate of this percentage to determine the amount of improvement contributed by this project?

Participants who do not provide answers to these questions would be excluded from the analysis. Erroneous, incomplete, and extreme information should also be discarded before the analysis. To obtain a conservative estimate, a confidence percentage can be factored into each of the values. The confidence percentage is a reflection of the error in the estimate. Thus, an 80 percent confidence equates to a potential error range of plus or minus 20 percent. Guiding Principle 4 suggests that we should be conservative in the analysis and use the lowest number (-20 percent). To reduce a number by 20 percent, we should multiply it by 80 percent.

With this approach, the estimate is multiplied by the confidence to be at the lower side of the range. For example, a participant allocates 60 percent of the improvement to the program and has a confidence in the estimate of 80 percent. The confidence percentage is then multiplied by the actual amount of the improvement (post-program value minus pre-program value) to isolate the portion attributed to the program. For example, if errors declined 10 per week, 4.8 of the reduced errors would be attributed to the program (10 × 48 percent). The adjusted improvement is now ready for conversion to monetary value and, ultimately, use in the ROI calculation.
Although the reported contribution is an estimate, this approach offers considerable accuracy and credibility. Five adjustments are effectively applied to the participant estimate to produce a conservative value:

- Participants who do not provide usable data are assumed to have observed no improvements.
- Extreme data values and incomplete, unrealistic, or unsupported claims are omitted from the analysis, although they may be included in the “other benefits” category.
- For short-term programs, it is assumed that no further benefits are realized after the first year of full implementation. For long-term programs, several years may pass after program implementation before benefits are realized.
- The amount of improvement is adjusted by the portion directly related to the program, expressed as a percentage.
- The improvement value is multiplied by the confidence, expressed as a percentage, to reduce the amount of the improvement and reflect the potential error.

As an enhancement of this method, the level of management above the participants may be asked to review and concur with each participant’s estimate.

**Manager’s Estimate of Impact**

In lieu of, or in addition to, participant estimates, the participants’ manager (or other influencer) may be asked to provide input concerning the program’s role in improving performance. In some settings, the managers may be more familiar with the other factors influencing performance, and therefore may be better equipped to provide estimates of impact. The questions to ask managers, after identifying the improvement ascribed to the program, are similar to those asked of the participants.

Managers’ estimates should be analyzed in the same manner as the participant estimates, and they may also be adjusted by the confidence percentage. Once the estimates are collected from the participants and managers, the decision of which estimate to use becomes an issue. If there is a compelling reason to believe that one estimate is more credible than the other, then that estimate should be used. This is Guiding Principle 3. Then the most conservative approach is to use the lowest value and include an appropriate explanation. This is Guiding Principle 4.

**Customer Estimates of Program Impact**

An approach that is useful in some narrowly focused program situations is to solicit input on the impact of a program directly from the customers who are served by the program. Customers are asked why they chose a particular product or service or are asked to explain how their reaction to the product or service was influenced by individuals or the systems involved in the program. This technique often focuses directly on what the program was designed to improve.
Internal or External Expert Estimates

External or internal experts can sometimes estimate the portion of results that can be attributed to a program. With this technique, experts must be carefully selected based on their knowledge of the process, program, and situation. For example, an expert in quality might be able to provide estimates of how much change in a quality measure can be attributed to a quality program and how much can be attributed to other factors.

However, this approach has its drawbacks. It can yield inaccurate data unless the program and the setting in which the estimate is made are quite similar to the program with which the expert is familiar. Also, this approach may lack credibility if the estimates come from external sources and do not involve those close to the process.

This process has the advantage that its reliability is often a reflection of the reputation of the expert or independent consultant. It is a quick and easy form of input from a reputable expert or consultant. Sometimes top management has more confidence in such external experts than in its own staff.

Estimate Credibility: The Wisdom of Crowds

The following is an excerpt from James Surowiecki’s bestselling book *The Wisdom of Crowds* (2004). This story highlights the power of input from average individuals. Other experiments are available on YouTube by searching for “wisdom of crowds.”

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The Wisdom of the Crowds

In 1906, Francis Galton, a British scientist known for his work in statistics and the science of heredity, attended a regional fair where the local farmers and townspeople showcased their livestock for the effects of good breeding. At the fair, Galton came across a weight judging competition for an ox, which involved guessing the weight of the ox after it was slaughtered and dressed.

For a small cost, an individual could purchase a ticket, provide their name, occupation, address, and an estimate of the ox’s weight. The best guess would win the prize. Eight hundred people participated in the contest. Many of the participants were farmers and butchers, who would be knowledgeable about the weight of livestock, but some participants were just average individuals with no specific experience or knowledge on the subject.

Galton was interested in the capability of the average individuals or “the crowd” so, he turned the competition into an impromptu experiment. When the contest was completed, Galton borrowed the tickets from the organizers and ran a series of statistical tests on the weight estimates. First, he arranged the tickets in order from highest to lowest guesses and plotted them to see if a bell curve would form. He also added up all the weight estimates and calculated the mean. In theory, the total represented, what
might be called the collective “wisdom of the crowd.” In essence, if the crowd were considered a single person, the average would be that individual’s estimate of the weight. Galton anticipated the average estimate of the group would be grossly inaccurate. But to his surprise, he was wrong. The crowd had guessed that the weight of the ox would be 1,197 pounds; and in fact, the ox weighed 1,198 pounds. Essentially meaning the crowd’s judgment was perfect.

Francis Galton discovered a simple but powerful truth. In the right circumstances, groups are often smarter than the smartest people in them and can make wise decisions, collectively.

SELECT THE METHOD
With all of these methods available to isolate the impact of a program, selecting the most appropriate ones can be difficult. Some methods are simple and inexpensive; others are time-consuming and costly. When choosing among them, consider these factors:

• feasibility of the method
• accuracy associated with the method
• credibility of the method with the target audience
• specific cost (time) to implement the method
• amount of disruption in normal work activities resulting from the method’s implementation
• participant, staff, and management time required for the method.

The use of multiple methods should be considered because two methods are usually better than one. When multiple methods are used, the most credible one should be used for ROI calculation. If they are all credible, then the most conservative method should be used (this is the method that lowers the ROI), because a conservative approach builds acceptance. The target audience should always be given an explanation of the process and the subjective factors involved.

QUICK SUMMARY
Isolating the effects of a program is an important step in answering the question of how much of the improvement was caused by the program. The methods presented in this chapter are the most effective approaches available to answer this question and are used by some of the most progressive organizations. Too often results are reported and linked to a program with no attempt to isolate the portion of the outcome associated with the program. This leads to an outcome with no credibility.

The next chapter discusses the process for converting the results of a program to money.
Convert Data to Monetary Values

OPENING STORY

Networking is an important benefit that results from many programs, and the monetary value of networking is an elusive figure. One of Canada’s largest banks decided to tackle this issue. This banking system is on a path to be a major global organization with acquired banks in different countries and expanded divisions within the bank serving a global market (Phillips et al. 2019).

Recently, the bank conducted a global leadership development program at its headquarters in Toronto where the heads of the banking units and banks around the world discussed a variety of strategy and leadership topics. The talent development team saw this as an opportunity to enhance networking. Top executives had always thought that the operating executives could benefit by working together, perhaps sharing some of the same clients and expanding specialized services to other countries. Some bank units offer services that could be purchased by other parts of the bank. With the urging of top executives, the team decided to track the success of the networking and develop the actual monetary value for networking.

The bank used an innovative technology where the name tags of individuals could electronically track networking. The devices tracked which participants met other participants, how long they met, and how many times they met. Participants were asked to keep their name badges with them at all times with this message, “We want to try an experiment to see how much networking actually occurs and the value of that networking. This is not a performance issue. It’s just an attempt to understand the value of networking.” The bank engaged the services of external consultants to measure the monetary value of the networking.

More than 50 participants were involved in the meeting. Armed with the data that showed the networking profile, the external firm conducted interviews with each participant one month after the meeting to indicate what had actually happened with the networking, explore what had occurred since the meeting, and how it connected to the business.
Another follow up was set three months after the meeting with the specific goal of tracking the successes from the networking. A few had very little networking experience with no value. Some exchanged clients or obtained a client from another executive. For example, the headquarters of a client company may be in one country and the participants in another country used the headquarters connection to sell local financial services. A few were able to use the services of other divisions. Some were able to provide referrals. Each of these actions and consequences were detailed with as much specifics as possible to understand what happened and what was anticipated to happen in the future.

The participants attempted to place a monetary value on the outcome anticipating a profit (or cost savings) that would be generated from the contact. In some cases, a new client was secured, and they knew the value of a new client, based on the average tenure of a client and the average annual profit made with that particular product line. In interviews with 52 executives, 21 were able to provide specific data, and seven had impressive results.

Part of the process included the question “How much of this improvement was actually caused by the networking?” There is a chance that the outcome could have happened through normal channels. In some cases, there was a possibility that the improvement could have happened without networking, as some were thinking about those particular clients. The networking helped. So, they gave a percentage of the improvement to the meeting. A final question asked for the confidence of the allocation to the program using a percent from 0 percent (no confidence) to 100 percent (certainty). This analysis of the data followed the procedures in chapter 6, Isolate the Effects of the Program.

When all the money was tallied, divided by all 52 participants, an average value of the networking was $4,265 per person. Although the total amount was impressive, it wasn’t enough to cover the total cost of the conference, but that wasn’t the principal reason for it. This value gave executives some comfort that networking activities can add business value.

Was the calculation necessary? In this case, it was because it was requested by top executives. One of the techniques for converting data to money is that we can calculate it using our data in the organization. This approach has to be taken with caution since it can take too much time and resources. The good news is that most of the data items that matter to the organization have been converted to money. This chapter outlines the various ways that this conversion can be achieved.

**THE IMPORTANCE OF MONETARY VALUE**

The need to convert data to monetary amounts is not always clearly understood by program leaders. A program can be successful just by providing impact data and the amount of change that is directly attributable to it. For example, an improvement in health status, job growth, market share, or crime could be linked directly to a new soft
skills program. For some, this may suffice. However, many sponsors will want to know the actual monetary value the program is bringing in; as a result, more program leaders are taking the extra step of converting data to monetary value.

**Value Equals Money**

There are many different types of value. However, monetary value is becoming a primary criteria for success, as the economic benefits of programs are pursued. Executives, sponsors, clients, administrators, and other influencers are particularly concerned with the allocation of funds and want to see evidence of a program’s contribution in terms of monetary value. Any other outcome for these key stakeholders would be unsatisfactory. For example, in the counseling at the food bank in the opening story for chapter 4, the provincial government asked for the ROI on the counseling program, fully explaining what it meant by the value it sought.

**Money Makes Impact More Impressive**

For some programs, the impact is more impressive when stated in terms of monetary value. Consider, for example, the impact of a major program to improve the creativity of an organization’s employees, and thereby enhance the innovation of the organization. This program involved every employee and affected all parts of the organization. Across all departments, functions, units, and divisions, employees were being more creative, suggesting new ideas, taking on new challenges, and driving new products—in short, helping the organization in a wide variety of ways. The best way to understand the value of this program was to convert the individual efforts and their consequences to monetary values. Totaling the monetary values of all the innovations would provide a sense of the program’s value.

Or, consider the impact of a leadership program directed at an organization’s middle managers. At the beginning of the program, the managers were asked to select at least two key performance indicators that should change or improve for them to meet their specific goals. The measures had to be under the control of their team and could be changed using the leadership competencies with the team. For the group of 50 managers, 100 different measures could be influenced and reported as improvements. While it would be difficult to appreciate the value of these improvements on their own, converting to monetary values allowed them to be expressed as total monetary benefits.

**Monetary Value Is Vital to Organizational Operations**

With global competitiveness and the drive to improve the efficiency of operations, awareness of the costs related to processes and activities is essential. In the 1990s this emphasis gave rise to activity-based costing (ABC) and activity-based management. ABC converts cost data to relevant, actionable information. It has become increasingly useful for identifying improvement opportunities and measuring the benefits realized from performance initiatives on an after-the-fact basis (O’Guin 1991). In our work at
ROI Institute, more than 80 percent of the ROI studies conducted show programs benefiting the organization through cost savings (cost reductions or cost avoidance). Consequently, understanding the cost of a problem and the payoff of the corresponding solution is essential to proper management of the organization.

**Monetary Values Are Necessary to Understand Problems and Cost Data**

In any business, costs are essential to understanding the magnitude of a problem. Consider, for example, when Mayor Annise Parker of Houston, Texas, calculated the cost of chronic homelessness. She found that the cost for 2,500 chronically homeless people was $103 million in public resources annually; this included the cost of police, EMS, street/park cleanup, and the court system. The per person cost per year of $41,200 was clearly a problem worth solving from a monetary perspective. The city didn’t attempt to calculate impacts on property values, lost business in areas of high concentration, or the cost to nonprofits for meals, showers, and case-managed apartments (Parker 2017). But ultimately, the calculation lead to a feasible solution to reduce the number of homeless.

A variety of estimates and expert input may be necessary to supplement costs to arrive at a credible value. The good news is that organizations have developed a number of standard values for identifying undesirable costs. For example, Walmart calculated how much it cost for a truck to sit idle at a store for one minute while waiting to be unloaded. While that one minute may not cost much, when it is multiplied by the hundreds of deliveries per store, and then again by the 5,000 stores, the cost becomes huge.

**KEY STEPS IN CONVERTING DATA TO MONEY**

Converting data to monetary values involves five steps for each item:

1. **Focus on a unit of measure.** First, a unit of measure must be defined. For output data, the unit of measure is something produced or completed (a student graduated) or service provided (a package shipped). Time measures could include the time to complete a program, time to process a form, or response time; the unit is usually expressed in terms of minutes, hours, or days. Quality is another common measure, with a unit defined as one error, reject, defect, or reworked item. Soft data measures vary, with a unit of improvement expressed in terms of complaints or incidents. Specific examples of units of measure include one accident, one homicide, one sale, one day of incarceration, one sexual assault, a microfinance loan approved, one out of compliance incident, a new job, one voluntary turnover, one citizen complaint about the police, one infection, a patient discharged, a new customer, and an hour of system downtime.
2. **Determine the value of each unit.** Now comes the important part: placing a value (V) on the unit identified in the first step. The process is relatively easy for most common and important measures. Most organizations maintain records or reports that can pinpoint the cost of one unit. However, soft data are more difficult to convert to money. For example, it’s harder to determine the monetary value of one citizen complaint about police. The techniques described in this chapter provide an array of approaches for making this conversion. When more than one value is available, the most credible value is generally used in the calculation. If the credibility is the same, the lowest value is used.

3. **Calculate the change in performance data.** The change in output data is calculated after the effects of the program have been isolated from other influences. This change (Δ) is the performance improvement that is directly attributable to the program, represented as the Level 4 business impact measure. The value may represent the performance improvement for an individual, a team, a group of participants, or several groups of participants.

4. **Determine the annual amount of change.** The Δ value is annualized to develop a value for the total change in the performance data for one year (ΔP). Using annual figures is a standard approach for organizations seeking to capture the benefits of a program, even though the benefits may not remain constant throughout the year. For a short-term solution, first-year benefits are used even when the program produces benefits beyond a year. This approach is considered conservative. More will be discussed about this later.

5. **Calculate the annual value of the improvement.** The total value of improvement is calculated by multiplying the annual performance change (ΔP) by the unit value (V) for the complete group in question. For example, if one group of participants is involved in the program being evaluated, the total value will include the total improvement for all participants providing data in the group. This value for annual program benefits is then compared with the costs of the program to calculate the BCR, ROI, or payback period.

Let’s explore this further using an example from a customer service program at a trucking company. The program was developed and implemented to address customer complaints due to inadequate or improper customer service associated with deliveries. The number of complaints was selected as an output measure. Figure 7-1 shows the steps in assigning a monetary value to the data, which resulted in a total program impact of $228,000.
FIGURE 7-1. CONVERTING CUSTOMER COMPLAINT DATA TO MONETARY VALUES

Setting: Customer complaints for a trucking company.

Step 1. Define the unit of measure.
The unit is defined as one customer complaint.

Step 2. Determine the value (V) of each unit.
According to internal experts (the customer care staff), the estimated cost of an average complaint in this category was $1,500, when time and direct costs are considered (V = $1,500).

Step 3. Calculate the change (Δ) in performance data.
Six months after the program was completed, total complaints per month had declined by 25. As determined by the frontline customer service staff (isolating program impact), 65 percent of the reductions were related to the project, with an average confidence of 78 percent. Using the six-month value of 25 × 65% × 78% = 12.7 per month.

Step 4. Determine an annual amount for the change (ΔP).
The monetary amount is multiplied by 12 to yield an annual improvement value of:

\[ 12.7 \times 12 = 152 \]

\[ \Delta P = 152 \]

Step 5. Calculate the annual value of the improvement.

Annual value = ΔP × V
= 152 × $1,500
= $228,000

STANDARD MONETARY VALUES

A standard value is a monetary value assigned to a unit of measurement that is accepted by key stakeholders, including the sponsors and donors. They are often the measures that matter most to the organization and community. Standard values often reflect problems, and their conversion to monetary values show their impact on the operational and financial well-being of the organization or community.

For the last two decades, quality initiatives have typically focused only on the cost of quality, placing a value on mistakes, or the payoff from avoiding mistakes. This assigned value—the standard cost of quality—is one of the critical outgrowths of the quality management movement. Additionally, a variety of process improvement programs—such as reengineering, reinventing the corporation, transformation, and continuous process improvement—have included a component in which the cost of a measure is determined. The development of a variety of cost control, cost containment, and cost management systems has also forced organizations, communities, and governments to place costs on activities and, in some cases, relate those costs directly to the revenues or profits of the organization.
The following discussion describes how measures of output, quality, and time are being converted to standard values.

**Converting Output Data to Money**

When a program results in a change in output, the value of the increased output can usually be determined using the organization’s accounting or operating records. For organizations operating on a profit basis, this value is typically the marginal profit contribution of an additional unit of production or service provided. An example is a team within a major appliance manufacturing firm that was able to boost the production of small refrigerators after completing a program focused on teamwork; the unit of improvement is the profit margin associated with one refrigerator.

For organizations that are performance driven rather than profit driven, this value is usually reflected in the savings realized when an additional unit of output is gained using the same input. For example, in the visa processing section of a government office, one additional visa application may be processed at no additional cost; an increase in output due to a time management program translates into a cost savings equal to the unit cost of processing a visa application.

Most organizations have standard values readily available for performance monitoring and goal setting. Managers often use marginal cost statements and sensitivity analyses to pinpoint values associated with changes in output. If the data are not available, the program team must initiate or coordinate the development of appropriate values.

One of the more important measures of output is productivity, particularly in a competitive organization. Today, most organizations competing in the global economy do an excellent job of monitoring productivity and placing a value on it.

The benefit of converting output data to money using standard values is that these calculations are already available for the most important data items. Perhaps no area has as much experience with standard values as the sales and marketing teams.

**Value of a College Degree**

If an organization was trying to determine the value of a program designed to increase college graduation rates, it would need to know the monetary value of a college degree. Instead of calculating the value or searching the Internet, most analysts would refer to the U.S. Census Bureau to get their answer. This is generally accepted as the standard source for executives, sponsors, administrators, and donors.

A college education has many benefits that justify the expenses of obtaining a degree, including technical skills acquired through the degree and softer skills from the experience. Additionally, college graduates generally earn more money during their working lives than people with high school diplomas. According to statistical data from the U.S. Census Bureau, in the course of their careers, people with bachelor’s degrees earn nearly $2 million, associate’s degrees nearly $1.5 million, and high school diplomas
nearly $1.2 million. In addition, a college graduate with a bachelor’s degree will likely earn twice as much as a college dropout, which translates to about $1.6 million more in lifetime earnings than workers with a high school diploma. In the long run, graduating college should be viewed as an investment in building capability of hard and soft skills that pays off later in life and contributes to a higher living standard.

The advantages of a college degree are not limited to financial gain only. College graduates have significantly lower rates of unemployment and poverty than high school graduates and are generally healthier and more adaptable. Overall, society also benefits from higher education. Some of these benefits include higher tax receipts, increased public awareness about important social issues, and lower unemployment. Educated parents, in turn, are far more likely to raise children who go on to obtain a college degree as well (Best College Values 2018).

Calculating the Cost of Inadequate Quality

Quality and the cost of quality are important issues in all types of organizations. Because many programs are designed to increase quality, the program team may have to place a value on the improvement of certain quality measures. For some measures, the task is easy. For example, if quality is measured in terms of the defect rate, the value of the improvement is the cost to repair or replace the product. The most obvious cost of poor quality is the amount of scrap or waste generated by mistakes. Defective products, spoiled raw materials, and discarded paperwork are all the result of poor quality, which can result from poor teamworking skills. Scrap and waste translate directly into a monetary value. In a production environment, for example, the cost of a defective product is the total cost incurred up to the point at which the mistake is identified, minus the salvage value. In the service environment, the cost of a defective service is the cost incurred up to the point at which the deficiency is identified, plus the cost to correct the problem, the cost to make the customer happy, and the loss of customer loyalty.

In the public sector, quality measures are reflected in crime rates, diseases, poverty, injuries, homelessness, recidivism, student dropouts, and pollution. These are “mistakes” that should not have happened, and many programs are implemented to reduce or prevent them.

Quality costs can be grouped into six major categories (Campanella 1999):

• Internal failure represents costs associated with problems detected prior to product shipment or service delivery. Typically, such costs are reworking and retesting.
• Penalty costs are fines or penalties incurred because of unacceptable quality.
• External failure refers to problems detected after product shipment or service delivery. Typical items include technical support, complaint investigation, remedial upgrades, and fixes.
• Appraisal costs are the expenses involved in determining the condition of a product or service. Typical costs involve testing and related activities, such as product quality audits.

• Prevention costs involve efforts undertaken to avoid unacceptable products or service quality. These include service quality administration, inspections, process studies, and improvements.

• Customer dissatisfaction is perhaps the costliest element of inadequate quality. In some cases, serious mistakes result in lost business. Customer dissatisfaction is difficult to quantify and arriving at a monetary value may be impossible using direct methods. The judgment and expertise of sales, marketing, or quality managers are usually the best resources to draw upon when measuring the impact of dissatisfaction. Market surveys are also being used more frequently to measure customer and client dissatisfaction.

As with output data, a tremendous number of quality measures have been converted to standard values. These measures include readmissions into a hospital, product returns, sexual assaults, property thefts, rework, processing errors, student dropouts, accidents, addictions, grievances, system downtime, incarcerations, delays, compliance discrepancies, student loan defaults, and citizen complaints.

**Converting Employee Time Savings Using Compensation**

Saving time is a common outcome for soft skills programs, which may enable the team to work together more effectively to complete tasks in less time or with fewer people. A major program could even reduce the need for additional staff. On an individual basis, a program may be designed to help staff and volunteers save time when performing daily tasks. The value of the time saved is an important measure and determining a monetary value for it is relatively easy.

The most obvious time savings stem from reduced labor costs for performing a given amount of work. The monetary savings are found by multiplying the hours saved by the labor cost per hour. For example, after participating in a time-saving program, participants saved an estimated average of 74 minutes per day. In monetary terms, that was worth $31.25 per day or $7,500 per year, based on the average salary plus employee benefits for a typical participant.

The average wage, with a percentage added for employee benefits, will suffice for most calculations. However, employee time may be worth even more. For example, you could consider the additional costs for maintaining an employee, such as office space, furniture, telephones, utilities, computers, administrative support, and other overhead expenses. When these are included, the wage rate used in the calculation can escalate quickly. In a large-scale employee reduction effort, calculating the costs of additional employees may be more appropriate for showing the value. However, for most programs, the conservative approach of using salary plus employee benefits is recommended.
Beyond reducing the labor cost per hour, time savings can produce benefits such as improved service, avoidance of penalties for late programs, and increased service. You can estimate the value of these benefits using other methods discussed in this chapter.

However, a word of caution concerning time savings—they are realized only when the amount of time saved translates into a cost reduction or a profit contribution. Even if a program produces savings in time, monetary value is not realized unless the participant puts the time saved to productive use. Having participants estimate the percentage of time saved that is devoted to productive work is helpful, especially if it is followed up with a request for examples of how the extra time was used. Ideally, a team-based program eliminates several hours of work each day, the actual savings will be based on the corresponding reduction in staff or the need for new staff. Therefore, an important preliminary step in figuring time savings is determining whether the expected savings will be genuine.

Finding Standard Values
Standard values exist for all types of data, and organizations typically develop standard values that are monitored for that area. The functions that track standard values in most organizations include administration, operations, finance and accounting, engineering, IT, sales and marketing, customer service and support, quality, procurement, logistics, compliance, research and development, HR and talent development.

Thanks to enterprise-wide systems software, standard values are commonly integrated and a variety of people can access them. In some cases, access may need to be addressed to ensure that the data can be obtained by those who require it.

WHEN STANDARD VALUES ARE NOT AVAILABLE
There are several other strategies for converting data to monetary values. Some are appropriate for a specific type of data or data category, while others may be used with nearly any type of data. The challenge is to select the strategy that best suits the situation.

Using Historical Costs From Records
Historical records often indicate the value of a measure, and the cost (or value) of a unit of improvement. This strategy relies on identifying the appropriate records and tabulating the proper cost components for the item in question. Essentially, we calculate the value.

Sorting through databases, cost statements, financial records, and activity reports takes a tremendous amount of time, which may not be available for the program. Thus it is important to keep this part of the process in perspective. Converting data to monetary values is only one step in the ROI Methodology. Time needs to be conserved.
In some cases, it’s not possible to see all the costs for an item because the data doesn’t exist. In addition to the direct costs associated with a measure, an equal number of indirect or invisible costs may be present that cannot be obtained easily.

Compounding the problems of time and availability is access. Someone else may control the system or record set where the monetary values are held. Cost data is more sensitive and is often protected for a number of reasons, including competitive advantage. Therefore, access can be difficult and sometimes is even prohibited unless an absolute need-to-know can be demonstrated.

Finally, the need for accuracy in this analysis should not be overlooked. A measure provided in current records may appear to be based on accurate data, but this may be an illusion. When data are calculated, estimations are involved, access to certain systems is denied, and different assumptions are made (all of which can be compounded by different definitions of systems, data, and measures). Because of these limitations, the calculated values should be viewed as suspect unless the means are available to ensure that they are accurate.

Calculating monetary value using historical data should be done with caution, and only when the sponsor has approved the use of the additional time, effort, and money to develop a monetary value from the current records and reports. Otherwise, an alternative method is preferred.

**How Much Time Do You Need?**

The metro bus system of a large city in the United States was experiencing significant unplanned absenteeism, which resulted in a huge operating cost and a negative impact on customer satisfaction as many of the bus routes were experiencing delays. This system had more than 1,000 buses with 2,900 drivers, and unplanned absenteeism had reached 8.7 percent. The system addressed the problem by creating a pool of 231 substitute drivers.

While this helped avoid serious bus delays, it also incurred a tremendous cost. To address the cost issue of the solution, the bus system contracted with an external firm to calculate the cost of absenteeism. The firm produced a detailed analysis of how the drivers were used, including how many were not needed on some days, as well as the days when the absences exceeded the numbers of the pool. When all the costs of the solution were calculated, the total was staggering. Using this value, the firm then calculated the cost per absence and divided it by the average wage rate, which pegged the cost of absenteeism to the average pay rate. This gave the company a benchmarking figure they could use in the future. In addition, the results of the study led the company to present two new, more appropriate solutions to start to control and drastically reduce unplanned absenteeism (Phillips and Phillips 2018).

This story illustrates the excessive time that may be involved in calculating the actual cost of a specific measure. In this evaluation, the ROI study on the impact of the two new, more appropriate solutions was a separate project, removed from the calculations of the cost of absenteeism. This underscores the cost of calculating the monetary value credibly.
Using Input From Experts
If historical cost data are not available, data can be converted using input from experts on the process. Internal experts can provide the cost (or value) of one unit of improvement in a measure. However, individuals with knowledge of the situation and the confidence of management must be willing to provide estimates, as well as their assumptions behind them. Internal experts may be found in the department in which the data originated—such as compliance, marketing, operations, logistics, or support. Most experts have their own methodologies for developing these values, so it is important to explain the full scope of what is needed and provide as many specifics as possible.

If internal experts have a strong bias regarding the measure, or the measures are not available, it’s possible to reach out to external experts. Experts should be selected based on their experience with the unit of measure, such as values in healthcare, the environment, economic development, justice, social services, and community development. They are often willing to provide estimates of the cost (or value) of these intangibles.

The credibility of the expert, whether internal or external, is critical if the monetary value placed on a measure is to be reliable. Foremost among the factors behind an expert’s credibility is the individual’s experience with the process or measure at hand. Ideally, they should be unbiased and work with the measure routinely.

Additionally, the external experts’ credentials—published works, degrees, and other honors or awards—are important in validating their expertise. Since many experts are tapped often, their track records can and should be checked. If their estimate has been validated in more detailed studies and was found to be consistent, this can serve as a confirmation of their qualifications in providing such data.

Using Values From External Databases
For some measures, the use of cost (or value) estimates based on the work and research of others may be appropriate. This technique uses external databases that contain studies and research programs focusing on the cost of data. Fortunately, many databases are accessible online and include cost studies for data items related to programs, such as the costs or value of illnesses, diseases, addictions, crimes, incarcerations, jobs, labor stoppage, accidents, and customer satisfaction.

The difficulty lies in finding a database with studies or research germane to the program. Ideally, the data should originate from a similar setting in the same industry, but that is not always possible. Sometimes, data on general industries or organizations are sufficient, with adjustments possibly required to suit the program at hand.

Figure 7-2 shows an example of data on the cost of employee turnover collected from an external database.
**FIGURE 7-2. USING EXTERNAL DATABASES TO EVALUATE EMPLOYEE TURNOVER**

<table>
<thead>
<tr>
<th>Job Type</th>
<th>Example</th>
<th>Turnover Cost as a % of Annual Wage/Salary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entry Level (Hourly, Non-Skilled)</td>
<td>Fast Food Workers</td>
<td>30–50 percent</td>
</tr>
<tr>
<td>Service and Production Workers (Hourly)</td>
<td>Couriers</td>
<td>40–70 percent</td>
</tr>
<tr>
<td>Skilled Hourly</td>
<td>Machinists</td>
<td>75–100 percent</td>
</tr>
<tr>
<td>Clerical and Administrative</td>
<td>Scheduler</td>
<td>50–80 percent</td>
</tr>
<tr>
<td>Professional</td>
<td>Sales Representatives, Nurses, Accountants</td>
<td>75–125 percent</td>
</tr>
<tr>
<td>Technical</td>
<td>Computer Technicians</td>
<td>100–150 percent</td>
</tr>
<tr>
<td>Engineers</td>
<td>Chemical Engineers</td>
<td>200–300 percent</td>
</tr>
<tr>
<td>Specialists</td>
<td>Computer Software Designers</td>
<td>200–400 percent</td>
</tr>
<tr>
<td>Supervisors and Team Leaders</td>
<td>Section Supervisors</td>
<td>100–150 percent</td>
</tr>
<tr>
<td>Middle Managers</td>
<td>Department Managers</td>
<td>125–200 percent</td>
</tr>
</tbody>
</table>

**Notes**
- Percentages are rounded to reflect the general range of costs.
- Costs are fully loaded to include every cost associated with replacing an employee and bringing them to the level of productivity and efficiency of the former employee. The turnover included in studies is usually unexpected and unwanted. Cost categories usually included are customer dissatisfaction, employment cost, exit cost of previous employee, loss of expertise and knowledge, lost productivity, orientation cost, recruiting cost, supervisor’s time for turnover, temporary replacement costs, training cost, quality problems, and wages and salaries while training.
- Turnover costs are typically calculated when excessive turnover is an issue, and turnover costs are high. The actual cost of turnover for a specific job in an organization may vary considerably. These ranges reflect what has been reported in the literature when turnover costs are analyzed.

**Data Sources**
The data sources for these studies follow two general categories:
- Industry and trade magazines, which have reported the cost of turnover for a specific job within an industry.
- Publications in general management (academic and practitioner), human resources management, human resources development training, and performance improvement, which often reflect ROI cost studies because of the importance of turnover to senior managers and human resources managers.

The above data come from ERIC (Education Resources Information Center), an online digital library of education research and information. It is sponsored by the U.S. Department of Education’s Institute of Education Sciences. ERIC provides access to education literature to support the use of educational research and information to improve practice in learning, teaching, educational decision making, and research.

**Linking With Other Measures**
When standard values, records, experts, and external studies are not available, a feasible alternative might be to find a relationship between the measure in question and some other measure that can be easily converted to a monetary value. This involves identifying existing relationships that show a strong correlation between one measure and another with a standard value.
A classic relationship is the correlation between job satisfaction and employee turnover. Suppose that in a program designed to improve job satisfaction, the program administrators need to determine a value reflecting changes in the job satisfaction index. A predetermined relationship showing the correlation between increases in job satisfaction and reductions in turnover can directly link the two measures. Using standard data or external studies, the cost of turnover can easily be determined, as described earlier. Therefore, a change in job satisfaction can be converted to a monetary value, or at least an approximate value. The conversion is not always exact because of the potential for error and other factors, but the estimate is sufficient for these purposes.

Many other examples of this type of analysis have been developed. For example, the Danish postal service developed a correlation between employee engagement and postal revenue per employee. Essentially, employees sold more postal products as they became more engaged. Amsterdam’s Akzo Nobel noted a significant correlation between employee engagement and safety—as fewer accidents occurred when employees were more engaged. At Lowe’s Home Improvement stores in the United States, increased employee engagement resulted in increased sales (Coco 2009). Southeast Corridor Bank saw a correlation between engagement and employee turnover—as employees became more engaged, they were more likely to stay with the organization (Phillips and Phillips 2018). PolyWrighton, a plastics manufacturer, found that engagement was directly related to quality improvements (Phillips and Phillips 2018).

Although the data was analyzed by other teams, it shows the links between a hard-to-value measure (such as engagement) and an easy-to-value measure (such as retention, quality, safety, or sales). If these companies sought to improve engagement through a soft skills development program, they would have data to link to postal revenue, safety, sales, employee turnover, or quality.

**Using Estimates From Participants**

Participants in the program can also estimate the value of improvement. This technique is appropriate if participants are capable of providing estimates of the cost (or value) of the unit of measure that improved as a result of the program. With this approach, participants should be given clear instructions and examples of the type of information needed. The advantage is that the people who are most closely connected to the improvement may be able to provide the most reliable estimates of its value. As with isolating program effects, when estimates are used to convert measures to monetary values, adjustments are made to reduce the error in those estimates.

**Using Estimates From the Management Team**

In some situations, program participants may be incapable of placing a value on the improvement. For example, their work may be so far removed from the ultimate value of the process that they cannot provide reliable estimates. In these cases, the participants’ team leaders, supervisors, or managers may be able to provide estimates.
instead. Thus, they may be asked to provide a value for a unit of improvement linked to the program. Or, managers may be asked to review and approve participants’ estimates and confirm, adjust, or reject those values.

Senior management can often provide estimates of the value of data. In this approach, senior managers concerned with the program are asked to place a value on the improvement based on their perception of its worth. This approach is used when it’s difficult to calculate the value or when other sources of estimation are unavailable or unreliable.

**Using Program Staff Estimates**
The final strategy for converting data to monetary values is using program staff estimates. Using all available information and experience, the staff members most familiar with the situation provide estimates of the value. For example, a program for an international oil company was designed to reduce dispatcher absenteeism and address other performance problems. Unable to identify a value using the other strategies, the consulting staff estimated the cost of an absence to be $200. This value was then used to calculate the savings from the reduction in absenteeism that followed the program implementation. Although the program staff may be qualified to provide accurate estimates, this approach can be sometimes perceived as biased. It should therefore be used only when other approaches are unavailable or inappropriate.

**SELECTING THE TECHNIQUE**
With so many techniques available, the challenge is often selecting which techniques are most appropriate for the situation and available resources. Developing a list of possible techniques may be helpful. Use the following guidelines to help select a technique and finalize the value.

**Choose a Technique Appropriate for the Type of Data**
Some techniques are designed specifically for hard data, whereas others are more appropriate for soft data. Thus, the type of data often dictates the strategy. Most hard data items have standard values, which are developed using organization records and cost statements. Soft data often involve the use of external databases, links with other measures, and estimates.

**Move From Most Accurate to Least Accurate**
The techniques in this chapter were presented in order of accuracy. Standard values are usually most accurate and therefore the most credible. But, as mentioned earlier, they are not always readily available. When standard values are not available, this sequence of operational techniques should be tried:

1. Calculate the value using historical costs from organization records (if available and there is enough time to do it).
2. Use internal and external experts.
3. Search external databases.
4. Locate links with other measures.
5. Collect estimates.

Consider Source Availability
Sometimes the availability of source data determines the method selection. For example, experts may be readily accessible. Some standard values are easy to find; others are more difficult. In other situations, the convenience of a technique is a major factor in the selection. The Internet, for example, has made external database searches more convenient.

Use the Source With the Broadest Perspective on the Issue
According to Guiding Principle 3, the most credible data source must be used. The person providing estimates must be knowledgeable of the processes and the issues surrounding the valuation of the data. For example, consider the estimation of the cost of a grievance in a manufacturing plant. Although a supervisor may have insight into what caused a grievance, they might have a limited perspective. A high-level manager, on the other hand, may be able to grasp the overall impact of the grievance and how it will affect other areas. Thus, a high-level manager would be a more credible source in this situation.

Use Multiple Techniques When Feasible
Using more than one technique to obtain values for the data is often beneficial. When appropriate, multiple sources can provide a basis for comparison or for additional perspectives. The data must be integrated using the standards. The first consideration is credibility—if one stands out as more credible, it should be used, following Guiding Principle 3. If they all have equal or similar credibility, then follow the conservative approach of using the lowest value, according to Guiding Principle 4.

Converting data to monetary values has its challenges. When a method has been selected and applied, several adjustments or tests may be necessary to ensure the use of the most credible and appropriate value with the least amount of resources.

Consider the Short-Term Versus Long-Term Issue
When data are converted to monetary values, one year’s worth of data is usually included in the analysis for short-term solutions, following Guiding Principle 9. The issue of whether a program is short term or long term depends on the time it takes to complete or implement it. If one group participating in the program and working through the process takes months or years to complete it, then it is probably not short term.

In general, it is appropriate to consider a program short term when an individual takes a month or less to learn what needs to be done to make the program
successful. When the lag between program implementation and the consequences is relatively brief, a short-term solution is also appropriate. If the development or acquisition costs are high, that usually means a long-term solution is appropriate. When a program is long term, no time limit is used for data inclusion, but the time value should be set before the program evaluation is undertaken. Input on the time value should be secured from all stakeholders, including the sponsor, donor, implementer, designer, and evaluator. The estimates of the time factor or the benefits stream should be conservative, and perhaps reviewed by finance and accounting. When a program is a long-term solution, extrapolation will be necessary to estimate multiple years of value, since few sponsors will want to wait several years to see if a program is successful.

**QUICK SUMMARY**

Showing the real monetary value of a program requires just that—money. Business impact data that has improved as a result of a program must be converted to money. Standard values make this process easier, but are not always an option and other techniques may need to be used. Experts, whether internal or external, are usually able to provide a value based on their experience and expertise. External databases can be located, estimates can be provided, and the value can even be calculated using conservative principles. However, if a measure cannot be converted with minimum resources or no assurance of credibility, the improvement in the measure should be reported as an intangible benefit.

The next chapter focuses on identifying intangible measures, capturing costs, and ultimately calculating ROI.
Identify Intangibles, Capture Costs, and Calculate ROI

OPENING STORY
The meditation and mindfulness industry includes studio classes, workshops, books, online courses, and apps, according to a 2017 estimate by Marketdata Enterprises. During the past five years, the national meditation rate has tripled, and within two years the number of adults in the United States who meditate will be more than those who practice yoga, according to a report from the Centers for Disease Control and Prevention (Potkewitz 2018).

This expanding attention to mindfulness has ignited the digital industry with more than 2,000 meditation apps launching in the last three years. Most share a mission to increase health and happiness around the world. All of this attention has raised a question among executives, “What’s the ROI of mindfulness training?”

With hopes that mindfulness will improve productivity and reduce stress-related healthcare costs, many businesses are assisting employees with the practice. According to a survey by The National Business Group on Health and Fidelity Investment, in 2016 nearly 22 percent of companies offered meditation training, and in 2017 an additional 21 percent of businesses added the benefit. A major resource on mindfulness suggested that programs are implemented to help employees:

• Become more relaxed and calm.
• Cope better with stress and anxiety.
• Help prevent depression.
• Have better concentration and focus.
• Cope with chronic pain or illness.
• Enjoy and appreciate life more.
• Handle strong emotions more successfully.
• Develop greater self-awareness and insight.
• Be more accepting of self and others.
• Connect with a sense of meaning.
• Have more sense of space in life (Watt 2012).
New research papers are published routinely on the use of mindfulness in coping with mental health issues such as drug addiction or obsessive-compulsive disorder (OCD) and some physical health conditions, such as tinnitus. Still, other studies focus on the health benefits and well-being mindfulness provides to specific groups of participants, such as parents, students, or prisoners.


Here are some of the key areas where mindfulness has been shown to be helpful:

- Stress reduction
- Depression improvement
- Pain reduction
- Illness prevention

Science is now backing up the benefits of mindfulness experienced by many who practice it. Neuroscientists, using MRI technology to examine the brains of those who meditate, have found fascinating results.

The brain can strengthen in certain regions according to how we use it, just as muscles can strengthen with exercise. For example, the brains of medical students involved in intense periods of study show changes in the areas important for memory. Several studies have shown that people who meditate have more active grey matter in the areas of the brain that regulate emotions and are associated with happiness and well-being. These changes in brain structure and activity have been documented both in seasoned meditators and those with just a few weeks of mindfulness practice.

Could a mindfulness program be evaluated at the business impact or ROI level? The answer is yes, but it may take more effort than the talent development team is willing to provide. The challenge is to convert impact data to money. Most of the measures identified above are in the intangible category. Intangibles are measures that cannot be converted to money credibly, with a reasonable amount of effort. Some organizations take the time to convert them to money because of executive pressure. The opening story of the previous chapter illustrates what can be accomplished when the resources are provided to convert networking to money.

Leaving these measures as intangibles is usually acceptable for many executives when they realize the effort required. Still, to make them credible, they must be clearly connected to the program. This chapter shows how this is accomplished. This chapter also completes the “Make It Credible” steps with tabulating the costs and calculating the actual ROI.

**MAKE IT CREDIBLE: IDENTIFY THE INTANGIBLES**

Almost all programs generate results that include tangible and intangible measures. By definition and based on the guiding principles of the ROI Methodology, an intangible benefit is not converted to money, because the conversion cannot be credibly
accomplished with minimum resources. These measures are usually identified at the beginning of the program and monitored after the program has been completed. Although not converted to monetary values, they are an important part of the evaluation process; for many programs, they are the most important outcome. In this chapter, we explore the role of intangibles, how to measure them, when to measure them, and how to report them.

**WHY INTANGIBLES ARE IMPORTANT**

The range of intangible measures is almost limitless, so this chapter focuses on a few common and desired program outcomes. These are just a few examples of these measures:

- agility
- ambiguity
- alliances
- awards
- brand
- burnout
- capability
- capacity
- carbon emissions
- clarity
- collaboration
- communication
- compassion
- complexity
- compliance
- conflict
- corporate social responsibility
- creativity
- culture
- customer service
- decisiveness
- emotional intelligence
- employee attitudes
- engagement
- food security
- grit
- happiness
- human life
- image
- intellectual capital
- job satisfaction
- leadership effectiveness
- loyalty
- mindfulness
- mindset
- net promoter score
- networking
- organizational commitment
- partnering
- patient satisfaction
- poverty
- reputation
- risk
- social capital
- stress
- sustainability
- team effectiveness
- timeliness
- trust
- uncertainty
- volatility
- work-life balance.

Some make the list because of the difficulty in measuring them; others because of the difficulty in converting them to money. Still others are on the list for both reasons. However, being labeled as intangible does not mean that these items can never be measured or converted to monetary values. It simply means that, for a typical program, it’s difficult to convert them into monetary values.

Intangible measures are not new. They drive the economy and funding for major programs. Some organizations are built on intangible measures. In every direction we look, they’re are not only important, but critical to the organization. Here’s a recap of why they have become so important.
Intangibles Are the Invisible Advantage

When examining the reasons behind an organization’s success, intangibles are often found: A highly adaptive company continues to develop new and improved products. A government agency reinvents itself. A company with highly involved and engaged employees attracts and keeps talent. An organization shares knowledge with employees, providing a competitive advantage. Still another organization is able to develop strategic partners and alliances. These successes are often measured by intangibles, which make a huge difference, even if they do not appear in cost statements and other record keeping.

More Intangibles Are Converted to Tangibles

Data, often regarded as intangible, are being converted into monetary values. As a result, classic intangibles are now accepted as tangible measures, and their value is more easily understood. Consider, for example, patient satisfaction. Just a decade ago, few healthcare organizations had a clue as to the monetary value of patient satisfaction. Now more healthcare organizations have taken the extra step to link patient satisfaction directly to patient revenues, recommendations, and other measures. The result has been an increased effort on the part of the organizations to provide a better patient experience.

More than a decade ago, Kevin T. Jackson began working on assigning a value to reputation in his book *Building Reputational Capital: Strategies for Integrity and Fair Play That Improve the Bottom Line*. In their 2017 book, *Awakening Compassion at Work: The Quiet Power That Elevates People and Organizations*, Monica C. Worline and Jane E. Dutton concluded that compassion connects to the bottom line, fuels strategic advantage, motivates innovation, and drives service quality. Through our work at ROI Institute, we have converted stress to money (Phillips and Phillips 2018).

Motivational coach Diane Tracy and William Morin, former chairman and CEO of the search firm Drake, Beam, Morin, attempted to connect trust to the bottom line in their book *Truth, Trust, and the Bottom Line: 7 Steps to Trust-Based Management*. They said that trust was the lubricant of society and the glue that holds societies together. When trust is present and goals are relatively congruent, there is room for honest disagreement—an essential ingredient for innovation and growth. On the other hand, when trust is absent, innovation suffers and costs rise exponentially. Think of the games played with time logs, insurance claims, and expense accounts. No wonder economists are concerned about trust. It finds its way into all their calculations—whether the gross national product or the economics of the firm (Tracy and Morin 2001).

Organizations are seeing the tremendous value that can be derived from intangibles. And, as more data are being accumulated to show monetary values, it’s becoming easier to move some intangible measures into the tangible category.
Intangibles Drive Programs and Investments
Some programs are implemented because of intangibles. For example, the need to have greater collaboration, partnering, branding, reputation, image, communication, teamwork, or service. In the public sector, programs are often driven by the need to reduce poverty, improve health status, lower the number of homeless, employ disadvantaged citizens, and save lives. From the outset, the intangibles are the important drivers and become the most important measures. Consequently, more executives include a string of intangibles on their scorecards, as key performance indicators, on dashboards, and in other routine reporting systems. In some cases, the intangibles represent nearly half of the measures being monitored.

As a general rule, only about 15 percent of the value of a contemporary organization can be tied to such tangible assets as buildings and equipment. Thus, intangible assets have become the dominant investment in businesses. They are a growing force in the economy, and measuring their values poses challenges to managers and investors. They can no longer be ignored. They must be properly identified, selected, measured, reported, and (in some cases) converted to monetary values.

MEASURING AND ANALYZING INTANGIBLES
In some programs, intangibles are more important than monetary measures. Consequently, they should be monitored and reported as part of the program evaluation. In practice, every program, regardless of its nature, scope, or content, will produce intangible measures. The challenge is to identify them effectively and report them appropriately.

Measuring Intangibles
It may be necessary to measure those values that are difficult to measure. Responses to this exploration usually occur in the form of comments instead of questions; “You can’t measure it,” for example, is a typical response. However, this isn’t true—anything can be measured. Just because it is not something you can count, examine, or see in quantities, like items produced or products sold, a quantitative value can still be assigned to or developed for any intangible. If it exists, it can be measured. Consider human intelligence for example. Although human intelligence is a complex and abstract thing with myriad facets and qualities, people can take an IQ test and receive an IQ score, which most seem to accept.

There are several approaches for measuring intangibles. One possibility is counting those intangibles that can be counted, such as alliances, staff complaints, and conflicts. These can be recorded and constitute one of the most acceptable types of measures. Unfortunately, many intangibles are based on attitudes and perceptions that must be measured. The key is in how the instrument is developed. Instruments of measurement usually use scales of three, five, or 10 points to represent levels of perception. For example, a five-point scale can be used to describe degrees of
reputation, ranging from the worst rating (a horrible reputation) to the best rating (an excellent reputation).

Intangibles are often combined with a variety of tangibles to reflect the performance of a business unit, function, or program. In addition, intangibles are often associated with nonprofit, nongovernment, and public-sector organizations.

**Converting to Money**
Converting the hard-to-measure to monetary values is challenging, to say the least. When working with intangibles, the interest in the monetary contribution expands considerably. Three major groups have an interest in the monetary value:

- The sponsors who fund the program almost always seek monetary values among the measures.
- The public is no longer willing to accept the notion that the intangibles are enough to fund programs, particularly if they are funded by tax dollars. This is true even for private-sector organizations, which are trying to improve their image, reputation, and public confidence.
- The individuals who are actively involved with and support the program often need, and sometimes demand, to know the monetary value.

Here is an example:

**Can Happiness Be Converted to Money?**

Yale University offers a course on happiness that focuses on helping students find meaning and value in much of what they do and are involved in. The course is very popular among Yale’s student body.

“The course, taught by Laurie Santos, a psychology professor and the head of one of Yale’s residential colleges, tries to teach students how to lead a happier, more satisfying life in twice-weekly lectures,” writes David Shimer in the *New York Times*. “Dr. Santos speculated that Yale students are interested in the class because, in high school, they had to deprioritize their happiness to gain admission to the school, adopting harmful life habits that have led to what she called ‘the mental health crises we’re seeing at places like Yale.’ A 2013 report by the Yale College Council found that more than half of undergraduates sought mental healthcare from the university during their time there” (Shimer 2018).

In this case, increased happiness could be linked to mental health outcomes, such as healthcare costs, absenteeism, and productivity.

Many organizations measure happiness through job satisfaction, which is influenced by pay, career, supervisors, and the work they are doing. Employee engagement focuses more on the fulfilling aspects of their work, such as being more responsible, involved in decisions, accountable for results, and willing to share information. Engagement has been connected to retention, productivity, and quality, which are all easily converted to money.

The United Nations has developed a happiness index, which measures six main factors: GDP per capita, social support, healthy life expectancy, freedom to make life choices,
generosity, and freedom from corruption. According to the World Happiness Report 2020, Finland topped the happiness index, while the United States ranked 18th. In addition, the report found that “individuals with higher levels of interpersonal and institutional trust fare significantly better than others in several negative situations, including ill health, unemployment, low incomes, discrimination, family breakdown, and fears about the safety of the streets. Living in a trusting social environment helps not only to support all individual lives directly, but also reduces the well-being costs of adversity.”

The Roads and Transport Authority (RTA) in Dubai, which builds additional roads, bridges, new lanes, transit systems, water taxis, and other kinds of transport processes, uses the monetary value of happiness to show the ROI on its projects. Until recently, RTA only worked on transport projects because there was a need to eliminate road congestion, accidents, and driving times. Essentially, the RTA wanted to make citizens happy with the transportation system. But they wanted to know more. So, we worked with them to develop a process to determine the ROI of their transportation projects. We were surprised to find that RTA had a happiness department, which was able to provide some interesting data project managers could use to determine the ROI of new projects. For example, this department found a correlation between happiness with transit and the amount of money citizens spent in the city. If they were happy with transit—it was reliable, took a short amount of time to travel, and was safe—they were more likely to go to the mall and spend money, and citizens spending money ultimately helps the city.

In short, there is usually a way to calculate the monetary value of happiness. The key issue is that it can be done and is being done—if it is needed.

**Collecting Data on Intangibles**

For each intangible measure identified, it’s necessary to show some evidence of its connection to the program. This is especially true when program leaders need to know the specific amount of change in the intangible measure that is linked to the program. Intangible data often reflect improvement; however, the amount of improvement and how much that is directly related to a program are not always identified. Additionally, a detailed analysis isn’t necessary because the value of the data is not included in the ROI calculation. Thus, intangible benefits are often viewed as additional evidence of the program’s success and presented as supportive qualitative data.

Linking intangible data to a program can be easily accomplished with a single question using a five-point scale, as shown in Figure 8-2. The most credible source (usually the participants) provides input about the influence of the program on the intangibles. The program evaluators must then decide how much influence to assign to each measure—moderate influence is typically used as a minimum. Also, the evaluators must decide how many responses of three, four, or five to include in the report to the stakeholders. This is usually 10 to 20 percent of the sample being evaluated.
FIGURE 8-2. CONNECTING TO INTANGIBLES

Please indicate the extent to which the program has influenced these measures:

<table>
<thead>
<tr>
<th>Intangible Measure</th>
<th>No Influence</th>
<th>Influence</th>
<th>Moderate Influence</th>
<th>Some Significant Influence</th>
<th>Very Significant Influence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Image</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Teamwork</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Brand</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Engagement</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Stress</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Patient Satisfaction</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Communications</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

MAKE IT CREDIBLE: CAPTURE THE COSTS OF THE PROGRAM

Specific costs to capture should be identified along with the economical ways they can be developed. One of the primary challenges is deciding which costs should be captured or estimated. For major programs, some costs are hidden and rarely counted. However, the conservative philosophy of the ROI Methodology is to account for all costs, whether direct and indirect.

One of the main reasons to monitor costs is to create budgets for programs. The initial cost of most programs is usually estimated during the proposal process and is often based on previous programs. A clear understanding of cost is necessary so that it can be used to determine future budgets and how much programs will cost in the future. It is helpful to track cost using different categories, which builds a database for understanding and predicting costs in the future (this is covered later in this chapter).

Costs should be monitored in an ongoing effort to control expenditures and keep the program within budget. Monitoring costs not only reveals the status but also gives visibility to expenditures and encourages the program team to spend wisely. And, of course, monitoring costs during the ongoing process is much easier, more accurate, and more efficient than trying to reconstruct events to capture costs retrospectively.

Monitoring program costs is an essential step in developing the ROI calculation because it represents the denominator in the ROI formula. The first step in monitoring costs is to define and address issues relating to cost control. Several rules apply to tabulating costs, and consistency and standardization are necessary. A few guidelines follow:

- Monitor all costs, even if they are not needed now.
- Costs must be realistic and reasonable.
• Some costs will not be precise; estimates are OK.
• Disclose all costs.

**Fully Loaded Costs**
Because a conservative approach is used to calculate the ROI, costs should be fully loaded, which is Guiding Principle 10. With this approach, all costs (direct and indirect) that can be identified and linked to a program are included. The philosophy is simple: For the denominator, when in doubt, put it in (that is, if there is any question as to whether a cost should be included, include it, even if it’s not required by the organization’s cost guidelines). When an ROI is calculated and reported to target audiences, the process should withstand even the closest scrutiny to ensure its credibility. The only way to meet this test is to include all costs. Of course, if the controller or CFO insists on not including certain costs, then leaving them out or reporting them in an alternative way is appropriate.

**Costs Reported Without Benefits**
A top administrator in a southeast Asian country’s ministry of innovation wanted to know the success of every design thinking workshop that had been conducted in organizations within the country. The program team responded by sharing the number of workshops, the number of participants, and the total costs of the program. The minister was disappointed—he wanted to know the outcomes.

Costs represent input to the program, not outcomes. However, because costs are easy to collect, they are often presented to management in many ways, such as in terms of the total cost of the program, cost per day, and cost per participant. While these figures may be helpful for efficiency comparisons, presenting them without identifying the corresponding benefits may be problematic. When most executives review program costs, they’ll also want to know what benefit was received from the program. This is a typical management reaction, particularly when costs are perceived to be very high.

**Develop and Use Cost Guidelines**
When multiple programs are being evaluated, it may be helpful to detail the philosophy and policy on costs in the form of guidelines for the evaluators or others who monitor and report costs. These guidelines detail specifically which cost categories are included with programs, and how the data are captured, analyzed, and reported. Standards, unit cost guiding principles, and generally accepted values are also included. Cost guidelines can range from a one-page brief to a 100-page document; however, the simpler approach is better. Once they’re fully developed, cost guidelines should be reviewed and approved by the finance and accounting staff. The final document serves as the guiding force for collecting, monitoring, and reporting costs. When the ROI is calculated and reported, costs are included in a summary or
table form, and the cost guidelines are usually referenced in a footnote or attached as an appendix.

Sources of Costs
It is sometimes helpful to first consider the sources of program costs. The charges and expenses from the program team represent the major segment of costs and are usually transferred directly to the client or sponsor for payment. These are often placed in subcategories under fees and expenses. A second major cost category relates to the vendors or suppliers who assist with the program. A variety of expenses, such as consulting or advisory fees, may fall in this category. A third cost category is those expenses borne by others in the organization, both direct and indirect. While these costs are not identified in many programs, they are still included as part of the program costs. The final cost category involves expenses not covered in the other three categories, such as payments for equipment and services needed for the program. Finance and accounting records should track and reflect the costs from these different sources.

Prorated Versus Direct Costs
Usually all costs related to a program are captured and expensed to that program. However, some costs are prorated over a longer period. Equipment purchases, software development and acquisitions, and the construction of facilities are all significant costs with a useful life that may extend beyond the program. Consequently, a portion of these costs should be prorated to the evaluation of a group of participants in the program. Under a conservative approach, the expected life of the program is fixed or estimated. Some organizations will assume a period of one year of operation for a simple program. Others may consider three to five years as appropriate. If a question is raised about the specific time period to be used in this calculation, the finance and accounting staff should be consulted, or appropriate guidelines should be developed and followed.

Employee Benefits Factor
Employee time is valuable. When their time is required for a program, the cost of that time must be fully loaded, representing total compensation including employee benefits. This means the employee benefits factor, which is usually well-known and used in other costing formulas, should be included. This number represents the cost of all employee benefits expressed as a percentage of payroll. In some organizations this value is as high as 50–60 percent; in others, it may be as low as 25–30 percent. The average U.S. value is 32 percent (SHRM 2017).
SPECIFIC COSTS TO INCLUDE

Figure 8-3 shows the recommended cost categories to include in a fully loaded conservative approach to estimating program costs. Consistency in capturing these costs is essential, and standardization adds credibility.

FIGURE 8-3. PROJECT COST CATEGORIES

<table>
<thead>
<tr>
<th>Cost Item</th>
<th>Prorated</th>
<th>Expensed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial analysis and assessment</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Development of solutions</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Acquisition of solutions</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Implementation and application</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Salaries/benefits for program team time</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Salaries/benefits for coordination time</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Salaries/benefits for participant time (if appropriate)</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Program materials</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Hardware/software</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Travel/lodging/meals</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Use of facilities</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Capital expenditures</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Maintenance and monitoring</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Administrative support and overhead</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Evaluation and reporting</td>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>

Initial Analysis and Assessment

One of the most underestimated items is the cost of conducting the initial analysis and assessment that exposes the need for the program. This typically involves data collection, problem solving, assessment, and analysis. Sometimes the cost is near zero because the program is implemented without an initial assessment of need. However, as more program sponsors place their attention on needs assessment and analysis, this item will become a significant cost.

Development of Program Solutions

Also significant are the costs of designing and developing the program, which include time spent in the design and development, as well as the purchase of supplies, technology, and other materials directly related to the solution. As with needs assessment costs, design and development costs are usually charged to the program. However, if the solution can be used in other programs, it’s possible to prorate the major expenditures.
Acquisition Costs
In lieu of development costs, some program leaders use acquisition costs connected
to purchasing solutions from other sources, either directly or in a modified format. The
costs for these solutions include the purchase price, support materials, and licensing
agreements. Some programs have both acquisition costs and solution development
costs. Acquisition costs can be prorated if the acquired solutions can be used in other
programs.

Implementation Costs
A program’s largest cost segment is associated with implementation and delivery. The
time (salaries and benefits), travel, and other expenses of those involved in any way
should be included, and can be estimated using average or midpoint salary values for
specific job groups. When a program is targeted for an ROI calculation, participants
can provide their salaries directly in a confidential manner. This cost becomes an issue
when employees in an organization are involved. For nonprofit programs, employees
may not be involved because participants may not be “employees” and are sometimes
volunteers.

Program materials—such as field journals, instructions, reference guides, case
studies, surveys, and participant workbooks—should be included in the implementa-
tion costs. Other costs to record include license fees, user fees, royalty payments, and
supporting hardware, software, and videos. In addition, the cost of the facilities needed
for the program should be included. For external meetings, this is the direct charge for
the conference center, hotel, or motel. If the meetings are conducted internally, the
conference room represents a cost for the organization, which should be estimated
and incorporated, even if facilities costs aren’t typically included in other cost report-
ing. If a facility or building is constructed or purchased for the program, it is included
as a capital expenditure, but it’s prorated. The same is true for the purchase of major
hardware and software, as long as they are considered capital expenditures.

Maintenance and Monitoring
Maintenance and monitoring involve the routine expenses necessary to maintain and
operate the program. These ongoing expenses allow the new programs solution to
continue and may involve staff members and additional expenses. These costs may
be significant for some programs.

Support and Overhead
The cost of support and overhead includes the additional costs not directly charged to
the program—that is, any program cost not considered thus far in the calculations.
Typical items include the cost of administrative and clerical support, telecommunica-
tion expenses, office expenses, salaries of client managers, and other fixed costs. This
is usually provided in the form of an estimate allocated in some convenient way.
Evaluation and Reporting
The total evaluation cost completes the fully loaded costs. Activities under evaluation costs include developing the evaluation strategy, designing instruments, collecting data, analyzing data, preparing a report, and communicating the results. Cost categories include time, materials, purchased instruments, surveys, and any consulting fees.

The Value of Mentors
JobsNow! is a program that helps inner-city youth find suitable jobs and promotes sustainable opportunities for employers and job seekers to bridge career goals through community networking and enterprise. The program is designed to tackle the high unemployment rate for the under-25 age group, which hovers in the 20 to 30 percent range in major cities. Volunteers are recruited and screened as mentors and matched to one or more job seekers, helping them develop interview skills, among many others.

The impact measures for success are jobs secured and crime prevented (unemployed youth have high crime rates), both of which are easily converted to money. The program costs include all direct and indirect categories. Because the mentors are volunteers, there are no direct costs other than the administrative expenses of recruiting, selection, and coordination.

To properly account for the value of mentors, the evaluation team used no salary for the mentors in the first ROI calculation. This is the actual ROI under the current system. Then they calculated a second ROI, this time with an average salary included for the mentors. By comparing the two ROIs, the evaluation team was able to show the value of the volunteer effort. If the second ROI calculation was positive, the program would be successful from an economic perspective, even if mentors were paid for their services.

MAKE IT CREDIBLE: CALCULATE ROI
The term return on investment is the ultimate accountability for a program and is often desired by sponsors and donors. Its use is also growing, particularly for expensive, important, and high-profile programs. Sometimes, ROI is given a broad definition that includes any benefit from the program. In this situation, however, ROI becomes a vague concept in which even subjective data linked to a program are included. In this book, the return on investment is defined more precisely; it represents an actual value determined by comparing program costs to benefits. The two most common measures are the benefit-cost ratio (BCR) and the ROI formula.

The formulas presented in this chapter use annualized values; the first-year impact is used for short-term programs. Using annualized values is an accepted practice for developing the ROI in organizations. It is a conservative way to develop the ROI because many short-term programs have added value in the second or third year. For long-term programs, longer timeframes should be used. For example, a five-year
timeframe was used in an ROI analysis of a major software purchase. However, first-year values are appropriate for short-term programs that take only a few weeks to implement (such as a stress reduction program for new parents or a family financial planning program).

When selecting the approach to measure ROI, the formula used and the assumptions involved in that decision, should be communicated to the target audience. This helps prevent misunderstandings and confusion surrounding how the ROI value was developed. Although several approaches are described in this chapter, two stand out as preferred methods: the benefit-cost ratio and the basic ROI formula.

**Benefit-Cost Ratio**

One of the original methods for evaluating programs is the benefit-cost ratio (BCR). This analysis was developed by governments to make decisions about building roads, bridges, and canals, and its history dates back several centuries. BCR compares the benefits of the project with the costs, using a simple ratio:

\[
BCR = \frac{\text{Program Benefits}}{\text{Program Costs}}
\]

In simple terms, the BCR compares a program’s annual economic benefits with its costs. A BCR of 1 means that the benefits equaled the costs. A BCR of 2, usually written as 2:1, indicates that for each dollar spent on the program, two dollars were returned in benefits. The following example illustrates the use of the BCR.

A program on conflict resolution was implemented at an electric and gas utility. In a follow-up evaluation, action planning and business performance monitoring were used to capture the benefits. The first-year payoff for the program was $1,077,750. The total, fully loaded implementation costs were $215,500. Thus, the ratio was:

\[
BCR = \frac{\$1,077,750}{\$215,500} = 5.1
\]

For every dollar invested in the program, five dollars in benefits were realized.

**ROI Formula**

Perhaps the most appropriate formula for evaluating program investments is net program benefits divided by costs. This is the traditional financial ROI and is directly related to the BCR. The ROI ratio is usually expressed as a percentage where the fractional values are multiplied by 100. In formula form:

\[
\text{ROI} \, (\%) = \frac{\text{Net Program Benefits}}{\text{Program Costs}} \times 100
\]
Net program benefits are a program’s monetary benefits minus costs. A shortcut to calculate ROI is to subtract 1 from the BCR and multiply by 100 to get to the ROI percentage. For example, a BCR of 2.45 is the same as an ROI value of 145 percent (1.45 × 100%). This formula is essentially the same as the ROI for capital investments. For example, when a firm builds a new plant, the ROI is developed by dividing annual earnings by the investment. The annual earnings are comparable to net benefits (annual benefits minus the cost). The investment is comparable to the fully loaded program costs.

An ROI of 50 percent means that the costs were recovered, and an additional 50 percent of the costs were returned. A program ROI of 150 percent indicates that the costs have been recovered, and an additional 1.5 times the costs were returned.

Investments in plants, equipment, subsidiaries, or other major items and capital expenditures are usually evaluated with ROI. Using the ROI formula to calculate the return on noncapital investments, as described in this book, essentially places these investments on a level playing field with capital investments whose valuation uses the same formula and similar concepts. The ROI calculation is easily understood by key management and financial executives who regularly work with investments and ROI.

**Monetary Benefits**

It is helpful to review the monetary benefits part of the equation, which is captured when the impact data are converted to monetary data. The benefits are either cost savings (cost avoidance) or profits.

Profits can be generated through increased revenue from sales, memberships, tuition, or license fees. In practice, there are more opportunities for cost savings than for profits. Cost savings can be realized when accidents are prevented, convicted felons don’t return to prison, time to graduate is reduced, or disease is prevented.

In a review of almost 500 studies submitted to ROI Institute for ROI Certification, most programs saw cost savings. Approximately 85 percent of those studies used benefits based on cost savings, cost reduction, or cost avoidance. The others used benefits based on sales increases, where the earnings were derived from the profit margin. Nonprofits can have revenue, which means that the concept of “profit” can also apply to them. For example, a recruiting program for a university generates new students who pay tuition, and the additional cost of obtaining each student is less than their tuition. The difference in a “marginal amount or reserve” is similar to the profit. Cost savings are important for nonprofits and public-sector organizations, where opportunities for profit are often unavailable.

**Misuse of ROI**

The ROI formula should be used consistently throughout an organization. Deviations from or misuse of it can create confusion, not only among users but also among the finance and accounting teams. The CFO and the finance and accounting staff should become partners in implementing the ROI Methodology. The program team must use
the same financial terms as those used and expected by the CFO. Without the support, involvement, and commitment of those individuals, the widespread use of ROI will be unlikely. Figure 8-4 shows some financial terms that are misused in literature.

**FIGURE 8-4. MISUSED FINANCIAL TERMS**

<table>
<thead>
<tr>
<th>Term</th>
<th>Misused Definition</th>
<th>CFO Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROI</td>
<td>Return on ideas</td>
<td>Return on investment</td>
</tr>
<tr>
<td></td>
<td>Return of impact</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Return of information</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Return on innovation</td>
<td></td>
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<tr>
<td></td>
<td>Return on inspiration</td>
<td></td>
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<tr>
<td></td>
<td>Return of intelligence</td>
<td></td>
</tr>
<tr>
<td>ROE</td>
<td>Return on expectation</td>
<td>Return on equity</td>
</tr>
<tr>
<td></td>
<td>Return on events</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Return on exhibit</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Return on engagement</td>
<td></td>
</tr>
<tr>
<td>ROA</td>
<td>Return on anticipation</td>
<td>Return on assets</td>
</tr>
<tr>
<td>ROCE</td>
<td>Return on client expectation</td>
<td>Return on capital employed</td>
</tr>
<tr>
<td>ROP</td>
<td>Return on people</td>
<td>?</td>
</tr>
<tr>
<td>ROR</td>
<td>Return on resources</td>
<td>?</td>
</tr>
<tr>
<td>ROT</td>
<td>Return on technology</td>
<td>?</td>
</tr>
<tr>
<td>ROW</td>
<td>Return on web</td>
<td>?</td>
</tr>
<tr>
<td>ROM</td>
<td>Return on marketing</td>
<td>?</td>
</tr>
<tr>
<td>ROO</td>
<td>Return on objectives</td>
<td>?</td>
</tr>
<tr>
<td>ROQ</td>
<td>Return on quality</td>
<td>?</td>
</tr>
<tr>
<td>ROC</td>
<td>Return on character</td>
<td>?</td>
</tr>
</tbody>
</table>

In the innovation field, terms such as return on ideas (or innovation) are abbreviated as ROI and used to describe the benefits of innovation without the financial calculation. For meetings, ROI may stand for the return on involvement. NASA uses return on inspiration (ROI) for students who are exposed to space and technology. Technology groups use return on information (ROI) and return on intelligence (ROI). These terms will confuse a CFO and other C-suite executives, who will assume that ROI refers to return on investment. Sometimes return on expectations (ROE), return on anticipation (ROA), and return on client expectations (ROCE) are used, instead of return on equity, return on assets, and return on capital employed, respectively, which are what the C-suite would expect. The events field uses return on event (ROE), return on exhibit (ROE), or return on engagement (ROE).

The use of these non-CFO-friendly terms will likely confuse and perhaps cause you to lose the support of the finance and accounting staff. Other terms such as return on people, return on resources, return on technology, return on web, and return on marketing are used with almost no consistency in terms of financial calculations. The
bottom line: Don’t confuse the CFO. Consider this person an ally, and use the same terminology, processes, and concepts when applying financial returns for programs.

Social Return on Investment
SROI, which stands for social return on investment, is a relatively new term for communicating the value of a nonprofit’s impact on the community. The most credible calculation comes from the New Economics Foundation, which suggests that SROI “captures social value by translating outcomes into financial values” (Strombaugh 2017). SROI uses the general formula:

\[
SROI = \frac{\text{Tangible Value to the Community} + \text{Intangible Value to the Community}}{\text{Total Resource Investment}}
\]

If the tangible and intangible values are all the outcome data, then this represents the total benefits, based on cost avoidance. If the total resource investment is the cost of the program, then this is the cost of the program. Therefore, this is actually the benefit-cost ratio, which has been used by governments for centuries.

There are other variations of this concept, which has the advantage of being more acceptable to those who are uncomfortable with the standard ROI calculation. The disadvantage is that the funders and executives may think that it and subsequent calculations are not credible.

Whose ROI?
In some situations, it is helpful to understand ROI from different perspectives, such as the organizational perspective or an individual’s perspective. For example, when evaluating an annual agents conference in the insurance industry, the ROI calculation is needed from the perspectives of two different stakeholders—the company and the agent. To do this, the costs of each perspective is compared with the monetary benefits from each perspective.

QUICK SUMMARY
Intangible measures are crucial to reflecting the success of a program. Although they may not carry the weight of measures expressed in monetary terms, they are nevertheless an important part of the overall evaluation. Intangible measures should be identified, explored, examined, and monitored for changes linked to programs. Collectively, they add a unique dimension to the final report because most, if not all, programs involve intangible variables.

ROI, the fifth and final outcome evaluation level, compares the program’s costs with its monetary benefits. Costs are important and should be fully loaded in the ROI calculation using direct and indirect costs. From a practical standpoint, some costs may be optional, depending on the organization’s guidelines and philosophy. However, because of the scrutiny ROI calculations typically receive, all costs should be
included, even if this goes beyond organizational policy requirements. After the benefits are collected and converted to monetary values and the program costs are tabulated, the ROI calculation itself is easy. Plugging the values into the appropriate formula is the final step. This chapter presented two basic approaches for calculating return: the ROI formula and the benefit-cost ratio.

Now that we have fully detailed the process, the next chapter details how to report the results, tell a compelling story, and optimize the results.
Use Results in Creative Ways

OPENING STORY
Joan Kravitz’s company participated in an executive leadership development program, which was led by a prestigious business school. The program was expensive and had been running for five years. Although it was supported by executives and received record levels of funding, the top executives offered Joan an interesting challenge and request. They wanted to see the impact that the program was having on the organization, and, if possible, the financial ROI. Fortunately, Joan received this request in enough time to implement changes into the program to keep it focused on results and have the participants committed to showing the value of their individual and team programs.

Joan was a little nervous as she faced the top executive audience. She had been there a couple of times for other briefings, but never with this issue. As she scanned the room, she saw the senior executives who were interested in her briefing, and, more importantly, in the success of the executive leadership program. She was confident she knew the material and had a clear agenda. She had practiced this briefing with her own team, who’d given her candid feedback. She had some intriguing data to share with the executives. Yes, she’d had some bumps along the way, but she still had a good story to tell, and she was proud of it.

As Joan scanned the audience, she knew the perspectives of the different audience members. The CEO was not there, but the other senior team members were present. She was disappointed because the CEO was the champion of this program, but an urgent schedule change had kept him away. She would have a private session with him later to cover the agenda. The CFO seemed to support the program, but he was concerned about budgets, costs, and the value of every program the organization participated in. The operations executive VP thought the program was helpful, but was still concerned about its business value. The VP of design and engineering did not support the program and rarely nominated participants for it. The VP of marketing was a solid supporter of the program. The friendliest face in the group was the executive VP of HR, who was a strong supporter and was actively involved in various parts of the program. The remaining members of the group were largely neutral.

Joan knew that there were two major issues she had to address. She must show not only the results and secure approval for any changes to the program, but also the
methodology she was using. Yes, they all thought they knew ROI, but not the way she was presenting it. Although the process used the same formula the CFO would use for a capital investment, the way in which the data were collected was what made it so interesting and credible. Joan had used conservative processes, which should agree with this group, but she had to explain this to them in a mere 30 minutes. She also had a little fear that, if they liked the process, they might want to see this type of analysis for every program. So, she also had to emphasize that it should be used selectively. All these things were racing through her mind as she opened the presentation.

The Presentation

“Good morning, colleagues,” Joan began. “Thank you for coming and giving up your time to see the value of a program that you have supported for several years. We all know the Advanced Leadership Program, which has enjoyed a five-year history with this company, with more than 200 individuals participating. We have some results to show you from the group that participated last year. While these results are intriguing and impressive, they do point to some important changes we need to make. I want to secure your approval for these changes.”

Joan began to relax and get comfortable with her presentation, and she saw an engaged audience. There were no grumpy expressions or frowns at that point.

Joan quickly described the program and revealed the methods that were being used to show the value.

“Our method of choice to evaluate this program is the ROI Methodology,” she explained. “It is the most-used evaluation system in the world. The ROI Methodology is ideal for measuring this type of program because it captures reaction to the program, learning about the program content, application of the content, business impact, ROI, and intangibles.

“It operates with a system of logical processes and uses conservative standards that I know you will find to be most credible and convincing,” Joan continued. “Here are two standards as applied to this study. First, the entire cost of the program was used in the calculation, including the executive’s time away from work. Second, for individual programs, we claimed only one year of monetary value on the benefit side. We all know that if an executive changes behavior and implements changes for the team, there will be multiple years of benefits. For the team programs that are being implemented throughout the organization, a three-year payoff was used, which is also very conservative. These timeframes were endorsed by finance and accounting. These two standards, which are number nine and 10 on the list in front of you, are only two of the 12 standards we followed in conducting this study.”

Joan noticed the executives glancing at the standards while trying to pay attention to her—this was what she wanted. She’d captured their interest with those two assumptions, and they were beginning to look at some of the others. She felt she could only allocate about two minutes for this issue because she had much more to present.
Reaction and Learning

“As I present the results, please feel free to ask questions at any time,” Joan said. “This will be interactive, and I promise to keep it within 30 minutes. The first two levels of results, reaction, and learning are presented first. While they may not be of much interest to you, we know that the program could go astray if the participants don’t see value in it. Also, if they didn’t learn anything about themselves, their team, or their own competencies, then there won’t be any subsequent actions, behavior change, and impact. Fortunately, we have very positive reaction and learning results.”

Joan took two minutes to cover Level 1 (reaction) and Level 2 (learning), and she quickly moved on to Level 3 (application).

Application

“Application describes the extent to which these executives are changing the way they work, changing their behavior from a leadership perspective. I’m sure that you are more interested in this,” Joan continued. She then spent the next three minutes describing the table with the application data. “At this point, it is appropriate to examine the barriers and enablers, which are the important issues that inhibit or enhance application. As you can see, the barriers for executives to use the program are not very strong, but it is good to know what they are. If this program had significant barriers, we would want to work on them quickly.”

By then, Joan had taken a total of 10 minutes; the rest of the time would be focused on impact and ROI. Up to that point, there had been no questions, much to Joan’s surprise. She thought that this group would always be engaged, but she knew the next section would get them involved.

Business Impact

“In terms of business impact, we examined three sets of data,” Joan explained. “The first was the individual programs the participants took, centered on an important business measure in their particular business unit. Using action plans, they made improvements with these measures. Your report will have a copy of the action plan and sample copies of completed ones. This chart shows a sampling of individual programs, highlighting the specific measures selected and the amount of money the improvements represent, as participants actually converted the improvements to money. These improvements, which were monitored six months after their action plans were initiated, were impressive. The chart also shows the basis for this conversion, and it addresses another important issue, isolating the effects of this program.” This was where Joan began to have some anxieties because she was concerned about the executives’ reaction to this issue.

“As you know, when any improvement is made, multiple factors may be behind it. These executives selected measures that are often influenced by various factors, and sometimes we implement other programs that are also intended to improve those measures. So, we must sort out the impact of this program from other influences. Our
best method for accomplishing this is an experimental versus control group arrangement, where one group of executives is involved in this program, and another is not. As you can imagine, this won’t work here, because they all have different measures from different business units. And unfortunately, other analytical techniques won’t work either. So, we have to rely on the executives to provide this information. But the good news is that they are credible. These are the individuals who have achieved the results, and we don’t think there is any reason why they would attribute more results to this program than some other influence.

“We collected the information in a nonthreatening, unbiased way, by having them list other factors that have improved the results and then provide the percentage of improvement that should be attributed to this program. Because it is an estimate—and we don’t like estimates—we also asked them ‘What is your confidence in the allocation that you have just provided, on a scale of 0–100 percent?’ which served as an error adjustment. For example, if someone was 80 percent confident in an allocation to the program, that reflects 20 percent error. So, we took out that 20 percent by multiplying by the 80 percent. Let me take you through an example.”

Joan described one participant’s results and followed the data through the chart to show the value. The executive reported an improvement with three other factors causing it. The executive allocated 25 percent improvement to the leadership program and was 70 percent confident with that. So, 17.5 percent (25% × 70%) was allocated to the program. As expected, this table attracted a lot of interest and many questions. Joan spent some time confidently responding to those.

The CFO opened up, “If I want to see this particular measure, pointing to a particular individual, I could go to that business unit and find the measure and track what has changed.”

“Yes, you can see the actual unit value of that measure, and we can provide you the business unit if you would like to,” Joan responded. “On the chart, we did not use specific names, because we did not want this to appear to be a performance evaluation for the executive. This should be process improvement; if the program doesn’t work, we need to fix it and not necessarily go after the participant. So, we can provide business units if you want to do that kind of audit.”

“There is really no need to do that,” the CFO said. “I was just curious.”

“Please remember that the groups took on team programs and that this group had four programs representing needed changes in the organization,” Joan continued. “Three of those programs have been implemented, and the other has not, at least at this point. So, we don’t count any value for the fourth program. For the three programs implemented, we used a three-year payoff.”

Joan then methodically described the three programs, showing their monetary value, the assumptions that were made, and the isolation issue. This took about five minutes, but it attracted interest, and the executives asked a few questions about the
programs. Joan next presented a summary of the money from individual programs and team programs to show the amount saved or generated because of this leadership program. She reminded the audience that the amount claimed was connected to the leadership program and isolated from other influences.

Next, Joan presented the cost. She had previously reviewed the cost categories with finance and accounting, and they agreed with Joan. In fact, Joan had invited Brenda, her finance and accounting representative, to the meeting. After showing the detailed cost table, with a quick cost summary discussion, she noted that all costs were included. She then turned to Brenda and asked for her assessment of the categories of cost that were included. Brenda confirmed that all costs seemed to be covered, including some items that might not be necessary. For example, the time away from work probably should not be included, because the executives got their jobs done anyway.

“We wanted to be consistent and credible,” Joan explained, “so we included all the cost.” She quickly looked at the CFO and could see he was really intrigued and pleased with this part of the presentation.

**ROI**

Finally, Joan presented the ROI calculation two ways: The first was based on individual programs alone, which generated an ROI of 48 percent.

“We have a standard that if someone doesn’t provide you with data, then you assume it had no value,” Joan explained. “Of the 30 people in this session, six did not provide data, perhaps for good reason. Because it was not there, we included zero for them. This is Guiding Principle 6. When the team programs are included, the number is staggering—831 percent ROI. Please remember, the data have been approved by the executives involved in the program. And, only the portion of the program directly connected to the outcome was used in the calculation, recognizing that other factors could have influenced the data. So, this shows a huge value add from the program.”

**Intangibles**

Finally, Joan moved on to the intangibles. She had asked the participants about the extent to which the program was influencing certain intangible measures, which she’d listed in a chart in the report. This attracted some interest from the executives as Joan described how the table was constructed. The CFO asked about connecting these measures to monetary values.

“They have not been converted to money in our organization,” Joan replied. “But some organizations have done so, and we recommend that we pursue more of those types of conversions. The current trend is to convert more of the classic intangibles to money, and this would be a good time to focus on that task.”

The CFO agreed.
Conclusion and Recommendations

Joan quickly concluded with a summary and some recommendations that she wanted to make, based on the comments from participants. The team program seemed to be a bit cumbersome and generated a lot of frustration with the participants. They’d suggested that the individual program might be enough. Because the team program had been operating for some time, many of the most challenging and necessary problems had been addressed. Although new ones were generated, it could be an optional part of the process. Joan’s recommended change was to make the team program optional.

After some discussion among the group, the executives concluded that the team programs should stay part of the process, with added administrative support to help executives with the work. Joan noted that some support had been provided, which was accounted for in the cost of the program, but having more support available would certainly be helpful.

The executives didn’t approve the change to the team program that Joan recommended. The decision underscored their support for the program and the results she had presented. Joan concluded the conversation by asking if there were any other major programs that should be evaluated at this level. But she cautioned that this level of evaluation took resources for the team to conduct the study plus the cost of having it reviewed by an external expert. The executives identified two other programs that they wanted to see evaluated at this level.

The CFO indicated this was a good presentation and that he certainly appreciated the effort. Joan was pleased when the executives left the room. The HR executive was elated. “This was exactly what we need to be doing, Joan,” she said. “You have done an amazing job.”

Reflection

Walking back to her office, Joan was relieved. She felt good about her presentation and the support from executives. She was pleased that she was able to show the results of an important soft program in a tangible, credible way. The presentation was challenging, but it was not too difficult. She had methodically followed the guidelines shown later in Figure 9-7.

THE IMPORTANCE OF COMMUNICATING RESULTS

Now that you have the results in hand, what’s next? Do you tell a story? If so, how should it be structured? Should you use the results to modify the program, change the process, demonstrate the contribution, justify new programs, gain additional support, or build goodwill? How should the data be presented? The worst course of action is to do nothing. Achieving results without communicating them is like planting seeds and failing to fertilize and cultivate the seedlings—the yield will be less than optimal. This
chapter provides useful information for presenting evaluation data to different audiences in the form of oral and written reports. It also explores how to optimize the results to increase funding.

Communicating results is critical to program success. The results achieved must be conveyed to stakeholders not just at program completion, but throughout the duration of the program. Continuous communication maintains the flow of information so adjustments can be made, and all stakeholders are kept up-to-date on the program’s status.

Information is collected at different points during the process, and providing feedback to involved groups enables them to take action and make adjustments if needed. Thus, the quality and timeliness of communication are critical to making improvements. Even after the program is completed, communication is necessary to make sure the target audience fully understands the results achieved, and how the results may be enhanced in future programs, or in the current program if it is still operational. Communication is the key to making important adjustments at all phases.

Different target audiences will need a thorough explanation of the results that show the program’s contribution, as determined by the six major types of measures. The communication strategy—including techniques, media, and the overall process—will determine the extent to which each group understands the contribution. Communicating results, particularly in terms of business impact and ROI, can quickly overwhelm even the most sophisticated target audiences. Communication must be planned and implemented with the goal of making sure each audience understands the full contribution.

**PRINCIPLES OF COMMUNICATING RESULTS**

The skills needed to communicate results effectively are almost as sensitive and sophisticated as those needed for obtaining results. The style of the communication is as important as the substance. Regardless of the message, audience, or medium, a few general principles apply.

**Communication Must Be Timely**

In general, program results should be communicated as soon as they become known. From a practical standpoint, however, it is sometimes best to delay the communication until a convenient time, such as the publication of the next client newsletter or the next general management meeting. Several questions are relevant to the timing decision: Is the audience ready for the results in view of other issues that may have developed? Is the audience expecting results? When will the delivery have the maximum impact on the audience? Do circumstances dictate a change in the timing of the communication?
Communications Should Be Targeted to Specific Audiences
Communication is usually more effective if it is designed for the specific group being addressed. The message should be tailored to their interests, needs, and expectations. The results of the program should reflect outcomes at all levels, including the six types of data presented in this book. Some of the data are developed earlier in the program and communicated during the implementation. Other data are collected after program implementation and communicated in a follow-up study. The results, in their broadest sense, may incorporate early feedback in qualitative form all the way to ROI values expressed in varying quantitative terms.

Media Should Be Carefully Selected
Certain media may be more appropriate for one group than for others. For example, face-to-face meetings may be preferable to special bulletins, or a memo distributed exclusively to top executives may be a more effective outlet than the company newsletter. The proper format of communication can determine the effectiveness of the process.

Communication Should Be Unbiased and Modest in Tone
For communication to be effective, facts must be separated from fiction, and accurate statements distinguished from opinions. Some audiences may approach the communication with skepticism, anticipating the presence of biased opinions. Boastful statements can turn off recipients, and most of the content will be lost. Observable phenomena and credible statements carry much more weight than extreme or sensational claims, which often detract from the importance of the results.

Make the Message Clear
The communication must be clear and precise. In short, it must be well-written. Harold Evans (2017), one of the greatest editors of our time, offers timeless advice for making meaning clearer: “Refresh your writing. Unravel convoluted sales talk written to deceive. See through campaigns erected on a tower of falsehoods. Billions of words come at us every day with unimaginable velocity and shriveled meaning, in social media posts, bloated marketing, incomprehensible contracts, and political language designed to make lies sound truthful. The digital era has had unfortunate effects on understanding. Ugly words and phrases are picked up by the unwary and passed on like a virus. Cryptic assertion supplants explanation and reasoned argument. Muddle and contradiction suffocate meaning.”

THE PROCESS FOR COMMUNICATING RESULTS
The communication of program results must be systematic, timely, and well-planned, and the process must include seven components in a precise sequence, as illustrated in Figure 9-1. The seven steps are discussed further in the following sections.
STEP 1. ANALYZE REASON FOR COMMUNICATION

Because there may be many different reasons for communicating results, a list should be tailored to the organization and adjusted as necessary. The reasons for communicating results depend on the program, the setting, and the unique needs of each party. Some of the most common reasons are:

- securing approval for the program and the allocation of time and money
- gaining support for the program and its objectives
- reinforcing the processes used in the program
- driving action for improvement in the program
- preparing participants for the program
- optimizing results throughout the program and the quality of future feedback
- showing the complete results of the program
- motivating participants to become involved in the program.

There may be other reasons for communicating results, so this list should be tailored to the needs of each organization.

STEP 2. PLAN FOR COMMUNICATION

Any activity must be carefully planned to achieve maximum results. This is a critical part of communicating the results of the program. Communication planning is important to help ensure the appropriate audience receives the proper information at the right time, and that necessary actions are taken. Several issues are crucial in planning the communication of results:

- What will be communicated?
- When will the data be communicated?
- How will the information be communicated?
- Where will the information be communicated?
- Who will communicate the information?
- Who is the target audience?
- What are the specific actions required or desired?
For example, in a stress management program for teams working in a high-stress environment, an ROI study was conducted to show the value of the program to current and prospective participants. Figure 9-2 outlines this strategy. Four separate documents were developed to communicate with the different target groups in a variety of ways.

The communication plan is usually developed when the program is approved. This plan details how specific information is to be developed and communicated to various groups, as well as the expected actions. In addition, it details how the overall results will be communicated, the timeframe for communication, and the appropriate groups to receive the information. The program leader, key managers, and stakeholders will need to agree on the degree of detail in the plan.

**FIGURE 9-2. COMMUNICATION STRATEGIES**

<table>
<thead>
<tr>
<th>Communication Document</th>
<th>Communication Target</th>
<th>Distribution</th>
</tr>
</thead>
</table>
| Complete report with appendices (75 pages) | • Organization development team  
  • Safety and health staff  
  • Team manager | Distributed and discussed in a special meeting |
| Executive summary (8 pages) | • Senior management in the business units  
  • Senior corporate management | Distributed and discussed in routine meeting |
| General interest overview and summary without the actual ROI calculation (10 pages) | • Program participants | Email |
| Brochure highlighting program, objectives, and specific results | • Prospective team leaders | Included with program descriptions |

**STEP 3. SELECT THE AUDIENCE**

These questions should be asked about each potential audience when communicating program results:

- Are they interested in the program?
- Do they want to receive the information?
- Has a commitment been made to include them in the communications?
- Is the timing right for this audience?
- Are they familiar with the program?
- What is their preferred method of communication for results?
- Do they know the program leader? The program team?
- Are they likely to find the results threatening?
- Which medium will be most convincing to this group?

For each target audience, three steps are necessary. To the greatest extent possible, the program leader should get to know and understand the target audience, as
well as what information is needed and why. Each group will have its own information requirements; some will want details, while others will prefer a brief overview. Rely on the input from others to determine the audience’s needs. Finally, program leaders should consider audience bias. Some audiences may immediately support the results, others may oppose them, and still others will be neutral. The staff should be empathetic and try to understand the basis for differing views. Given this understanding, communications can be tailored to each group. This is critical if there is any potential for the audience to react negatively to the results.

The target audiences for information on program results are varied in terms of roles and responsibilities. Determining which groups will receive what communication requires careful thought because problems can arise when a group receives inappropriate information or is overlooked altogether. A sound basis for audience selection is to analyze the reason for the communication, as discussed earlier.

Figure 9-3 identifies common target audiences and the basis for selection. Several audiences stand out as critical—perhaps the most important is the client (group or individual) who initiates the program, arranges funding, selects the program leader, and makes the decisions based on the program’s recommendations. Another important target audience is top executives, who are responsible for allocating resources to the program and need the information to help justify expenditures and gauge the effectiveness of the efforts. In some cases, this group is the client.

**FIGURE 9-3. COMMON TARGET AUDIENCES**

<table>
<thead>
<tr>
<th>Primary Target Audience</th>
<th>Reason for Communication</th>
</tr>
</thead>
<tbody>
<tr>
<td>Client</td>
<td>• To secure approval for the program</td>
</tr>
<tr>
<td>Managers</td>
<td>• To gain support for the program</td>
</tr>
</tbody>
</table>
| Participants            | • To secure agreement with the issues  
|                         | • To create the desire for a participant to be involved |
| Top Executives          | • To enhance the credibility of the program leader  
|                         | • To improve the results and quality of future feedback |
| Immediate Managers      | • To reinforce the processes used in the program  
|                         | • To prepare participants for the program |
| Program Team            | • To drive action for improvement |
| Key Stakeholders        | • To show the complete results of the program |
| Support Staff           | • To explain the techniques used to measure results |
| All Employees           | • To demonstrate accountability for expenditures |
| Prospective Participants| • To market future programs |

Participants also need feedback on the overall success of the effort. Some individuals may not have been as successful as others in achieving the desired results. In this case, communicating the results creates additional subtle pressure to implement the
program effectively and improve results in the future. For those achieving excellent results, this will serve as reinforcement. Communication of program results to participants is often overlooked, because it’s assumed that once the program is completed, they do not need to be informed of its success.

Communicating with the participants’ immediate managers (or other influencers) is essential. In many cases, these managers must encourage participants to implement the program. Also, they are key in supporting and reinforcing the program’s objectives. An appropriate return on investment strengthens the commitment to the program and enhances the credibility of the program team.

The program team must receive information about program results. Whether for small programs in which team members receive a program update, or for larger programs where a complete team is involved, those who design, develop, facilitate, and implement the program require information on the program’s effectiveness. Evaluation data are necessary so that adjustments can be made if the program is not as effective as projected.

**STEP 4. DEVELOP REPORTS**

The type of formal evaluation report depends on the degree of detail presented to the target audience. Brief summaries of program results with appropriate charts may be sufficient for some communication efforts. In other situations, particularly those involving major programs requiring extensive funding, a detailed evaluation report is crucial. In fact, it’s usually necessary to create a complete and comprehensive impact study report. This can then be used as the basis for more streamlined information aimed at specific audiences and using various media. One possible outline for an impact and ROI study report is presented in Figure 9-4. A brief one-page summary may be possible for an audience who understands the basic concepts of the ROI Methodology (Figure 9-5).

While the impact study report is an effective, professional way to present ROI data, several cautions are in order. Since this report documents the success of a program involving a group of participants, credit for the success must go completely to the participants and their immediate leaders. Their performance generated the success. Also, it is important to avoid boasting about results. Grand claims of overwhelming success can quickly turn off an audience and interfere with the delivery of the desired message.

The methodology should be clearly explained, along with any assumptions made in the analysis. The reader should easily see how the values were developed, and how specific steps were followed to make the process more conservative, credible, and accurate. Detailed statistical analyses should be placed in an appendix.
FIGURE 9-4. OUTLINE FOR AN IMPACT STUDY REPORT

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>1.</td>
<td><strong>General Information</strong></td>
</tr>
<tr>
<td></td>
<td>» Background</td>
</tr>
<tr>
<td></td>
<td>» Objectives of study</td>
</tr>
<tr>
<td>2.</td>
<td><strong>Methodology for Impact Study</strong></td>
</tr>
<tr>
<td></td>
<td>» Levels of evaluation</td>
</tr>
<tr>
<td></td>
<td>» ROI process</td>
</tr>
<tr>
<td></td>
<td>» Alignment</td>
</tr>
<tr>
<td></td>
<td>» Standards</td>
</tr>
<tr>
<td>3.</td>
<td><strong>Data Collection Analysis Issues</strong></td>
</tr>
<tr>
<td>4.</td>
<td><strong>Results: General Information</strong></td>
</tr>
<tr>
<td></td>
<td>» Response profile</td>
</tr>
<tr>
<td></td>
<td>» Success with objectives</td>
</tr>
<tr>
<td>5.</td>
<td><strong>Results: Reaction</strong></td>
</tr>
<tr>
<td></td>
<td>» Data sources</td>
</tr>
<tr>
<td></td>
<td>» Key issues</td>
</tr>
<tr>
<td>6.</td>
<td><strong>Results: Learning</strong></td>
</tr>
<tr>
<td></td>
<td>» Data sources</td>
</tr>
<tr>
<td></td>
<td>» Key issues</td>
</tr>
<tr>
<td>7.</td>
<td><strong>Results: Application and Implementation</strong></td>
</tr>
<tr>
<td></td>
<td>» Data sources</td>
</tr>
<tr>
<td></td>
<td>» Key issues</td>
</tr>
<tr>
<td>8.</td>
<td><strong>Results: Impact</strong></td>
</tr>
<tr>
<td></td>
<td>» Data sources</td>
</tr>
<tr>
<td></td>
<td>» Isolating the effects of the program</td>
</tr>
<tr>
<td></td>
<td>» Key issues</td>
</tr>
<tr>
<td>9.</td>
<td><strong>Results: ROI</strong></td>
</tr>
<tr>
<td></td>
<td>» Converting data to money</td>
</tr>
<tr>
<td></td>
<td>» Project costs</td>
</tr>
<tr>
<td></td>
<td>» ROI and its meaning</td>
</tr>
<tr>
<td>10.</td>
<td><strong>Results: Intangible Measures</strong></td>
</tr>
<tr>
<td>11.</td>
<td><strong>Barriers and Enablers</strong></td>
</tr>
<tr>
<td></td>
<td>» Barriers</td>
</tr>
<tr>
<td></td>
<td>» Enablers</td>
</tr>
<tr>
<td>12.</td>
<td><strong>Conclusions</strong></td>
</tr>
<tr>
<td>13.</td>
<td><strong>Recommendations</strong></td>
</tr>
<tr>
<td>14.</td>
<td><strong>Exhibits</strong></td>
</tr>
</tbody>
</table>
FIGURE 9-5. EXAMPLE ONE-PAGE SUMMARY FOR A LEADERSHIP PROGRAM

**Leadership Development: Precision Manufacturing**

**The Leadership Challenge**
- Four-day workshop with action plans and support tools
- Each participant selects two key performance indicators to improve using the competencies with their 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%

**Impact Objectives: Two Objectives for Each Participant**

**Costs**
- Direct: $355,370
- Indirect, Prorated: $99,890
- Total: $365,260

**BCR = 1.47**

**ROI = 47%**

**Learning Objectives Met**

<table>
<thead>
<tr>
<th>Pre- and Post-Improvements</th>
<th>Improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Communicate values and beliefs</td>
<td>48%</td>
</tr>
<tr>
<td>2. Focus on key values through actions</td>
<td>57%</td>
</tr>
<tr>
<td>3. Build collaboration teamwork and trust</td>
<td>42%</td>
</tr>
<tr>
<td>4. Strengthen others’ abilities to excel</td>
<td>69%</td>
</tr>
<tr>
<td>5. Inspire others to share a common vision</td>
<td>53%</td>
</tr>
<tr>
<td>6. Recognize the accomplishments of others</td>
<td>67%</td>
</tr>
</tbody>
</table>

**Method of Converting Data to Money**

**Total Monetary Benefits = $538,640**

**Intangibles**
- Engagement
- Satisfaction
- Stress
STEP 5. SELECT MEDIA

Many options are available for the dissemination of program results. In addition to the impact study report, commonly used options include meetings, interim and progress reports, organization publications, and case studies. Figure 9-6 lists a variety of options for developing the content and the message.

FIGURE 9-6. OPTIONS FOR COMMUNICATING RESULTS

<table>
<thead>
<tr>
<th>Meetings</th>
<th>Detailed Reports</th>
<th>Brief Reports</th>
<th>Electronic Reporting</th>
<th>Mass Publications</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Executives</td>
<td>• Impact study</td>
<td>• Executive summary</td>
<td>• Website</td>
<td>• Announcements</td>
</tr>
<tr>
<td>• Management</td>
<td>• Case study (internal)</td>
<td>• Slide overview</td>
<td>• E-mail</td>
<td>• Bulletins</td>
</tr>
<tr>
<td>• Stakeholders</td>
<td>• Case study (external)</td>
<td>• One-page summary</td>
<td>• Blogs and Social Media</td>
<td>• Newsletters</td>
</tr>
<tr>
<td>• Staff</td>
<td>• Major articles</td>
<td>• Brochure</td>
<td>• Video</td>
<td>• Brief articles</td>
</tr>
</tbody>
</table>

Meetings

If used properly, meetings are fertile ground for communicating program results. All organizations hold a variety of meetings, and some may provide the proper context to convey them. Along the chain of command, staff meetings are held to review progress, discuss current problems, and distribute information. These meetings can be an excellent forum for discussing the results achieved in a program that relate to the group’s activities. Program results can also be sent to executives for use in a staff meeting, or a member of the program team can attend the meeting to give a presentation.

Interim and Progress Reports

Although usually limited to large programs, a highly visible way to communicate results is the use of interim and routine memos and reports. Published or disseminated by e-mail on a periodic basis, they are designed to inform management about the status of the program, communicate interim program results, and spur any needed changes or improvements. The interim report will also enlist additional support and commitment from the management group to keep the program intact.

Routine Communication Tools

To reach a wide audience, the program leader can use internal routine publications. Whether a newsletter, magazine, newspaper, or electronic file, these media usually reach all employees or stakeholders. The content can have a significant impact if communicated appropriately. The scope should be limited to general-interest articles, announcements, and interviews.
Results communicated through these types of media must be important enough to arouse general interest. For example, a story with the headline “New Program Helps Reduce Teen Suicide” will catch the attention of many readers because they’ll likely appreciate the study’s magnitude and relevance. Reports on the accomplishments of a group of participants may not generate interest if the audience cannot relate to their accomplishments.

Stories about participants and the results they have achieved can help create a favorable image about a program. This type of communication helps participants see that the organization is investing time and money to improve their performance and prepare for the future. It also provides information about a program that employees may be otherwise unfamiliar with, and it may even create a desire in others to participate if given the opportunity.

General audience communication can bring recognition to participants, particularly those who excel in some aspect of the program. Publicly recognizing participants who deliver exceptional performance can enhance their self-esteem and drive to continue to excel. A program can generate many human-interest stories. For example, a rigorous program with difficult challenges can provide the basis for an interesting story about participants who made the extra effort.

**Email and Electronic Media**
Internal and external Internet pages, company-wide intranets, and emails are excellent vehicles for releasing results, promoting ideas, and informing employees and other target groups of program results. Email, in particular, provides a virtually instantaneous means of communicating results to and soliciting responses from large groups of people. For major programs, some organizations write blog posts to present results and elicit reactions, feedback, and suggestions.

**Program Brochures and Pamphlets**
A brochure might be appropriate for a program conducted on a continuing basis, or where the audience is large and continuously changing. The brochure should be attractive and present a complete description of the program, with a major section devoted to results obtained with previous participants, if available.

**Case Studies**
Case studies represent an effective way to communicate the results of a program. A typical case study describes the situation, provides appropriate background information (including the events that led to the program), presents the techniques and strategies used to develop the study, and highlights the key issues in the program. Case studies tell an interesting story of how the program was implemented and how the evaluation was developed, including any problems and concerns identified along the way.
STEP 6. PRESENT THE INFORMATION

The key to delivering the message is to understand the audience and their perspective, and then show what’s in it for them. Regardless of the form of communication (briefing, meeting, webinar, blog, one-page summary, article, or case study), the challenge is to drive home the message and persuade the audience. Darlene Price (2012), communications expert, provides her advice for delivering the message:

- Stop worrying about perfecting your communication and start connecting with your audience.
- Organize your presentation with persuasive logic and an effective structure.
- Ensure a dynamic, confident delivery every time with live presentations.
- Engage and involve your audience when possible to make your message meaningful and memorable.
- Use PowerPoint more effectively to reinforce your message and optimize impact.
- Manage nervousness and create a great first impression in live and recorded presentations.
- Cultivate a variety of image enhancers that will subtly lend power to your presentation—and much more.

Being able to communicate to a group of decision makers and positively influence their thinking is a sure path to success.

Routine Feedback on Program Progress

A primary reason for collecting reaction and learning data is to provide feedback so that adjustments can be made throughout the program. Data are typically routinely collected and communicated to a variety of groups. One option may be to design a feedback action plan that provides information to several audiences using a variety of media. These feedback sessions may point out specific actions that need to be taken. However, this process can become complex and must be managed in a very proactive manner.

Storytelling

Numbers cannot tell the whole story and other means of communication are required to define and articulate the results. Stories have the ability to bring people onto the same page and to organize information and present it in an efficient and accessible manner.

Stories foster empathy and connectedness, because of how they prioritize information and objectives. The narrative structure of a story—the clear beginning, middle, and end—provides a teaching tool that can make complex data or relationships more easily accessible to an audience. Because the important ideas are set in a metaphor that people understand, both storytellers and listeners can move past arcane details and focus on the problem at hand. The immediacy of the story helps people
track the important relationships while empathizing with the subject. This allows for a richer experience and fosters greater insight into the nature of the program, its place in the organization, and how the choices of the participants contribute to its success (Mootee 2013).

The simple rationale for telling stories is that they work. Paul Smith (2012) offers some compelling reasons to tell stories:

- Storytelling is simple.
- Storytelling is timeless.
- Stories are contagious.
- Stories are easier to remember.
- Stories inspire.
- Stories appeal to all types of audiences.
- Stories fit in the workplace where most of the work happens.
- Telling stories shows respect for the audience.

Narrative and Numbers

Fortunately, the ROI Methodology provides a framework for categorizing, collecting, analyzing, and reporting six types of data (reaction, learning, application, impact, ROI, and intangibles). This framework presents a profile of success with qualitative and quantitative data, which are often collected at different timeframes from different sources. Numbers, by themselves, can be boring. When collecting data, always include a place for respondents to provide comments, which can then be used to form the narrative. By folding the results into a story narrative, they become more interesting and engaging, and will be easier to remember. The key is to have both numbers and narrative.

Reaction

Reaction data uses measures to show that participants perceived the program to be relevant, important to their success, and something they would use and recommend to others. In a place for comments, one participant in a program on building trust noted, “This is the most significant professional development program I have attended in my 22 years of work. It was timely and just what I needed.” That brief but powerful reaction leaves a lasting impression.

Learning

Learning data provides measures of learning, whether through a self-assessment, role playing, test scores, or simulations. While important, this is an area that executives may not be as interested in; however, a good story about learning could help get their attention. For example, a participant in a sales training program commented, “I came to this program expecting it would be difficult and confusing. Instead, I’ve learned a tremendous amount and now have the confidence to face my first real customer.” This helps bring the participant’s experience to life.
Application
Application data often show the extent, frequency, and success of use, as well as any barriers and enablers to use. Comments collected at this level will often be free-flowing, presenting a great opportunity for stories. In a program focused on leadership for high-performance teams, a participant said, “The techniques I learned were much easier to use than I thought. The reaction of my team was much better than expected and, for me, it is working. The support, tools, and job aids provided made it much easier. This will be my new approach going forward.” This presents a vivid image of success.

Impact
Impact data are tangible (output, quality, costs, and time) and intangible (teamwork, engagement, and collaboration), and they capture executive and sponsor attention. Displaying those measures requires a lot of data. However, a story can personalize the success. For example, in a program on improving a team’s work habits, one participant wrote, “After using this material, I noticed unplanned absenteeism began to reduce quickly. This validated what I learned, and I am amazed at the results. Not only did I meet my goal of reducing unplanned absenteeism, but I exceeded it. The program made a big difference.” These words personalize the impact.

ROI
A story about ROI is also possible, even if the participant hasn’t seen the ROI calculation. For example, when responding to the success of a safe workplace program, a nurse manager said, “I was amazed at how we improved our safety performance. We evaluated after one year with this program, and it exceeded our wildest dreams. We avoided some very costly patient accidents. No doubt, this is a positive ROI for the hospital. It’s also an eye-opener of how we can lower costs in the hospital.” This story responds to ROI, even without the actual ROI calculation. This is powerful.

Intangibles
Intangibles are measures not converted to money because of time constraints or credibility concerns. Great stories often surround intangibles. One participant in a leadership program said, “This program has enhanced my team’s ability to collaborate, communicate, and work together. It’s made an amazing difference in our work and the efforts of my team.” This helps to connect important intangibles to the program. It is also possible to follow a participant’s story completely through the evaluation levels. Regardless of if you show one type of data or all six in your narrative, the key to being effective is to present both numbers and narrative. By using this framework, the audience can logically see how the stories emphasize the data and illustrate the overall value chain.

Sharing Results With Senior Management
Perhaps one of the most challenging and stressful types of communication is presenting an impact and ROI study to the senior management team, which also serves as the client for a program. The challenge is convincing this group that outstanding results
have been achieved (assuming they have) in a reasonable timeframe, while addressing the salient points and making sure they understand the process. Two potential reactions can create problems. First, if the results are too impressive, it may be difficult for the senior team to accept the data. On the other extreme, if the data is negative, it will be important to ensure that managers don’t overreact and look for someone to blame. Several guidelines can help ensure that this process is planned and executed properly.

Arrange a face-to-face meeting to review the results with the senior team. If they are unfamiliar with the ROI Methodology, this is especially important to make sure they understand the process. They will probably attend because they have never seen ROI data developed for this type of program; however, the presentation usually takes about an hour so be careful about taking up too much of their time. After a couple presentations, the senior members should understand the process, at which point an executive summary or shortened version may suffice.

The results should not be disseminated before the initial presentation or even during the session. Instead, save them for the end of the session. This will allow enough time to present the process and collect reactions to it before the target audience sees the ROI calculation. Joan Kravitz’s story from the beginning of this chapter is an excellent example of how to structure this type of presentation.

If the senior team requests more precise calculations, show them consequences of doing so. The trade-off for having more accuracy and validity in calculations often is increased expense. Agree to add more data if required. Collect the team’s concerns, reactions, and issues involving the process and adjust accordingly for the next presentation.

Collectively, these steps will help in the preparation and presentation of one of the most important meetings in the ROI Methodology (Figure 9-7).

**STEP 7. ANALYZE THE REACTION**

The best indicator of how effectively the results of a program have been communicated is the level of commitment and support from managers, executives, and sponsors. The allocation of requested resources and commitment from top management are strong evidence of a positive perception of the results. In addition to this macro-level reaction, a few techniques can also be helpful for measuring the effectiveness of the communication effort.

When results are communicated, monitor the reactions of the target audiences, such as their nonverbal gestures, oral remarks, written comments, or indirect actions. Usually, when results are presented in a meeting, the presenter will have some indication of how they were received based on the audience’s perceived interest and attitudes. Comments about the results, formal or informal, should be noted and tabulated.
FIGURE 9-7. GUIDELINES FOR THE EXECUTIVE BRIEFING

Purpose of the Meeting:
• Create awareness and understanding of ROI.
• Build support for the ROI Methodology.
• Communicate results of study.
• Drive improvement from results.
• Cultivate effective use of the ROI Methodology.

Use These Ground Rules:
• Do not distribute the impact study until the end of the meeting.
• Be precise and to the point.
• Avoid jargon and unfamiliar terms.
• Spend less time on the lower levels of evaluation data.
• Present the data with a strategy in mind.

Follow This Presentation Sequence:
1. Describe the program and explain why it is being evaluated.
2. Present the methodology process.
3. Present the reaction and learning data.
4. Present the application data.
5. List the barriers and enablers to success.
6. Address the business impact.
7. Show the costs.
8. Present the ROI.
9. Show the intangibles.
10. Review the credibility of the data.
11. Summarize the conclusions.
12. Present the recommendations.

Program team meetings are an excellent arena for discussing reactions to communicated results. Comments can come from many sources depending on the target audience. For example, when major program results are communicated, a brief feedback questionnaire may be administered to the entire audience or a smaller sample. The questionnaire will help determine the extent to which the audience learned and believed the information presented. However, this is practical only when the effectiveness of the communication has a significant impact on future actions by the program team.

PROCESS IMPROVEMENT IS THE KEY: BLACK BOX THINKING
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, using the results and increasing the ROI. Figure 9-8 shows the connection between the evaluation and allocation of funds.

**FIGURE 9-8. OPTIMIZE RESULTS**

Unfortunately, most programs fail to deliver the desired results, and the reason for the failure must be uncovered and adjustments must be made. This is similar to how engineers use the black boxes on airplanes to drive serious process improvement.

Failure is something we all have to endure from time to time, whether it is missing a deadline, flunking an examination, or losing a neighborhood softball game. Sometimes, failure can be far more serious. For doctors and others working in safety-critical industries, getting it wrong can have deadly consequences.

**Black Box Thinking**

Airline travel is the safest transportation system in the world and being in an airplane is one of the safest places you can be. In fact, you are a hundred times more likely to be struck by lightning on a golf course than killed in an airplane crash. How did it get this way? It happened through the concept of black box thinking. Each airplane has two black boxes, one for systems recording and the other for voice recording. When a plane crashes, these boxes can usually point to the cause. The analysis of data typically results in changes to design, procedures, processes, or crew member training. Black box thinking, which is required by regulation and standards that are enforced globally, has made airline travel extremely safe.

Mathew Syed, in his 2015 book *Black Box Thinking: Why Most People Never Learn from Their Mistakes—But Some Do*, argues that black box thinking should permeate the healthcare industry. Using dramatic examples, Syed describes the state of today’s healthcare situation, where errors kill thousands of people every month. This book has prompted many discussions and inspired some action, but little progress has been made because there is much resistance in the healthcare industry.

In a *Wall Street Journal* article Scott Shackleford (2019) suggested that black box thinking should also be brought into the cybersecurity industry. He asserted that a cybersecurity breach must be investigated, and that the investigation should lead to changes required by law or regulation. This would dramatically reduce the number of cyberattacks. Currently, when an attack happens, the organization investigates and makes adjustments, but it is rare for industrywide changes to take place.
Black box thinking and learning from mistakes are not new—they are part of a concept called process improvement, which has been practiced for years. Unfortunately, people don’t often focus on process improvement. Instead, mistakes are usually ignored, covered up, or diminished for a variety of reasons.

The talent development field has its own track record of mistakes. It is not unusual to for programs to be implemented for the wrong reasons, have the wrong solutions, or lack any expectation of adding value to the organization. Consequently, the program fails to deliver value. It should come as no surprise that these programs are not always supported by the management team. Fortunately, there is a way to change this.

Think about it. We know how to:
- Begin with the end in mind using very clear business measures.
- Select the right solution.
- Expect success with clear objectives all the way through impact.
- Collect data to make sure the program matters to the individuals involved and make adjustments if it doesn’t.
- Make it stick, ensuring that learning is applied and delivers an impact in the workplace.

Yet, for too long, learning and talent development teams have ignored these opportunities and not changed their habits. Remember, we are evaluating the programs and not the individuals. If it’s not working, there is something wrong with the program and not the participants. Let’s make sure we are setting ourselves up for success in the beginning, and that we measure programs along the way to ensure success and adjust if needed.

**Failures in Programs**

When examining soft skills programs, it’s known that:

1. More than half of programs are wasted (not used or implemented, although we want them to be used). The culprit is a failure of the system.
2. Most program evaluators do not measure success at the levels desired by top executives (Levels 4 and 5). The culprit is fear of results (or perceived failure).

The failure of programs (or the fear of failure) is serious, although it may seem trivial. After all, what will it hurt if participants:
- Are involved in a program when they are not in a role or situation to make the program successful?
- Are not interested in the program content, information, or concepts and are not motivated to use them?
- Choose not to learn how to make the program successful?
- Fail to take action to make the program successful?
This is not so important unless you examine the numbers. For example, we have six clients at ROI Institute with more than $1 billion each in their learning and talent development budgets. If 50 percent of participants do not use what they learn, that equates to a waste of more than $3 billion in these six organizations. Now it becomes important.

We cover up mistakes not only to protect ourselves from others but to protect us from ourselves. Studies have shown that people have a sophisticated ability to remove failures from their memory. Far from learning from mistakes, we edit them out of the official autobiographies we keep in our own heads.

This basic perspective—that failure is profoundly negative, something to be ashamed of in ourselves and judgmental about in others—has deep cultural and psychological roots. According to Sidney Dekker (2014), a psychologist and systems expert at Griffith University in Australia, the tendency to stigmatize errors is at least 2,500 years old. We need to redefine our relationship with failure. This is the most important step on the journey to creating successful programs. Only by redefining failure will we unleash progress, creativity, and resilience.

The Fear of Results
As discussed earlier, the greatest barrier to evaluating programs at the impact and ROI levels is a fear of the results. Stakeholders who have ownership in the program are likely concerned that disappointing results will reflect unfavorably on them and their performance. Others may fear the outcome will lead to budget cuts or a decision to discontinue the program.

This is not necessarily the case, which is why ROI evaluation is so valuable. If you wait for the funder, sponsor, or executive to ask for results, then you are disadvantaged by a short timeline. You may find that the program wasn’t properly aligned and designed to achieve the desired results, and you’ve missed the opportunity to make the needed adjustments. In addition, the request will place you on the defensive, and that’s not a good place to be.

You always want to be on the offensive, be proactive, and drive accountability. This positions you in a much better situation for sponsors to react to negative data. When you initiate the evaluation of the program, it’s because you want to ensure that it is delivering results. If it’s not, you make adjustments. The continuous process of evaluating and improving programs is the best way to overcome the fear of negative results.

You Can Always Make It Better
The design thinking process, emphasized in this book, focuses on results at each step in the program cycle. If the results are not there, adjustments are made. It is extremely rare for a program to be perfect and deliver maximum results in the first attempt. Instead, barriers and difficulties typically arise through the chain of value. Whether
these obstacles are minimal or major, this is an opportunity for improvement and making the program better.

When you follow these processes, you minimize negative outcomes because of your focus on results in the beginning and adjustments throughout the cycle to deliver those results. Using the ROI Methodology with design thinking creates a high probability of a positive ROI, essentially guaranteeing positive results. This helps to reduce the fear and anxiety of delivering undesirable outcomes.

**When Do You Discontinue the Program?**

Although rare, there are times when programs need to be discontinued. Perhaps the right audience wasn’t involved, the wrong solution was implemented, or the program was not aligned to business measures. If there is no way to adjust or modify the program to deliver positive results, then it is best to eliminate the program.

In our work at ROI Institute, we have seen many negative program evaluations—in fact, as many as 40 to 50 percent of programs are negative on the first evaluation. Of those programs, we estimate that only 10 percent are ultimately discontinued. This is important because many program owners and evaluators worry that almost all programs will be negative, which will then lead to program cancelation. Fortunately, this isn’t true. A negative study usually leads to program improvements and positive results.

**INCREASING ROI**

Fundamentally, ROI is increased by 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 it is easily understood. Is there a way to reduce the cost of the program? Some cost reductions are easier to spot than others. Cost reduction possibilities often spark discussions about converting classroom learning to e-learning, online learning, blended learning, or mobile learning. However, this isn’t always the right thing to do. During the global recession, for example, learning departments witnessed a shift to e-learning as executives were cutting costs, including for training and travel. Converting facilitator-led training into e-learning courses looked like a great way to address both cost categories by dramatically lowering training costs (the facility and facilitator) and participant travel costs. Unfortunately, companies didn’t always implement these changes with enough thought about the impact the program was delivering. As a result, money was wasted converting some programs that should have been discontinued.

Cheaper is not always the right answer. We see this with major programs, even classroom-designed programs. There is a misconception that if the costs are lowered, ROI will always improve. Consider this situation: An organization is interested
in building the capability and expertise of the learning and talent development team, and they want a certified professional designation for the staff. They first examine ATD’s Certified Professional in Talent Development (CPTD) program. However, they decide not to participate because, at nearly $1,000 per person, they think it is too expensive. They instead purchase a different program that is only $100 per person. Unfortunately, subsequent analysis shows that the program had no impact on the team. By definition, if there is no impact, yet they absorbed the cost of the program, the ROI is -100 percent. In another study conducted by an independent organization for ATD, the CPTD program brought on a positive ROI. The conclusion: A cheaper program doesn’t necessarily deliver a higher ROI.

**Addressing the Monetary Benefits**

When the monetary value isn’t what you expected, it could be that the measure or measures being influenced may be more or less what was originally thought to be credible. This may require a review of the data conversion process to make sure it is accurate. Or perhaps other measures are being influenced, or the intangibles that were not converted to money may need to be in the future. The challenge is to increase the monetary value credibly.

**INFLUENCING ALLOCATION**

One theme of this book is that an important goal of evaluation is influence program funding. Whether the objective is to minimize reductions in the soft skills budget, maintain the current budget, or increase the budget, this is probably the most important outcome of this results-based approach. Thanks to ROI calculations showing the value of these programs, we witnessed some organizations actually increasing program budgets during the Great Recession, even while cutting budgets in other places. This is powerful evidence for the importance of evaluation, and is the culmination of designing for value through the process.

**Investment Versus Cost**

It’s helpful to revisit the concept of cost and investments. An organization has many activities that represent costs, and the executives’ and administrators’ perception of these costs becomes critical. If they see the activity as an investment with a positive ROI, then they will be less likely to minimize or reduce it. If the activity has no apparent impact or lacks credible data to show its effects, then there is often a desire to reduce, minimize, control, or even eliminate it. Figure 9-9 summarizes the cost versus investment issue. It’s a simple but powerful concept.

An important exercise is to think about how top executives, who provide funding for programs, see these programs in your organization. Do they see them as an investment or an expense? If they are not perceived as an investment, you could easily see budgets cut during tough times and increased during lean times, which can wreak
havoc with programs that are tracking important issues. To convince executives that your programs are an investment, you must show an impact or ROI evaluation for a few of the major ones.

**FIGURE 9-9: COSTS VERSUS INVESTMENT PERCEPTION**

<table>
<thead>
<tr>
<th>Perception</th>
<th>Actions</th>
<th>Consequences</th>
</tr>
</thead>
<tbody>
<tr>
<td>It’s a cost</td>
<td>• Control it</td>
<td>• Partnerships are rare</td>
</tr>
<tr>
<td></td>
<td>• Reduce it</td>
<td>• Influence diminishes</td>
</tr>
<tr>
<td></td>
<td>• Eliminate it</td>
<td>• Support is lost</td>
</tr>
<tr>
<td>It’s an investment</td>
<td>• Maintain it</td>
<td>• Funding is curtailed</td>
</tr>
<tr>
<td></td>
<td>• Enhance it</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Protect it</td>
<td></td>
</tr>
</tbody>
</table>

**Competition for Funding**
The competition for funds is fierce. The money budgeted for your soft skills programs is often desired by others in the organization. If the funding becomes significant then that money really becomes a target. Although they may have significant budgets, others might want to claim some of your funds to increase their own.

From the top executive perspective, there is a dilemma. For example, IT and marketing typically show the ROI of major programs. On the other hand, HR and learning and talent development rarely show the value of what they are doing. As a *Harvard Business Review* article suggested, “Few HR departments have felt compelled to make the case that any of their practices could drive profits. Many don’t calculate ROI, even though other functions have been expected to do so for at least a generation. That just feeds into business leaders’ view of HR as a cost center where the goal is always to cut, cut, cut” (Cappelli 2015).

Program leaders must make sure there is some mechanism to convince executives that this is a good investment, which is accomplished with data. You do it with impact and ROI, not data from Levels 3, 2, or 1 and certainly not with Level 0. You must have convincing evidence that you are making a difference and that your proposed budget contributes to that. The more credible and specific the data, in terms of impact and ROI, the more convincing your story and the more likely that your budget will be approved.
Anxiety and Downturns Translate Into Cost Reduction

When there is a downturn in the economy, executives look for budgets they can easily cut, like a program that’s an expense or cost. If they see a program as an investment, however, they may not cut it. In addition, in times of uncertainty, anxiety, or volatility, companies have a tendency to prepare for the unknown by maintaining a tighter ship and leaner budget. This translates into significant budget controls and sometimes budget cuts. We even have witnessed budget cuts in companies with record profits because they’re worried about an uncertain future and so want to remove unnecessary programs that don’t add value. Without data that shows your programs make a difference, it is difficult even to argue to keep the budget.

FINAL THOUGHTS

Communicating results is a crucial step in the overall evaluation process. If not executed adequately, the full impact of the results will not be recognized, and the evaluation study may be a waste of time. We began this chapter by outlining general principles and seven steps for communicating program results. These can serve as a guide for any significant communication effort. We then discussed target audiences, with emphasis on the executive group because of its importance. We also suggested a format for a detailed evaluation report, and presented common media for communicating program results. The executive briefing is the most challenging and important method of communicating results to clients and top executives.

This chapter also showed how to use the results of an evaluation to improve programs and optimize the ROI. By increasing ROI, you can influence how funds are allocated. You can only influence program funding with credible data that shows you have made a difference and are delivering a positive ROI for major programs.

This chapter was also the capstone of the book’s results-based philosophy. Although step 1 outlined why we are tackling a program, this final step, optimize results, showed why we want to use evaluation in the first place. You have serious budgets, serious challenges, and serious consequences—you have to show the value. The approach is not to measure your way to a positive ROI, but to design the entire process to deliver ROI. That’s what is needed, and that is what the book helps you do.
PART II

Evaluation in Action: Case Studies on the Evaluation of Soft Skills Programs
ABSTRACT

This case study describes how an organization was able to build evaluation into the training process and position it as an application tool. Public Health Services (PHS), a leader in the public-health industry, identified a lack in understanding of effective recruitment and selection practices. As a result, a two-day training was designed and delivered to explore a framework for understanding the role of effective recruitment and selection while enhancing competency-based interviewing (CBI), a highly successful tool used in the selection process. The keys to this program’s success are identified as planning for the evaluation, building it into the training process, and using the data to help potential future delegates. Because of this program’s success, the CBI training was implemented into PHS’s other countries of operation.
BACKGROUND

Background of the Company
As a leader in public health, PHS provides world-class public health services in many countries in the Middle East. During the past five years, PHS has grown steadily to employ more than 500 employees in its countries of operations, with plans for continued growth. A country manager leads each branch, under which fall heads of departments who are responsible for achieving targets, ensuring a minimum of 20 percent net profit for the branch.

Heads of departments operate autonomously and are held accountable for department performance and for being surrounded by high-performing employees; this starts with the recruitment and selection process. Hiring right is a key performance indicator in which department heads act as hiring managers.

Purpose of the Program
With input from interviews observed for three months and with detailed input from the CEO and country managers, the HR manager identified the major cause of the problems: a lack of understanding of effective recruitment and selection practices. As a result, the HR manager designed a two-day competency-based interviewing (CBI) training for the country managers and the heads of departments of PHS to explore a framework for understanding the effective role of successful recruitment and selection while enhancing competency-based interviewing, a highly successful tool used in the selection process.

Objectives of the Program
The training had these objectives:

- Explain the company’s recruitment and selection practices.
- Discuss how to align the company workforce planning with its strategic direction.
- Identify and explain the different recruitment methods and sources.
- Measure the effectiveness of recruitment.
- Describe the effective role of recruitment in employment branding.
- Explain the company’s selection process.
- Describe the role of competencies in selection.
- Prepare and conduct an effective competency-based interview and formulate appropriate questions.
- Conduct an objective evaluation of candidates.
- Become a brand ambassador through the company’s recruitment and selection best practices.
The training was based on a series of sessions that incorporated adult learning methodologies such as interactive exercises, role plays, case studies, and relevant work-related examples and discussions to induce and guarantee active interaction and participation.

**Purpose of the Evaluation**

The HR manager chose the CBI training for an ROI evaluation for two reasons:

- The HR manager was interested in the accountability of all HR programs, including CBI.
- Positive results would clearly show management that this type of programs could significantly contribute to the bottom line when implemented and supported by management.

Because the program could have been expensive if applied to all the countries of operation, PHS decided to implement it in Qatar to determine its success and then adjust the program, stop the program, or deliver it in other branches. The evaluation methodology provided the best information to make the decision.

**EVALUATION METHODOLOGY**

**General Description of Approach**

PHS used the ROI Methodology, a comprehensive measurement and evaluation process that generates six types of data:

- reaction and planned action
- learning and confidence
- application and implementation
- business impact
- ROI
- intangible measures.

The ROI Methodology provides a balanced approach to evaluating training and development programs, including soft skills programs. The process is divided into four stages. The first stage addresses evaluation planning, which begins with the development of program objectives and comprehensive evaluation plans. The second stage represents the data collection process, with data collected at different timeframes and from different sources to develop a balanced set of measures. The third stage of the process is data analysis, which includes isolating the effects of the program and converting data to monetary value. The fully loaded costs are used to develop the actual ROI. The fourth and final stage is the communication of results.

This comprehensive model allows the organization to follow a consistent standardized approach each time it is applied to evaluate training and development programs. This was PHS’s first time.
The HR manager established the objectives of the CBI program, as shown in Table 10-1. These objectives compose the basis for determining the depth of the evaluation and range from the participant reaction to the ROI calculation. Doing that required a thorough needs assessment to ensure business alignment, as shown in Table 10-2.

**TABLE 10-1. OBJECTIVES**

<table>
<thead>
<tr>
<th>Objective</th>
<th>Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROI</td>
<td>25%</td>
</tr>
<tr>
<td>Impact</td>
<td>• Decrease turnover rate from 25% to 15%</td>
</tr>
<tr>
<td></td>
<td>• Reduce time to hire from 90 to 60 days</td>
</tr>
<tr>
<td></td>
<td>• Reduce cost per hire by 50%</td>
</tr>
<tr>
<td>Application</td>
<td>• Prepare and conduct effective competency-based interview and formulate appropriate questions</td>
</tr>
<tr>
<td></td>
<td>• Conduct objective evaluation of candidates</td>
</tr>
<tr>
<td>Learning</td>
<td>• Acquisition of CBI technique</td>
</tr>
<tr>
<td></td>
<td>• Learning of interview feedback documentation</td>
</tr>
<tr>
<td>Reaction</td>
<td>• Participants see this program as relevant to their job and important to job success</td>
</tr>
</tbody>
</table>

**TABLE 10-2. NEEDS ASSESSMENT**

<table>
<thead>
<tr>
<th>Needs</th>
<th>Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Payoff</td>
<td>• Recruitment is taking a long time, and the quality of candidates and hires is less than the standards set by the organization</td>
</tr>
<tr>
<td>Business</td>
<td>• The turnover rate during the last six months is 25%</td>
</tr>
<tr>
<td></td>
<td>• A 15% turnover rate can be easily reached</td>
</tr>
<tr>
<td></td>
<td>• The time to hire is 90 days and growing</td>
</tr>
<tr>
<td></td>
<td>• The cost per hire is $3,000 on average</td>
</tr>
<tr>
<td>Performance</td>
<td>• Recruitment sources are neither efficient nor cost effective</td>
</tr>
<tr>
<td></td>
<td>• Selection criteria are not clearly set, and assessment is highly subjective</td>
</tr>
<tr>
<td>Learning</td>
<td>• Align workforce planning with strategy and use effective and popular recruitment and selection practices, specifically CBI</td>
</tr>
<tr>
<td>Preference</td>
<td>• Buy-in of hiring managers, who should see the &quot;What’s in it for me?&quot; from this program</td>
</tr>
</tbody>
</table>

To ensure the success of the program, the HR manager needed to link the objectives developed to levels of evaluation, as shown in Table 10-3. Reaction objectives link to Level 1, learning objectives link to Level 2, application objectives link to Level 3, impact objectives link to Level 4, and finally, the desired ROI from the program links to Level 5.
### Data Collection Strategy

With clearly defined objectives, it was time for the HR manager to develop a data collection plan, as shown in Table 10-4. This plan included broad program objectives, measures, and data collection methods and sources, in addition to the timing of the data collection as well as who would be responsible for gathering the various data items from the different sources.

### ROI Analysis Strategy

After developing the data collection plan, Level 4 data items were moved to the ROI analysis plan, as shown in Table 10-5. In this document, the HR manager decided on the methods for isolating the effects of the program and converting data to monetary value. The ROI analysis plan also identified the program costs, as well as the Level 4 business measures that will not be converted to monetary value—the intangible benefits. Additionally, the ROI analysis plan notes other potential influences that may affect business measures. Finally, this plan identifies the target audience to receive the final results.

---

**TABLE 10-3. DATA COLLECTION AT EACH EVALUATION LEVEL**

<table>
<thead>
<tr>
<th>Evaluation Level</th>
<th>Data Collection Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 5. ROI</td>
<td>25%; it would be calculated using cost versus benefit</td>
</tr>
<tr>
<td>Level 4. Business Impact</td>
<td>Records will be checked for turnover rate, time to hire, and cost per hire</td>
</tr>
<tr>
<td>Level 3. Application and Implementation</td>
<td>On-the-job observation and submission of documented interview feedback</td>
</tr>
<tr>
<td>Level 2. Learning and Confidence</td>
<td>Skill practice; trainer assessment, and participants’ feedback</td>
</tr>
<tr>
<td>Level 1. Reaction and Planned Action</td>
<td>Questionnaire at the end of the workshop</td>
</tr>
</tbody>
</table>
### Table 10-4: Data Collection Plan

<table>
<thead>
<tr>
<th>Level</th>
<th>Broad Program Objectives</th>
<th>Measure</th>
<th>Data Collection Methods</th>
<th>Data Sources</th>
<th>Timing</th>
<th>Responsibilities</th>
</tr>
</thead>
</table>
| 1. Reaction | • Relevance to the job  
  • Amount of new information  
  • Intent to use  
  • Importance to job success | • 3 out of 4 on a 1–4 rating scale | • Feedback questionnaire | • Participants | • End of workshop (day 2) | • Trainer (HR manager) |
| 2. Learning | • Acquisition of CBI technique  
  • Learning of interview feedback documentation | • Ability to explain and demonstrate the learning objectives through application during workshop | • Skill practice (CBI role-playing and probing exercise)  
  • Trainer’s assessment  
  • Participants’ feedback | • Trainer  
  • Participants | • During the two days of the workshop | • Trainer (HR manager) |
| 3. Application | • Prepare and conduct effective competency-based interview and formulate appropriate questions  
  • Conduct objective evaluation of candidates | • Competency-based interviews  
  • Interview feedback documented | • On-the-job observations (during interviews)  
  • Submit documented interview feedback | • Participants | • Immediately after workshop and throughout the three weeks after | • Trainer (HR manager)  
  • Qatar HR officer |
| 4. Impact | • Decrease in turnover rate  
  • Reduction in time to hire  
  • Reduction in cost per hire | • Turnover rate  
  • Time to hire  
  • Cost per hire | • Recruitment measures monitoring | • Recruitment reports | • Six months after workshop | • Trainer (HR manager)  
  • Qatar HR officer |
| 5. ROI | | | | | | 25% |
### TABLE 10-5. ROI ANALYSIS PLAN

<table>
<thead>
<tr>
<th>Program/Project: CBI</th>
<th>Responsibility: HR Manager</th>
<th>Date:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Level 4 Program Objectives</strong></td>
<td><strong>Methods for Isolating the Effects</strong></td>
<td><strong>Methods of Converting Data to Monetary Value</strong></td>
</tr>
<tr>
<td>• Decrease in turnover rate</td>
<td>• Participants’ estimate</td>
<td>• External studies</td>
</tr>
<tr>
<td>• Reduction in time to hire</td>
<td>• Historical data</td>
<td>• Needs assessment</td>
</tr>
<tr>
<td>• Reduction in cost per hire</td>
<td></td>
<td>• Research, design, and development of material</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Program materials</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Trainer’s time</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Participants’ time</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Travel, lodging, and meals</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Admin/Overhead</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Evaluation</td>
</tr>
</tbody>
</table>
EVALUATION RESULTS

Level 1. Reaction and Planned Action
The HR manager collected Level 1 data at the end of the two-day program using a standard feedback questionnaire, which focused on issues such as the relevance of the material, the amount of new information, and intention to use the skills. Following is a summary of the reaction data on a rating scale of one to four, in which one is the lowest and four is the highest. The overall rating was 3.38.

- The training was a good use of my time: 3.2
- The training was relevant to my job: 3.2
- The training provided me with new information: 3.2
- I recommend this training to others: 3.6
- I learned new knowledge and skills: 3.4
- I am confident in my ability to practice what I have learned: 3.6
- This training is critical to my job success: 3.4

Level 2. Learning and Confidence
The training program featured a series of sessions that incorporated adult learning methodologies such as interactive exercises, role plays, case studies, relevant work-related examples, and discussions to induce and guarantee active interaction and participation.

The HR manager measured learning mainly by observing skill-practice sessions during which each participant practiced CBI. An example practice exercise and observation note is provided in Table 10-6. While the approach is subjective, the HR manager thought it provided enough evidence that the participants had learned the CBI technique.

TABLE 10-6. JOINT CBI EXAMPLE PRACTICE EXERCISE

<table>
<thead>
<tr>
<th>Example of Practice Exercise: “Joint CBI”</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Form a group of two.</td>
</tr>
<tr>
<td>• Interview the other person for their real position.</td>
</tr>
<tr>
<td>• Interview on three competencies out of seven from the framework that you assess as the most relevant to their position.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>On the Interview Feedback Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Identify complete (C), false (F), and partial (P) situation, task, action, and result (STARs).</td>
</tr>
<tr>
<td>2. Indicate whether complete STARs are effective (+) or ineffective (-) according to recency, impact, and similarity to the target job.</td>
</tr>
<tr>
<td>3. Determine and record rating accordingly (refer to competency framework).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Trainer’s Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>“I believe the CBI training in Qatar was a success: Buy-in of country manager and heads of departments has been obvious since day one through continuous interaction, participation, sharp questions, high commitment, and immediate impressive implementation.”</td>
</tr>
</tbody>
</table>
Level 3. Application and Implementation
To determine the extent to which participants were using the skills, they were asked to interview their own department’s employees. This was done during the three weeks after delivery of the workshop, using mainly on-the-job observations from the HR officer in Qatar. The typical challenge of implementation reported by participants was lack of time, while typical enablers were the buy-in of the country manager and the support of HR in Qatar. Interview feedback forms were provided to the trainer (the group HR manager), who used those as an opportunity to summarize the progress with the action plan.

Level 4. Business Impact
Recruitment reports show the turnover rate, average time to hire, and average cost per hire for a period of six months prior and after the program. An example of a recruitment report is shown in Table 10-7. As the data shows, there is a significant improvement because of the program.

**TABLE 10-7. RECRUITMENT REPORTS**

<table>
<thead>
<tr>
<th>Measure</th>
<th>6 Months Prior to CBI</th>
<th>6 Months After CBI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turnover rate</td>
<td>25%</td>
<td>13.5%</td>
</tr>
<tr>
<td>Time to hire</td>
<td>90 days</td>
<td>70 days</td>
</tr>
<tr>
<td>Cost per hire</td>
<td>$3,000</td>
<td>$1,000</td>
</tr>
</tbody>
</table>

Isolating the Effects of Solution
Isolating the effects is essential because many factors will influence performance data after the implementation of the program. The specific strategies in this step pinpoint the amount of improvement directly related to the program. The result is increased accuracy and credibility of the ROI Methodology results. The main strategy used to isolate the effects of the CBI was participant estimate.

Participants were provided the six-month measures from before and after the program and were asked to estimate the percent of improvement caused by the CBI training and their level of confidence (100 percent indicates full confidence, and 0 percent indicates no confidence). To calculate the contribution rate, the two percentages were multiplied. The average percentages from the participants are shown in Table 10-8.

**TABLE 10-8. AVERAGE PERCENTAGES**

<table>
<thead>
<tr>
<th>Measure</th>
<th>6 Months Prior to CBI</th>
<th>6 Months After CBI</th>
<th>Contribution Rate*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turnover rate</td>
<td>25%</td>
<td>13.5%</td>
<td>75%</td>
</tr>
<tr>
<td>Time to hire</td>
<td>90 days</td>
<td>70 days</td>
<td>82%</td>
</tr>
<tr>
<td>Cost per hire</td>
<td>$3,000</td>
<td>$1,000</td>
<td>70%</td>
</tr>
</tbody>
</table>

*Estimate (%) × Level of Confidence (%) = Contribution Rate (%)

(83% × 90% = 75%; 89% × 92% = 82%; 80% × 88% = 70%)
Convert Data to Monetary Value

The HR manager determined the monetary benefits for the program using the methods outlined in the ROI analysis plan: external studies for calculating turnover cost and historical data for determining the value of the cost per hire. No values were used for the time to hire.

The turnover rate of 25 percent for the six months before the program refers to 23 employees (6 professionals, 17 technicians) out of 90 leaving the company in Qatar. The 13.5 percent for the six months after the program refers to 12 employees out of 90 (3 professionals, 9 technicians). The turnover rate, in this case, was calculated taking into consideration separations, new joiners, and the average total number of employees during the specified period, as shown in Table 10-9.

**TABLE 10-9. PRE- AND POST-PROGRAM TURNOVER RATES**

<table>
<thead>
<tr>
<th>Turnover Rate Pre-Program: 25%</th>
<th>23 employees: 6 professionals and 17 technicians</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 professional salary per month at PHS, Qatar = $2,000</td>
<td>1 technician salary per month at PHS, Qatar = $500</td>
</tr>
<tr>
<td>Turnover cost for 1 professional per month = 50% × $2,000 = $1,000</td>
<td>Turnover cost for 1 technician per month = 50% × $500 = $250</td>
</tr>
<tr>
<td>Turnover cost for 6 professionals per month = $1,000 × 6 = $6,000</td>
<td>Turnover cost for 17 technicians per month = $250 × 17 = $4,250</td>
</tr>
<tr>
<td>Turnover cost for 6 professionals for 6 months = $6,000 × 6 = $36,000</td>
<td>Turnover cost for 17 technicians for 6 months = $4,250 × 6 = $25,500</td>
</tr>
<tr>
<td>Total turnover cost = $36,000 + $25,500 = $61,500</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Turnover Rate Post-Program: 13.5%</th>
<th>12 employees: 3 professionals and 9 technicians</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 professional salary per month at PHS, Qatar = $2,000</td>
<td>1 technician salary per month at PHS, Qatar = $500</td>
</tr>
<tr>
<td>Turnover cost for 1 professional per month = 50% × $2,000 = $1,000</td>
<td>Turnover cost for 1 technician per month = 50% × $500 = $250</td>
</tr>
<tr>
<td>Turnover cost for 3 professionals per month = $1,000 × 3 = $3,000</td>
<td>Turnover cost for 9 technicians per month = $250 × 9 = $2,250</td>
</tr>
<tr>
<td>Turnover cost for 6 professionals for 6 months = $3,000 × 6 = $18,000</td>
<td>Turnover cost for 17 technicians for 6 months = $2,250 × 6 = $13,500</td>
</tr>
<tr>
<td>Total turnover cost = $18,000 + $13,500 = $31,500</td>
<td></td>
</tr>
</tbody>
</table>

This conversion of turnover rate to monetary value shows savings of:

$61,500 − $31,500 = $30,000

Adjusted Value = $30,000 × 75% (contribution rate) = $22,500

Simply, cost per hire shows a difference of:

$3,000 − $1,000 = $2,000

Adjusted Value = $2,000 × 70% (contribution rate) = $1,400

Total savings for a six-month period are:

$22,500 + $1,400 = $23,900
Capture Costs of Solution
Table 10-10 shows the CBI costs for a fully loaded cost profile.

**TABLE 10-10. FULLY LOADED COST PROFILE**

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost in U.S. Dollars</th>
</tr>
</thead>
<tbody>
<tr>
<td>Needs assessment</td>
<td>$6,000</td>
</tr>
<tr>
<td>Development cost</td>
<td>$4,500</td>
</tr>
<tr>
<td>Program materials</td>
<td>$250</td>
</tr>
<tr>
<td>Trainer’s time</td>
<td>$346</td>
</tr>
<tr>
<td>Participants’ time</td>
<td>$2,500</td>
</tr>
<tr>
<td>Travel and lodging of trainer</td>
<td>$1,100</td>
</tr>
<tr>
<td>Facilities and refreshments</td>
<td>$500</td>
</tr>
<tr>
<td>Admin/Overhead</td>
<td>$500</td>
</tr>
<tr>
<td>ROI evaluation</td>
<td>$4,500</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$20,196</strong></td>
</tr>
</tbody>
</table>

**Program materials:** 5 (number of participants) × $50 (unit cost of material)

**Trainer’s time:** $4,500 (monthly salary) × 2-day training ÷ 26 days (number of working days a month at PHS)

**Participants’ time:** $5,000 (average monthly salary) × 5 (number of participants) × 2 days ÷ 26 (number of working days) × 1.3 (the benefits factor)

**Travel and lodging:** $650 (travel ticket) + $300 (2 hotel nights) + $150 (2-day per diem)

**Facilities and refreshments:** $250 × 2 days

Calculate the Return on Investment
Based on the calculated monetary benefits and fully loaded cost, the group HR manager calculated the ROI by comparing both as follows:

$$ROI\% = \frac{23,900 - 20,196}{20,196} \times 100$$

$$ROI\% = \frac{3,704}{20,196} \times 100$$

$$ROI\% = 0.1834 \times 100$$

$$ROI = 18.34\%$$
The ROI value is a credible value and rests on the following principles on which the study was based:

- The data comes from participants, historical data, and external studies that are valid and reliable by nature.
- The data could be audited to see if the changes were taking place.
- To be conservative, the data includes only the first six months of improvements.
- The costs are fully loaded to include both direct and indirect costs.

### Identify Intangibles
The HR manager identified several intangible benefits in the study and confirmed them with input from participants and management. The identified intangibles include:

- Hiring managers became brand ambassadors.
- Better recruitment decision making has been achieved.
- Customer satisfaction and retention increased.

### COMMUNICATION STRATEGY
The final stage of the ROI Methodology addresses the communication of results. Communicating results effectively is essential to the success of the ROI Methodology.

The first step in the reporting model was to analyze the need for the communication of the whole study; there were many reasons, mainly to:

- Secure approval for training and development programs.
- Gain support for training and development programs.
- Obtain commitment to training and development programs.
- Build credibility for training and development programs.
- Demonstrate the importance of measuring training and development programs.

### How and to Whom Were Results Reported?
The HR manager conducted the communication strategy as shown in Table 10-11.

### TABLE 10-11. COMMUNICATION STRATEGY

<table>
<thead>
<tr>
<th>Communication Document</th>
<th>Communication Target</th>
<th>Distribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complete study report</td>
<td>• CEO</td>
<td>• Meeting (study report handout and PowerPoint presentation)</td>
</tr>
<tr>
<td></td>
<td>• Qatar country manager</td>
<td></td>
</tr>
<tr>
<td>Executive summary</td>
<td>• Qatar HR officer</td>
<td>• Email and Skype session</td>
</tr>
<tr>
<td></td>
<td>• Participants</td>
<td>• Email</td>
</tr>
</tbody>
</table>
Response of Stakeholders
Because of the significance of the study and the information, stakeholders decided that whenever programs involving large groups of employees are considered, a detailed needs assessment should be conducted to ensure that the proper program is developed. Also, an ROI study should be conducted for a small group of programs to measure the impact before complete implementation.

Recommendations
Because of this program’s success, the stakeholders recommended implementing it in other countries of operations. It was also advised that all hiring managers transfer the CBI knowledge and skills to their employees, even if not directly involved in selection decisions.

LESSONS LEARNED
Recently, PHS expanded the implementation of the ROI concept to all types of investments, including HR solutions, which reflect the growing demand for evidence of positive returns on investing in HR. For the ROI concept to be feasible, it must simple, credible, valid, reliable, and sound. The ROI Methodology applied in this case study meets those challenges.

Changing Approach
The ROI Methodology states that “at least one method must be used to isolate the effects of a program.” This guiding principle, among others, ensures consistency and replication of impact studies and provides a much-needed conservative approach to the analysis. This conservative approach may lower the actual ROI calculation but builds the needed credibility. It’s always better to be conservative than have results that are not credible (Phillips et al. 2019).

In alignment and agreement with the conservative approach and to establish better credibility, it is recommended to use three strategies to isolate the effects of training: “triangulation.” By combining multiple observers, theories, methods, and empirical materials, researchers can hope to overcome the weakness or intrinsic biases and the problems that come from single-method, single-observer, single-theory studies. Often the purpose of triangulation in specific contexts is to obtain confirmation of findings through the convergence of different perspectives. The point at which the perspectives converge is seen to represent reality (Jakob 2001).

Response of PHS to the Evaluation Methodology
In response to the evaluation effort, PHS found it had created a culture of measurement and a focus on establishing a variety of measures, including ROI.
QUESTIONS FOR DISCUSSION
1. The program was designed and delivered by the HR manager to the country manager and the heads of departments of PHS, Qatar. Explain why.
2. Why should this program be evaluated at the ROI level? Explain.
3. How were the results isolated to the program?
4. Should the cost-per-hire improvement be adjusted for the number of new hires during the period? Explain.
5. The payoff is based on six months of improvement. Should there be more? Explain.
6. Discuss the strengths of this study and opportunities for improvement.

ABOUT THE AUTHOR
George BouMalhab is a human resource expert with more than 15 years of experience in the field. After heading one office of HR, he currently holds the position of director of continuing education, director of university policies, and part-time instructor at the faculty of business administration and economics at Notre Dame University, Louaize, Lebanon. He previously occupied several key HR positions with large corporations, such as Elie Saab in Beirut and Paris, as well as Boecker, Spinneys, and Azadea in Beirut. George is well rounded in developing and initiating HR strategic initiatives. Throughout his career, he has been instrumental in building organizational design solutions. He has a passion for people development and puts his heart into everything he does. George holds an MBA from St. Joseph University in Lebanon and the universities of Sorbonne and Paris-Dauphine of France, and a doctorate in business administration from the Paris School of Business in France. He is an accredited trainer with international standards, a certified occupational test user with the British Psychological Society, and a certified ROI professional (CRP) with ROI Institute.
Transitioning From College to Corporate Program: An ROI Impact Study

Global Systems Corporation

Jessica Kriegel

This case was prepared to serve as a basis for discussion rather than as an illustration of either effective or ineffective administrative and management practices. Names, dates, places, and data may have been disguised at the request of the author or organization.

Abstract

The following case study analyzes the effect of a one-and-a-half-day workshop for Global Systems Corporation (GSC) new hires titled Transitioning From College to Corporate. The training was designed to help college graduate new hires acclimate to the GSC corporate culture. The need for this training was identified after numerous managers reported problems working with their college-age new hires. A team of internal consultants within human resources working for the organization and the talent development (OTD) team conducted a thorough needs analysis with the GSC college hire group and their managers, including questionnaires and focus groups. The program was designed based on the feedback received. Two one-and-a-half-day sessions were conducted at the GSC corporate headquarters in California. Sixteen GSC college hires attended Session 1 and 16 attended Session 2. In addition, OTD conducted a one-and-a-half-hour virtual training session for the hires’ managers.

The program was evaluated at five levels. A third-party-facilitated focus group was conducted with all college hires immediately following the session for Level 1 data. In addition, participants were given a post-course test for Level 2 data. Focus groups and
surveys were conducted six months after training completion to evaluate at Levels 3 and 4. Finally, the return on investment (ROI) was calculated. Overall, the impact on the business was significant, and the ROI was 695 percent. Considering that the development for the program is complete and future sessions are planned, this is and will continue to be a good investment for the product development team within GSC.

PROGRAM BACKGROUND

The GSC college hire program was established to recruit, train, and retain recent college graduates for the GSC product development team. The program involved training to get the hires acclimated and productive on new and innovative work. After the first cohort was hired, the employees’ managers began to report issues with new college hire behavior. They attributed this behavior largely to generational issues, because all college hires were of the Millennial generation. GSC’s global organization and talent development team offered an acclimation training in response, called Transitioning From College to Corporate. The purpose of this training was to address the issues expressed by the managers and to increase productivity, reduce attrition, and increase employee engagement as a result.

The audience totaled 32 new employees hired through the GSC college hire program in production development and based out of GSC’s corporate headquarters in California. The purpose of the training program was to identify age-related stereotypes and discuss manager perception of incoming college hires. The program provided guidelines and examples of how to adapt to the GSC culture, demonstrated how to manage difficulties related to intergenerational dynamics, and encouraged creation and commitment to a transition plan of onboarding. The purpose outlined in the previous paragraph translated to business objectives of increasing employee productivity, employee engagement, and employee satisfaction for college hires while reducing attrition.

The Learning Solution

A one-and-a-half-day, instructor-led course was developed to address the skills and knowledge required to support the program objectives. Because the audience was located at corporate headquarters, the training was held on-site. The course agenda included sessions on intergenerational understanding, work-life balance, understanding GSC, building relationships, and creating a transition plan. Thirty-two new college hires completed two sessions of training for this study. This represents 7 percent of the target audience for a typical year. Further training sessions are planned in the future.

Cost of the Learning Solution

Total cost to conduct the assessment, as well as design, develop, deliver, and evaluate the training, was $97,416 (Table 11-1). Because this was a pilot, all design and development costs are fully loaded in this ROI assessment. As the solution is delivered in future training sessions, the costs will decrease, because they will be prorated.
TABLE 11-1. COSTS OF DESIGN, DEVELOPMENT, DELIVERY, AND EVALUATION

<table>
<thead>
<tr>
<th>Stage</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Needs assessment</td>
<td>$5,763.64</td>
</tr>
<tr>
<td>Development</td>
<td>$23,826.94</td>
</tr>
<tr>
<td>Delivery</td>
<td>$63,127.28</td>
</tr>
<tr>
<td>Evaluation</td>
<td>$4,698.14</td>
</tr>
<tr>
<td><strong>Total Cost to GSC</strong></td>
<td><strong>$97,416</strong></td>
</tr>
</tbody>
</table>

EVALUATION METHODOLOGY

This study was completed using the ROI Methodology. This methodology is the most widely accepted process to evaluate the business impact of learning and other processes (Phillips et al. 2019). To understand the ROI process, it is helpful to examine the key steps involved in developing the ROI.

The ROI model illustrates the process and highlights the issues addressed in this study. The first step is the collection of baseline data, and then follow-up data is collected after a program has been conducted. A variety of post-program data collection methods are available. Perhaps the most important step in the model focuses on the issue of isolating the effects of training. In every organizational situation, a variety of factors influence the output measures of organizational or business impact. Training is only one of many influences that will drive a particular measure. One or more strategies must be selected to isolate the effects of training.

The next step in the ROI model is converting data to monetary values. Output measures must be converted to dollar values, so they can be compared with the cost of the program to develop the ROI. All fully loaded costs that are related directly or indirectly to the training program are included in the ROI calculation. This includes participant salaries and benefits while away from work to attend the training.

Finally, the costs and benefits come together in an equation for the ROI. Net benefits (the program benefits minus costs) are divided by the total investment in the training program. This provides an ROI formula comparable to ROI calculations for other investments, which typically show the net earnings divided by the average investment. A final step lists intangible benefits, which are important but not translated into monetary values for the program benefits. In this study, intangible benefits are identified and reported as well as the tangible results.

The key decisions involving the application of the ROI model involve selecting specific methods to collect data, isolating the effects of training, and converting data to monetary values. These are the three most difficult and critical steps in the process and are addressed in the next sections. It is helpful and instructive to view the evaluation of training using a framework of evaluation levels. As shown beginning in the next sections, an evaluation is conducted at five different levels.

The data collection plan and the ROI analysis plan for the Transitioning From College to Corporate Program are shown in Table 11-2 and Table 11-3.
<table>
<thead>
<tr>
<th>Level</th>
<th>Broad Program Objectives</th>
<th>Measures</th>
<th>Data Collection Methods</th>
<th>Data Sources</th>
<th>Timing</th>
<th>Responsibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Reaction</td>
<td>Positive reaction to the training</td>
<td>Provide overall positive feedback</td>
<td>Focus group</td>
<td>Participants</td>
<td>End of program</td>
<td>Third-party facilitator</td>
</tr>
<tr>
<td>2. Learning</td>
<td>Understand the intergenerational teachings in the course</td>
<td>Pass the post-class test with a 60% or higher</td>
<td>Post-class test</td>
<td>Participant performance tests</td>
<td>During training</td>
<td>OTD</td>
</tr>
<tr>
<td>3. Application</td>
<td>Complete a transition plan provided in class</td>
<td>Completed transition plans</td>
<td>Focus group</td>
<td>Participants</td>
<td>6 months after training</td>
<td>OTD and third-party facilitator</td>
</tr>
<tr>
<td></td>
<td>• Discuss the transition plan with their managers</td>
<td>Conversations with their managers</td>
<td>Follow-up questionnaire</td>
<td>Managers</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Collaborate more closely with their managers in the workplace</td>
<td>Increase in reported collaboration across generations</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Impact</td>
<td>Increase job satisfaction</td>
<td>Improve from current baseline</td>
<td>Focus group</td>
<td>Participants</td>
<td>6 months after training</td>
<td>OTD and third-party facilitator</td>
</tr>
<tr>
<td></td>
<td>• Increase employee engagement</td>
<td></td>
<td>Follow-up questionnaire</td>
<td>Managers</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Increase retention (intention to stay)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Increase job productivity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. ROI</td>
<td>ROI Target: at least 25%</td>
<td>Comments:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
TABLE 11-3. ROI ANALYSIS PLAN

**Purpose of This Evaluation:** Determine Impact of the Transitioning From College to Corporate Program

<table>
<thead>
<tr>
<th>Data Items (Usually Level 4)</th>
<th>Methods for Isolating the Effects of the Program/Process</th>
<th>Methods of Converting Data to Monetary Values</th>
<th>Cost Categories</th>
<th>Intangible Benefits</th>
<th>Communication Targets for Final Report</th>
<th>Other Influences/Issues During Application</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase job productivity</td>
<td>Client estimate</td>
<td>• Converting productivity increase to money using salary as a basis</td>
<td>• Needs assessment</td>
<td>• Job satisfaction</td>
<td>• Directors</td>
<td>• CSC college hire training program includes a training bootcamp that is unrelated</td>
<td>Increase in retention may be recalculated after 2–3 years to see if intention to stay translated to actual retention</td>
</tr>
<tr>
<td>Increase retention (intention to stay)</td>
<td>Client estimate</td>
<td>• External study: 200% of salary for computer software designer specialists</td>
<td>• Program material</td>
<td>• Participant salaries plus benefits</td>
<td>• Training department</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increase employee engagement</td>
<td>Client estimate</td>
<td>• No standard value</td>
<td>• Training overhead</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increase job satisfaction</td>
<td>Client estimate</td>
<td>• No standard value</td>
<td>• Evaluation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
EVALUATION RESULTS

Level 1. Reaction Results
Level 1 results focus on the reaction to the training program, the facilitator, and how application might occur. The Level 1 feedback was collected via focus group immediately following the sessions. A third party conducted the focus groups while the instructors left the room.

The students’ immediate end-of-class feedback on all aspects of the learning event was very positive:

• The participants felt that in general, it was beneficial to them as new hires. They also felt that the training was fun and engaging.
• Participants stated that highlights of the program included the section on professional networking and emotional regulation.
• Participants were not as pleased with the discussion on intergenerational understanding. They did not see the relevance to them.
• The instructors were highly rated, and most students said that they would recommend this program to their colleagues.

Level 2. Learning Results
Level 2 results focus on the participants’ learning and various support mechanisms for learning. The participants’ mastery of the content and skills in the class was assessed by an eight-question, end-of-course test. The test was mostly multiple choice, but also included one short answer question. All participants passed the test on the first try. The average score achieved was 76 percent.

Level 3. Application Results
Level 3 results focus on the participants’ work setting and support mechanisms for applying learning. To determine whether people were performing the activities required for their jobs, participants were asked to answer a follow-up questionnaire six months after finishing the learning event. The learners’ managers were also asked to answer a follow-up questionnaire.

Highlights of follow-up job application and implementation are reported in the next section. A total of 16 college hires, representing a 50 percent response rate, completed questionnaires reporting their post-training job performance.

The goal of the training was to allow them to work more collaboratively with their manager as a result of reduced intergenerational tensions post-training. In addition, it was important that participants leave the session with a transition plan that they would discuss with their managers. The self-reports of ability to perform the suggested activities for their role were positive:
100 percent of employees had a completed transition plan.
80 percent of employees had a meeting with their managers regarding their transition plans.
36 percent reported increased collaboration with their managers as a result.

**Level 4. Impact Results**

Level 4 results focus on the consequences of participants’ application of the learning as they relate to business measures. A total of 16 college hires participated in the evaluation focus groups six months post-training. Nine managers of college hires participated in separate manager-only focus groups as well. During the focus group, the college hires were asked to estimate their improvement in four categories: job satisfaction, productivity, intention to stay with GSC, and employee engagement. In addition, the managers were asked to make the same estimates with regards to their own improvement.

Then, to isolate for the effects of the program, each group was asked to estimate the percentage of this improvement that was due exclusively to the Transitioning From College to Corporate training. Finally, each participant was asked to estimate how accurate their adjustment percentage was. The results are displayed in Table 11-4.

**Table 11-4. Participants’ and Managers’ Estimations**

<table>
<thead>
<tr>
<th></th>
<th>College Hires</th>
<th></th>
<th>Managers</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Average Self-Report</td>
<td>Adjusted % After Isolation for Effects of the Program</td>
<td>Average Self-Report</td>
<td>Adjusted % After Isolation for Effects of the Program</td>
</tr>
<tr>
<td>Improvement in productivity</td>
<td>33%</td>
<td>22%</td>
<td>19%</td>
<td>10%</td>
</tr>
<tr>
<td>Increase in intention to stay</td>
<td>44%</td>
<td>23%</td>
<td>34%</td>
<td>19%</td>
</tr>
<tr>
<td>Improvement in job satisfaction</td>
<td>43%</td>
<td>30%</td>
<td>6%</td>
<td>0%</td>
</tr>
<tr>
<td>Increased employee engagement</td>
<td>52%</td>
<td>15%</td>
<td>47%</td>
<td>28%</td>
</tr>
</tbody>
</table>

**Level 5. Return on Investment**

Level 5 results focus on the fully loaded costs of the program compared with the program benefits.

A positive ROI reflects:

1. There must be a training need.
2. A feasible training solution must be implemented at the right time, for the right people, at a reasonable cost.
3. The training solution must be supported and applied in the work setting.
4. Linkage must exist to one or more organizational measures.
5. The monetary benefits from the training exceed the cost of the training.

All training for this project was completed, and post-training evaluation results were gathered six months later. Out of the 32 original training participants, only 16 participated in the post-training focus groups. As a result, the sample size was not large enough to apply to the entire group. For this impact study, only the improved results of the 16 participants in the post-training focus groups were counted in the monetary benefits. However, the costs of the 32 were included in the cost of the program.

**Productivity**

GSC considers productivity to be an employee operating at average capacity. New hires are considered a drain on productivity, drawing a salary but consuming training and orientation expenses and using co-workers’ time. Because this program couldn’t be isolated from all new-hire investments, such as the number of people onboarding the new college hire, their time involved, and their salary cost, productivity costs were calculated using new college hire salary. Essentially, productivity loss is salary cost before an employee is operating at average capacity.

Also, because new college hires report to a variety of teams performing different functions, one standard productivity measure (such as lines of code developed or numbers of bugs fixed) was impossible. Therefore, measures used self- and manager-reported increases in productivity, coupled with their confidence factor that it was the program that caused the increase. The following percentages are the final figures of reported productivity increase adjusted by the confidence factor.

- Improvement in productivity was reported as 22 percent by the new hires and 10 percent by the college hires’ managers. For the purpose of this impact study, the number chosen is 10 percent.
- 10 percent of average salary and benefits × 16 college hires reporting = $191,200:
  » Salary is the average of oncoming college hires, as per GSC HR.
  » Benefits are 24 percent of salary, as per GSC benefits, the internal group responsible for benefits.

**Retention**

At the time of post-training evaluation, all 32 participants were still employed by GSC. Participant new hires were between one day and five months of employment when the program was run and were under one year of employment at the time of the post-training evaluation. New college hire attrition has an upswing at one year of employment or greater. Retention for this program is measured by intent to stay. Retention will be checked at the one-year, 18-month, and two-year marks.

Of the 16 (50 percent) who participated in the post-training evaluation, all claimed that this program was a contributing factor. They stated that if the program had not been in place, they would have been more inclined to leave.
Savings were considered to be captured in the reduction of turnover costs, usually recruiting and training replacements, among other costs. Because turnover costs include many factors, the research of Patricia P. Phillips and Holly Burkett (2008) served as guidance.

To calculate the cost of turnover, an Internet search was conducted through Educational Resources Information Center (ERIC). The search, available through EBSCO-host, yielded a variety of studies that, when arranged by job group, yielded the information (Phillips and Edwards 2008).

The results indicated 200–400 percent of salary for computer software designer specialists, the closest match for the participants. The more conservative 200 percent is used for this impact study.

- Increase in intention to stay was reported as 23 percent by the new hires and 19 percent by the college hires’ managers. The more conservative number is used.
- Average salary is $96,000, as per GSC compensation.
- Average salary of $96,000 (GSC Comp) × 200% × 19% (conservative number from managers reports) × 16 reporting participants = $583,680.

**ROI**

For ROI, the productivity increase of $191,200 was added to the retention cost savings of $583,680 for a total benefit of $774,880. A cost estimating worksheet was used to identify total program cost. Using the ROI formula, the return was calculated at 695 percent.

\[
ROI \% = \frac{(Total \ benefits - Program \ cost)}{Program \ cost} \times 100
\]

\[
ROI \% = \frac{($774,880 - $97,416)}{$97,416} \times 100 = 695\%
\]

**Use of Salary in Both Measurements**

Using salary in the productivity and retention benefit measurements was a cause for concern. Yet its use is valid in both because lack of productivity uses salary as an investment cost (paying a new employee for future productivity), and retention uses salary as a benchmark for recruiting and training costs.

**Intangible Benefits**

Increases in employee engagement and job satisfaction were not quantifiable, and so these were kept separate as intangible benefits.
ROI Interpretation
When developing the actual ROI, a conservative approach is always taken. If monetary benefits have a subjective component, they are adjusted downward. If program costs contain estimates, they are adjusted upward. This conservative approach builds credibility and makes the resulting calculation more reliable.

The formula used for the ROI is the same basic calculation used to evaluate other investments, such as those in equipment and plants. Thus, the target rates used for other investments could be compared to these percentages in this study. However, because this process is not precise, a different target rate is often suggested. For most organizations involved in calculating return on investment of training programs, coaching programs, and change initiatives, a target rate of 25 percent is recommended, pushing this minimum acceptance rate above what would be required for a capital expenditure (that is, a building). Thus, if a program is not generating at least a 25 percent return on investment in the first year, it could be an undesirable investment. Using this as an objective, the ROI of 695 percent achieved for the Transitioning From College to Corporate Program is extremely good.

Estimating the return on investment for a training program can be a difficult process. The exact value will never be known, just as the impact of an advertising program will never be known precisely. However, the process used in the previous calculations is becoming a generally accepted technique for measuring solutions. Credible sources such as contract associates, the client, and client reports provided the information. There was no pressure to respond or to provide a certain type of data. In addition, several other considerations and adjustments were made to produce more conservative estimates:

- Both new hires and managers were asked to estimate the impact of the training on the business. Where there was a differential in impact estimated by the two groups, the lower impact was taken for the ROI calculation.
- Only the benefits captured in the first year are utilized, although there may be second- and third-year benefits.
- The benefit value is reduced to reflect the percentage linked directly to the Transitioning From College to Corporate Program, based on the client’s estimate.
- The total benefits are based only on the data furnished by reliable sources.
- The costs are fully loaded, including estimated salaries and benefits for each participant for the time the participants were in training.

With these adjustments and considerations, it is safe to assume that the ROI value reflected in the study have been achieved (Phillips 2017).

Summary of Results
After six months of using the new tool and process, the business expectations were realized:
• Productivity of GSC college hires that participated in the program increased by 10 percent.
• Intention to stay with GSC among participants increased by 19 percent.
• ROI of 695 percent was achieved.
• Intangible benefits resulting from this training include an increase in employee engagement by 15 percent.

Overall, the training was a good investment for the product development group. A positive ROI was achieved, and the business impact was significant.

Only 23 percent of product development GSC college hires participated in the program, and so it is recommended that all new hires in the program participate in the Transitioning From College to Corporate training. In addition, the program should be improved based on participant feedback.

Communication Strategy
The evaluation results and ROI process were presented by the program designers to the greater organization development consulting (ODC) group. The presentation generated questions and interest. While this group has been introduced to the ROI concepts and has seen a tangible example, they need to put ROI into practice.

GSC is beginning an ROI task force in ODC with the goal of extending ROI process knowledge and capability; streamlining the process through simple, reusable plans and templates; and creating best practices for reporting back to the business. The task force has solicited volunteers and received buy-in by organization development leadership.

Lessons Learned
As a result of completing this evaluation study, the OTD team that developed the program was validated in the value that they bring to the business. This was one of the first ROI studies done by the team, and being able to quantify the value to business executives was powerful in justifying the department’s expense. Initially, the OTD management team was resistant to conducting an ROI analysis due to the time and cost required to evaluate the program at this level of detail. However, the resulting data was a powerful tool with executives, and so it was embraced. Often it is difficult to prove the value of soft skills training, particularly when it comes at such a large expense. This tool allows conservative demonstration that real business value is created. This is important to the sustainability of the team and the continued support by the business executives we support.

The ROI process is now standard for the GSC College Hire Transitioning From College to Corporate training.
Questions for Discussion

1. Is this case study credible? Explain.
2. What is your assessment of using the results from 16 participants and the cost from 32?
3. How can this type of process be used to build support for programs in the future?
4. How can the outcomes of soft skill programs be linked to your organization’s business outcomes?
5. Discuss the strengths of this study and opportunities for improvements.

ABOUT THE AUTHOR

Jessica Kriegel is a researcher and expert in organizational culture. She is the author of Unfairly Labeled: How Your Workplace Can Benefit From Ditching Generational Stereotypes. She also speaks on the topic of culture transformation and generational dynamics nationally. She acts as an advisor and strategist in matters of cultural alignment. In 2013 she completed her doctoral degree in educational leadership and management with a specialization in human resources development from Drexel University. She also has an MBA in international business, which she completed in 2008. Jessica is based in Sacramento and represented by the Washington Speakers Bureau.
Combining Motivational Forces to Deliver Team Performance and a Positive ROI

National Crushed Stone

Jack J. Phillips, Patti P. Phillips, and Rebecca Ray

This case was prepared to serve as a basis for discussion rather than as an illustration of either effective or ineffective administrative and management practices. Names, dates, places, and data may have been disguised at the request of the author or organization.

BACKGROUND RESEARCH AND THEORY
Motivation is the key to the success of talent. Exploring various ways to motivate employees and teams have been at the forefront of behavioral research. While there are many to motivate teams to deliver superior performance, this case study focuses on the combination of three approaches. First is the use of an improved engagement system to provide additional motivation for performance. The second focuses on team development and cohesiveness to produce superior performance. Finally, the use of monetary incentives for recognition and achievement becomes a powerful motivator, when based on team gains that they can control. This case study explores how the use of these concepts drive superior team performance in an unlikely setting.

Engagement
It’s nearly impossible to be unaware of the importance of employee engagement in organizations. Employee engagement is a process that has built on a host of previous approaches to improve the employee experience. It began with employee satisfaction
as organizations focused on how to make employees “happy” with their pay, job, supervisor, co-workers, and career. Although this was important for attraction and retention of employees, it did not necessarily motivate employees to improve the organization and drive performance. The concept morphed into organizational commitment, which focused on getting employees more attached to, concerned about, and identified with the organization. This was further refined into employee engagement, which was intended to have employees more involved in the decisions affecting their work, attached to goals for which they are accountable; take more responsibility for their work and the outcomes; and share information and work as a team. In essence, employee engagement provides the motivational effect that drives productivity, quality, safety, sales, and client satisfaction, to name a few.

**Gainsharing**

The gainsharing process is an incentive designed for the team. Gainsharing is a system of management that includes a financial measurement and feedback system to monitor company performance and distribute those gains in the form of bonuses to employees. It’s also a focused involvement system to eliminate barriers of improved performance. As performance improves, employees share financially in the gain.

Gainsharing systems vary widely in terms of their design and the degree to which they are integrated into the regular operating systems of the company. Of course, the more they are integrated into the day-to-day operational systems, the more commitment there is to the gainsharing system. And, the more commitment there is to achieving overall business goals (including the gainsharing goals), the better the resulting performance is.

**Motivation**

Motivation has been a subject of exploration in research for more than a century, with much of it developed and refined in the 1960s. Motivational factors can vary widely depending on the nature of the work, the experience of the employees, the type of organization, and the structure of the organization. Depending on which research you review, the motivational factors will have some differences, but will usually share some common themes:

- providing recognition for accomplishment
- encouraging achievement at work
- treating employees with respect
- empowering employees to take action
- providing feedback and coaching
- building trust with employees
- involving employees in decisions
- setting clear expectations
- providing routine and transparent communication.
Focus on Teams
Most organizations try to have an integrated team, and the employees are often called team members. Teams are critical because team members support one another to produce more than the sum of the individuals. However, for teams to work properly, there must be respect for the team and shared responsibilities for the team, and information shared within it. Truly, the focus is for the good of the team and not necessarily for the good of the individuals, as is widely displayed among team sports.

This case study is based on a project that combines the elements of an improved engagement system that focuses on team bonus with a process called gainsharing, and builds on the motivation aspects to produce superior performance.

ORGANIZATIONAL SETTING AND SOLUTION
The crushed stone industry is a very competitive one in which profit margins are narrow and cost control is everything. Companies in this industry are constantly seeking ways to control costs to gain a competitive advantage in the marketplace. National Crushed Stone (NCS) is one of the leading firms in the crushed stone industry, with more than 300 locations in several geographic areas (Phillips et al. 2019).

Each crushed stone plant offers a narrowly defined product mix, consisting of various sizes of crushed stone used in construction projects such as roads, bridges, and large buildings. NCS takes pride in its employee relations programs and usually has a stable workforce, although turnover can be a problem in the U.S. labor markets. A typical plant is staffed with approximately 20 employees and is managed by a plant manager. Employees perform a variety of jobs, from entry-level labor duties to skilled mechanic positions involving equipment repair. They are assigned to one of 12 different job titles within a plant. Each job has a distinctive pay rate, and employees usually work in their specific job classifications all day.

Engagement, Motivation, and Gainsharing at NCS
There are some concerns that the costs at NCS were not as low as they could be, although they were among the lowest in the industry. Some costs are fixed and not under the control of the quarry team. The suggestion was that if employees are really engaged in quarry operations, taking a strong interest in maintaining the equipment, taking care of the equipment, working smarter, and operating in an efficient way, the costs could be lower, perhaps even in significant amounts.

The operations vice president is proud of his ability to maintain efficient plants and was skeptical when the HR executive approached him about having employees more “engaged,” but he was willing to explore the concept. The HR team conducted a simple employee engagement survey, the results of which are shown in Table 12-1.

The scores were very low on the six critical statements (questions 1, 2, 5, 8, 9, and 10). To a certain extent, this confirmed that there was a lack of engagement. The HR executive proposed that if employees become more engaged, they will take more
interest in their jobs, be more efficient, take care of equipment, take care of the plant, and even make suggestions for improvements.

**TABLE 12-1. ENGAGEMENT SURVEY ISSUES**

<table>
<thead>
<tr>
<th>Topic</th>
<th>Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. My suggestions to improve work are welcomed.</td>
<td>2.15</td>
</tr>
<tr>
<td>2. I accept responsibility for my work.</td>
<td>2.19</td>
</tr>
<tr>
<td>3. I have great co-workers at work.</td>
<td>3.91</td>
</tr>
<tr>
<td>4. My work expectations are clear.</td>
<td>3.22</td>
</tr>
<tr>
<td>5. I routinely receive recognition for my good work.</td>
<td>2.15</td>
</tr>
<tr>
<td>6. My performance is often discussed.</td>
<td>2.61</td>
</tr>
<tr>
<td>7. I have opportunities to learn at work.</td>
<td>3.78</td>
</tr>
<tr>
<td>8. I am encouraged to do my best.</td>
<td>2.32</td>
</tr>
<tr>
<td>9. I am involved in decisions at work.</td>
<td>2.05</td>
</tr>
<tr>
<td>10. I have everything I need to do a good job.</td>
<td>2.77</td>
</tr>
</tbody>
</table>

Five-point scale: 1 = Not at all, 5 = Very much

The plant managers also viewed this approach with some skepticism because they were not sure that the program would make a difference, at least not enough to overcome the cost of the program. Many of them came from old-line management, in which the boss was the boss and everyone else took the orders. NCS was trying to change that culture by bringing in more open-minded managers who had college degrees and believed in participatory management and having employees involved in the process.

In early discussions, it was suggested that a portion of the cost savings be shared with the employees. There is no better way to recognize the efforts of employees than to reward them with a bonus that is tied to their performance. Using a concept called gainsharing, the decision was made to share half the gains in cost reductions with employees, providing a bonus for becoming more engaged, taking actions, and exploring options for lower costs. This concept has been successful in several areas, but until this study, there was no indication that it had been used with rock quarries. Fortunately, they were open to trying the process to see if it worked; if successful, the bonus could be significant.

**EVALUATION PLANNING**

Because this program represented a significant change in the way employees worked and were rewarded, the top executives wanted a thorough evaluation, including an ROI calculation. The ROI Methodology, the most used evaluation system in the world, was used to evaluate the program.
Planning the evaluation is a key step in measuring the effectiveness of a successful implementation. Detailed planning includes determining the methods for data collection, isolating the effects of the new system, converting data to monetary values, and deciding which costs to capture. The two planning documents used in this analysis are presented. Table 12-2 shows the data collection plan, which includes collecting data for Level 1 (reaction to the system), Level 2 (learning how the system works), Level 3 (application of the system), and Level 4 (business impact). It also shows the specific data collection methods and the timing for data collection, as well as defining the responsibilities. Table 12-3 presents the plan for the ROI analysis, which includes detailing how the effects of the system will be isolated from other influences and how the data will be converted to monetary values. In addition, the specific cost categories of the program are detailed, along with other important issues concerning the overall evaluation plan.

Control Group Selection
Selecting specific plants to use in a control group represented a challenging issue. Although as many as 30 variables can influence the performance of a crushed stone plant, only a small group of variables could be used, on a practical basis, to select the two groups. The area operations managers of the six selected locations identified the top six variables as:
  - the size of the plant, in terms of annual production
  - the age of the plant, which is already a routinely monitored variable; older equipment can cause inefficiencies in production
  - previous plant cost
  - previous plant turnover
  - previous plant unplanned absenteeism
  - staffing level.

Engagement Redefined
The engagement survey, administered as part of the initial needs assessment, was the beginning point to determine what types of issues should be addressed. After much input from the plant managers, senior executives, and employees, coupled with a review of the literature on engagement, a new definition of engagement was developed, as shown in Table 12-4. This breaks down the process to achieve results with engagement by first detailing the six items employees need from their jobs. Next, the five items of what employees must actually see and experience in the work setting are identified. More importantly, it identifies the seven items that employees must do as they take a more active role and make some improvements leading to the desired impact. This initial list was a starting point that showed where adjustments needed to be made.
## TABLE 12-2. DATA COLLECTION PLAN

<table>
<thead>
<tr>
<th>Level</th>
<th>Broad Program Objectives</th>
<th>Measures</th>
<th>Data Collection Methods</th>
<th>Data Sources</th>
</tr>
</thead>
</table>
| 1. Reaction | • Relevance of new system to the work  
  • Importance of new system to NCS  
  • Importance of new system to my success  
  • Motivational effect of new system  
  • Intent to use new system | • Questionnaire (2 pages) | • End of initial meeting about new system | • HR representative |
| 2. Learning | • Engagement concepts  
  • Job responsibilities change  
  • Brainstorming process  
  • Gainsharing fundamentals  
  • How the system works | • Objective test: True-False/ Multiple-Choice (15 items)  
  • 70 percent success | • End of initial meeting about new system | • HR representative |
| 3. Application | • Increased engagement  
  • Increased participants  
  • More responsibilities | • Survey to employees  
  • Questionnaire to plant managers/employees | • 3 months after implementation | • HR representative  
  • External consultant |
| 4. Impact | • Reduce variable costs per ton  
  • Reduce employee turnover  
  • Reduce absenteeism | • Monitor records | • 6 months and 1 year after implementation | • HR representative  
  • External consultant |
<p>| 5. ROI | <strong>ROI Target:</strong> at least 25% | | | |</p>
<table>
<thead>
<tr>
<th>Data Items</th>
<th>Methods for Isolating the Effects of the Program</th>
<th>Methods of Converting Data to Monetary Values</th>
<th>Cost Categories</th>
<th>Intangible Benefits</th>
<th>Other Influences/Issues</th>
<th>Communication Targets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost per Ton</td>
<td>Control group arrangement</td>
<td>Direct conversion-cost savings</td>
<td>• Needs assessment</td>
<td>• Job satisfaction</td>
<td>• Avoid peak season, if possible</td>
<td>• Employees</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Development</td>
<td>• Teamwork</td>
<td>• No communication with control group</td>
<td>• Plant managers</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Administration</td>
<td>• Customer satisfaction</td>
<td>• Watch for Hawthorne Effect</td>
<td>• Area operation managers</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Plant manager time</td>
<td>• Customer complaints</td>
<td></td>
<td>• Production manager</td>
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<td></td>
<td></td>
<td></td>
<td>• Employee time</td>
<td>• Quality</td>
<td></td>
<td>• Senior executives</td>
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<td></td>
<td></td>
<td>• Training/Meetings</td>
<td>• Downtime</td>
<td></td>
<td>• Other plant managers</td>
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<td>• Materials</td>
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<td>• HR staff</td>
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<td>• Plant manager workshop</td>
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<td>• Bonus pay</td>
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<td></td>
<td>• Evaluation</td>
<td></td>
<td></td>
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<tr>
<td>Employee Turnover</td>
<td>Control group arrangement</td>
<td>Industry data from study, adjusted for company</td>
<td>• Needs assessment</td>
<td>• Job satisfaction</td>
<td></td>
<td>• Employees</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Development</td>
<td>• Teamwork</td>
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<td>• Plant managers</td>
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<td></td>
<td>• Administration</td>
<td>• Customer satisfaction</td>
<td></td>
<td>• Area operation managers</td>
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<td>• Plant manager time</td>
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<td>• Production manager</td>
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<td>• Employee time</td>
<td>• Quality</td>
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<td>• Senior executives</td>
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<td>• Training/Meetings</td>
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<td></td>
<td></td>
<td></td>
<td>• Evaluation</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Absenteeism</td>
<td>Control group arrangement</td>
<td>Estimate from the HR team</td>
<td>• Needs assessment</td>
<td>• Job satisfaction</td>
<td></td>
<td>• Employees</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Development</td>
<td>• Teamwork</td>
<td></td>
<td>• Plant managers</td>
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<td>• Area operation managers</td>
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<td>• Bonus pay</td>
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<td></td>
<td></td>
<td></td>
<td>• Evaluation</td>
<td></td>
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</tr>
</tbody>
</table>
TABLE 12-4. ENGAGEMENT DEFINED

<table>
<thead>
<tr>
<th>What Employees Need</th>
<th>What Employees Must See</th>
<th>What Employees Must Do</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Opportunities to grow</td>
<td>• Routine feedback from managers</td>
<td>• Take responsibility for results</td>
</tr>
<tr>
<td>• Increases in pay in proportion to contribution</td>
<td>• Their future in the organization</td>
<td>• Use unique talents to make a contribution</td>
</tr>
<tr>
<td>• Recognition for the good work they do</td>
<td>• Learning opportunities on the job</td>
<td>• Take more active roles in decisions</td>
</tr>
<tr>
<td>• Appreciation for their work</td>
<td>• A supportive environment</td>
<td>• Offer suggestions for improvement</td>
</tr>
<tr>
<td>• Opportunities to do their best work</td>
<td>• Work that is important</td>
<td>• Collaborate more with co-workers</td>
</tr>
<tr>
<td>• Clear expectations</td>
<td></td>
<td>• Control the work and make adjustments</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Perform high-quality work</td>
</tr>
</tbody>
</table>

IMPLEMENTATION PHASES

The new system was planned for implementation in six locations that represented typical NCS plants. The complete process had several phases:

- Phase 1 was to review the cost statements with the plan to present them to the employees.
- Phase 2 involved developing potential actions that employees could take to improve each of these measures.
- Phase 3 focused on amending job responsibilities to ensure that they were written in a manner that would cause employees to assume more responsibility.
- Phase 4 involved plant meetings for reviewing the cost data, comparing it with the budget, and then highlighting critical areas where focus is needed.
- Phase 5 involved the design of the gainsharing process. The design essentially follows these rules:
  » The budget becomes the target for employees.
  » As employees come under the budget, they receive half the savings, to be paid quarterly.
  » For the next year, the new target is the previous budget plus a small amount for inflation, using the producer price index as the measurement for adjusting the budget.
- Phase 6 was the plant managers’ one-day workshop for the six plant managers involved in this pilot group. This workshop taught them the concepts of engagement, their roles in the process, how their jobs are shifting, how the process works, and the gainsharing rewards for everyone.
- Phase 7 involved an introductory two-hour training session with employees to introduce the process, show how it works, and explain their particular role in the process.


PROGRAM RESULTS

Reaction and Learning
Employees must learn about the new system and react favorably to it. Although a positive reaction was assumed, employee feedback was obtained, using a one-page questionnaire. This evaluation was considered necessary because of potential skepticism from management and the sensitivity of making adjustments to the job and adding a bonus. The questionnaire captured specific reaction in five areas, as shown in Table 12-5, which also includes reactions from the plant manager on the same set of measures. Both employees and plant managers provided reactions that exceeded the expectations, which were critical for success later.

<table>
<thead>
<tr>
<th>Topic</th>
<th>Rating (Manager)</th>
<th>Rating (Employees)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Relevance of the engagement system to the work of employees</td>
<td>4.00</td>
<td>4.06</td>
</tr>
<tr>
<td>2. The importance of this system to NCS</td>
<td>4.20</td>
<td>4.22</td>
</tr>
<tr>
<td>3. The importance of this system to employee success</td>
<td>4.40</td>
<td>4.61</td>
</tr>
<tr>
<td>4. The motivational effect of the system</td>
<td>4.40</td>
<td>4.74</td>
</tr>
<tr>
<td>5. The intent to use the system properly</td>
<td>4.20</td>
<td>4.35</td>
</tr>
</tbody>
</table>

Five-point scale: 1 = Not at all, 5 = Very much

For learning, a simple true/false and multiple-choice test was administered, using three questions about each part, for a total of 15 points for perfect scores. Table 12-6 shows the results for this level from employees (11.2), which exceeded the goal of 70 percent minimum score.

<table>
<thead>
<tr>
<th>Topic</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>The engagement concepts</td>
<td>2.2</td>
</tr>
<tr>
<td>Job description and responsibilities changes</td>
<td>2.1</td>
</tr>
<tr>
<td>Brainstorming process</td>
<td>1.8</td>
</tr>
<tr>
<td>Gainsharing fundamentals</td>
<td>2.6</td>
</tr>
<tr>
<td>How the system works</td>
<td>2.5</td>
</tr>
<tr>
<td>Total</td>
<td>11.2</td>
</tr>
</tbody>
</table>

Five-point scale: 1 = Not at all, 5 = Very much

Application and Use
One of the most important parts of the study is to understand clearly if the employees are more engaged. A revised engagement instrument, based on the engagement issues defined in Table 12-4, was administered just before the program was launched with
the six pilot plants. Then a post-survey was administered three months later. The results are presented in Table 12-7. Overall the improvements were significant and impressive.

**TABLE 12-7. ENGAGEMENT SURVEY RESULTS**

<table>
<thead>
<tr>
<th>Engagement Issue</th>
<th>Pre-Survey</th>
<th>Post-Survey</th>
</tr>
</thead>
<tbody>
<tr>
<td>What employees need (six questions)</td>
<td>3.19</td>
<td>4.09</td>
</tr>
<tr>
<td>What employees must see (five questions)</td>
<td>2.92</td>
<td>4.27</td>
</tr>
<tr>
<td>What employees must do (seven questions)</td>
<td>3.05</td>
<td>4.52</td>
</tr>
</tbody>
</table>

*Five-point Scale: 1=Not at all, 5=Very much*

It is also important to capture data about how employees are participating in meetings, taking a more responsible role, accepting accountability for results, and sharing information freely with others. Data was collected from the employees and their plant managers. Data from the managers was based on observation, whereas the data from the employees was collected using a questionnaire to determine their perception of what they were actually doing. Table 12-8 shows the Level 3 application data taken from both employees and the plant manager.

**TABLE 12-8. ENGAGEMENT IMPLEMENTATION**

<table>
<thead>
<tr>
<th>System Issue</th>
<th>Rating (Employee)</th>
<th>Rating (Manager)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Using engagement concepts</td>
<td>4.12</td>
<td>4.20</td>
</tr>
<tr>
<td>2. Participating in meetings</td>
<td>4.22</td>
<td>3.40</td>
</tr>
<tr>
<td>3. Taking a more responsible role</td>
<td>4.70</td>
<td>3.60</td>
</tr>
<tr>
<td>4. Accepting accountability for results</td>
<td>4.78</td>
<td>3.60</td>
</tr>
<tr>
<td>5. Sharing information freely</td>
<td>4.47</td>
<td>4.20</td>
</tr>
<tr>
<td>6. Using the system properly</td>
<td>4.17</td>
<td>4.20</td>
</tr>
</tbody>
</table>

*Five-point scale: 1 = Not at all, 5 = Very much*

**Business Impact**

It is important to clearly understand the impact of the program. The cost per ton for each cost category was monitored, along with turnover and absenteeism. Table 12-9 shows the cost per ton for before and after the program. It also shows the turnover rate, which is reported monthly but annualized, and the absenteeism rate, which is the percent of individuals absent on any given day. This is restricted to the unplanned absenteeism category.

The data showed a dramatic improvement in impact caused by the program, with the exception in total employment and production, which remained similar between the control and pilot plants as desired. The cost per ton for the variable costs showed a dramatic improvement for the experimental plants, with a reduction of 31 cents per ton. However, because there was also a five cent per ton reduction in the plants...
without the system, this five cent per ton must be subtracted from the 31 cents to yield a 26 cent improvement.

The same approach was taken for volunteer turnover. The experimental plants saw a significant reduction from 18 percent down to 12 percent. Because the control plants also saw a 1 percent reduction, that 1 percent is subtracted. Thus, the program saw a 5 percent improvement.

Unplanned absenteeism saw a dramatic reduction from 7.4 percent to 4.2 percent for the experimental plants. There was a slight reduction (0.1 percent) in the control plant, which was also subtracted to give the overall improvement. This shows a dramatic improvement, and the method of isolation used is the best method.

From all indications, nothing unusual was happening in the six plants that could have affected results (such as a sudden market shift, weather issues, a change in plant manager, or other factors). So, it appears that these plants were matched up well and were consistent throughout the yearlong study period.

### TABLE 12-9. BUSINESS IMPACT RESULTS

<table>
<thead>
<tr>
<th></th>
<th>Before</th>
<th>After</th>
<th>Before</th>
<th>After</th>
<th>Before</th>
<th>After</th>
<th>Before</th>
<th>After</th>
<th>Before</th>
<th>After</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Plants With New System</strong></td>
<td>126</td>
<td>125</td>
<td>8.5</td>
<td>8.6</td>
<td>$3.19</td>
<td>$2.88</td>
<td>18%</td>
<td>12%</td>
<td>7.4%</td>
<td>4.2%</td>
</tr>
<tr>
<td><strong>Plants Without New System</strong></td>
<td>132</td>
<td>130</td>
<td>8.9</td>
<td>8.9</td>
<td>$3.22</td>
<td>$3.17</td>
<td>19%</td>
<td>18%</td>
<td>7.8%</td>
<td>7.7%</td>
</tr>
</tbody>
</table>

### ROI RESULTS

The ROI calculation involved three steps: connecting impact data to money, tabulating the direct and indirect costs of the program, and the actual calculation. In addition, the measures not converted to money, the intangibles, must be linked to the program to include in the results.

#### Monetary Values

Converting the data to money was relatively easy in this case because the monetary values are already in the organization. Production costs are expressed in money as cents per ton, so no conversion was necessary. This is the principal measure connected with the project. The cost of turnover was available from the HR team based on several external studies. The HR data from external studies suggested that for this...
mix of employees (production workers and some skilled workers), the voluntary turnover cost would be about 50 percent of annual pay, and management agreed to this value before the system was implemented. These studies were based on having a fully loaded cost for turnover, to include recruiting, selection, and onboarding, as well as training, on the job and off the job, until the employees were up to previous levels of performance. Finally, the absenteeism cost was straightforward, and the evaluation agreed that the estimated cost from the payroll function would be calculated at $160 per day of absence. This is probably lower than the actual number, but the key is that it had agreement in advance.

There were also a few intangibles that could have been converted to money. For example, the slight reduction in the number of loads of stone that were rejected by the customer could have been attributed to the program. However, the number was small, and it would require some extra work to calculate the actual money savings because the quality team had not calculated the average cost previously. In addition, another intangible cost that could have been attributed to the program was a decrease in the amount of downtime for the entire plant. Most of the team thought that much of it was because of this program, as the employees took better care of the plant and provided better plant maintenance. However, the number was small and there was no credible monetary value for one hour of downtime. Consequently, both of these were left as intangible, as described in a later section.

**Monetary Benefits of Project**

Table 12-10 shows the calculation of the monetary benefits. The 26-cent cost per ton improvement in total production (8.6 million tons) gave a bonus pool of $2,236,000 to be split equally with employees and the company. This yielded a bonus of $9,395 annually for the employees, which was about a 22 percent bonus over their base pay. This, indeed, is a powerful motivator. In addition, it represents a huge amount of savings directly to the company’s bottom line as the monetary benefit for this program: a total of $1,118,000.

Turnover costs were calculated similarly, with this program preventing 5 percent turnover, which would annualize to yield six turnovers prevented for the company. Plugging in the value of the cost of a turnover, there was an improvement of $125,736.

Absenteeism costs were straightforward, with a 3.1 percent reduction as a result of this program. When this is multiplied by the total number of days that employees could work, this 3.1 percent absenteeism reduction accounts for 885 days prevented. When this value is multiplied by the cost of an absence, the result is $141,600. In summary, there is a total benefit of $1,385,336 for one year of this program.
Combining Motivational Forces to Deliver Team Performance and a Positive ROI

### TABLE 12-10. MONETARY BENEFITS

<table>
<thead>
<tr>
<th>Production Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>$31¢ - 5¢ = 26¢ \text{ per ton}$</td>
</tr>
<tr>
<td>$8,600,000 \text{ tons} \times 26¢ = $2,236,000 \text{ bonus pool}$</td>
</tr>
<tr>
<td>Split $= \frac{$2,236,000}{2} = $1,118,000$</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Payout to Employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>$125 - 6 = 119 \text{ eligible employees}$</td>
</tr>
<tr>
<td>$\frac{$1,118,000}{119} = $9,395 \text{ per employee}$</td>
</tr>
<tr>
<td>Benefit to employee $= 22 % \text{ bonus}$</td>
</tr>
<tr>
<td>Benefit to company $= $1,118,000$</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Turnover Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>$18% - 12% = 6% - 1% = 5%$</td>
</tr>
<tr>
<td>$119 \times 5% = 6 \text{ turnovers prevented}$</td>
</tr>
<tr>
<td>Annual salary $= $20.15 \times 2,080 = $41,912$</td>
</tr>
<tr>
<td>Cost per turnover $= 50% \text{ of annual salary} = $20,956$</td>
</tr>
<tr>
<td>Benefits $= $20,956 \times 6 = $125,736$</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Absenteeism Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>$7.4% - 4.2% = 3.2% - 0.1% = 3.1%$</td>
</tr>
<tr>
<td>Total possible days: 240 days $\times 119 = 28,560 \text{ days}$</td>
</tr>
<tr>
<td>Prevented: 28,560 $\times 3.1% = 885 \text{ days}$</td>
</tr>
<tr>
<td>Cost per day $= $160$</td>
</tr>
<tr>
<td>Benefits $= 885 \times 160 = $141,600$</td>
</tr>
<tr>
<td>Total benefits $= $1,118,000 + $125,736 + $141,600 = $1,385,336$</td>
</tr>
</tbody>
</table>
Costs
Table 12-11 shows the total cost for the program by various categories. The needs assessment cost is estimated to be $18,000, which includes the cost of the initial analysis, the first engagement survey with a sample of employees, some various meetings, literature searches, and an external consultant. When this is prorated over 6,000 employees who would be eligible for the program—and calculated systemwide for all 300 facilities—this yields $3 per employee. When multiplied by the 121 employees who were involved at the beginning of the study, the yield is $363, which is not significant because of the large number of employees who would be eligible. Proration is the right thing to do because if the program is implemented systemwide, this cost would be prorated over the entire process.

TABLE 12-11. PROGRAM COST SUMMARY

<table>
<thead>
<tr>
<th>Costs</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Needs assessment</td>
<td>$363</td>
</tr>
<tr>
<td>(prorated over all eligible employees)</td>
<td>$18,000 / 6,000 employees = 3 x 121</td>
</tr>
<tr>
<td>System development including adjusting job description</td>
<td>$605</td>
</tr>
<tr>
<td>(prorated over all eligible employees)</td>
<td>$30,000 / 6,000 = 5 x 121</td>
</tr>
<tr>
<td>Content development for workshops</td>
<td>$242</td>
</tr>
<tr>
<td>(prorated over all eligible employees)</td>
<td>$12,000 / 6,000 = 2 x 121</td>
</tr>
<tr>
<td>Engagement design</td>
<td>$202</td>
</tr>
<tr>
<td>(prorated over all eligible employees)</td>
<td>$10,000 / 6,000 = 1.67 x 121</td>
</tr>
<tr>
<td>Engagement surveys: time and travel</td>
<td>$12,440</td>
</tr>
<tr>
<td>$12,440</td>
<td></td>
</tr>
<tr>
<td>Program materials</td>
<td>$2,420</td>
</tr>
<tr>
<td>20 x 121</td>
<td></td>
</tr>
<tr>
<td>Meetings, travel, and lodging: manager and HR staff</td>
<td>$29,440</td>
</tr>
<tr>
<td>$29,440</td>
<td></td>
</tr>
<tr>
<td>Workshop facilitation and coordination: time and travel</td>
<td>$14,000</td>
</tr>
<tr>
<td>$2,000 x 7 days of facilitation, travel, and coordination</td>
<td></td>
</tr>
<tr>
<td>Facilities and refreshments</td>
<td>$7,200</td>
</tr>
<tr>
<td>72 days at $100 cost per day</td>
<td></td>
</tr>
<tr>
<td>Participants’ time: salaries plus benefits (30 percent benefits factor)</td>
<td>$44,374</td>
</tr>
<tr>
<td>14 hrs x 121 x $20.15 x 1.3</td>
<td></td>
</tr>
<tr>
<td>Salaries plus benefits</td>
<td>$5,640</td>
</tr>
<tr>
<td>20 hrs x 6 managers x $47.00/hr</td>
<td></td>
</tr>
<tr>
<td>Overhead</td>
<td>$2,000</td>
</tr>
<tr>
<td>ROI evaluation</td>
<td>$11,000</td>
</tr>
<tr>
<td>Total</td>
<td>$129,886</td>
</tr>
</tbody>
</table>

The same approach is taken for the system development cost of $30,000, which includes adjusting the job descriptions and duties, developing the gainsharing plan, and developing an entire series of meetings for the program. Content development was also accounted for through developing the workshops for the plant managers and the initial two-hour workshop for the employees. The engagement design was a redesign of the engagement survey from the original document, formatted to fit what the organization was attempting to do; it was tested and administered at two different times. The initial engagement design cost was $10,000. Both the content development and engagement design were prorated. The actual survey administration, including time and travel of the team, was $12,440. However, these costs were not prorated.

Program materials costs were small. Travel and lodging for the managers and HR staff who attended the monthly meetings at all six plants for a year made up a significant portion of the cost. The workshop facilitation and coordination for time and travel was also included. The facilities and refreshments were minimal (about $100 per meeting). Some meetings were held over breakfast, some were at lunch, and some were just during a coffee break. Another expense was the participants’ time for the meetings, including the two-hour workshop. Some would argue that this cost was already in the system (all plant-related costs should be in the system on a cost per ton basis for the variable costs). However, to be extremely credible and conservative, these costs were calculated for all the employees who were taken off production for the two-hour workshop and approximately one hour for each meeting. Finally, the plant managers’ time was included, along with a very small overhead allocation. Costs for the ROI evaluation study, which was conducted by the staff, also included the time and travel required to present the results to different groups. This totaled $129,886.

**ROI Calculation**

The benefit-cost ratio and ROI were calculated and are shown. For every dollar invested, there was $10.70 in benefits, which is extremely high by any BCR calculation. In addition, the ROI was calculated to be 967 percent, which means that for every dollar invested in this program, another $9.67 was returned after the dollar is recovered. This is significant.

\[
\text{BCR} = \frac{1,385,336}{129,886} = 10.67
\]

\[
\text{ROI (\%)} = \frac{1,385,336 - 129,886}{129,886} \times 100 = 967\%
\]

**Intangible Benefits**

Although measurable and convertible to monetary values in some cases, the intangibles were considered significant but were not used in the ROI analysis. Several intangible benefits were identified and connected to the project, including job satisfaction,
teamwork, customer satisfaction, the number of customer complaints, the number of loads of stone rejected by the customer, and the amount of plant downtime. The last two, quality of the stone and plant downtime, could possibly have been converted to money but were not because of the extra time involved.

**CONCLUSIONS**

The results are impressive, exceeding the expectations of all involved. The vice president of operations was amazed at the reduction in cost and did not think that it was possible to make that much of a difference. Armed with this initial first year of results, he made the recommendation to set the next budget at the previous level, adjusted for the producer price index. This will be the budget going forward. If the team maintains this same level of performance, their bonus will increase as the producer price index increases. If the team can further reduce costs, the bonus will be even greater. The value of this program is almost a no-brainer and shows the value of investing in engagement and motivation programs. He also made the decision to implement the gainsharing system in the other plants.

**QUESTIONS FOR DISCUSSION**

- What are the strengths of this case?
- Assess the methods of data collection.
- Assess the methods of isolating the effects of the program.
- Assess the methods of converting data to money.
- How could this study be improved?

**ABOUT THE AUTHORS**

Jack J. Phillips, PhD, a world-renowned expert on accountability, measurement, and evaluation, is chairman of ROI Institute. He provides consulting services for Fortune 500 companies and major global organizations, is author or editor of more than 100 books, and conducts workshops and presents at conferences around the world.

Patti P. Phillips, PhD, CPTD, is the CEO of ROI Institute. She helps organizations implement the ROI Methodology worldwide, provides consulting services to Fortune 500 companies, and facilitates workshops for major conferences around the world. Patti has written or contributed to more than 75 books and dozens of articles focused on measurement, evaluation, accountability, and ROI.

Rebecca Ray, PhD, is executive vice president, knowledge organization; human capital practice lead; and director of the Engagement Institute at The Conference Board. She is responsible for overall quality and the continuing integration of research and engagement efforts. Rebecca previously led a consulting practice, offering leadership assessment and development services to Fortune 500 companies and top-tier professional services firms.
Measuring ROI for Emerging Leaders Development Program

Dubai Electricity and Water Authority

Reem Alsuwaidi

Abstract

In line with achieving Dubai Electricity and Water Authority’s (DEWA) vision to be “a sustainable, innovative world-class utility,” DEWA’s learning and development team planned to conduct an emerging leaders’ development program. This program’s focus was to develop young leaders in the organization and equip them with leadership skills, competencies, and behaviors they need in the field of planning and organizing, problem solving and decision making, building teams, developing people, and driving change and strategy.

The proposed program met the following ROI Level 4 selection criteria; therefore, an impact study was conducted using the ROI Methodology.

- importance of program
- linkage to the strategic objective
- cost of the program
- life cycle of the program
- management interest in the evaluation.

Therefore, the ROI team conducted an impact study using the ROI Methodology.
BACKGROUND
Many factors led Dubai Electricity and Water Authority (DEWA) to implement a leadership development program. Contributing reasons included:

- the Dubai strategic plan 2021, which focuses on developing people
- the DEWA strategic directions toward employee development as reflected in the DEWA balanced scorecard
- the DEWA strategic objective focusing on building future leaders.

DEWA considered several leadership development programs before selecting the emerging leaders development program, which focused on developing and preparing the next generation of leaders.

Project Description
The emerging leaders development program was designed for 29 candidates. The program used nine modules and 10 coaching sessions to provide participants and the organization with these benefits:

- Provide participants with the best practices and tactics to enable them to develop as emerging leaders.
- Equip participants with vigorous leading angles: strategic thinking, influence, process, navigation, trust, respect, and commitment.
- Enable participants to examine how to be effective in the highest calling of management.

Program Design
The program consisted of nine classroom-based modules. To pass each module, each participant submitted assignments showing their application of skills on the job using real examples.

The topics for each module were:

- developing yourself as a team leader
- planning and monitoring work
- understanding change in the workplace
- communicating effectively in the workplace
- managing yourself
- understanding effective teamwork
- understanding conflict management in the workplace
- solving problems and making decisions
- understanding training and coaching in the workplace.

Ten coaching sessions were also provided based on the 360-degree feedback collected for each participant from peers, subordinates, and supervisors. Recommendations of additional development programs were made for some participants as an outcome from the coaching.
The ROI business impact study on the emerging leaders’ development program showed a positive ROI of AED 3.42 (the United Arab Emirates’ currency) for each AED spent, due to the application of leadership skills acquired as a result of the program. The program provided participants the ability to plan and monitor work, apply change management skills, communicate effectively, manage themselves and others, build an effective team, manage conflict, solve problems, make decisions, understand employees’ training needs, and coach their team members.

Improvement in skills led to a positive impact on the organization in terms of time savings, output improvement, quality improvement, cost reduction, process improvement, new initiatives, delegation of more work to direct reports, and more coaching engagements. Participants are expected to receive different career development opportunities as an additional outcome of the program.

METHODOLOGY FOR THE IMPACT STUDY

Levels of Evaluation
DEWA implemented the ROI Methodology to measure the effectiveness and the ROI of the program, as well as to identify and make changes to improve the program based on the outcomes and results from the ROI impact study.

The initial analysis took place with the coordination of both the ROI team and the learning and development team. This analysis was completed prior to designing the program and included five levels of business needs and objectives established at each level. This alignment process is shown in Figure 13-1.

FIGURE 13-1. PROGRAM ALIGNMENT

<table>
<thead>
<tr>
<th>Needs Assessments</th>
<th>Program Objectives</th>
<th>Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>5. Payoff Needs</td>
<td>ROI Objectives</td>
<td>Level 5: ROI</td>
</tr>
<tr>
<td>DEWA’s strategic direction</td>
<td>ROI of 25%</td>
<td></td>
</tr>
<tr>
<td>Business measures that needs to be improved (increase output, productivity, efficiency, and quality, and reduce cost, time)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Performance Needs</td>
<td>Application Objectives</td>
<td>Level 3: Application</td>
</tr>
<tr>
<td>Effective leadership skills</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Learning Needs</td>
<td>Learning Objectives</td>
<td>Level 2: Learning</td>
</tr>
<tr>
<td>DEWA young leaders require knowledge in how to communicate effectively, how to build effective teams, how to understand self and others, how to make decisions, how to manage change, and how to coach others</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Preference Needs</td>
<td>Reaction Objectives</td>
<td>Level 1: Reaction</td>
</tr>
<tr>
<td>Program should be relevant to DEWA’s requirement in emerging leaders, should be perceived as important for employees’ success</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Business Alignment and Forecasting | Emerging Leaders Development Program | The ROI Process Model
Objectives of the Program
The program objectives established for each level are shown in Table 13-1.

**TABLE 13-1. OBJECTIVES OF THE PROGRAM**

<table>
<thead>
<tr>
<th>ROI Level</th>
<th>Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 1. Reaction and Satisfaction</td>
<td>• Positive reaction to the program&lt;br&gt;• Achieve 70% satisfaction rate for an average of 90% participation</td>
</tr>
<tr>
<td>Level 2. Learning</td>
<td>• Learn new knowledge and skills&lt;br&gt;• Increase level of knowledge by 15%</td>
</tr>
<tr>
<td>Level 3. Application and Implementation</td>
<td>• Apply new leadership skills&lt;br&gt;• Show improvement in skills&lt;br&gt;• Identify barriers and enablers</td>
</tr>
<tr>
<td>Level 4. Business Impact</td>
<td>• Identify at least one improvement in terms of increased output, productivity, efficiency, and quality, or reduced cost, time</td>
</tr>
<tr>
<td>Level 5, ROI</td>
<td>• Achieve 25% ROI</td>
</tr>
</tbody>
</table>

ROI Process
With the needs assessment complete and the objectives created, the ROI team assigned to this project prepared an action plan, a data collection plan, and an ROI analysis plan. A formal awareness session for program participants was conducted to explain the ROI process, the requirements at each level, timing for data collection, and responsibilities.

The ROI team collected data for each level at the appropriate time, using the selected data collection tools and methods. These evaluations were prepared on a regular basis, and the following are the details for each level. During the data analysis phase, the effect of the program was isolated, data was converted to monetary value, program costs were captured, the Level 5 analysis was prepared, and the return on investment was calculated. Additionally, not only were the tangible measures highlighted and converted to monetary values, but the intangible benefits were also identified and connected to the program. At the end of the evaluation, according to the ROI Methodology (Guiding Principle 12), the results were communicated to different stakeholders through different channels, including recommendations for improving the program outcomes in the future.

Data Collection and ROI Analysis Plan
A clear data collection plan and data analysis plan were prepared for the emerging leaders’ development program during the evaluation planning. These two documents were completed in coordination with the learning and development team and highlighted the program objectives and expected outcomes. The data collection plan covers objectives with their targets, measures, data collection methods, sources of data or main data providers, a timeline, and responsibilities (Table 13-2).
The data analysis plan requires identifying methods for isolating the program effects on data items, methods of converting data to monetary value, different cost categories, intangible benefits, identifying the communication targets for the final results, other influences, issues during the application, and any other comments for improvement (Table 13-3).

**Isolating the Effects of the Program**

To ensure the credibility of the study, the team selected participants’ estimates for isolating the effects of the emerging leaders’ development program. Because estimates may be biased and not always accurate, the participants were asked to provide a confidence percentage to adjust the estimate and reduce errors. The participants were also asked to list other factors that may have contributed to the improvements outside of this program. These are Guiding Principles 5 and 7 of the ROI Methodology.

**Converting Data to Monetary Values**

When participants submit Level 4 business measures, they specify whether the improvement falls under output, costs, time, or quality. Based on each measure, additional information is required to convert data to monetary values. Some of the techniques available to convert data to monetary values are standard values, wages plus employee benefits, historical cost, internal or external expert estimates, an external database, participants’ estimates, and supervisors’ and managers’ estimates.

**Assumptions (Guiding Principles)**

The guiding principles provided the direction for the impact study. Here are the guiding principles used most during this study:

1. When conducting a higher-level evaluation, collect data at lower levels.
2. When collecting and analyzing data, use only the most credible sources.
3. Use at least one method to isolate the effects of a program.
4. Adjust estimates of improvement for potential errors of estimation.
5. Avoid the use of extreme data items and unsupported claims when calculating ROI.
6. Use only the first year of annual benefits in ROI analysis of short-term solutions.
7. Fully load all costs of a solution, project, or program when analyzing ROI.
8. Communicate the results of the ROI Methodology to all key stakeholders.
<table>
<thead>
<tr>
<th>Level</th>
<th>Broad Program Objectives</th>
<th>Measures</th>
<th>Data Collection Methods</th>
<th>Data Sources</th>
<th>Timing</th>
<th>Responsibilities</th>
</tr>
</thead>
</table>
| 1. Reaction | • Participants will have a positive reaction to the program  
  • Coaching program will be perceived as important to their career success and recommended to others | • 70% satisfaction rate will be given on content, lecturer, and venue  
  • Average 4 out of 5 on 1-5 rating scale | • End of program feedback survey  
  • Coaching feedback questionnaire  
  • 360-degree (pre-coaching sessions) | • Participants | • At the end of each module  
  • End of last coaching session | • ROI team |
| 2. Learning | • Communicating effectively in the workplace  
  • Developing yourself as a team leader  
  • Managing yourself  
  • Understanding effective teamwork  
  • Planning and monitoring work  
  • Understanding change in the workplace  
  • Solving problems and making decisions  
  • Understanding conflict management in the workplace  
  • Understanding training and coaching in the workplace  
  • Understanding self-strength and weaknesses  
  • Converting feedback into action | • Achieve passing score in all assignments  
  • Increase level of knowledge by 15% | • Post-program assignments  
  • Pre- and post-assessment questionnaire | • Participants  
  • Coach | • End of each module  
  • Before and after each module | • Facilitator  
  • ROI team |
### 3. Application
- Participants would implement leadership skills back on the job with their team members and other departments
- Show improvement in skills
- Identify barriers and enablers

- Report the frequency and the effectiveness of skills application by the participant and direct supervisor
- Report barriers and enablers

- 360-degree (post-coaching sessions)
- Questionnaire
- Action plans

- Participants
- Direct supervisor
- Coach

- 3 months after the program

- ROI team

### 4. Impact
- Identify at least one improvement in terms of increased output, productivity, efficiency, and quality, or reduced cost, time

- Different work unit measures

- Action plans
- Performance monitoring

- Participant
- Department records

- 6 months after the program

- ROI team

### 5. ROI
- Achieve 25% ROI

- Participant
- Department records

- ROI team

**Comments:**
<table>
<thead>
<tr>
<th>Data Items (Usually Level 4)</th>
<th>Methods for Isolating the Effects of the Program/Process</th>
<th>Methods of Converting Data to Monetary Values</th>
<th>Cost Categories</th>
<th>Intangible Benefits</th>
<th>Communication Targets for Final Report</th>
<th>Other Influences/Issues During Application</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Varies based on measures selected</td>
<td>Participants estimate</td>
<td>• Participants’ estimate</td>
<td>• Needs assessment</td>
<td>• Employee loyalty</td>
<td>• Senior management</td>
<td>Finding a suitable timing for meetings with some of the participants, due to workload and busy schedules. The participant list was a mix of admin and technical employees.</td>
<td>High response rate is required</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Standard values</td>
<td>• Coordination with staff and facilitator</td>
<td>• Job satisfaction</td>
<td>• Managers and supervisors</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Total program fees</td>
<td>• Increase confidence</td>
<td>• L&amp;D staff</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Coaching fees</td>
<td>• Setting goals and objectives</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Participants’ salaries and other benefits (during training)</td>
<td>• Follow-up</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Evaluation process cost</td>
<td>• Increase in job effectiveness</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• Implementation of new ideas</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• Successful completion of projects</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• Setting goals and objectives</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Employee Participation in Evaluation
Over the course of the evaluation efforts, the ROI team gathered more than 70 percent participation across most of the levels. To ensure high participation, the ROI team used these techniques:

1. Conduct an awareness session for participants prior to the program and explain the ROI process, levels, and requirements.
2. Explain why data is collected at each level and how it will be used.
3. Explain who will be viewing the data and what type of data will be communicated.
4. Keep surveys, questionnaires, and other tools as simple as possible.
5. Explain that data will be presented to stakeholders without participant details, because those are kept confidential.
6. Follow up with participants and send reminders to each unit and each level to ensure a high level of participation.

The percentage of participation in ROI levels for the emerging leaders’ development program is shown in Table 13-4.

<table>
<thead>
<tr>
<th>Modules</th>
<th>Level 1</th>
<th>Level 2</th>
<th>Level 3 (participant)</th>
<th>Level 3 (supervisor)</th>
<th>Level 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>100%</td>
<td>95%</td>
<td>97%</td>
<td>62%</td>
<td>100%</td>
</tr>
<tr>
<td>2</td>
<td>100%</td>
<td>100%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 and 4</td>
<td>100%</td>
<td>84%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>96%</td>
<td>91%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>96%</td>
<td>79%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>100%</td>
<td>81%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>100%</td>
<td>72%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>89%</td>
<td>86%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

RESULTS
The ROI team collected data using surveys, assignments, questionnaires, 360-degree feedback, meetings, performance follow-up, and one-on-one meetings.

Reaction
Because the program design consisted of nine modules on different topics with different lecturers, the ROI team requested that participants submit satisfaction surveys per module to ensure the accuracy of information. Once the full program was completed, the team calculated an overall satisfaction result.

Survey requests were not distributed by the vendor or lecturer to ensure that the feedback provided reflected reality. Survey requests were forwarded directly to each participant’s email.
The team Level 1 survey questions were designed to measure the participants’ satisfaction in three dimensions—program content, lecturer, and logistics—using a five-point scale, where 1 is “poor” and 5 is “excellent.” The ROI team sought at least a 70 percent overall satisfaction result for the program to consider it a success. Fortunately, the overall satisfaction rate for the program was 76 percent. Drilling down to the three dimensions, the team found satisfaction rates of 75 percent for the content, 78 percent for the lecturer, and 74 percent for the logistics (Figure 13-2).

**Learning**

Pre- and post-assessment questionnaires were designed per module, referring to each program’s outline and objectives and using a five-point scale, where 1 is “poor” and 5 is “excellent.” The pre-assessment questionnaires measured the level of knowledge the participants had in the topics that would be covered in the program, while the post-assessment measured the level of learning on the topics that were covered in the program.

DEWA targeted an improvement of 15 percentage points in the level of knowledge as a result of attending the program. The pre-program assessment found an average score of 64 percent, and after the program it rose to 81 percent. The results show an improvement of 17 percentage points in knowledge (Figure 13-3).

**FIGURE 13-2. OVERALL PROGRAM LEVEL 1 RESULT**

<table>
<thead>
<tr>
<th></th>
<th>Content</th>
<th>Lecturer</th>
<th>Logistics</th>
<th>Overall Satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage</td>
<td>75%</td>
<td>78%</td>
<td>74%</td>
<td>76%</td>
</tr>
</tbody>
</table>

Emerging Leaders’ Development Program
Questions 2, 3, and 4 in the first part of the post-assessment questionnaire are the key questions to move forward to Level 3. The target is a four out of five rating. The response rates are shown by question in Figure 13-4:

- Question 2: To what extent have you acquired new skills or knowledge from the program?
- Question 3: To what extent have your existing skills been improved?
- Question 4: To what extent do you think you’ll apply the skills on the job?

In addition, to assess learning transfer, the program evaluator issued assignments per module. Passing the assignment was one of the requirements. The team conducted 360-degree surveys pre- and post-program, with the pre-feedback results used as an input for the coaching.
Application
To measure the level of skills implementation, the ROI team sent out two different questionnaires three months after the program completion day, one to the participants and one to their direct supervisors. The questionnaire used a five-point scale, where 1 is “poor” and 5 is “excellent.” Results are shown in Figure 13-5 and include:

- The scores showed that the participants have applied what they learned from the program and have shown a performance improvement of 80 percent, according to their supervisors’ observations on the job.
- The scores showed that the participants have applied what they learned from the program and have shown a 75 percent improvement in their job performance after attending the program.
- Question 5 in both questionnaires is the key to move forward to Level 4. The target is a rating of four out of five, as shown in Figure 13-6.
  » For supervisors, question 5 was, “To what extent does the participant’s skills application have a positive influence on the job?” Supervisors assigned a rating of 4.16 to this question.
  » For participants, question 5 was, “To what extent does your skills application have a positive influence on the job?” Participants assigned a rating of 4.03 to this question.

FIGURE 13-5. LEVEL 3 APPLICATION RESULTS
Minor barriers were highlighted and addressed by employees. However, they managed to overcome some of those barriers, which led to positive ROI. The enablers had a bigger impact in supporting employees as they implemented their new leadership skills.

**Impact**
Participants achieved positive results in terms of reducing processing time, rework and error rates, complaint rates, and operating costs, as well as improving self- and team productivity, by implementing these skills:

- coaching their team members
- empowering the team and delegating tasks
- applying effective communication skills
- requesting feedback on supervisory skills for improvement
- applying effective negotiation skills
- effective problem solving and decision making
- developing a team based on learning styles
- effective project management
- conflict management
- effective work planning and monitoring
- prioritizing tasks
- effective time management.
The ROI team identified the program’s tangible benefits and converted the improvement in the data related to the business measures to monetary value. Converting data collected to monetary value requires different information. Table 13-5 reports the benefits for only the first year of the program, because this program is considered a short-term solution (Guiding Principle 9).

### TABLE 13-5. MONETARY BENEFITS (ISOLATED AND ADJUSTED)

<table>
<thead>
<tr>
<th>Annual Improvement (1) AED</th>
<th>Measure</th>
<th>Convert Data to Monetary Value</th>
<th>Contribution From Program (2)</th>
<th>Confidence Estimation (3)</th>
<th>Adjusted Value (1) x (2) x (3) AED</th>
</tr>
</thead>
<tbody>
<tr>
<td>128,520</td>
<td>Time (lost time)</td>
<td>Estimate</td>
<td>40%</td>
<td>80%</td>
<td>41,126</td>
</tr>
<tr>
<td>1,568,700</td>
<td>Time (process time)</td>
<td>Estimate</td>
<td>80%</td>
<td>30%</td>
<td>376,488</td>
</tr>
<tr>
<td>719,880</td>
<td>Time (process time)</td>
<td>Estimate</td>
<td>50%</td>
<td>100%</td>
<td>359,940</td>
</tr>
<tr>
<td>454,465</td>
<td>Time (process time)</td>
<td>Estimate</td>
<td>50%</td>
<td>80%</td>
<td>181,786</td>
</tr>
<tr>
<td>122,351</td>
<td>Time (lost time)</td>
<td>Estimate</td>
<td>90%</td>
<td>100%</td>
<td>110,115.90</td>
</tr>
<tr>
<td>128,520</td>
<td>Time (time to proficiency)</td>
<td>Estimate</td>
<td>20%</td>
<td>85%</td>
<td>21,848</td>
</tr>
<tr>
<td>23,817.96</td>
<td>Time (meeting schedules)</td>
<td>Estimate</td>
<td>80%</td>
<td>100%</td>
<td>19,054</td>
</tr>
<tr>
<td>66,000</td>
<td>Time (process time)</td>
<td>Estimate</td>
<td>30%</td>
<td>80%</td>
<td>15,840</td>
</tr>
<tr>
<td>7,280</td>
<td>Time (process time)</td>
<td>Estimate</td>
<td>65%</td>
<td>90%</td>
<td>4,258</td>
</tr>
<tr>
<td>2,295</td>
<td>Time (time to proficiency)</td>
<td>Estimate</td>
<td>70%</td>
<td>70%</td>
<td>1,124.55</td>
</tr>
<tr>
<td>991,200</td>
<td>Time (process time)</td>
<td>Estimate</td>
<td>42%</td>
<td>90%</td>
<td>374,673.60</td>
</tr>
<tr>
<td>1,187,025</td>
<td>Time (process time)</td>
<td>Estimate</td>
<td>80%</td>
<td>100%</td>
<td>949,620</td>
</tr>
<tr>
<td>197,400</td>
<td>Output (productivity)</td>
<td>Standard</td>
<td>80%</td>
<td>100%</td>
<td>157,920</td>
</tr>
<tr>
<td>113,400</td>
<td>Output (productivity)</td>
<td>Standard</td>
<td>50%</td>
<td>100%</td>
<td>56,700</td>
</tr>
<tr>
<td>163,380</td>
<td>Output (productivity)</td>
<td>Standard</td>
<td>67%</td>
<td>80%</td>
<td>87,571.68</td>
</tr>
<tr>
<td>268,800</td>
<td>Output (productivity)</td>
<td>Standard</td>
<td>100%</td>
<td>100%</td>
<td>268,800</td>
</tr>
<tr>
<td>88,200</td>
<td>Output (productivity)</td>
<td>Standard</td>
<td>50%</td>
<td>100%</td>
<td>44,100</td>
</tr>
<tr>
<td>128,520</td>
<td>Output (productivity)</td>
<td>Standard</td>
<td>50%</td>
<td>80%</td>
<td>51,408</td>
</tr>
<tr>
<td>188,580</td>
<td>Output (productivity)</td>
<td>Standard</td>
<td>70%</td>
<td>70%</td>
<td>92,404</td>
</tr>
<tr>
<td>128,856</td>
<td>Output (productivity)</td>
<td>Standard</td>
<td>42%</td>
<td>90%</td>
<td>48,707.57</td>
</tr>
<tr>
<td>122,640</td>
<td>Output (productivity)</td>
<td>Standard</td>
<td>100%</td>
<td>100%</td>
<td>122,640</td>
</tr>
<tr>
<td>50,400</td>
<td>Output (productivity)</td>
<td>Standard</td>
<td>20%</td>
<td>85%</td>
<td>8,568</td>
</tr>
<tr>
<td>263,025</td>
<td>Quality (rework required)</td>
<td>Standard</td>
<td>67%</td>
<td>80%</td>
<td>140,981</td>
</tr>
<tr>
<td>220,003.64</td>
<td>Quality (error rates)</td>
<td>Standard</td>
<td>58%</td>
<td>80%</td>
<td>70,502</td>
</tr>
<tr>
<td>293,760</td>
<td>Quality (error rates)</td>
<td>Standard</td>
<td>30%</td>
<td>80%</td>
<td>70,052</td>
</tr>
<tr>
<td>70,290</td>
<td>Quality (complaints)</td>
<td>Standard</td>
<td>70%</td>
<td>70%</td>
<td>34,442</td>
</tr>
<tr>
<td>Annual Improvement (1) AED</td>
<td>Measure</td>
<td>Convert Data to Monetary Value</td>
<td>Contribution From Program (2)</td>
<td>Confidence Estimation (3)</td>
<td>Adjusted Value (1 x (2 x (3) AED)</td>
</tr>
<tr>
<td>---------------------------</td>
<td>---------------------------</td>
<td>-------------------------------</td>
<td>------------------------------</td>
<td>----------------------------</td>
<td>----------------------------------</td>
</tr>
<tr>
<td>50,960</td>
<td>Quality (errors)</td>
<td>Standard</td>
<td>85%</td>
<td>90%</td>
<td>38,984</td>
</tr>
<tr>
<td>100,980</td>
<td>Quality (complaints)</td>
<td>Standard</td>
<td>30%</td>
<td>80%</td>
<td>24,235</td>
</tr>
<tr>
<td>58,942.50</td>
<td>Quality (complaints)</td>
<td>Standard</td>
<td>60%</td>
<td>88%</td>
<td>31,121.64</td>
</tr>
<tr>
<td>25,800</td>
<td>Quality (rework required)</td>
<td>Standard</td>
<td>20%</td>
<td>85%</td>
<td>4,386</td>
</tr>
<tr>
<td>27,090</td>
<td>Cost (operating cost)</td>
<td>Standard</td>
<td>70%</td>
<td>90%</td>
<td>17,066.70</td>
</tr>
<tr>
<td>110,754.50</td>
<td>Cost (operating cost)</td>
<td>Standard</td>
<td>27%</td>
<td>90%</td>
<td>26,913</td>
</tr>
<tr>
<td>4,035</td>
<td>Quality (complaint)</td>
<td>Standard</td>
<td>80%</td>
<td>100%</td>
<td>3,228</td>
</tr>
<tr>
<td>289,555</td>
<td>Cost (operating cost)</td>
<td>Standard</td>
<td>50%</td>
<td>100%</td>
<td>144,777.50</td>
</tr>
<tr>
<td>28,707.50</td>
<td>Quality (complaint)</td>
<td>Standard</td>
<td>67%</td>
<td>80%</td>
<td>15,387</td>
</tr>
<tr>
<td>262,500</td>
<td>Cost (operating cost)</td>
<td>Standard</td>
<td>30%</td>
<td>100%</td>
<td>78,750</td>
</tr>
<tr>
<td>43,560</td>
<td>Cost (operating cost)</td>
<td>Standard</td>
<td>58%</td>
<td>80%</td>
<td>20,211</td>
</tr>
<tr>
<td>18,720</td>
<td>Cost (operating cost)</td>
<td>Standard</td>
<td>50%</td>
<td>80%</td>
<td>7,488</td>
</tr>
<tr>
<td>234,669</td>
<td>Cost (operating cost)</td>
<td>Standard</td>
<td>90%</td>
<td>100%</td>
<td>211,202.80</td>
</tr>
<tr>
<td>73,480</td>
<td>Cost (operating cost)</td>
<td>Standard</td>
<td>30%</td>
<td>80%</td>
<td>17,635</td>
</tr>
<tr>
<td>717,468</td>
<td>Cost (operating cost)</td>
<td>Standard</td>
<td>80%</td>
<td>70%</td>
<td>401,782</td>
</tr>
<tr>
<td>567,623.70</td>
<td>Cost (operating cost)</td>
<td>Standard</td>
<td>70%</td>
<td>70%</td>
<td>278,135.60</td>
</tr>
<tr>
<td>115,200</td>
<td>Cost (operating cost)</td>
<td>Standard</td>
<td>85%</td>
<td>90%</td>
<td>88,128</td>
</tr>
<tr>
<td>246,024</td>
<td>Cost (operating cost)</td>
<td>Standard</td>
<td>80%</td>
<td>100%</td>
<td>196,819</td>
</tr>
<tr>
<td>14,647.50</td>
<td>Cost (operating cost)</td>
<td>Standard</td>
<td>100%</td>
<td>100%</td>
<td>14,647.50</td>
</tr>
<tr>
<td>4,378.33</td>
<td>Cost (supervisory time)</td>
<td>Estimate</td>
<td>60%</td>
<td>88%</td>
<td>2,311.75</td>
</tr>
<tr>
<td>79,446.50</td>
<td>Cost (operating cost)</td>
<td>Standard</td>
<td>20%</td>
<td>85%</td>
<td>13,505</td>
</tr>
<tr>
<td>111,469.38</td>
<td>Cost (operating cost)</td>
<td>Standard</td>
<td>80%</td>
<td>90%</td>
<td>80,257.95</td>
</tr>
<tr>
<td>746,940</td>
<td>Cost (operating cost)</td>
<td>Standard</td>
<td>65%</td>
<td>90%</td>
<td>436,959.90</td>
</tr>
<tr>
<td>1,112,083.33</td>
<td>Cost (operating cost)</td>
<td>Standard</td>
<td>100%</td>
<td>100%</td>
<td>1,112,083</td>
</tr>
<tr>
<td>45,000</td>
<td>Cost (operating cost)</td>
<td>Estimate</td>
<td>30%</td>
<td>100%</td>
<td>13,500</td>
</tr>
<tr>
<td>100,000</td>
<td>Cost (participant cost)</td>
<td>Estimate</td>
<td>50%</td>
<td>70%</td>
<td>35,000</td>
</tr>
<tr>
<td>448,729.46</td>
<td>Cost (operating cost)</td>
<td>Estimate</td>
<td>85%</td>
<td>90%</td>
<td>343,278</td>
</tr>
</tbody>
</table>

Total Benefits: AED 7,399,784
Table 13-6 reports the fully loaded cost of the program (Guiding Principle 10).

**TABLE 13-6. FULLY LOADED COSTS**

<table>
<thead>
<tr>
<th>Cost Items</th>
<th>Total Cost (AED)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Needs assessment and training plan</td>
<td>18,150</td>
</tr>
<tr>
<td>Total training cost</td>
<td>705,400</td>
</tr>
<tr>
<td>Salary (cost of attending training course)</td>
<td>1,295,893</td>
</tr>
<tr>
<td>Attending coaching sessions cost</td>
<td>109,185</td>
</tr>
<tr>
<td>Evaluation and reporting ROI levels</td>
<td>34,421</td>
</tr>
<tr>
<td><strong>Total Program Costs</strong></td>
<td><strong>2,163,048</strong></td>
</tr>
</tbody>
</table>

**ROI**

The benefit-cost ratio (BCR) and ROI calculations for the emerging leaders’ development program are as follows:

\[
BCR = \frac{\text{Program Benefits}}{\text{Program Costs}} = \frac{\text{AED 7,399,784.15}}{\text{AED 2,163,048}} = 3.42
\]

\[
\text{ROI} = \frac{\text{Net Program Benefits}}{\text{Program Cost}} = \frac{\text{AED 7,399,784.15} - \text{AED 2,163,048}}{\text{AED 2,163,048}} \times 100 = 242\%
\]

DEWA accrued a return of AED 3.42 for each AED spent in terms of reducing time, improving productivity, improving quality, and reducing cost.

**Intangible Benefits**

Intangible benefits are those measures that cannot be converted to monetary value easily with a minimum of resources, yet it’s worth capturing intangible benefits for their importance. The ROI team also communicated these results to different stakeholders (Guiding Principle 11). Following is a list of most intangible benefits highlighted by the participants and derived from the program:

- employee loyalty
- job satisfaction
- increased confidence
- setting goals and objectives
- increased job effectiveness
- implementation of more new ideas
- successful completion of projects
- setting goals and objectives more effectively.
Other Factors

Other factors that may have caused the improvement were also captured through participants’ estimates. Here is the list from the participants:

- management and team support
- education and other training programs
- reading materials
- SAP system (automation)
- years of experience
- on-the-job training
- DEWA rules
- change in processes
- work environment.

Summary of Findings

The emerging leaders’ development program Institute of Leadership Management exceeded set targets for each level, as shown in Table 13-7.

The main issue was finding a suitable timing for meetings with some of the participants because of their workload and busy schedules. The participants were a mix of both administrative and technical employees.

CONCLUSION AND RECOMMENDATIONS

The emerging leaders’ development program showed positive results and a positive ROI of AED 3.42 for each AED spent. Thanks to the implementation of acquired leadership skills, DEWA saw reduced processing times, improved quality, reduced costs, and improved outputs. In fact, the program exceeded set targets for each level, as shown in Table 13-7. Therefore it was recommended that the program be continued based on the case study.

### TABLE 13-7. RESULTS VERSUS TARGETS

<table>
<thead>
<tr>
<th>Level 1 Reaction and Satisfaction</th>
<th>Level 2 (Improvement in Knowledge and Learning)</th>
<th>Level 3 (Skills Implementation)</th>
<th>Level 4 (Business Impact)</th>
<th>Level 5 (ROI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Target</td>
<td>Actual</td>
<td>Target</td>
<td>Actual</td>
<td>Target</td>
</tr>
<tr>
<td>70%</td>
<td>76%</td>
<td>15%</td>
<td>17%</td>
<td>AED 1.71</td>
</tr>
<tr>
<td>Actual</td>
<td></td>
<td>Actual</td>
<td>AED 1.25</td>
<td>AED 3.42</td>
</tr>
</tbody>
</table>

In addition, the ROI team provided the following recommendations:

- Request that each participant highlight the knowledge and skills they expect to gain after attending the program, and prepare an action plan to implement skills gained.
Record positive feedback about the coaching session and the positive impact it had on the employees in the field. Employees were requesting more coaching sessions, so the ROI team relayed that feedback to their departments.

The ROI study results, findings, and recommendations were communicated to DEWA top management and the head of learning and development through different communication channels, such as official memos, MD and CEO presentations, and reports.

QUESTIONS FOR DISCUSSION
1. What are the strengths of this case?
2. Assess the methods of data collection.
3. Assess the methods of isolating the effects of the program.
4. Assess the methods of converting data to money.
5. How could this study be improved?
6. Is this analysis repeatable? Please explain.

ABOUT THE AUTHOR
Reem Alsuwaidi is a certified ROI professional from ROI institute. She was awarded with the Best Practice Implementation Award 2015 and ROI Practitioner of the Year 2018 by ROI Institute. With 10 years of professional experience in measuring training effectiveness and implementing the ROI Methodology in different programs, she has broadly influenced audiences and organizations on both internal and external levels. She has prepared different case studies for leadership, customer service, conferences, health and safety, postgraduate degrees, e-learning, and other programs.
14

ROI Evaluation of a Coaching Culture Institutionalization Project

Global Telecom Organization

Frédéric Patricelli

This case was prepared to serve as a basis for discussion rather than to illustrate either effective or ineffective administrative and management practices. All names, dates, places, and organizations have been disguised at the request of the author or organization.

Abstract

Coaching and mentoring are important components of transforming an organization, but as with any other project, coaching and mentoring programs must deliver a satisfactory return on investment (ROI) to stakeholders.

Based on research about the benefits for an organization of deploying a coaching culture, the Global Telecom Organization (GTO) decided to design, roll out, and institutionalize a coaching culture company-wide. Many benefits (both tangible and intangible) resulting from the initiative were confirmed through the employee engagement survey that the company runs on a yearly basis. The aim of this case study is to calculate the ROI related to the project to validate its success from a financial point of view.
INTRODUCTION
Survey-based research shows that more companies are turning to coaching and mentoring initiatives to develop their talents, and the most flourishing ones are those that succeed in creating a sustainable internal coaching and mentoring culture. In fact, more than 71 percent of the S&P 500 companies offer coaching and mentoring to their employees, and it is widely recognized that the managers who get the most out of their team are those who, in addition to self-developing, spend a high proportion of their energy coaching and mentoring others (Leedham 2005). Furthermore, it’s been proved that ROI for companies that invest in coaching is up to seven times the initial investment, and that retention is 25 percent higher in companies that sponsor mentoring—that is, in companies that have institutionalized a coaching culture.

Based on this research, GTO decided to deploy and institutionalize a coaching culture. The overall initiative was designed and structured in two phases: a one-year leadership development program (phase 1) composed of a series of individual coaching sessions plus pre- and post-360-degree leadership assessments, followed by the Institute of Leadership and Management (ILM) Level 7 Executive Coach Certification (phase 2) of a pool of internal coaches. The aim of phase 2 was to extend to all employees the positive outcomes of phase 1 in a cost-effective way (Patricelli 2015).

The GTO team involved in the project, with different roles and responsibilities, was composed of the organization development (OD) and the learning and development (L&D) functions, coordinated by the HR director and supported by the other HR functions. The individual coaching sessions and the ILM certification were delivered by a pool of external, highly qualified coaches under the coordination of the project team.

In this detailed description of the overall initiative, some methods to evaluate the contribution of coaching and mentoring to organization performance are presented. In particular, this case focuses on Raymond Katzell’s four evaluation steps (1956) and the ROI Methodology introduced by Jack Phillips in 1973. The study illustrates the step-by-step application of the ROI Methodology to the GTO project, from the data collection plan to the computation of both the ROI and the benefit-cost ratio (BCR). The case study ends with conclusions.

INSTITUTIONALIZATION OF THE COACHING CULTURE IN GTO
Traditional learning methods are based on classroom lectures, case studies, extensive reading assignments, small group discussions, speeches from executives, and video presentations. The related trainings are meant to expose the participants to different ideas and situations, as well as to stimulate peer interactions and broaden their perspectives, but the impact of such training is limited (especially for those endeavoring behavioral changes). Consequently, training is widely considered to be far from sufficient for the effective development of managers.

In contrast, new learning methods introduce aspects such as the immediate opportunity to apply the knowledge and skills acquired, action orientation, emotional
engagement, personalization, customization, and implementation accountability, just to name a few (Phillips and Phillips 2016). These new learning methods are grounded in feedback (360-degree assessment), simulations, team-building activities, and, in particular, coaching and mentoring. Although the terms are frequently used as synonyms, coaching and mentoring address different facets of people development. In fact, if coaching is the art of facilitating, the unleashing of people potential by showing them how to learn rather than by teaching them, then mentoring is the art of supporting who wants to learn and grow within an organization. Consequently, coaching and mentoring involve different methods and processes, and are used in different situations. The coaching context in organizations relates mainly to aspects such as business strategy development, employee-performance optimization, change management, career development, and knowledge sharing. Mentoring, in contrast, is used to gain valuable advice, build a relational network, develop knowledge and skills, advance in one’s career, and learn new perspectives.

The overall Institutionalization of a Coaching Culture project in GTO was structured in two main phases:

- **Phase 1**
  - Leadership pre-assessment of 45 directors and managers
  - Series of three individual coaching sessions
  - Individual “refresher” leadership coaching sessions
  - Leadership post-assessment of the 45 directors and managers

- **Phase 2**
  - Shortlisting a pool of 20 internal “believers,” giving priority to the 45 directors and managers involved in the first phase
  - Series of training Initiatives to coach the coaches and prepare them for the ILM Level 7 Executive Coach Certification
  - ILM Level 7 Executive Coach Certification of the 20 internal coaches

The leadership competency model used in phase 1 is by Zenger and Folkman (2002); that was already in practice in GTO. The model is based on 16 competencies and skills that researchers and studies have proved to be mastered, or owned, by extraordinary leaders.

These 16 competencies have been grouped into five categories:

- character
- personal capability
- focus on results
- interpersonal skills
- leading change.

These categories are illustrated as a five-pole tent. Each pole represents the “quantity” of leadership skills possessed by a leader, perceived by the people he is in contact with (manager, peers, direct reports, others), that is commonly measured through a 360-degree leadership assessment survey.
The project was embraced with enthusiasm by both the pool of 20 shortlisted internal coaches and the directors and managers who had the opportunity to experience firsthand (during phase 1) the benefit of the initiative. Nevertheless, two problems had to be faced:

- the additional workload for the internal coaches
- the employees’ initial perception of coaching as a remedial initiative rather than an opportunity, sometimes combined with their acceptance of being coached by a colleague.

The first problem was resolved by the internal coaches’ extra effort, put in place because they were conscious of the great opportunity to earn a prestigious internationally recognized certification. Moreover, from the beginning of the overall initiative, the HR and OD functions communicated company-wide a positive perception, which made the coaches proud of their role. This extra activity was also rewarded by HR, and is now part of the process.

The second problem required more time to fully resolve, because it relates to cultural aspects. The situation nevertheless improved much faster than expected. In fact, the tangible benefits experienced by employees who have received one or more internal coaching sessions have generated an increased sense of opportunity, rather than remediation. Consequently, the number of employees asking HR for an internal coach to support them with their specific work issues is increasing.

In addition to some of the intangible positive outcomes mentioned in the research, such as increased enthusiasm, mutual respect and understanding, higher appreciation and trust, knowledge sharing, and role-modeling among employees, some tangible key outcomes of the initiative were found in an analysis of the employee engagement (EE) surveys that an external company runs for GTO yearly. In fact, the overall EE index increased 19 percent from the first year of the initiative to the second.

Because of the positive impact of the project experienced company-wide, GTO management decided to go ahead with the initiative and to implement a second edition of the project, in the third year, to add 11 more ILM Level 7 Executive Certified coaches to the existing internal pool.

EVALUATION OF THE COACHING AND MENTORING

The market for coaching and mentoring is increasing; the industry currently brings in several billion dollars a year. It is no surprise that the questions raised by CEOs and human resource directors (HRDs) are: “Does it work? Is it effective?” All the studies of coaching lead to the same conclusion: Everyone likes to be coached and believes that it positively influences their effectiveness and career (Manikutty 2005). Thus, the answer is definitely: “Yes, it works!”

However, if there is no evaluation structure in place for a coaching initiative, how will the CEOs and HRDs know if it is creating success, stagnation, or even damage? The purpose of this evaluation is not only to answer these questions, but also to
encourage a better dialogue with the stakeholders. Surveys show that less than 10 percent of the organizations in the United States, and only 19 percent of those in the United Kingdom, formally evaluate the impact of coaching (Merrick 2013). Yet among those that do, there is strong evidence that the ROI for coaching is high.

The difficulty, however, as with the measurement of any other kind of program, is isolating the effect of the coaching. Moreover, if tangible elements such as productivity and sales figures are easier to measure, the complexity increases when appraising the impact on the bottom line, and of intangible elements such as leadership and relationship handling. In any case, the studies are consistent in asserting that the impacts on the bottom line of both tangible and intangible coaching and mentoring elements, measured through self-reported and 360-degree feedback, are positive (Olivero and Kopelman 1997).

Many training evaluation methods and models have been designed in the last few decades, and all can be classified as either “result oriented” or “process oriented.” The most used and robust model is the ROI Methodology, which is based on five outcomes. These five levels tell the ultimate story of program success:

- **Level 1. Reaction and Planned Action** measures participant satisfaction with the program and captures planned action.
- **Level 2. Learning** measures changes in knowledge and skills.
- **Level 3. Application and Implementation** measures changes in behavior and specific actions on the job to make the program successful.
- **Level 4. Business Impact** measures changes in business impact measures.
- **Level 5. Return on Investment (ROI)** compares the monetary benefits with the costs.

The Phillips contribution to the ROI evaluation of projects also included formalizing a complete methodology. As a consequence of its simplicity and clarity, the ROI Methodology had an almost immediate success among HR professionals and quickly became the most-used reference model for evaluating the ROI of projects globally.

**ROI EVALUATION OF THE GTO COACHING CULTURE PROJECT**

As recommended by the ROI Methodology, a data collection plan has been prepared and executed, as shown in Table 14-1. The evaluation feedback provided by the participants at Level 1 using a five-point Likert scale (ranging from 1 = strongly disagree to 5 = strongly agree) is summarized in Table 14-2 and as targeted in the collection plan, all ratings exceeded 4.

The evaluation feedback at Level 2 was implemented by asking (through a questionnaire) the participants to self-appraise their knowledge about the company competency model before and after phase 1. The evaluation is summarized in Table 14-3. The improvement measured was \((4.57 - 3.20) = 43\%\), far above the targeted 30 percent in the data collection plan.
<table>
<thead>
<tr>
<th>Level</th>
<th>Program Objective(s)</th>
<th>Measures</th>
<th>Data Collection Methods</th>
<th>Data Sources</th>
<th>Timing</th>
<th>Responsibilities</th>
</tr>
</thead>
</table>
| 1. Reaction | - Part 1: Rate project relevant for their jobs  
- Part 2: Rate project important for their jobs | - Minimum 4 out of 5 for each factor on a 5-point Likert scale | - Questionnaire         | - Participants | - End of phase 1     | - L&D team       |
| 2. Learning | - Participants demonstrate knowledge of the GTO Competence Model | - 30% higher knowledge after phase 1 | - Self-assessment through questionnaire | - Participants | - End of phase 1     | - L&D team       |
| 3. Application | - Participants use the leadership competencies routinely with their reports, peers, and others | - Overall leadership rating increase of 5% or above | - Pre- and post-360-degree L&D assessment | - Participants | - Six months after end of phase 1 | - L&D team       |
| 4. Impact | - Employee engagement  
- Absenteeism  
- Turnover | - Increase of 10%  
- Decrease of 20%  
- Decrease of 20% | - Engagement survey and data  
- Data  
- Data | - Employees and HR IS  
- HR IS  
- HR IS | - After phase 2  
- After phase 2  
- After phase 2 | - HR  
- HR  
- HR |
| 5. ROI | ROI: Achieve a 50% ROI within one year of completing phase 2 | | | | | |

**Comments:** Benefits will be computed from the savings due to the expected lower absenteeism, lower turnover, and higher productivity as a consequence of increased employee engagement.
TABLE 14-2. PARTICIPANT REACTION

<table>
<thead>
<tr>
<th>Issues</th>
<th>Ratings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Important for my work</td>
<td>4.32</td>
</tr>
<tr>
<td>Provided new information</td>
<td>4.50</td>
</tr>
<tr>
<td>Worthwhile investment</td>
<td>4.47</td>
</tr>
<tr>
<td>Good use of my time</td>
<td>4.18</td>
</tr>
<tr>
<td>Recommended to others</td>
<td>4.37</td>
</tr>
</tbody>
</table>

Based on a five-point scale.

TABLE 14-3. PARTICIPANT LEARNING

<table>
<thead>
<tr>
<th>Issues</th>
<th>Ratings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learn new knowledge/skills</td>
<td>4.48</td>
</tr>
<tr>
<td>Knowledge before phase 1</td>
<td>3.20</td>
</tr>
<tr>
<td>Knowledge after phase 1</td>
<td>4.57</td>
</tr>
<tr>
<td>Effectiveness of coach</td>
<td>4.72</td>
</tr>
</tbody>
</table>

Based on a five-point scale.

The evaluation of the project at Level 3 was conducted by comparing the results of pre- and post-360-degree leadership assessments, and by using a survey with five-point Likert scale (1 = strongly disagree to 5 = strongly agree). The results, with reference to the five categories of the competency model, are reported in Table 14-4. The improvements gained in the leadership skills (above 6 percent in almost all categories) were aligned with the 5 percent targeted in the data collection plan and have been successively confirmed by the increase of some key indexes of the yearly EE survey. The “My Manager” index had an increase of 28 percent; “My Job” increased 12 percent; “Learning and Development” improved 34 percent; and “Work-Life Balance” had an increase of 43 percent, just to name a few. Moreover, all of these trends have been confirmed again by the successive engagement pulse surveys that GTO runs quarterly.

TABLE 14-4. APPLICATION OF SKILLS ACQUIRED

<table>
<thead>
<tr>
<th>Issues</th>
<th>Ratings Before</th>
<th>Ratings After</th>
</tr>
</thead>
<tbody>
<tr>
<td>Character</td>
<td>3.93</td>
<td>4.13</td>
</tr>
<tr>
<td>Personal capabilities</td>
<td>3.76</td>
<td>4.02</td>
</tr>
<tr>
<td>Focus on results</td>
<td>3.78</td>
<td>4.03</td>
</tr>
<tr>
<td>Interpersonal skills</td>
<td>3.70</td>
<td>3.95</td>
</tr>
<tr>
<td>Leading change</td>
<td>3.75</td>
<td>4.01</td>
</tr>
</tbody>
</table>

Based on a five-point scale.

The evaluation of the project at Level 4 required a more complicated procedure because, as reported in the data collection plan, the business impacts of the selected factors are not that easy to quantify, monetize, and isolate. An ROI analysis plan was created and put into action (Table 14-5).
## TABLE 14-5. ROI ANALYSIS PLAN

<table>
<thead>
<tr>
<th>Data Items (Usually Level 4)</th>
<th>Methods for Isolating the Effects of the Program/Process</th>
<th>Methods of Converting Data to Monetary Values</th>
<th>Cost Categories</th>
<th>Intangible Benefits</th>
<th>Communication Targets for Final Report</th>
<th>Other Influences/Issues During Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employee engagement</td>
<td>International HR standard values</td>
<td>• Standard values</td>
<td>• Time for ROI assessment of the project</td>
<td>• Increased enthusiasm</td>
<td>• Executive report for executives</td>
<td>Potential barriers:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• HR estimates</td>
<td>• Project design</td>
<td>• Mutual respect and understanding</td>
<td>• Meeting with board of directors</td>
<td>• Additional workload required to internal coaches</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Pre- and Post-360° assessments</td>
<td>• Higher appreciation and trust</td>
<td>• Summary report for managers</td>
<td>• Employees’ perception of coaching as a remedy</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Coaching sessions</td>
<td>• Higher customer satisfaction</td>
<td>• Short summary for staff, uploaded onto the company portal</td>
<td>• Initial employees’ acceptance of being coached by their supervisor (privacy and confidentiality issues)</td>
</tr>
<tr>
<td>Absenteeism</td>
<td>International HR standard values</td>
<td>• Standard values</td>
<td>• Time to create coaching policy</td>
<td>• Knowledge sharing</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• HR and finance estimates</td>
<td>• ILM Level 7 certification</td>
<td>• Role-modeling among employees</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Time of participants</td>
<td>• Cost savings by using internal coaches</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Turnover</td>
<td>International HR standard values</td>
<td>• Standard values</td>
<td>• Time for ROI assessment of the project</td>
<td>• Increased enthusiasm</td>
<td>• Executive report for executives</td>
<td>Potential barriers:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• HR and finance estimates</td>
<td>• Project design</td>
<td>• Mutual respect and understanding</td>
<td>• Meeting with board of directors</td>
<td>• Additional workload required to internal coaches</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Pre- and Post-360° assessments</td>
<td>• Higher appreciation and trust</td>
<td>• Summary report for managers</td>
<td>• Employees’ perception of coaching as a remedy</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Coaching sessions</td>
<td>• Higher customer satisfaction</td>
<td>• Short summary for staff, uploaded onto the company portal</td>
<td>• Initial employees’ acceptance of being coached by their supervisor (privacy and confidentiality issues)</td>
</tr>
</tbody>
</table>
The overall costs assumptions and analysis were made using the invoices paid to the various providers (coaching sessions, ILM certification training, and so on) and suppliers (360-degree leadership assessment) involved in the project; the cost of labor of the project team members (such as the L&D team); and the cost of participant labor, as shown in Table 14-6:

- Total fees paid to the provider for the design and delivery of all the coaching sessions (three rounds in year one, plus two refresher rounds in year two) for each of the 45 directors and managers, plus ILM Level 7 Certification (10-day training) of the 20 internal coaches in year two, and an additional 11 coaches in year three.
- Total fee paid for the 360-degree leadership pre-assessments in year one and labor costs related to the 60 working hours required to run the 360-degree leadership post-assessment (done internally by the GTO HR team in year two).
- Labor cost related to the 100 working hours required to prepare the ROI assessment of the project in year three. In this case, the ROI assessment had been created as a case study, when the project was almost finished. The results were satisfactory not only to prove the validity of the initiative to the top management, but also justify its continuation.
- Labor cost related to the 80 working hours required to design and prepare the GTO coaching policy in year three.
- Labor costs related to the 225 working hours spent by the 45 directors and managers for attending their five, one-hour coaching sessions, and to the 1,860 working hours spent by the 31 internal coaches to attend their ILM Level 7 Certification 10-day training.

**TABLE 14-6. ASSUMPTIONS AND COSTS ANALYSIS**

<table>
<thead>
<tr>
<th></th>
<th>First Year (US$)</th>
<th>Second Year (US$)</th>
<th>Third Year (US$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provider fee</td>
<td>111,157</td>
<td>80,215</td>
<td>48,442</td>
</tr>
<tr>
<td>360° leadership development assessment</td>
<td>8,999</td>
<td>3,021</td>
<td>0</td>
</tr>
<tr>
<td>ROI assessment</td>
<td>0</td>
<td>0</td>
<td>3,535</td>
</tr>
<tr>
<td>Coaching policy</td>
<td>0</td>
<td>0</td>
<td>2,827</td>
</tr>
<tr>
<td>Employee labor</td>
<td>4,794</td>
<td>47,127</td>
<td>24,918</td>
</tr>
<tr>
<td><strong>Total cost</strong></td>
<td><strong>124,950</strong></td>
<td><strong>130,363</strong></td>
<td><strong>79,722</strong></td>
</tr>
</tbody>
</table>

With reference to the benefits assumptions and analysis, the evaluation started by using the results of the yearly EE survey (56 percent in the first year, and 79 percent two years later), as well as the standards values provided by some recognized international benchmarks. Moreover, when possible, the benefits shown in Table 14-7 have been monetized as savings rather than earnings. In particular:
• Based on the EE survey data, the overall increase from the first year to the second has been calculated as \((79\% \div 56\%) - 1 = 41\%\)—that is, much beyond the 10 percent targeted in the data collection plan. Then, to monetize the EE improvement, and because no specific productivity data was available for those years, a benchmark from Gallup (2016) that highly engaged employees increase productivity by 20 percent was used. The impact of the EE increase on employees’ productivity has therefore been calculated as \((75\% - 56\%) \times 0.2 = 3.8\%\). Then an isolation factor of 10 percent has been estimated by HR for the impact of this specific project on employees’ productivity \((3.8\% \times 10\% = 0.38\%)\). Consequently, the savings from increased productivity in the second year have been calculated as 0.58 percent of the revenue in year two, and the same approach has been used to calculate the earnings from increased productivity in year three.

• The savings from lower absenteeism have been calculated using HR data as the difference between the company-wide absenteeism hours in the first and second year multiplied by twice the labor cost per hour (twice was to take into consideration both the missed hours and those for replacement). In this case, an isolation factor of 50 percent has been estimated by HR for the impact of the project on the reduction of absenteeism. The same approach has been followed to calculate the savings from lower absenteeism in the third year.

• The savings from lower turnover (also based on HR data) in the second year have been calculated as the difference between the number of employees who have quit or were fired in year two and year one, multiplied by the average cost to hire an employee. Additionally, an isolation factor of 30 percent has been estimated by HR for the impact of the project on the turnover reduction, and the same approach has been used to calculate the savings associated with lower turnover in the third year.

### TABLE 14-7. ASSUMPTIONS AND BENEFITS ANALYSIS

<table>
<thead>
<tr>
<th></th>
<th>Second Year (US$)</th>
<th>Third Year (US$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>From increased engagement</td>
<td>716,099</td>
<td>137,053</td>
</tr>
<tr>
<td>From lower absenteeism</td>
<td>89,270</td>
<td>182,691</td>
</tr>
<tr>
<td>From lower turnover</td>
<td>2,173</td>
<td>6,516</td>
</tr>
<tr>
<td><strong>Total benefits</strong></td>
<td><strong>807,542</strong></td>
<td><strong>326,260</strong></td>
</tr>
</tbody>
</table>

At this point, all the isolated and monetized values needed to calculate both the BCR and ROI of the project have been calculated. Thus, by simply applying this formula:

\[
BCR = \frac{\text{Benefits}}{\text{Costs}}
\]
ROI Evaluation of a Coaching Culture Institutionalization Project

ROI (%) = \frac{\text{Benefits} - \text{Costs}}{\text{Costs}} \times 100

On the data evaluated previously, the BCR and ROI of the project at year two are easily obtained, as shown in Table 14-8:

BCR = \frac{807,542}{(124,950 + 130,363)} = 3.16

ROI (%) = \frac{807,542 - (124,950 + 130,363)}{(124,950 + 130,363)} \times 100 = 216%

Note that to be more conservative, the BCR and the ROI related to year two have been calculated by considering the overall costs (year one and year two); another approach could have been to consider an amortization of the year-one costs on more than only one year. The BCR and ROI for year three and for the overall project are calculated in the same way, using the related data.

BCR = \frac{326,260}{79,722} = 4.09

ROI (%) = \frac{326,260 - 79,722}{79,722} \times 100 = 309%

Of note is also the fact that the overall project has been partially funded by a governmental institute, and therefore, the BCR and ROI for GTO have been even better. In fact, by redoing the math, considering only the costs afforded by GTO (total costs reported in Table 14-6 minus funds received) the BCR and ROI become 5.56 and 456 percent, respectively (Table 14-8).

<table>
<thead>
<tr>
<th>TABLE 14-8. ASSUMPTIONS AND COSTS ANALYSIS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Second Year</td>
</tr>
<tr>
<td>BCR</td>
</tr>
<tr>
<td>ROI (%)</td>
</tr>
<tr>
<td>BCR for GTO</td>
</tr>
<tr>
<td>ROI for GTO (%)</td>
</tr>
</tbody>
</table>

With reference to the intangible benefits, as reported in the ROI analysis plan, these intangible benefits have been observed in GTO:

- increased enthusiasm
- mutual respect and understanding
• higher appreciation and trust
• higher customer satisfaction
• knowledge sharing
• role-modeling among employees
• cost savings due to the use of internal coaches instead of external ones (this intangible benefit of using a less-expensive solution to coach the employees has been informally estimated in savings of $100,000 in the year one and two period).

Finally, as suggested by the ROI Methodology, a decision has been made regarding the optimal way for reporting and communicating the results to the different stakeholders, as shown in Table 14-5. An executive report has been written for the executives and a meeting organized with the board of directors. In addition, a summary of the executive report has been handed to the managers, and a short summary has been sent to staff and uploaded onto the company portal.

CONCLUSIONS
The capability of learning faster than competitors is becoming the only sustainable competitive advantage for organizations. In this scenario, coaching and mentoring are essential to support business objectives and cope with the market challenges, and they are the drivers for cultural change. One of the winning strategies of successful companies is to institutionalize an internal coaching culture; the challenge is in the process, policy, and measurement that HR must manage wisely for a smooth adaptation.

This case study addressed the calculation of the ROI related to institutionalizing a coaching culture in GTO. By applying the ROI Methodology, the ROI related to the project was calculated at 238%. This result is aligned with international benchmarks. In the ROI calculation, numerous intangible benefits have not been taken into consideration because they are too expensive to monetize, and are proof that the real ROI of the project is even higher than the calculated one.

Based on all the positive impacts of the project experienced company-wide, a recommendation to extend the project has been made to the top management, not only to keep the momentum but also to add internal certified coaches to the existing pool.

QUESTIONS FOR DISCUSSION
1. What are the strengths of this case?
2. Assess the methods used to isolate the effects of the program.
3. Assess the methods used to convert data to money.
4. How could this study be improved?
ABOUT THE AUTHOR
Frédéric Patricelli has been with Telecom Italia’s corporate university since 1986, teaching information systems and database technology as applied to telecommunications. In 1997, he joined Motorola’s satellite-communication division in Phoenix, Arizona, and was appointed head of the international education strategic business unit at Telecom Italia Learning Services in 2000. In 2007, Frédéric was appointed group learning and development manager at Zain (formerly MTC Vodafone), a leading Kuwaiti mobile telecom operating in 24 countries in the Middle East and Africa. Currently, he is managing partner at RPM International Consultancy, WLL (Bahrain), and an HR consultant at Zain Bahrain. Frédéric has served as a visiting lecturer at European universities, authored numerous papers, and spoken at Academy of Sciences in Moscow, Ecole Supérieure des Télécommunications in Paris, and VTT Electronics/Nokia in Helsinki. He is certified professional by ILM and ROI Institute, as well as a certified trainer for Zenger and Folkman’s Extraordinary Leader and Extraordinary Performer programs (USA) and Carew International’s Dimension of Professional Selling program.
Measuring ROI in Coaching for Sales Managers

Global Healthcare

Kaycee Buckley

This case was prepared to serve as a basis for discussion rather than as an illustration of either effective or ineffective administrative and management practices. Names, dates, places, and data may have been disguised at the request of the author or organization.

Abstract

This global healthcare company recognized a critical need to provide effective coaching to their sales teams to drive revenue and market share. Without any formal coaching model, the learning and development department was tasked with assessing current behavior and selecting and implementing a global, standardized coaching model enabling sales managers to develop high-performing sales teams.

The goal of the program was to ensure adoption of learned coaching practices, changing the behavior of the sales manager from “super sales rep” to sales manager, and ultimately supporting the sales representative in improving the velocity of an opportunity (sales velocity), revenue, and overall sales performance.

PROGRAM BACKGROUND

Global Healthcare is a pioneer in providing innovative ways to monitor a vast range of health conditions. Recently, Global Healthcare launched its next-generation products and services to protect and grow its market share. The sales organization consists of more than 2,000 sales representatives and more than 300 sales managers in 124 countries.

To stay competitive in a complex sales environment, and with the launch of new products to meet the growing demands of its customers and the dynamic challenges
in the market, Global Healthcare required the sales force to move to a more solution-oriented selling approach. This new selling approach required the sales organization to work with more stakeholders, help solve for unique business challenges, educate its customers on a rapidly changing market, and show up differently than it had before and from its competitors. With this new selling approach, the business began to see longer sales cycles. This was due to opportunities stalling in the sales process. Sale representatives were either moving through the first stage of the process too quickly, or not gathering the appropriate information and finding themselves needing to go back, with their customer, to the beginning of the selling process. Opportunities were also stalling in certain stages of the sales process due to specific situations in which their sales manager needed to help successfully guide them through the issue.

Along with additional selling skills training, the company realized that this change of behavior and new skills could only be supported and reinforced by the sales managers. Therefore, the senior leaders called upon the learning and development team to create a sales coaching culture by developing and executing a global sales coaching model and cadence to achieve sales results through their people improving sale performance, increasing productivity, and driving for results.

The Analysis
The L&D team surveyed the sales organization along with area training leads to gain insights on how sales managers were coaching, if they were at all. The team discovered that five different “coaching” approaches were being used, derived from external models or developed internally. There was also no standard definition or use of a sales coaching cadence, or process, globally.

The survey also revealed that the organization wanted a coaching model that was clear, easy to use, standardized, consistent globally, and adaptable to any situation, and that allowed for feedback, action, and follow-up with a clear plan and achievable results supported by a global cadence and tools.

The L&D team decided that the internal expertise to build a coaching model and training program that would meet all these objectives did not exist. Therefore, the decision was made to evaluate external vendors specializing in coaching, and score them based on specific sales coaching focus, simplicity, global application, proof of success, delivery method, length of training, coaching tools, and trainer certification.

The survey results, along with the selected vendor, were shared with area vice presidents and area commercial leads to gain alignment and agreement.

Program Design
The selected vendor worked with the L&D team and subject matter experts to customize the training program, developed both training material and supporting playbooks for on-the-job use, translated all material, and conducted a train-the-trainer certification for internal trainers.
Figure 15-1 outlines the coaching program. The program began with pre-work, in which the participants were asked to think of their top three leaders and come up with a list of attributes that characterized them. The participants were also asked to bring one of their “must-win” accounts to work on during training.

Next, participants attended a two-day training in which sales managers were taught how to have an effective coaching conversation using different coaching styles, identify a goal during the coaching conversation, help the person gain awareness of the current situation, create possible solutions, and establish a clear action plan and next steps. Immediately after the two-day training, participants were asked to complete a self-assessment reflecting on the new skills they had learned. In addition, the participants’ direct reports completed a similar 180-degree assessment of their managers. Sales managers were also given a 12-week coaching playbook that listed weekly activities for the sales manager to execute for each of their direct reports. The goal of the playbook was to help reinforce and put into action the skills and behaviors learned during the two-day training. At four, eight, and 12 weeks, regional trainers would host a checkpoint conference call for sales managers to attend and provide feedback of their progress in implementing the coaching skills.

**FIGURE 15-1. SALES COACHING TRAINING PROGRAM DESIGN**

- **Foundation**
  - **Coaching Training**
    - 2-day coaching training
  - **Coaching Assessment**
    - Initial assessment to compare current skills with new skills

- **Application**
  - **12-Week Coaching Playbook**
    - Complete weekly coaching activities
  - **Coaching Assessment**
    - Assess how coaching skills have improved after three months
  - **12-Week Checkpoint**
    - Area/regional conference call to align on coaching activities

- **Sustainable**
  - **Coaching Assessment**
    - Final assessment to identify areas needing improvement
Due to the investment in purchasing a model from an external vendor, senior
leadership asked the L&D team to demonstrate the value of sales coaching by develop-
ing training and measurement strategies that promoted the benefits of sales coaching,
specifically how coaching could affect overall sales performance, the velocity at which
an opportunity moved through specific stages of the sale process, and revenue.

EVALUATION METHODOLOGY
The ROI Methodology was used to evaluate the effectiveness of the program by deter-
mining the five levels of value, including participant reaction, learning, and application.
Also measured were business impact, barriers and enablers, and return on investment.

Data Collection
Table 15-1 shows the data collection for the plan for each level of evaluation. Level 1
reaction data was gathered the last day of the training to determine the initial success
of the program. For Level 2 learning, scores were averaged between the managers’
and direct reports’ responses from the coaching assessment, asking them to rate
themselves on the skills learned in the training.

Level 3 application data was gathered three months after the training using several
sources. These sources included a survey to determine the number of coaching con-
versations conducted over the last three months, as well as other measures, such as
how quickly they were able to apply the coaching skills and their manager's support
in applying the coaching skills learned. Other sources included another coaching
assessment using the same questions, which was compared with the previous assess-
ment scores to show improvement, and the coaching playbook, to measure behavioral
change by executing coaching activities immediately after the training. Sales leaders
agreed that the Level 4 business impact data should focus primarily on how coaching
affected the velocity of an opportunity through the sale process, and then revenue and
overall performance. Therefore, questions to capture these specific measures were
added to the same survey sent for Level 3 data.

Level 5, ROI was a calculation of net program benefits over costs, expressed as:

\[
\text{ROI} \% = \frac{\text{Program Benefits} - \text{Program Costs}}{\text{Program Costs}} \times 100 \%
\]

ROI Analysis Plan
Table 15-2 presents the ROI analysis plan for this project and represents a common
approach to this type of analysis. It begins with the business impact measures that will
be influenced by the program. The method of isolation is the participants' estimates.
With participants’ estimates, the data is collected in a nonthreatening, nonbiased way,
and there are adjustments for error in their estimates.
EVALUATION RESULTS
A total of 324 participants attended the workshops. There were 22 workshops hosted around the world in 11 languages. Surveys, self-assessments, and playbooks to reinforce behavior were used to collect efficiency, effectiveness, and outcome measures.

Level 1. Reaction Results
Table 15-3 shows how participants reacted to the program. This was assessed on the last day of the training. Participants rated the program on how relevant it was to their job, learning effectiveness, worthwhile investment to their career development, and alignment with business priorities and goals. The overall reaction from the participants was above average (4.5 out of a 5.0 scale). The results from the Level 1 survey provided initial outcomes that the program was well received.

In addition to the overall Level 1 scores, 35 percent rated the knowledge and skills learned in this training as extremely critical to their success on the job, and 57 percent planned to use all the skills from the training on the job. These skills included:

• establishing clear and appropriately balanced goals
• gaining awareness of the current situation from the coachee’s perspective
• providing clear and candid feedback
• identifying or creating possible solutions and helpful resources to achieve established goals
• co-creating a clear action plan for next steps.

Participants also commented that the coaching model and skills will:

• Provide a good, simple framework to guide and develop their teams.
• Help better manage necessary activities and lead their team in more productive actions.
• Demonstrate the value and difference between coaching and managing and their impact on improved performance.
• Be applied during weekly one-on-ones, field travel, and account strategy discussions to maximize each team member’s potential and increase their contribution to the organization’s success.
• Increase the teams’ ability to overcome barriers, align strategies, advance opportunities, and improve performance.
• Be used during customer conversations to make potential difficult conversations more productive.

Participants also commented that the coaching skills and behaviors needed consistent reinforcement, and that follow-up training should be provided within six to 12 months of the initial training.
### TABLE 15-1. DATA COLLECTION PLAN

**Purpose of This Evaluation:** Calculate the Business Impact and ROI of Sales Coaching

**Program:** Sales Coaching

**Responsibility:** Kaycee Buckley

**Date:** June

<table>
<thead>
<tr>
<th>Level</th>
<th>Broad Program Objectives</th>
<th>Measures</th>
<th>Data Collection Methods</th>
<th>Data Sources</th>
<th>Timing</th>
<th>Responsibilities</th>
</tr>
</thead>
</table>
| 1. Reaction | • Participants rate the program as relevant to their job  
• Participants rate the program effective for their learning  
• Participants rate the program as a worthwhile investment in their carrier development  
• Participants agree program aligns with business priorities and goals | • Program receives 4 out of 5 for business results and job impact  
• Program receives 4 out of 5 for learning effectiveness  
• Program receives 4 out of 5 for “pre-ROI”  
• Program receives 4 out of 5 for alignment | • Survey                                                                 | • Participants            | • Last day of training | • Facilitator   |
| 2. Learning | • Discover personal coaching strengths and weaknesses  
• Identify an individual's skill and motivation for greatest potential  
• Enhance leadership skills and coach more effectively to deliver targeted results  
• Establish a coaching cadence  
• Collaborate with colleagues to continue progressing with new skills | • Managers assess themselves at least 3.5 post-training  
• Managers’ teams assess their manager at least 3.5 post-training  
• Coaching assessment  
• 180-degree assessment | • Coaching assessment  
• Participants  
• Participants’ teams | • Last day of training | • Global L&D |
<table>
<thead>
<tr>
<th>3. Application</th>
<th>4. Impact</th>
<th>5. ROI</th>
</tr>
</thead>
</table>
| • Conduct coaching conversations  
  • Apply coaching skills  
  • Complete activities in the coaching playbook | • Increase revenue  
  • Improve velocity of opportunity  
  • Improve overall sales performance | 20% |
| • Conduct at least one coaching conversation using the coaching model for each direct report  
  • Achieve an average 4 or above on coaching assessment as assessed by the participant and the participant’s direct reports  
  • 100% completion of playbook | • Monthly sales and pipeline advancement | Comments: |
| • Survey  
  • Coaching assessment  
  • Playbook | • Performance records | | • Program manager |
| • Sales managers  
  • Sales managers’ direct reports | • Salesforce | • 3 months after completion of training | |
<p>| | | • Program manager | |</p>
<table>
<thead>
<tr>
<th>Data Items</th>
<th>Methods for Isolating the Effects of the Program/Process</th>
<th>Methods of Converting Data to Monetary Values</th>
<th>Cost Categories</th>
<th>Intangible Benefits</th>
<th>Communication Targets for Final Report</th>
</tr>
</thead>
</table>
| • Velocity of opportunity  
• Revenue  
• Overall performance | • Expert estimation | • Revenue calculation | • Content development (development costs, SME time, training leads time, vendor travel, and other costs)  
• Needs assessment  
• Translations  
• Facilitator, vendor, project team, participant travel costs  
• Material production  
• Sales manager salary  
• L&D team salary | • Employee satisfaction  
• Customer satisfaction | • Global commercial VP and global L&D team  
• Area training  
• Area commercial directors  
• Area VPs |
Measuring ROI in Coaching for Sales Managers

### TABLE 15-3. LEVEL 1, REACTION RESULTS

<table>
<thead>
<tr>
<th>Area</th>
<th>Number of Participants</th>
<th>Number of Events</th>
<th>Level 1, Reaction*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Europe</td>
<td>104</td>
<td>9</td>
<td>4.42</td>
</tr>
<tr>
<td>AMT</td>
<td>27</td>
<td>1</td>
<td>4.60</td>
</tr>
<tr>
<td>China</td>
<td>32</td>
<td>1</td>
<td>4.69</td>
</tr>
<tr>
<td>Japan</td>
<td>26</td>
<td>1</td>
<td>4.19</td>
</tr>
<tr>
<td>APAC</td>
<td>56</td>
<td>4</td>
<td>4.66</td>
</tr>
<tr>
<td>US</td>
<td>49</td>
<td>2</td>
<td>4.61</td>
</tr>
<tr>
<td>LAC</td>
<td>30</td>
<td>4</td>
<td>4.60</td>
</tr>
<tr>
<td>Overall</td>
<td>324</td>
<td>22</td>
<td>4.54</td>
</tr>
</tbody>
</table>

*Based on a five-point scale.

### Level 2. Learning Results

Immediately after the training, participants were asked to assess themselves on the coaching skills that were being taught in the program. The assessment was also sent to their direct reports to assess their manager on the same skills. The two scores were compared to identify any differences, and then averaged, as shown in Table 15-4.

Results showed that the team rated their managers higher than the managers rated themselves. Based on the results and comments from Level 1, the Level 2 assessment scores tell us that the managers feel they can and should improve their coaching skills.

### TABLE 15-4. LEVEL 2, LEARNING RESULTS: COACHING ASSESSMENT SCORES

<table>
<thead>
<tr>
<th>First Assessment</th>
<th>Team</th>
<th>Self</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAC</td>
<td>3.98</td>
<td>3.54</td>
<td>3.88</td>
</tr>
<tr>
<td>JAPAN</td>
<td>4.23</td>
<td>3.88</td>
<td>4.18</td>
</tr>
<tr>
<td>US</td>
<td>4.25</td>
<td>3.80</td>
<td>4.14</td>
</tr>
<tr>
<td>AMT</td>
<td>4.22</td>
<td>3.78</td>
<td>4.11</td>
</tr>
<tr>
<td>EUROPE</td>
<td>4.11</td>
<td>3.73</td>
<td>4.03</td>
</tr>
<tr>
<td>CHINA</td>
<td>4.19</td>
<td>3.89</td>
<td>4.10</td>
</tr>
<tr>
<td>APAC</td>
<td>4.07</td>
<td>3.54</td>
<td>3.95</td>
</tr>
<tr>
<td>Overall</td>
<td>4.15</td>
<td>3.74</td>
<td>4.06</td>
</tr>
</tbody>
</table>

*Based on a five-point scale.

### Level 3. Application Results

A 90-day post-training survey was sent to participants and their managers to collect data on how they were applying the behaviors and skills learned. The survey asked similar questions from the Level 1 survey but focused on how the coaching was applied over the last three months. The survey first asked participants to rate:
• **Job impact.** How successful has the participant been in applying the knowledge and skills learned?

• **Support tools.** Have the materials for the training been useful on the job, and has the participant been provided appropriate resources (time, money, support from manager) to apply the knowledge and skills?

• **Predictive ROI.** Have the knowledge and skills learned been a worthwhile investment in their career?

The participants’ managers also completed a post-training survey in which they were asked to rate their employees on the previous categories, as well as:

• **Learning effectiveness.** Has the employee learned new knowledge or skills?

• **Business results.** Have the knowledge and skills learned improved their employee’s job performance?

The application results were still good, with predictive ROI being the highest rating. However, the biggest impact to the overall-lower rating was the perceived lack of support from their reporting managers to apply coaching.

Level 3 scores provided additional information:

• 25 percent rated the knowledge and skills learned as extremely critical to their success on the job.

• 39 percent have been able to use most of the skills from the training.

• Participants agreed that coaching has had a significant impact on increased productivity and employee satisfaction, equally.

Participants commented that the coaching has had an impact on:

• structuring next steps to aid in gaining new sales, identifying activities that were wasting time, and advancing opportunities forward that were previously “stuck”

• examining a sales opportunity in different ways, finding different options that were not seen before, and overcoming large obstacles in strategic accounts

• successfully closing an opportunity that resulted in an additional revenue

• focusing on key issues of both personal and professional advancement.

In the same survey, participants were asked how many instances of the different coaching styles they had used since training. Considering that 12 weeks had passed since the training, and participants commented at the end of the training they would apply coaching to their weekly one-on-ones, the expectation was that most of the participants would have conducted at least 10-15 coaching instances. According to the results in Table 15-5, only half of the participants that responded used each style in one to five instances. Additionally, the overall rating dropped slightly due to other priorities.
**TABLE 15-5. LEVEL 3, APPLICATION RESULTS: SURVEY**

<table>
<thead>
<tr>
<th>Overall</th>
<th>Job Impact</th>
<th>Support Tools</th>
<th>Predictive ROI</th>
<th>Learning Effectiveness</th>
<th>Business Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participants</td>
<td>4.3</td>
<td>4.43</td>
<td>3.86</td>
<td>4.43</td>
<td>—</td>
</tr>
<tr>
<td>Managers</td>
<td>4.24</td>
<td>4.07</td>
<td>4.25</td>
<td>4.56</td>
<td>4.34</td>
</tr>
</tbody>
</table>

*Based on a 5-point scale.*

<table>
<thead>
<tr>
<th>Coaching Style</th>
<th>1–5 Instances</th>
<th>6–10 Instances</th>
<th>10–15 Instances</th>
<th>More Than 15 Instances</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coachee Initiated</td>
<td>54%</td>
<td>30%</td>
<td>10%</td>
<td>6%</td>
</tr>
<tr>
<td>Coaching for Development</td>
<td>51%</td>
<td>28%</td>
<td>7%</td>
<td>14%</td>
</tr>
<tr>
<td>Coaching for Sales Management</td>
<td>49%</td>
<td>30%</td>
<td>11%</td>
<td>10%</td>
</tr>
</tbody>
</table>

The same coaching assessment that had been completed by both participants and their direct reports was completed again, 90 days after training, to identify any change in behavior, as shown in Table 15-6.

**TABLE 15-6. LEVEL 3, APPLICATION RESULTS: COACHING ASSESSMENT**

<table>
<thead>
<tr>
<th></th>
<th>First Assessment</th>
<th>Three Months Post-Training</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Team</td>
<td>Self</td>
</tr>
<tr>
<td>LAC</td>
<td>3.98</td>
<td>3.54</td>
</tr>
<tr>
<td>JAPAN</td>
<td>4.23</td>
<td>3.88</td>
</tr>
<tr>
<td>AMT</td>
<td>4.22</td>
<td>3.78</td>
</tr>
<tr>
<td>EUROPE</td>
<td>4.11</td>
<td>3.73</td>
</tr>
<tr>
<td>CHINA</td>
<td>4.19</td>
<td>3.89</td>
</tr>
<tr>
<td>APAC</td>
<td>4.07</td>
<td>3.54</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>4.15</strong></td>
<td><strong>3.74</strong></td>
</tr>
</tbody>
</table>

*Based on a five-point scale.*

**Barriers and Enablers**

Of those that responded, 57 percent were able to apply the coaching skills within one week of the training. As participants commented, this was due to the coaching being a simple framework that was easily applied to different situations, associated worksheets and tools to help guide the conversations, and a post-training playbook that reinforced coaching activities weekly.

However, as mentioned previously, coaching conversations decreased due to several barriers, as listed in Table 15-7. Comments from participants specified that “other” was lack of adequate resources (time, money, equipment) to successfully apply the coaching.
TABLE 15-7. BARRIERS

<table>
<thead>
<tr>
<th>Barriers</th>
<th>Percent Responded</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other</td>
<td>63%</td>
</tr>
<tr>
<td>Other priorities</td>
<td>60%</td>
</tr>
<tr>
<td>Content not practical</td>
<td>28%</td>
</tr>
<tr>
<td>No opportunity</td>
<td>13%</td>
</tr>
</tbody>
</table>

Level 4. Impact Results
The Level 3 survey also collected data to help calculate business outcomes, such as how often participants applied the types of coaching learned and how coaching has improved revenue, sales velocity, and overall performance. This data was used for Level 4, Impact results.

Because the expert estimation methodology was used to isolate the effects of the coaching, participants were asked how much of the improvement was a direct result of coaching and to rate their confidence in their response to factor in adjustments for error. This was then calculated into the improved data to achieve the adjusted value for both velocity of opportunity (in days) and revenue. Overall performance was kept in percentages.

Business Impact 1: Sales Velocity
Sales leaders asked that the results focus on the velocity of opportunities (in days) for only four stages of the sales cycle. This was decided based on past data that opportunities were stalling during these stages, and that sales managers were not effectively coaching their reps through these situations.

Twelve months prior to coaching, sales data showed that the velocity of an opportunity took an average 235.2 days to move through the four selected stages. Using the data from the survey, participants responded that the velocity of opportunities has improved by 41 percent, given all factors since the coaching training. They then responded that 46 percent of that improvement was a direct result of coaching. To adjust for error, participants responded that they were 63 percent confident in their estimation. Table 15-8 shows the final adjusted value of a 27.9 days’ improvement in the velocity of an opportunity.

Although the velocity is important impact data and it is developed and presented separately, it is not converted to money, because that would be double counting. The additional revenue generated by the reduced sales cycle time is additional revenue that is included in the total revenue amount. It is already counted in the conversion of revenue to money with the use of the profit margin.
TABLE 15-8. VELOCITY OF OPPORTUNITIES

<table>
<thead>
<tr>
<th>Prior Year</th>
<th>Post-Period</th>
<th>Improvement</th>
<th>Direct Result of Coaching</th>
<th>Adjusted Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Velocity of Opportunities*</td>
<td>–</td>
<td>41% improvement given all factors</td>
<td>46% of improvement due to coaching</td>
<td>63% confident of estimations</td>
</tr>
<tr>
<td>235.2 days</td>
<td>138.8 days</td>
<td>96.4 days (reduction)</td>
<td>44.3 days</td>
<td>27.9 days</td>
</tr>
</tbody>
</table>

*Stages measured: Investigate, Propose, Commit, Implement

Business Impact 2: Revenue

The same expert estimation was used to calculate the impact to revenue. Profit margin was factored in to show actual profit gained. Table 15-9 outlines the steps used to calculate the impact for revenue.

TABLE 15-9. REVENUE CALCULATION

<table>
<thead>
<tr>
<th>Steps</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Gathered annual revenue of 12 months prior to coaching training</td>
<td>$4,813,000</td>
</tr>
<tr>
<td>2. Gathered annual revenue for the 12 months after the launch of coaching and added the adjusted sales velocity value</td>
<td>$5,616,000</td>
</tr>
<tr>
<td>3. Calculated the difference of the values for pre- and post-coaching</td>
<td>$5,616,000 – $4,813,000 = $803,000 improved value</td>
</tr>
<tr>
<td>4. Calculated the percentage of improvement that was a direct result of coaching to the improved value to get the contribution value</td>
<td>$803,000 × 36% = $289,080 contribution value</td>
</tr>
<tr>
<td>5. Calculated confidence estimates to factor in any error and get the adjusted value</td>
<td>$289,080 × 63% = $182,120.40 adjusted value</td>
</tr>
<tr>
<td>6. Multiplied the annual revenue by the profit margin</td>
<td>$182,120.40 × 60% = $109,272.24</td>
</tr>
</tbody>
</table>

Business Impact 3: Overall Performance

Participants were asked how coaching has improved their team’s performance. The estimates were left in percentages, as shown in Table 15-10.

TABLE 15-10. OVERALL PERFORMANCE

<table>
<thead>
<tr>
<th>Improvement</th>
<th>Direct Result of Coaching</th>
<th>Confidence in Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall performance</td>
<td>45%</td>
<td>43%</td>
</tr>
</tbody>
</table>
The Costs

Table 15-11 shows the costs allocated to this program. The most significant cost was the development costs from the supplier, which included translations, facilitation, production, train-the-trainer certification, license fees, and any travel expenses from the supplier. The development and production costs for the workshops totaled $215,800.

Because the coaching workshop was delivered to more than 300 sales managers around the globe, the salary varied. Therefore, the average sales manager salary was used to calculate their time for the two days. All coaching workshops were conducted locally, on-site; therefore, no other facilitation fees were incurred. Costs for facilitation by the local training teams were calculated using the average salary for the two days, plus another two days for the train-the-trainer certification.

Additionally, there was an overhead cost for the total learning and development team, which was $480 for 400 hours (total involvement of the L&D team). When all the costs are included, the total, as indicated in Table 15-11, is $705,566.

### Table 15-11. Costs

<table>
<thead>
<tr>
<th>Supplier Costs</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>IP and participant materials</td>
<td>$450 per leader</td>
</tr>
<tr>
<td>Facilitation</td>
<td>$13,500 per session × 4 sessions</td>
</tr>
<tr>
<td>Train-the-trainer certification workshop</td>
<td>First 10 facilitators no cost</td>
</tr>
<tr>
<td>Customization</td>
<td></td>
</tr>
<tr>
<td>Travel expenses</td>
<td>$2,000 per individual (3 individuals; 1 on-site meeting)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sales Manager Costs</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Two days for workshop</td>
<td>Average $135,000/manager ÷ 260 workdays $519/participant × 2 days</td>
</tr>
<tr>
<td>Local facilitator costs</td>
<td>Average 100,000/facilitator ÷ 260 workdays $385/facilitator × 2 days (TTT) + $385/facilitator × 2 days (workshop)</td>
</tr>
<tr>
<td>L&amp;D team costs*</td>
<td>Average $125,000/L&amp;D leader ÷ 260 workdays $480 ÷ 400 hours</td>
</tr>
<tr>
<td>Total</td>
<td></td>
</tr>
</tbody>
</table>

*Assessment and evaluation costs were included in overall L&D team costs.

### ROI Calculation

When the total monetary benefits are compared with the total costs, the ROI calculation is:

\[
\text{ROI (\%)} = \frac{\$109,272.24 - \$705,566}{\$705,566} \times 100\% = -85\%
\]
Although there was an initial positive reaction to the program, the result was a negative ROI. For every dollar invested in this program, it cost an additional 85 cents.

We can use a concept called sensitivity analysis from the finance and accounting field to see how the output can change if we change the input. This program has a negative ROI because the numerator is not where it needs to be, and the cost is probably more than it should have been. Let’s examine these two elements.

First, for the benefits, it could be argued that this program should be a two-year solution. That is, as the managers developed coaching on the job, they will use it routinely over a period of time. This application of coaching should make a difference for a longer period. Two years of data could be used and possibly justified. However, to be extra conservative, we used only one year. This is Guiding Principle 9 of the ROI Methodology.

Second, a significant cost is the cost of taking the managers off the job. Some would argue that these are busy managers who likely took care of issues, clients, and sales reps needs either during the workshops, immediately after, during the meetings, or at lunch. You could make a case for not including this cost. If this cost is removed, and the benefits are claimed for two years, the ROI is almost positive. However, to be conservative, this cost is included. Including this cost illustrates the conservative nature of this process and makes for a more credible analysis.

The key is to make adjustments going forward with the numerator and denominator.

**Intangible Benefits**

The following intangible benefits were connected to this project:

- positive customer experience due to a shorter sales cycle
- employee satisfaction
- career development
- personal and professional advancement
- more productive and structured customer conversations and negotiations.

These were the most commented intangible benefits from the Levels 1 and 3 surveys. These intangibles represent an important data set for sales leadership. If they were converted to monetary value, there would be even more value from this program and a higher ROI. The L&D team felt that these intangible benefits were just as important as the business impact and ROI; therefore, they agreed to continue with coaching but with adjustments, and that over time the ROI would be positive.

**COMMUNICATION STRATEGY**

Initially, only Levels 1–4 data were presented to the area vice presidents and other stakeholders. At that time, ROI data had not been calculated and presented because revenue numbers were not available. However, after the ROI was calculated, significant negative results were identified. The team notified the L&D director who agreed
that the results needed to be shared with the commercial vice president right away. The presentation, which included the methodology and along with the results for each level, intrigued the commercial vice president, who asked that the results be reviewed with the area commercial directors at the Global Commercial staff meeting.

After the staff meeting, Global Commercial leaders, impressed with the ROI Methodology, commented that they finally had a way to show how their training and skills brought value to the organization. They expressed their commitment to making the adjustments needed for the coaching to be successful. Additionally, because of the interest in ROI Methodology, the L&D team is planning to do additional ROI studies.

As the ROI study indicated, the L&D team and business leaders agreed that coaching was important and could impact the business. The business leaders recognized that while a few people consistently applying coaching skills would move the needle in the right direction, many more needed to do that before they could make a positive impact. The organization is now committed to making coaching a priority, and agreed to continue measuring the application and quality of the L&D team’s coaching and, ultimately, to create a coaching culture.

**Lessons Learned**

Coaching is important and affects the business positively. However, coaching is ineffective, as shown in this case, when it is not reinforced with refresher training or supported by upper management, and when there is no behavioral change in the sales managers.

For example, the coaching playbook was effective in reminding managers to apply skills learned through prescribed activities over 12 weeks, but this did not successfully change behavior or measure the quality of the coaching conversations. Due to the lack of support from upper management and other priorities, the playbook was perceived as a “check the box” activity.

Overall, there was a notable impact on applying coaching. As discovered from the needs analysis, the coaching model that was implemented did meet the needs of being clear, easy to use, standardized, consistent globally, adaptable to any situation, and allowing for feedback, action, and follow-up, with a clear plan and achievable results supported by a global cadence and tools.

But as the company discovered, coaching is not a skill but a culture, and, therefore, was not able to show a positive ROI within the first year of implementation. Without proper reinforcement, instances of coaching declined, and focus has returned to making the number each month. The next step is to continue developing the behavior and give sales managers a compelling reason to change. Using the data presented in this case study, Global Healthcare has modified the coaching assessment to measure more of what types of coaching are being used, and the quality of coaching conversations. This will allow the company to continue monitoring different metrics for business impact and provide managers with specific data on how coaching will affect their business and help their teams be successful.
QUESTIONS FOR DISCUSSION

1. Why do you think there was a positive reaction at the beginning, but the program generated a negative ROI?
2. What are the pros and cons for having a negative ROI study?
3. What other changes could have been made to show a positive ROI?
4. What are the strengths of this case?

ABOUT THE AUTHOR

Kaycee Buckley is the global commercial training manager for a global healthcare company. She is accountable for leading best-in-class training on topics such as identifying competencies and measuring business impact, supporting more than 2,000 employees to institutionalize organizational initiatives and drive global standardization. Recently, Kaycee was recognized for developing and delivering the first-ever standardized global sales new hire training curriculum for the division, including a series of training events to support the launch of a new product, which achieved 60 percent performance improvement in overall revenue and qualified opportunities. Kaycee has more than 20 years of experience in the learning and development industry, and a passion to show how training affects the overall success of a business.
Abstract

This case study describes how a successful precision parts manufacturing company implemented a leadership development program for first-line managers. Based on the results of the company’s annual engagement survey, the program was designed to enhance five basic leadership competencies. Using the principles of design thinking, this case study shows step-by-step how the program was designed and implemented to deliver results, and then evaluated and reported to all stakeholders. The objectives of the program were met at each level, and the program yielded a positive return on investment (ROI).

PRECISION MANUFACTURING

Precision Manufacturing is a manufacturer of precision parts used in a variety of industries, including the automotive industry. The company operates 22 plants with more than 24,000 employees. The company has been very successful, but top executives are always thinking they could do much better. The leadership development profile, taken directly from the employees in the annual engagement survey, revealed that leaders are not as effective as they should be. At the same time, some business measures could improve to make Precision Manufacturing a more profitable organization. The company wanted enhanced business performance and thought that leadership development was the approach to improve specific measures.
SETTING THE STAGE FOR SUCCESS

The leadership development team used the 12-step ROI Methodology process, which ensures that a program delivers the desired results. Using design thinking, the methodology aligns the program to the business, keeps the focus on business impact throughout the implementation cycle, and measures and analyzes the success with five levels of outcomes.

Step 1. Start With Why: Aligning Programs With the Business

Key business performance measures were in five major categories: sales growth, operating costs, productivity, quality, and safety. These measures could be improved if leaders stepped up to the challenge of getting more results from their teams. At the same time, some executives thought that more effective leadership development might accomplish this, because of a noticeable lack of leadership behaviors at the first level of management.

Because the measures are different from one department to another, business alignment would have to start with the managers who attend the program. The program would be aimed at the first-level managers, and each manager would select two measures to improve in their work units. These measures could represent a problem that needs to be addressed or an opportunity that should be pursued. These measures should roll up into the aforementioned five categories.

Step 2. Make It Feasible: Selecting the Right Solution

To ensure that a leadership development program is the right solution, the participants in the program, first-level managers, were asked if the two business measures they selected could be improved with their team, using a particular set of competencies. Six basic competencies were involved:

- Communicate values and beliefs.
- Focus on key values through actions.
- Build collaboration, teamwork, and trust.
- Strengthen others’ abilities to excel.
- Inspire others to share a common vision.
- Recognize the accomplishments of others.

These competencies were more refined than ones that had previously been used with this group, and this level of management had not been involved in a formal leadership program before. Because the business measures were team measures, most participants concluded that the measures could be improved using these competencies with their team on the job. If a manager was not sure that the measure could be improved, then another measure was selected. As they prepared to attend the
program, the participants would have two measures that could be improved with the program using the competencies with their team at the workplace. This aligns the proposed solution to the business measure.

A commercially available program, the Leadership Challenge, was selected for the solution. The program content was slightly modified to reflect the needs of the company. A four-day program was developed with action plans as the vehicle to drive business impact. A few support tools were available after attending the program, including videos, application tools, case studies, and a coach.

Step 3. Expect Success: Designing for Results

The success of most leadership development programs was defined as having appropriate leader behavior in place. When those programs “start with the end in mind,” leader behavior is the end. Most top executives, including those at Precision Manufacturing, want more. They want to see the impact of the behavior on key performance indicators. Consequently, the success of this program has been defined at the Impact level, improving two business measures for each first-level manager. Leadership development is the means to that end.

With this definition of success, objectives were developed for Level 1, Reaction; Level 2, Learning; and Level 3, Application. The Level 4, impact, objectives are based on the two measures that each manager selected. Thus, each participating manager has two SMART Impact-level objectives that represent a stretch for the team and team leader.

The success definition and objectives were provided to designers, developers, facilitators, and managers of the participants to make sure that everyone is designing for application and impact and expecting and supporting those two levels of results. Also, because of the need to connect leadership development to the business, this program will be measured all the way to the impact and ROI levels for a sample group. This will clearly show executives that leadership development represents an investment and not a cost. Because of this level of expectation, a data collection plan and an ROI analysis plan were developed for the program and are presented as Tables 16-1 and 16-2, respectively. The perceived advantage of this approach is to expect success, designing the program to deliver the desired results. Figure 16-1 shows the flow of the process.
### TABLE 16-1. DATA COLLECTION PLAN

**Purpose of This Evaluation:** To measure the ROI of the program and to improve the program.

**Program:** Leadership Challenge

<table>
<thead>
<tr>
<th>Level</th>
<th>Broad Program Objectives</th>
<th>Measures</th>
<th>Data Collection Methods</th>
<th>Data Sources</th>
<th>Timing</th>
<th>Responsibilities</th>
</tr>
</thead>
</table>
| 1. Reaction | **Perceive the program to be:**  
- Relevant to their work  
- Important to their success as a manager  
- Valuable enough to apply to the team | At least 4 out of 5 on a 5-point scale | Survey | Participants | At the end of the formal program | Facilitator |
| 2. Learning | **Increase skills by 30% in each of the following:**  
- Communicate values and beliefs  
- Focus on key values through actions  
- Build collaboration, teamwork, and trust  
- Strengthen others’ abilities to excel  
- Inspire others to share a common vision  
- Recognize the accomplishments of others | One to 10 rating on a skill level at least 30% improvement | Survey | Participants | At the beginning and end of a formal program (pre- and post-data) | Facilitator |
| 3. Application | **Complete action plan**  
Achieve at least 4 out of 5 on a five-point scale on:  
- Extent of use  
- Frequency of use  
- Success with use for each of the six skills | Checklist and improvement data  
Achieve 4 out of 5 on a 5-point scale | Action plan | Participants | Three months after program | Evaluation team |
| 4. Impact | **Improve at least two measures in these areas:**  
- Sales growth  
- Operating costs  
- Productivity  
- Quality  
- Safety | The precise amount is set for each measure | Action plan | Participants with input from company records | Three months after program | Evaluation team |
| 5. ROI | 14% | Baseline Data: Each manager will have baseline data for the two measures selected.  
Comments: 14% is the target for capital expenditures at PMC |
<table>
<thead>
<tr>
<th>Data Items (Usually Level 4)</th>
<th>Methods for Isolating the Effects of the Program/Process</th>
<th>Methods of Converting Data to Monetary Values</th>
<th>Cost Categories</th>
<th>Intangible Benefits</th>
<th>Communication Targets for Final Report</th>
<th>Other Influences/Issues During Application</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales Growth</td>
<td>Participant estimates</td>
<td>• Standard value</td>
<td>• Research, design, and development (prorated) costs</td>
<td>• Engagement</td>
<td>• Top executive group</td>
<td>• Company experiencing growth</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Expert input</td>
<td>• Materials cost</td>
<td>• Teamwork</td>
<td>• All managers</td>
<td>• Labor market is tight (low unemployment rate)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Participant estimate</td>
<td>• Facilitator and/or coordinator costs</td>
<td>• Job satisfaction</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>• Facilities costs</td>
<td>• Communication</td>
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<td></td>
<td></td>
<td></td>
<td>• Travel/lodging/meals</td>
<td>• Stress mindset</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Participant salaries and benefits while attending training</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>• Administrative/overhead costs</td>
<td></td>
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</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Evaluation costs</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating Costs</td>
<td>Participant estimates</td>
<td>• Standard value</td>
<td>• Research, design, and development (prorated) costs</td>
<td>• Engagement</td>
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<td>• Expert input</td>
<td>• Materials cost</td>
<td>• Teamwork</td>
<td>• All managers</td>
<td>• Labor market is tight (low unemployment rate)</td>
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<td></td>
<td></td>
<td>• Participant estimate</td>
<td>• Facilitator and/or coordinator costs</td>
<td>• Job satisfaction</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>• Facilities costs</td>
<td>• Communication</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>• Travel/lodging/meals</td>
<td>• Stress mindset</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Productivity</td>
<td>Participant estimates</td>
<td>• Standard value</td>
<td>• Research, design, and development (prorated) costs</td>
<td>• Engagement</td>
<td>• Top executive group</td>
<td>• Company experiencing growth</td>
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<td>• Expert input</td>
<td>• Materials cost</td>
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<td>• All managers</td>
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<td>• Participant estimate</td>
<td>• Facilitator and/or coordinator costs</td>
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<td></td>
<td>• Travel/lodging/meals</td>
<td>• Stress mindset</td>
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<tr>
<td>Quality</td>
<td>Participant estimates</td>
<td>• Standard value</td>
<td>• Research, design, and development (prorated) costs</td>
<td>• Engagement</td>
<td>• Top executive group</td>
<td>• Company experiencing growth</td>
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<tr>
<td></td>
<td></td>
<td>• Expert input</td>
<td>• Materials cost</td>
<td>• Teamwork</td>
<td>• All managers</td>
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<td></td>
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<td>• Facilitator and/or coordinator costs</td>
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<td>• Facilities costs</td>
<td>• Communication</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>• Travel/lodging/meals</td>
<td>• Stress mindset</td>
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<td></td>
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<td></td>
<td>• Evaluation costs</td>
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</tbody>
</table>
FIGURE 16-1. THE FLOW OF THE PROCESS

DATA COLLECTION
As the program is designed, developed, and implemented, data is collected for four levels: reaction, learning, application, and impact.

Step 4. Make It Matter: Designing for Input, Reaction, and Learning
A sample of 72 first-level managers was used in the evaluation, representing four groups of 18. A total of 970 managers were in the first-level management category and would eventually attend. This program must be important to participants, and several objectives were developed to drive the desired reaction. Participants perceived this program as relevant to their work and important to their success, and left the session with an intent to use the competencies with their team. Table 16-3 shows the reaction data.

For learning, it was important for participants to measure (or assess) improvement in their capability on each of the six competencies. Learning was measured on a pre-
and post-self-assessment survey, using a 10-point scale, and the results in Table 16-4 show improvements in each key competency area and an average of 56 percent. The good news at this point is that participants see value in the programs and have enhanced their leadership competencies.

### TABLE 16-3. REACTION DATA

<table>
<thead>
<tr>
<th>Reaction Results</th>
<th>4.2</th>
<th>4.3</th>
<th>4.1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relevant to my work</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Important to my success</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intent to use the competencies with my team</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Based on a five-point scale.

### TABLE 16-4. LEARNING DATA

<table>
<thead>
<tr>
<th>Learning Results (Pre- and Post-Improvements)</th>
<th>48%</th>
<th>57%</th>
<th>42%</th>
<th>69%</th>
<th>53%</th>
<th>67%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Communicate values and beliefs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Focus on key values through actions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Build collaboration, teamwork, and trust</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Strengthen others’ abilities to excel</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Inspire others to share a common vision</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Recognize the accomplishments of others</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Based on a 10-point scale.
Step 5. Make It Stick: Designing for Application and Impact

The key to making the program stick is improving the extent of use, frequency of use, and success with use of the six competencies on the job as measured by a follow-up questionnaire. With a five-point scale, the results are shown in Table 16-5, presenting averages for the six competencies. Several barriers were uncovered, with “not enough time” (23 percent) and “lack of support” (18 percent) reported as the top two. Figure 16-2 shows the barriers and enablers.

Of the 72 managers in the sample, 62 provided data on the two impact measures. The data was included in an action plan, which served as an application tool and a data collection method. Four of the 62 managers reported no improvement in the measures. Table 16-6 shows an example of an action plan from one participant.

One of the conservative standards for the ROI Methodology addresses missing data (no data, no improvement). Because 10 managers did not provide action plan data and four others had no improvements, they were omitted from the analysis (zero value). The payoff is based on 58 managers, although the costs of all 72 managers were included.

<table>
<thead>
<tr>
<th>Barriers</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not enough time</td>
<td>23%</td>
</tr>
<tr>
<td>Lack of support</td>
<td>18%</td>
</tr>
<tr>
<td>Doesn’t fit our culture</td>
<td>14%</td>
</tr>
<tr>
<td>Other</td>
<td>10%</td>
</tr>
<tr>
<td>Too theoretical</td>
<td>7%</td>
</tr>
<tr>
<td>Too complex</td>
<td>4%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Enablers</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good support from manager</td>
<td>48%</td>
</tr>
<tr>
<td>Tools and application support</td>
<td>32%</td>
</tr>
<tr>
<td>Structure and discipline</td>
<td>18%</td>
</tr>
<tr>
<td>It’s needed</td>
<td>9%</td>
</tr>
<tr>
<td>Other</td>
<td>8%</td>
</tr>
</tbody>
</table>

**TABLE 16-5. APPLICATION DATA**

<table>
<thead>
<tr>
<th>Application Results</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Extent of use</td>
<td>4.3</td>
</tr>
<tr>
<td>Frequency of use</td>
<td>4.5</td>
</tr>
<tr>
<td>Success with use</td>
<td>3.9</td>
</tr>
<tr>
<td>Action Steps</td>
<td>Analysis</td>
</tr>
<tr>
<td>--------------</td>
<td>----------</td>
</tr>
<tr>
<td>1. Review absenteeism records for each employee—with a focus on trends and patterns</td>
<td>A. What is the unit of measure? 1 Absence</td>
</tr>
<tr>
<td>2. Discuss reasons for absenteeism with them using problem solving skills</td>
<td>B. What is the value (cost) of one unit? $210</td>
</tr>
<tr>
<td>3. Consult with HR team on absenteeism issues and trends</td>
<td>C. How did you arrive at this value? Contacted HR</td>
</tr>
<tr>
<td>4. Counsel with “problem employees” to correct habits and explore opportunities for improvement</td>
<td>D. How much did the measure change during the evaluation period? (monthly value) 2 percent</td>
</tr>
<tr>
<td>5. Conduct a positive discussion with every employee returning to work after an unplanned absence</td>
<td>E. What other factors have contributed to changes in absenteeism (indicate positive or negative)? Special program on “Being Accountable” from the Culture Change Team (Positive)</td>
</tr>
<tr>
<td>6. Provide recognition to employees who have perfect attendance</td>
<td>F. What percent of this change was actually caused by this program? 70%</td>
</tr>
<tr>
<td>7. Follow-up with each “problem employee” and discuss improvement or lack of improvement and plan other action</td>
<td>G. What level of confidence do you place on the above information? (100%=Certainty and 0%=No Confidence) 80%</td>
</tr>
<tr>
<td>8. Monitor improvement routinely and provide recognition when appropriate</td>
<td></td>
</tr>
</tbody>
</table>

**Intangible Benefits:** Improved morale

**Comments:** This keeps me focused
ANALYSIS

With the impact data collected, a series of steps are necessary to eventually capture ROI. These steps must be addressed carefully, with the focus on credibility.

**Step 6. Make It Credible: Isolate the Effects of the Program**

A critical part of the analysis is isolating the effects of the program using estimation from the managers. An experimental versus control group approach could not work because the participants had different outcome measures; therefore, finding comparison groups would be almost impossible. Also, trend-line analysis, another useful technique, would not work because many of the business measures selected were influenced by other factors.

Estimates from participants is an appropriate method because the estimates are coming from the managers who understand the measure best (the most credible source). The estimates were collected in a nonthreatening, unbiased way and are adjusted for error in the estimates.

For example, the participant in the action plan (Table 16-6) had an improvement of 2 percent in absenteeism. This is a fact verified by the absenteeism records. Seventy percent of this fact is attributable to the leadership program. The other 30 percent was caused by another program. However, the participant was only 80 percent confident of the 70 percent allocation, representing 20 percent error (100 – 80). The 20 percent error is removed by multiplying by 80 percent. Thus, the adjusted percent of absenteeism prevented because of this program is:

\[ 2\% \times 70\% \times 80\% = 1.12\% \]

**Step 7. Make It Credible: Convert Data to Monetary Value**

A variety of techniques were used to convert data to money. Standard values were used 24 percent of the time. Standard values are already known to the manager and accepted by them. At other times, other experts in the organization could provide the monetary values, and this was used 63 percent of the time. A third option is to estimate the value; that was accomplished for a small number of data, 18 percent of the time. The total monetary benefit from the program is $538,640. Table 16-7 shows the analyses for one group of participants with their first measure.

For some action plans, all the data is there to calculate the money values. Others will require some additional data. An example will help to explain this: Participant 7 in Table 16-7 has 22 employees who will work 240 days total if they never miss a day. This equals 5,280 days. Based on the data in the table:

- The improvement in three months was 2 percent absenteeism.
- The improvement in days is 5,280 days × 2% = 105 days.
- The monetary value is 105 × $210 = $22,050.
- When isolated to the leadership program: $22,050 × 70% × 80% = $12,348.
<table>
<thead>
<tr>
<th>Participant Number</th>
<th>Measurement Area</th>
<th>Total Annual Value</th>
<th>Basis</th>
<th>Method for Converting Data</th>
<th>Contribution Factor</th>
<th>Confidence Estimate</th>
<th>Adjusted Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Safety</td>
<td>$10,500</td>
<td>Lost time accidents</td>
<td>Expert</td>
<td>40%</td>
<td>70%</td>
<td>$2,940</td>
</tr>
<tr>
<td>2</td>
<td>Retention</td>
<td>75,000</td>
<td>Turnovers</td>
<td>Expert</td>
<td>40%</td>
<td>60%</td>
<td>$18,000</td>
</tr>
<tr>
<td>3</td>
<td>Retention</td>
<td>55,000</td>
<td>Turnovers</td>
<td>Expert</td>
<td>50%</td>
<td>70%</td>
<td>$19,250</td>
</tr>
<tr>
<td>4</td>
<td>Cost savings</td>
<td>4,500</td>
<td>Cost statements</td>
<td>N/A</td>
<td>90%</td>
<td>80%</td>
<td>$3,240</td>
</tr>
<tr>
<td>5</td>
<td>Cost savings</td>
<td>12,000</td>
<td>Contract services</td>
<td>N/A</td>
<td>30%</td>
<td>70%</td>
<td>$2,520</td>
</tr>
<tr>
<td>6</td>
<td>Production</td>
<td>9,430</td>
<td>Increase in production</td>
<td>Standard value</td>
<td>74%</td>
<td>78%</td>
<td>$5,443</td>
</tr>
<tr>
<td>7</td>
<td>Absenteeism</td>
<td>22,050</td>
<td>2% improvement</td>
<td>Expert</td>
<td>70%</td>
<td>80%</td>
<td>$12,348</td>
</tr>
<tr>
<td>8</td>
<td>Safety</td>
<td>12,400</td>
<td>Accidents</td>
<td>Expert</td>
<td>65%</td>
<td>80%</td>
<td>$6,448</td>
</tr>
<tr>
<td>9</td>
<td>Cost savings</td>
<td>3,445</td>
<td>Supplies</td>
<td>N/A</td>
<td>100%</td>
<td>100%</td>
<td>$3,445</td>
</tr>
<tr>
<td>10</td>
<td>Cost savings</td>
<td>21,300</td>
<td>IT costs</td>
<td>Standard value</td>
<td>30%</td>
<td>85%</td>
<td>$5,432</td>
</tr>
<tr>
<td>11</td>
<td>Retention</td>
<td>33,000</td>
<td>Turnovers</td>
<td>Standard value</td>
<td>50%</td>
<td>70%</td>
<td>$11,550</td>
</tr>
<tr>
<td>12</td>
<td>Cost savings</td>
<td>5,575</td>
<td>Overtime</td>
<td>Standard value</td>
<td>62%</td>
<td>80%</td>
<td>$2,765</td>
</tr>
<tr>
<td>13</td>
<td>Production</td>
<td>18,500</td>
<td>Labor productivity</td>
<td>Standard value</td>
<td>40%</td>
<td>70%</td>
<td>$5,180</td>
</tr>
<tr>
<td>14</td>
<td>Quality</td>
<td>45,200</td>
<td>Rejects</td>
<td>Standard value</td>
<td>20%</td>
<td>75%</td>
<td>$6,780</td>
</tr>
<tr>
<td>15</td>
<td>Safety</td>
<td>9,000</td>
<td>Accidents</td>
<td>Expert</td>
<td>50%</td>
<td>80%</td>
<td>$3,600</td>
</tr>
</tbody>
</table>

First group, first measure total: $108,941
First group, second measure total: $82,990
All (four) groups, all measures total: $538,640
Step 8. Make It Credible: Capture Costs of Project
All of the costs were included, direct and indirect, for all 72 participants. The fully loaded direct costs were $355,370, and the indirect, prorated costs were $9,890, for a total of $365,260. Table 16-8 shows the costs from the program.

TABLE 16-8. SUMMARY OF FULLY LOADED COSTS

<table>
<thead>
<tr>
<th>Cost of Item</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Needs assessment (prorated over the life of the program)</td>
<td>$1,100</td>
</tr>
<tr>
<td>Program development (prorated over the life of the program)</td>
<td>4,290</td>
</tr>
<tr>
<td>Program materials ($209/participant)</td>
<td>15,048</td>
</tr>
<tr>
<td>Travel, meals, and lodging ($1,800/participant)</td>
<td>129,600</td>
</tr>
<tr>
<td>Facilitation and coordination ($2,000/day)</td>
<td>32,000</td>
</tr>
<tr>
<td>Facilities and refreshments ($700/day)</td>
<td>11,200</td>
</tr>
<tr>
<td>Participant salaries (plus benefits) for time and program</td>
<td>121,752</td>
</tr>
<tr>
<td>Manager salaries (plus benefits) for time involved in program</td>
<td>40,770</td>
</tr>
<tr>
<td>Learning and development overhead (prorated)</td>
<td>4,500</td>
</tr>
<tr>
<td>ROI evaluation costs</td>
<td>5,000</td>
</tr>
<tr>
<td><strong>Total for 72 participants</strong></td>
<td>$365,260</td>
</tr>
</tbody>
</table>

Step 9. Make It Credible: Calculate Return on Investment
With total costs of $365,260 and total monetary benefits of $538,640, the program’s benefit-cost ratio (BCR) and ROI calculations are as follows:

\[
\text{BCR} = \frac{\text{benefit}}{\text{cost}} = \frac{538,640}{365,260} = 1.47
\]

\[
\text{ROI (\%)} = \frac{\text{benefit} - \text{cost}}{\text{cost}} \times 100 = \frac{538,640 - 365,260}{365,260} \times 100 = 47\%
\]

This ROI exceeds the objective of 14 percent. For every one dollar invested in this program, the dollar is recovered, and an additional 47 cents is returned.

Step 10. Make It Credible: Identify Intangible Measures
In addition to improving the two measures each participant selected, intangibles were delivered by the program as well. The intangibles were connected to the program based on the responses to a brief questionnaire from the participants. The participants were asked about the extent of influence of this program on the intangible. On a five-point scale, where 1 is no influence and 5 is very significant influence, participants had to rate an item at least a 3 to be considered to have an influence. In addition, at least
20 percent had to rate it a 3 or higher to make the intangible list. Three made the list: improved employee engagement, improved job satisfaction of managers, and reduced stress for the managers.

**USE THE RESULTS**

With results in hand, two final steps must be taken to make decisions about the program and convince executives that leadership development is an investment.

**Step 11. Tell the Story: Communicating Results to Key Stakeholders**

The results were shared with all the participants (first-level managers), the managers of the participants (department managers), and the entire executive team. A briefing was conducted with the senior executives, so they could understand the process and methodology as well as the results. A one-page summary was also provided to these executives. Figure 16-3 presents the one-page summary of this ROI evaluation. The results were also shared with the entire leadership development team.

**Step 12. Optimize Results: Using Black Box Thinking to Increase Funding**

This evaluation was conducted on the first four groups of participants, and the results were impressive. Some adjustments were made to make the program more successful going forward, focusing on process improvement. At the same time, the study provided evidence that the leadership development program is delivering a positive return on investment, planting in the minds of top executives that leadership development is an investment and not a cost. This will help to sustain the program and will help executives resist the temptation to discontinue it in the future.

**QUESTIONS FOR DISCUSSION**

1. What are the strengths of this case?
2. Assess the methods of data collection.
3. Assess the methods of isolating the effects of the program.
4. Assess the methods of converting data to money.
5. How could this study be improved?
FIGURE 16-3. ONE-PAGE SUMMARY

Leadership Development: Precision Manufacturing

The Leadership Challenge
- Four-day workshop with action plans and support tools
- Each participant selects two key performance indicators to improve using the competencies with their team.

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

Reaction: Objectives Met
- Relevance
- Important
- Intent to use

Learning Objectives Met
Pre- and 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%

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%

Impact Objectives:
Two Objectives for Each Participant

Costs
Direct: $355,370
Indirect, Prorated: $99,890
Total: $365,260

Method of Converting Data to Money

Total Monetary Benefits = $538,640
- Intangibles
- Engagement
- Satisfaction
- Stress

BCR = 1.47
ROI = 47%
ABOUT THE AUTHORS

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About ROI Institute

ROI Institute Inc. is the leading resource on research, training, and networking for practitioners of the ROI Methodology. Founders and owners Patti P. Phillips, PhD, and Jack J. Phillips, PhD, are the leading experts in the application of ROI to learning, HR, and performance improvement programs.

Founded in 1993, ROI Institute is a service-driven organization assisting professionals in improving their programs and processes through the use of the ROI Methodology. This methodology is a critical tool for measuring and evaluating programs with more than 26 different applications in more than 70 countries.

ROI Institute offers a variety of consulting services, learning opportunities, and publications. In addition, it conducts research activities for organizations internally, as well as for other enterprises, public sector entities, industries, and interest groups, globally. ROI Institute is the only organization offering ROI Certification to build expertise in implementing ROI evaluation and sustaining the measurement and evaluation process in your organization.

For more information on certification, workshops, consulting and research, visit roiinstitute.net, email info@roiinstitute.net, or call 205.678.8101.
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Patti P. Phillips, CEO of ROI Institute, is a renowned leader in measurement and evaluation. Patti helps organizations implement the ROI Methodology in more than 70 countries around the world. Since 1997, Patti has been a driving force in the global adoption of the ROI Methodology and the use of measurement and evaluation to drive organizational change. Her work as an educator, researcher, consultant, and coach supports practitioners as they develop their own expertise to help organizations and communities thrive. Her work spans private, public, nonprofit, and nongovernmental organizations. Patti is a member of the board of trustees of the United Nations Institute for Training and Research and the International Federation of Training and Development Organizations. She is the chair of the Institute for Corporate Productivity People Analytics Board; principal research fellow for The Conference Board; board chair of the Center for Talent Reporting (CTR); and is an Association for Talent Development (ATD) Certification Institute fellow. Patti also serves on the faculty of the UN System Staff College in Turin, Italy. Patti has a PhD in international development and a master’s degree in public and private management. Her work has been featured on CNBC and Euronews, and in more than a dozen business journals. She has authored a number of books on the subject of measurement, evaluation, analytics, and ROI. Patti Phillips can be reached at patti@roiinstitute.net.

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**Jack and Patti Phillips** received the Distinguished Contributor Award from the Center for Talent Reporting for their contribution to the measurement and management of human capital in February 2019. In addition, the Thinkers50 organization recognized Patti and Jack as two of the initial Top 50 World Leaders in Coaching in November 2019. They were also listed as top finalists for the Marshall Goldsmith Distinguished Achievement Award in Coaching. Additionally, ROI Institute was the winner of the measurement, testing, and assessment category of the 2019 Training Magazine Network Choice Awards program. Together, Jack and Patti contribute to a variety of journals and have authored a number of books on the subject of accountability and ROI including their most recent books, *Return on Investment (ROI) Basics*, 2nd edition (ATD Press 2019) and *Value for Money: How to Show the Value for Money for All Types of Projects and Programs in Governments, Non-Governmental Organizations, Nonprofits, and Businesses* (Wiley 2019).

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