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THE ROI FIELD BOOK

Strategies for
Implementing
ROI in HR
and Training

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THE ROI FIELDBOOK



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THE ROI FIELDBOOK: STRATEGIES FOR IMPLEMENTING ROI IN HR AND TRAINING

Patricia Pulliam Phillips, PhD
Jack J. Phillips, PhD
Ron Drew Stone
Holly Burkett

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Supplementary Resources Disclaimer

Additional resources were previously made available for this title on CD. However, as CD has become a less accessible format, all resources have been moved to a more convenient online download option.

You can find these resources available here: www.routledge.com/9780750676229

Please note: Where this title mentions the associated disc, please use the downloadable resources instead.

ACKNOWLEDGMENTS

From Ron Drew Stone

Thanks to the many people around the world who have participated in ROI workshops and certification programs and to the clients who have engaged our consulting services in needs assessment, measurement, and accountability practices. This fieldbook includes our latest refinements of the ROI Methodology, many of which reflect your challenges to us as well as your contributions. It represents our most comprehensive resource to help you to complete your measurement projects and to sustain momentum as you blend measurement practices into the processes of your organization. I encourage you to use it not only as a learning tool but also as a teaching tool for others. I wish you continued success as you champion assessment, measurement, and accountability initiatives in your organization.

From Holly Burkett

I can't describe the many ways in which learning and practicing the ROI Methodology has transformed my career path, electrified my commitment to the field, and enriched my network of professional support. Many thanks to my mentors, Jack, Patti, and Ron, for their enduring support and for the invaluable privilege of being able to contribute my experiences and lessons learned to this endeavor. Thanks to the diverse array of clients who have graciously allowed me to learn with them and from them. I also want to recognize friends, colleagues, and cheerleaders from the ASTD ROI Network, who continue to inspire, challenge, and humble me by modeling what it means to be "best in class." Implementing the ROI process has fueled my thirst for continual learning and development, has helped me show how my work matters, has inexplicably nurtured my spirit along the way, and has continued to leave me hungry for more. May it do the same for you in your own journey.

PREFACE

Current trends emphasizing the value and payoff of workplace learning efforts may lead one to ask, “Okay, there is a lot of interest in ROI. We’re interested too. But how do we *do* ROI?” Good question. Few organizations go beyond the classroom to measure learning or use evaluation to assess how learning is applied back to the workplace. This *ROI Fieldbook* is designed to support the implementation of the ROI Methodology. Beginning with an overview of the ROI Methodology, this book will take you step by step through each phase of the ROI process. The exercises, case scenarios, case study, and tools and templates will help you apply the ROI Methodology to a case study of your own.

HOW THIS BOOK IS ORGANIZED

As shown in the chapter flow diagram, the book is organized into four primary parts, each representing a distinct phase of ROI implementation. For example, Part 1, “Getting Started,” emphasizes organizational readiness issues, strategies, and tools, and shows fieldbook users how to get started with the process. Part 2, “Implementing the Process,” emphasizes important areas of action around ROI implementation from start to finish. Part 3, “Implementation Issues,” focuses on common implementation issues that can help or hurt your implementation efforts and provides strategies for building evaluation capability in your organization. Finally, Part 4, “Staying on Track,” describes how to sustain commitment to the ROI Methodology after the momentum of your initial impact study has begun to wane.

Preface
Trends and Issues

PART ONE

Getting
Started

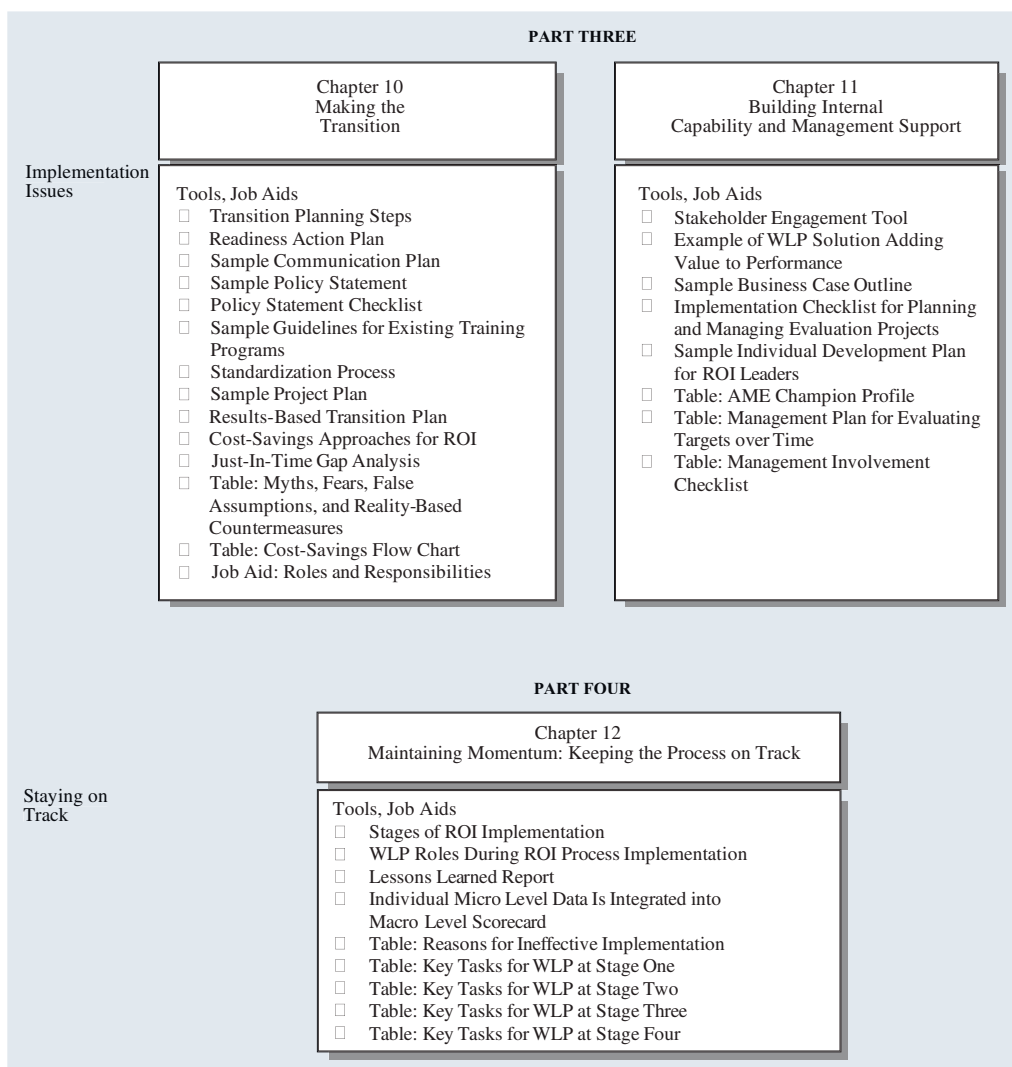
| Chapter 1 Status of ROI: Trends and Issues |
|--|
| Tools, Job Aids <ul style="list-style-type: none"> ROI Model Five Level Framework ROI Best Practices Guiding Principles Example of Evaluation Targets |

| Chapter 2 Planning Your Work |
|---|
| Tools, Job Aids <ul style="list-style-type: none"> Linking Needs to Objectives and Evaluation (Reliance Insurance example) Linking Needs to Objectives and Evaluation Data Collection Plan (blank) ROI Analysis Plan (blank) Communication Plan (blank) Project Plan (blank) Writing Objectives That Focus on Results Additional Data Collection and ROI Analysis Plans |

PART TWO

Implementing
the Process

| Chapter 3 Collecting the Data You Need | Chapter 4 Giving Credit Where Credit Is Due | Chapter 5 Converting Benefits to Money | Chapter 6 Counting the Costs | Chapter 7 Calculating the Return on Investment | Chapter 8 Telling the Story | Chapter 9 Forecasting the ROI |
|---|--|---|---|--|---|---|
| Tools, Job Aids <ul style="list-style-type: none"> Sample L1 Questionnaire Action Plan Form Questions When Developing Action Steps Cyber International Follow-up Questionnaire Sample Data Collection Plan—Performance Management Sample Completed Action Plans Sample L1 Questionnaire Sample L2 Performance Observation Sample Level 3 Before and After Questionnaire Template L2 Performance Observation Sample Size Table Level 1 Utility Measures Table: Hard Data Table: Soft Data Level 2 CRT Reporting Format Methods of Data Collection Improving Response Rates Job Aid: 7C Factors™ of Data Collection | Tools, Job Aids <ul style="list-style-type: none"> Techniques to Isolate the Effects Control Group Design Plot of Reject Rate Plot of Sexual Harassment Complaints Plot of Shipment Productivity Daily Sales Versus Advertising ROI Sample ROI Analysis Plan: Performance Management Template—Isolation Using Estimates Sample Isolation: Adjusting Participants' Estimates from a Leadership Program Sample Isolation Impact Questions and Adjustments Estimates of Factors That Influenced Performance Improvement Steps to Determine Isolation | Tools, Job Aids <ul style="list-style-type: none"> Experts and Historical Costs Linking to Other Measures Table: Influences on Credibility of Outcome Data Table: Methods of Converting Data Table: Supervisor Estimates Table: Turnover Cost Summary Job Aid: Five Steps to Convert Data Job Aid: To Convert or Not Convert Worksheet: To Convert or Not Convert | Tools, Job Aids <ul style="list-style-type: none"> Cost Estimating Worksheet Table: Comparison of Cost Scenarios Table: Recommended Cost Categories Table: Calculating Overhead Costs—Example Table: Executive Leadership Development Program Costs Table: Cost Classification Matrix | Tools, Job Aids <ul style="list-style-type: none"> Potential Magnitude of an ROI Table: Misuse of Financial Terms Table: Chain of Impact Drives ROI | Tools, Job Aids <ul style="list-style-type: none"> Format of Impact Study Report Feedback Action Plan Streamline the Communication with Executives Sample Streamlined Report Table: Communication Plan for Program Results Table: Common Target Audiences Job Aid: ROI Conservative Approach | Tools, Job Aids <ul style="list-style-type: none"> ROI at Different Time and Levels Pre-Program ROI Forecast Model Questions to Ask on Feedback Questionnaires Forecast Versus Actual Data Report Table: Relationships Between Test Scores and Performance |



With the exception of the introduction, each chapter is divided into five core sections:

Fundamentals. The first section addresses the fundamental issues of the topic, giving the fieldbook user some knowledge of the purpose and importance of each step. This is meant to review and refresh your basic understanding of the ROI Methodology and to support the foundational concepts provided in the seven primary references cited later.

Potential Challenges. Next, potential implementation challenges are addressed, along with specific proven solutions for surmounting those challenges. This section will help fieldbook users anticipate challenges in their own application of the ROI Methodology and will provide tools and resources for proactively confronting such issues.

Action Steps. The third section offers action steps to assist fieldbook users in applying each step of the ROI model. Action steps are meant to be applied to individual case scenarios as well as to a specific program relevant to the reader's workplace.

Chapter Summary. The summary section reviews and reinforces key concepts of the chapter and provides a transition to the next chapter.

References and Resources. The final section includes supplemental tools, templates, case studies, and references to additional readings to assist with immediate and ongoing application of ROI implementation. Each tool, template, or case is available on the CD-ROM and organized by chapter. The last chapter in the book provides networking resources that offer fieldbook users the opportunity to connect with others addressing similar challenges in implementing ROI.

Primary recommended references for all chapters are listed in the following. These resources will provide a “soup-to-nuts” conceptual framework for the ROI Methodology and are useful supplements to this application-based fieldbook:

1. Phillips, Jack J. *Return on Investment in Training and Performance Improvement Programs*, 2nd ed. Woburn, MA: Butterworth-Heinemann, 2003.
2. Phillips, Jack J., and Patricia Pulliam Phillips. *Proving the Value of HR: How and Why to Measure ROI*. Alexandria, VA: Society for Human Resource Management, 2005.
3. Phillips, Patricia Pulliam, and Jack J. Phillips. *Return on Investments Basics*. Alexandria, VA: American Society for Training and Development, 2006.
4. Phillips, Jack J., and Patricia Pulliam Phillips. *ROI at Work*. Alexandria, VA: American Society for Training and Development, 2005.
5. Phillips, Jack J. *Handbook of Training Evaluation and Measurement Methods*, 3rd ed. Woburn, MA: Butterworth-Heinemann, 1997.
6. Phillips, Jack J., and Ron Drew Stone. *How to Measure Training Results*. New York: McGraw-Hill, 2002.
7. Phillips, Jack J., Ron D. Stone, and Patricia Pulliam Phillips. *The Human Resources Scorecard: Measuring the Return on Investment*. Woburn, MA: Butterworth-Heinemann, 2001.

HOW IS THIS BOOK DIFFERENT?

A wide range of books, articles, journals, conferences, and workshops help practitioners understand and gain knowledge and skills in implementing measurement and ROI evaluation for training and performance improvement, human resources, and other programs, processes, and initiatives.

This book is not meant to be a substitute for books highlighting the theories and premises behind ROI evaluation. It does, however, provide you with an ample “one-stop shop” of information, tools, and resources that can help you avoid the “reinventing the wheel” syndrome and can help move you forward in your own efforts to implement the ROI Methodology in your organization.

Specifically, this book will give you:

- A basic overview of the ROI Methodology.
- Case scenarios to enhance and synthesize learning.
- A six-part case study, Premier Motors International, which focuses on applying the ROI Methodology.
- Relevant, practical, and real-world tools and resources for your immediate use.
- Guidelines for applying learning, tools, and resources to your own specific project or program (see the following note).
- A CD-ROM with chapter-specific tools and resources from each phase of the ROI process.

Note: If you do not have a specific project, then you can follow the multi-part example case study provided throughout the fieldbook. The case study, Premier Motors International, is in six parts. Each part builds on each step of the ROI Methodology as it is presented chapter-by-chapter, beginning in Part 1, Chapter 2, and continuing throughout Part 2 of the fieldbook. This case presents a thorough treatment of how decisions are made to collect, analyze, and present data in a real-world situation in which things don't always go as you would like. Your learning experience will be greatly enhanced if you apply the methodology, tools, and processes to your own project as you proceed through the fieldbook chapter-by-chapter. Criteria to help you with selecting a project will be presented. In fact, by the end of Part 2, "Implementing the Process," you should be well on your way to completing the significant components of planning and executing an ROI impact study!

Case examples of other implementation efforts and their related tools can also be adapted to your own programs. We want to help build your skills in implementing the ROI Methodology so you can demonstrate not only program value to an organization but also your own value as a results-oriented workplace learning professional.

WHO SHOULD BE READING AND USING THIS FIELDBOOK?

Although interest in ROI comes from practitioners as well as from senior management and executives, choosing the right book for the right person is important. A number of books are available on the ROI Methodology, including books that present a high-level view of the process. These books are often more suitable for executives and senior management who are interested in the process but don't want the details. Other books are available that explain the theory behind the process. Many books span the multiple types of measurement and evaluation processes available and compare the ROI Methodology to those processes so practitioners can choose the most appropriate process. Other books are available that detail Phillips's ROI Methodology.

This fieldbook is designed for the practitioner who is conducting an ROI impact study or for the person who is trying to implement the ROI Method-

ology in an organization. It can be someone who is a novice at the process or someone who has had some experience but needs a little help with more advanced approaches. This book can be used by individuals in training and performance improvement, quality, technology, HR, public-sector, private-sector, and nonprofit organizations.

HOW CAN I GET THE MOST OUT OF THIS BOOK?

As you read, focus on the core concepts and tools presented in each of the four parts of the book. Challenge yourself by working through the situational exercises. Starting with Chapter 2, use your project as a point of reference and focus on each step in implementing the ROI Methodology by using the tools and templates provided. If you do not have a project in mind, the multi-part case study will illustrate how the process works. If you are not interested in completing an impact study but are more interested in specific, individual steps, each chapter will describe the underlying concepts behind each step as well as potential challenges and suggested solutions in implementing them.

Pay special attention to the tools, resources, and action items that can help you with project issues you're facing. And finally, use the References and Resources from each chapter as a source of additional guidance. Be sure to access the exercises, readings, tools, templates, and job aids available on the CD-ROM and use or replicate them freely (giving appropriate credit).

ABOUT THE AUTHORS

Patricia Pulliam Phillips, PhD, president and CEO of the ROI Institute, Inc., earned her PhD in International Development and her MA in Public and Private Management. Early in her professional career, she was a corporate manager who observed performance improvement initiatives from the client perspective and knew that results were imperative. As manager of a market planning and research organization for a large electric utility, she and her team were responsible for the development of electric utility rate programs for residential and commercial customers. In this role, she played an integral part in establishing Marketing University, a learning environment that supported the needs of new sales and marketing representatives. Internationally known as an accountability, measurement, and evaluation expert, Ms. Phillips facilitates workshops all over the world and consults with U.S. and international organizations—public, private, nonprofit, and educational—on implementing the ROI Methodology™. She is the author of *The Bottomline on ROI* (CEP Press, 2002), which won the 2003 ISPI Award of Excellence. She is editor or coauthor of *Return on Investment (ROI) Basics* (ASTD, 2006), *ROI at Work: Best-Practice Case Studies from the Real World* (ASTD Press, 2005), *Proving the Value of HR: How and Why to Measure ROI* (SHRM, 2005), *The Human Resources Scorecard: Measuring the Return on Investment* (Butterworth-Heinemann, 2001), and *Measuring ROI in the Public Sector* (ASTD 2002).

Jack J. Phillips, PhD, a world-renowned expert on measurement and evaluation, is chair of the ROI Institute, Inc., which provides consulting services, workshops, and keynote addresses for *Fortune 500* companies and major organizations around the world. His expertise in measurement and evaluation is based on more than 27 years of corporate experience in five industries. Jack has served as training and development manager at two *Fortune 500* firms, senior HR officer at two firms, president of a regional federal savings bank, and management professor at a major state university. Phillips developed the ROI Methodology™, a revolutionary process that provides bottom-line figures and accountability for all types of training, performance improvement, human resources, and technology programs and is used worldwide by corporations, governments, and nonprofit organizations. Phillips is the author or editor of

more than 30 books and more than 100 articles. His most recent books are *Proving the Value of HR: How and Why to Measure ROI* (SHRM, 2005), *Investing in Your Company's Human Capital: Strategies to Avoid Spending Too Much or Too Little* (AMACOM, 2005), *ROI at Work: Best-Practice Case Studies from the Real World* (ASTD Press, 2005), *Return on Investment in Training and Performance Improvement Programs*, 2nd Edition (Butterworth-Heinemann, 2003), and *The Human Resources Scorecard: Measuring the Return on Investment* (Butterworth-Heinemann, 2001). Jack earned his PhD in Human Resource Management.

Ron Drew Stone is an author, international consultant and presenter, and one of the world's most recognized and accomplished authorities on improving and measuring training and performance improvement interventions. He provides consulting services in performance improvement, linking training to organization business measures, designing training for results and ROI, and measuring program results. Ron also certifies practitioners in the ROI process and conducts a full range of public and in-house performance improvement and measurement workshops. He also conducts a workshop on situational needs assessment. Ron has over 25 years of diverse experience in economic development, engineering, training, and human resources. He has coauthored *How to Measure Training Results: A Practical Guide to Tracking the Six Key Indicators* (McGraw-Hill, 2002) and *The Human Resources Scorecard: Measuring the Return on Investment* (Butterworth-Heinemann, 2001). He has contributed to numerous published case studies and resource books. He is a certified change consultant. He has a BBA from Georgia State University.

Holly Burkett, SPHR, CPT, Principal of Evaluation Works, has more than 20 years' experience assisting public- and private-sector organizations design and measure a wide range of performance improvement initiatives. As both an internal and external consultant, she has worked in the high-tech, petroleum, retail, and health care industries, as well as with government and nonprofit service agencies, to successfully create and implement results-based measurement systems, tools, and processes. Burkett is editor-in-chief of ISPI's *Performance Improvement Journal*, a select item writer for the Human Resource Certification Institute (HRCI), and an international conference presenter, workshop leader, and author on performance measurement. Her work has been featured in UK's *Industrial & Commercial Training Journal*, the *Istanbul HR Journal*, *T & D*, and Japan's *HRM* and *Training Magazine(s)*. Publications include authoring the evaluation chapter in *HPI Essentials* and coauthoring ASTD's *Info-Line*, *Managing Evaluation Shortcuts*, numerous ROI case studies with ASTD's *In Action* series, and the third edition of Donald Kirkpatrick's *Evaluating Training Programs: The Four Levels*. Holly earned her MA in Human Resources and Organization Development from the University of San Francisco.

Part One

Getting Started

1

STATUS OF ROI: TRENDS AND ISSUES*

Measuring the return on investment (ROI) in learning, development, and performance improvement has earned a significant place among the critical issues in the workplace learning and performance (WLP) field. Today's workplace learning and performance professionals are being challenged to provide convincing data about the contribution of specific human resources programs and processes. The need for measuring the return on investment (ROI) of learning programs has never been greater. For almost a decade, ROI has been on conference agendas and at professional meetings. Journals and newsletters regularly embrace the concept with increasing print space. More than a dozen books provide significant coverage of the topic. Even top executives have enhanced their appetite for ROI information.

Measuring ROI is a topic of much debate. It is rare for any topic to stir up emotions to the degree the ROI issue does. Return on investment is characterized as flawed and inappropriate by some, while others describe it as the only answer to their accountability concerns. The truth probably lies somewhere between. Understanding the drivers for the ROI Methodology and the inherent weaknesses and advantages of ROI makes it possible to take a rational approach to the issue and implement an approximate mix of evaluation strategies that includes ROI.

Although interest in the topic has heightened and much progress has been made, it is still an issue that challenges even the most sophisticated and progressive WLP departments. While some professionals argue that it is not possible to calculate ROI, others quietly and deliberately proceed to develop measures and ROI calculations. The latter group is gaining tremendous support from senior management teams and is making much progress. Regardless of

*This is an updated, condensed, and modified version of the first two chapters of *Return on Investment in Training and Performance Improvement Programs*, 2nd ed., by Jack J. Phillips, Boston: Butterworth-Heinemann, 2003. All rights reserved.

the position taken on the issue, the reasons for measuring the return still exist. Today, most WLP professionals share a concern that they must eventually show a return on their learning investment. Otherwise, funds may be reduced or the WLP department may not be able to maintain or enhance its present status and influence in the organization.

The dilemma surrounding the ROI process is a source of frustration with many senior executives—even within the WLP field itself. Most executives realize that learning is a basic necessity when organizations experience significant growth or increased competition. They intuitively feel that there is value in providing learning opportunities, and logically they anticipate a payback in important bottom-line measures such as productivity improvements, quality enhancements, cost reductions, and time savings. Yet frustration comes from the lack of evidence to show that the process is really working. While payoffs are assumed to exist and learning programs appear to be necessary, more evidence is needed or future funding may be adjusted. The ROI Methodology represents the most promising way to show this accountability in a logical, rational approach.

In this chapter you will:

- Learn about the status and current trends of ROI.
- Learn the five levels of evaluation and how they are employed with the ROI Methodology.
- Learn the fundamentals of the ROI Methodology.
- Identify a specific workplace learning program or initiative with which to apply ROI principles and practices.

CURRENT STATUS

One thing is certain of the ROI debate—it is not a fad. As long as there is a need for accountability of learning expenditures and a desire for an investment payoff, ROI will be used to evaluate major investments in learning and performance improvement.

A fad is a new idea or approach or a new spin on an old approach. The concept of ROI is not a fad; it has been used for centuries. The 75th-anniversary issue of *Harvard Business Review* (HBR) traced the tools used to measure results in organizations (Sibbet, 1997). The early issues of HBR, published during the 1920s, credited ROI as the emerging tool to use to place a value on the payoff of investments. With increased adoption and use, ROI is here to stay. As highlighted in Table 1–1, today over 2,000 organizations are routinely developing ROI calculations for learning and performance improvement programs.

Specific applications of ROI began in the manufacturing sector, where it was easily developed. It migrated to the service sector, health care, the public sector, and now to the educational sector. Recent applications involve measuring the return on investment of a graduate degree program, in-service teacher training, and continuing education programs at universities. According to *Training*

TABLE 1-1
SUMMARY OF THE CURRENT STATUS OF ROI USE

ROI by the Numbers

- The ROI Methodology has been refined over a 25-year period.
- The ROI Methodology has been adopted by over 2,000 organizations in manufacturing, service, nonprofit, government, and educational settings.
- 5,000 studies are developed each year using the ROI Methodology.
- 100 case studies are published on the ROI Methodology.
- 3,500 individuals have been certified to implement the ROI Methodology in their organizations.
- Organizations in 40 countries have implemented the ROI Methodology.
- 15 books have been developed to support the process.
- A 500-member professional network has been formed to share information.

magazine, the use of ROI in training organizations continues to grow. Of those listed as the Top 100 Organizations in 2004, 75% are using the ROI Methodology (*Top 100*, 2004). A major study by the Corporate Executive Board indicated that ROI is the fastest growing metric in learning and development. It is also the metric with the widest gap between actual use and desired use, which underscores the many misconceptions about ROI (Drimmer, 2002).

It is estimated that 5,000 studies are conducted globally each year by organizations using the ROI Methodology. This number is based on the number of organizations that have participated directly in certification for the ROI Methodology. At least 100 of these studies have been published in various casebooks and reference books on ROI. Some of these are included in journals and trade magazines. Table 1-2 shows 15 studies in a variety of applications. This listing underscores the variety of applications, settings, and results that can be achieved. It should be noted that these studies represent a very high ROI, which is not always the case; these are more positive examples of the use of the methodology. Many of the published ROI studies have very high ROI values, representing some of the most successful programs. High ROI values are achieved only when the learning program is needed, addresses a specific performance gap, and is applied and supported in the workplace.

At least 3,500 individuals have attended a five-day workshop to learn how to implement the ROI Methodology. Most of the individuals who have followed through with projects have become certified in ROI implementation. These individuals develop a particular project as part of the weeklong workshop, plan the evaluation, and communicate it to team members. The certification focuses on building competencies in 10 skill areas, as shown in Table 1-3 (Phillips, 2004). These certification workshops have been conducted in most major cities in the United States and over a dozen countries outside the United States.

Measuring return on investment is becoming a global issue. To date, 40 countries have implemented the ROI Methodology, including Ireland, England, Holland, Italy, Germany, Denmark, South Africa, Chile, Peru, Australia, New Zealand, Singapore, Malaysia, Japan, China, India, and Canada, among others.

TABLE 1–2
PUBLISHED ROI STUDIES

| Measuring the ROI | Key Impact Measures | ROI |
|--|---|---------------------|
| Performance Management (restaurant chain) | A variety of measures, such as productivity, quality, time, costs, turnover, and absenteeism | 298% ¹ |
| Process Improvement Team (Apple Computer) | Productivity and labor efficiency | 182% ¹ |
| Skill-Based Pay (construction materials firm) | Labor costs, turnover, absenteeism | 805% ² |
| Sexual Harassment Prevention (health care chain) | Complaints, turnover, absenteeism, job satisfaction | 1,052% ² |
| Safety Incentive Plan (steel company) | Accident frequency rate, accident severity rates | 379% ² |
| Diversity (Nextel Communications) | Retention, employee satisfaction | 163% ⁶ |
| Retention Improvement (financial services) | Turnover, staffing levels, employee satisfaction | 258% ³ |
| Absenteeism Control/Reduction Program (major city) | Absenteeism, customer satisfaction | 882% ² |
| Stress Management Program (electric utility) | Medical costs, turnover, absenteeism | 320% ² |
| Executive Leadership Development (financial) | Team projects, individual projects, retention | 62% ² |
| E-Learning (petroleum) | Sales | 206% ² |
| Internal Graduate Degree Program (federal agency) | Retention, individual graduate projects | 153% ⁴ |
| Executive Coaching (Nortel Networks) | Several measures, including productivity, quality, cost control, and product development time | 788% ⁵ |
| Competency Development (Veteran's Health Administration) | Time savings, work quality, faster response | 159% ⁴ |
| First Level Leadership Development (auto rental company) | Various measures—at least two per manager | 105% ⁷ |

1. *In Action: Measuring Return on Investment*, Volume 3. Patricia P. Phillips, Editor; Jack J. Phillips, Series Editor. Alexandria, VA: American Society for Training and Development, 2001.
2. *The Human Resources Scorecard: Measuring the Return on Investment*. Jack Phillips, Ron D. Stone, Patricia P. Phillips. Woburn, MA: Butterworth-Heinemann, 2001.
3. *In Action: Retaining Your Best Employees*. Patricia P. Phillips, Editor; Jack J. Phillips, Series Editor. Alexandria, VA: American Society for Training and Development and the Society for Human Resource Management, 2002.
4. *In Action: Measuring ROI in the Public Sector*. Patricia P. Phillips, Editor. Alexandria, VA: American Society for Training and Development, 2002.
5. *In Action: Coaching for Extraordinary Results*. Darelyn J. Mitch, Editor; Jack J. Phillips, Series Editor. Alexandria, VA: American Society for Training and Development, 2002.
6. *In Action: Implementing Training Scorecards*. Lynn Schmidt, Editor; Jack J. Phillips, Series Editor. Alexandria, VA: American Society for Training and Development, 2003.
7. *The Leadership Scorecard*, Jack J. Phillips and Lynn Schmidt. Woburn, MA: Butterworth-Heinemann, 2004.

TABLE 1-3
TEN SKILL SETS FOR CERTIFICATION

Skill Areas for Certification

- Planning for ROI calculations
 - Collecting evaluation data
 - Isolating the effects of training
 - Converting data to monetary values
 - Monitoring program costs
 - Analyzing data, including calculating the ROI
 - Presenting evaluation data
 - Implementing the ROI process
 - Providing internal consulting on ROI
 - Teaching others the ROI process
-

Implementation is defined as a particular organization establishing a consulting practice for the ROI Methodology in partnerships to present workshops and provide consulting services. As part of this implementation, an article on the ROI Methodology is usually featured in a prominent human resources and training and development publication in that country.

To date, 15 books have been developed to support the ROI Methodology; five complete casebooks are dedicated to the process—two of these have become the number 1 and number 2 all-time bestsellers for the ASTD. Special-interest ROI networks, such as the Public Sector ROI Network, housed at the Workforce Learning and Development Center at the University of Southern Mississippi, are also evolving.

Perhaps one of the most visible signs of acceptance of the ROI Methodology is the ASTD ROI Network, which now claims over 500 members. Founded in 1996, the ROI Network was formed by a group of practitioners involved in implementing the ROI Methodology. The purpose of the organization is to promote the application and use of ROI and exchange information on ROI tools, templates, practices, and applications. In 2002, the Network was acquired by ASTD and operates as the ASTD ROI Network. The Network shares information through newsletters, listserves, chat rooms, and conferences (www.ASTD.org).

The need for accountability and ROI is not limited to the private sector. Government leaders as well as taxpayers are concerned with government spending practices in all areas, including employee training and development. This concern is reflected in the United States by the Government Performance Results Act of 1993 (GPRA) and the President's Management Agenda of 2002 (PMA). The need for accountability within the government sector is reflected in governments around the world, including those of Canada, New Zealand, Australia, and the United Kingdom (Barzelay, 2001).

Without a doubt, the ROI Methodology is now becoming a mainstream tool to show the impact of human resources, learning and development, and performance improvement.

EVALUATION APPROACHES

There are many measurement evaluation schemes, all aimed at reporting the success of training and performance improvement programs. Some of these methods focus on financial success; others on nonfinancial data; and still others offer a balanced approach to measuring program results. Table 1–4 lists the most common processes in use today.

The Kirkpatrick framework is by far the most widely recognized framework for categorizing training evaluation data. Initially cited as four steps, this approach provides a unique and practical method for categorizing training data (Kirkpatrick, 1975). In the 1980s, Phillips added ROI as the fifth level of evaluation and uses the levels as an important framework for his ROI Methodology. Also in the 1980s, Phillips created his systematic performance-based methodology with the tools to carry out evaluation at any or all of the five levels.

Why ROI?

Return on investment has gained acceptance for good reasons. Although the viewpoints and explanations may vary, some things are clear. The key issues are outlined here.

Increased Budgets

Most training and development budgets have continued to grow year after year. As expenditures grow, accountability becomes more critical. A growing budget creates a larger target for internal critics, often prompting the development of an ROI Methodology. The function, department, or process showing the most value will likely receive the largest budget increase.

The Ultimate Level of Evaluation

Phillips's ROI Methodology adds a fifth level to the four levels of evaluation, which were developed almost 40 years ago (Kirkpatrick, 1975). Table 1–5 shows the five-level framework. At Level 1, *Reaction and Planned Action*, satisfaction from program participants is measured, as well as a listing of how they planned to apply what they have learned. At Level 2, *Learning*, measurements focus on what participants learned during the program using tests, skill practices, role plays, simulations, group evaluations, and other assessment tools. At Level 3, *Application and Implementation*, a variety of follow-up methods are used to determine if participants applied what they learned on the job. At Level 4, *Business Impact*, the measurement focuses on the changes in the impact measures linked to the program. Typical Level 4 measures include output, quality, costs, time, and customer satisfaction. At Level 5, *Return on Investment* (the ultimate level of evaluation), the measurement compares the program's Level 4 monetary benefits with the program costs. For many, the evaluation cycle is not complete until the Level 5 evaluation is conducted.

TABLE 1-4
TRAINING MEASUREMENT AND EVALUATION SCHEMES

| | |
|--|---|
| Benefit Cost Analysis | Probably the oldest process by which to evaluate feasibility of expenditures of all types of programs is benefit cost analysis. Based on theoretical frameworks of economics and finance, the original intent of Benefit Cost Analysis (BCA) was to ensure that society maintains optimum level of efficiency in allocating resources. Since its original use, it has been used to evaluate the success of many types of programs, including training and education. |
| Kirkpatrick's Four-Level Framework | The most commonly used training and evaluation framework is that developed by Kirkpatrick in the late 1950s. This framework describes four levels of evaluation: Level 1 reaction, Level 2 learning, Level 3 job behavior, Level 4 results. Many attempts have been made to successfully build on Kirkpatrick's concept of levels. |
| Phillips's Five-Level ROI Framework | Phillips's ROI Methodology and five-level framework is the most widely used process by which to evaluate training and performance improvement programs. Phillips added ROI as the fifth level of evaluation, recognizing that to move from Level 4 to Level 5, Level 4 measures must be converted to monetary value, fully loaded costs must be captured, intangible benefits identified, and the monetary benefits compared to the costs. Hence, combining the Kirkpatrick approach and Benefit Cost Analysis to ensure a balanced set of measures is reported. Phillips uses the five levels as a framework. Phillips also developed a systematic process that includes a performance-based methodology, strategies, approaches, and tools to implement evaluation at all five levels. The methodology also includes the critical step to isolate the effects of the program on key measures from other influences. In addition, the process identifies barriers and enablers to success and provides recommendations for continuous improvement. |
| Kaufman's Five Levels of Evaluation | Kaufman expands the Kirkpatrick four-level framework by defining Level 1 to include the concept of enabling, which addresses the availability of various resources and inputs necessary for successful intervention, and by adding a fifth level of evaluation concerned with societal and client responsiveness as well as the consequences and payoffs. |
| CIRO | Warr, Bird, and Rackham present another four-level framework in which four categories of evaluation make up the CIRO approach. CIRO stands for context, input, reaction, and outcome. |
| CIPP | Stufflebeam's CIPP model presents a framework around the program objectives, training content facilitation, program implementation, and program outcomes. CIPP stands for context, input, process, and product. |
| Marshall and Schriver's Model of Evaluation Knowledge and Skills | This five-step model evaluates knowledge and skills. The five-level model separates the evaluation of knowledge and skills. Level 1 measures participants' attitudes and feelings. Level 2 measures knowledge using paper-and-pencil tests. Level 3 measures skills and knowledge by requiring participants to demonstrate capability to perform the task's job standards. Level 4 measures skill transfer, and Level 5 measures organizational impact and ROI. |

Continued

TABLE 1-4—*Continued*
TRAINING MEASUREMENT AND EVALUATION SCHEMES

| | |
|--|--|
| Indiana University's Business Impact ISD Model | The evaluation process included in the Business Impact Instructional System's Design Model is based on six strata of impact beginning with Stratum 0, which accounts for activities such as the volume of training conducted or number of participants in the program. Stratum 1 measures participants' satisfaction with the program. Stratum 2 measures the extent to which participants exhibit knowledge and skills taught during the program. Stratum 3 measures transfer of the training, answering the question, "Are participants using what they learned?" Stratum 4 measures the extent to which employee performance has improved and whether this improvement affects profitability. Stratum 5 attempts to measure the effect changed performance in organizations has on society. |
| Success Case Evaluation | Brinkerhoff's success case evaluation uses purposive sampling rather than random sampling to gather data regarding program success. The process focuses on input from training participants who have been most successful as well as least successful in applying the knowledge and skills learned in the program. Through the process, stories of business value evolve as participants describe their success with application and elaborate on the barriers and enablers that either deterred or supported the use of skills and knowledge learned. |
| Utility Analysis | The work of Cascio brought utility analysis to the forefront. Utility analysis is a process by which the expected outcomes and the cost of decisions are taken into account. Specific outcomes are defined and the relative importance of the payoff is determined. |
| Brown and Reed's Integral Framework | This holistic approach to evaluation embraces both individual and organizational learning. Four key concepts to this approach include nested development, referring to the relationship of participant to the organization; interrelated realms, suggesting that development consider the interaction between the individual and larger groups; the integral framework, suggesting that there are multiple development pathways within each realm; and the link between development in one realm to the development taking place in another realm. |
| Balanced Scorecard | A common method used at the organization strategic reporting level, Kaplan and Norton's balanced scorecard presents a framework for an organization's vision from four perspectives (financial, customer, internal business processes, and learning and growth). The intent of the scorecard is to drive strategy for a business unit such as the training function. |

TABLE 1–5
FIVE-LEVEL FRAMEWORK

| Level | Brief Description |
|--|---|
| Level 1—Reaction and planned action | Measures participant's reaction to the program and outlines specific plans for implementation. |
| Level 2—Learning | Measures skills, knowledge, or attitude changes. |
| Level 3—Application and implementation | Measures changes in behavior on-the-job and specific application and implementation. |
| Level 4—Business impact | Measures business impact of the program. |
| Level 5—Return on investment | Compares the monetary value of the results with the costs for the program, usually expressed as a percentage. |

These five levels of measurement provide a framework to categorize our types of data. The ROI Methodology addresses the planning, collection, analysis, and reporting of each level of data in the context of stakeholder requirements.

ROI Is a Familiar Term

The business management mind-set of many current learning and development managers causes them to place more emphasis on economic issues within the function. Today's chief learning officer (CLO) is more aware of bottom-line issues in the organization and more knowledgeable of operational and financial concerns. This new "enlightened" manager often takes a business approach to learning and development, with ROI as part of the strategy. ROI is a familiar concept for these managers, particularly those with business administration and management degrees. They have studied ROI in their academic preparation, in which ROI is used to evaluate the purchase of equipment, application of technology, building a new facility, or buying a new company. Consequently, they understand and appreciate ROI and are pleased to see the ROI Methodology applied to the evaluation of learning and performance improvement.

Accountability Trend

There has been a persistent trend of accountability in organizations all over the globe. Every support function attempts to show its worth by capturing the value it adds to the organization. From the accountability perspective, the learning and development function should be no different from other functions—it must show its contribution to the organization.

Top Executive Requirement

ROI is now generating increased interest in the executive suite. Top executives who watched training and learning budgets continue to grow without the appropriate accountability measures have become frustrated and, in an attempt to respond to the situation, have turned to ROI. Top executives are now

demanding return on investment calculations from departments and functions in which they were not previously required. For years, training and development managers convinced top executives that the impact of training couldn't be measured, at least at the monetary level. Yet, many executives are now aware that it can and is being measured in many organizations. Top executives are subsequently demanding the same accountability from their training and development functions.

To date, the ROI Methodology you are about to embark on has been refined over a 25-year period. Consider the following facts:

ORIGIN/DEVELOPMENT

- The ROI Methodology™—developed by Dr. Jack J. Phillips in the 1970s, refined through application and use in the 1980s, and implemented globally during the 1990s
- First impact study—1973, Measuring the ROI in a Cooperative Education Program, for Lockheed-Martin
- First public presentation on the methodology—1978, ASTD Regional Conference
- First book published to include methodology—1983, *Handbook of Training Evaluation and Measurement Methods*, Gulf Publishing (now Butterworth-Heinemann)
- First one-day public workshop—1991, Birmingham, Alabama
- First two-day public workshop—1992, Johannesburg, South Africa
- First case study book published—1994, *Measuring Return on Investment*, ASTD
- First public certification workshop—1995, Nashville, Tennessee
- ROI Network organized—1996
- First ROI Network Conference—1997, New Orleans, Louisiana
- First ROI in Government Conference—2003, Gulfport, Mississippi, Cosponsored by the University of Southern Mississippi
- ROI Certification Online launched—2006, University Alliance (<http://roiinstituteonline.com>)

Applications

Typical applications of the ROI Methodology include:

- | | | |
|-------------------------------|---------------------------------------|---|
| ■ Apprenticeship programs | ■ Gain-sharing programs | ■ Self-directed teams |
| ■ Career development programs | ■ Leadership programs | ■ Skill-based/ knowledge-based compensation |
| ■ Competency systems | ■ Organization development | ■ Technology implementation |
| ■ Diversity programs | ■ Performance improvement initiatives | ■ Total quality management |
| ■ E-learning | | |
| ■ Executive coaching | | |
| ■ Executive education | ■ Recruiting strategies | |

- Reward and recognition programs
- Employee orientation
- Management development
- Training solutions
- HR programs
- Meetings and events
- Safety and health programs
- Business intelligence
- Wellness/fitness initiatives

The process has been challenged as well as supported by researchers, academics, professionals, and executives around the world. It is research-based with a strong theory serving as its foundation. The theoretical foundation serves to sustain the process in all types of organizations. By using this step-by-step process model, practitioners can easily complete an ROI study. Though there will be challenges along the way, if you use the guiding principles presented later in this book and select the appropriate methodologies for each step, you can be successful as an ROI practitioner.

ROI Best Practices

With the acceptance of ROI as a mainstream measurement tool for most learning and development functions, the debate has shifted from whether or not ROI should be conducted to *how* it should be conducted on a consistent, standardized basis. As a result, best practices for ROI have been developed. Table 1–6 shows the best practices collected from data involving several hundred organizations using the ROI process. These organizations have specifically decided to implement the ROI Methodology and have sent one or more individuals through ROI certification. The best practices reflect their use of the ROI Methodology and are explained in more detail later. These practices reveal

TABLE 1–6
ROI BEST PRACTICES

1. The ROI methodology is implemented as a process improvement tool and not a performance evaluation tool for the learning/development staff.
2. ROI impact studies are conducted very selectively, usually involving 5%–10% of programs.
3. A variety of data collection methods are used in ROI analysis.
4. For a specific ROI evaluation, the effects of learning/development are isolated from other influences.
5. Business impact data are converted to monetary values.
6. ROI evaluation targets are developed, showing the percent of programs evaluated at each level.
7. The ROI Methodology generates a microlevel scorecard.
8. ROI Methodology data are being integrated to create a macro scorecard for the learning/development function.
9. The ROI Methodology is being implemented for about 3%–5% of the learning/development budget.
10. ROI forecasting is being implemented routinely.
11. The ROI Methodology is used as a tool to strengthen/improve the learning/education process.

the comprehensive, integrated approach that is feasible, realistic, and achievable within most budget constraints.

Characteristics of Evaluation Levels

Although ROI is the ultimate level of accountability for training and performance improvement programs, not all programs should be evaluated with ROI. Different stakeholders need different information. If we categorize our stakeholders as consumers and clients, consumers represent those who are actively involved in the program or solution. This would include the training staff as well as the participants. Clients, on the other hand, are those people who fund, support, and approve the program. These are our line managers as well as senior management and executive staff. Although we evaluate training more frequently at Level 1 than at the ROI level, the value of the information for clients is higher at ROI than Level 1. The relative value of the five levels of evaluation is depicted in Table 1–7.

Determining whether to evaluate a program to ROI depends on stakeholder needs. Ask these questions: What does the consumer need? What does the client need? For instance, if key stakeholders are concerned with the cost of the program, then an ROI calculation may be necessary. However, if they're only concerned with how key business measures have changed because of a program or a solution implementation, then we may choose to stop an evaluation at Level 4. As you proceed through this fieldbook, you'll be better able to advise decisionmakers about which programs to take to which level of evaluation.

Even though a higher level of evaluation is conducted, we still evaluate at the lower levels. For example, if job behavior is the issue, we may choose to

TABLE 1–7
CHARACTERISTICS OF EVALUATION LEVELS

| Chain of Impact | Value of Information | Customer Focus | Frequency of Use | Difficulty of Assessment |
|-----------------|----------------------|-------------------------------------|------------------|--------------------------|
| Reaction | Lowest | Participants (consumers) | Frequent | Easy |
| Learning | ↓ | ↓ | ↑ | ↑ |
| Application | | | | |
| Impact | ↓ | | | |
| ROI | Highest | Executives/Sr. Management (clients) | Infrequent | Difficult |

Customers: Consumers are customers who are actively involved in the program or solution (i.e., participants).

Clients are customers who fund, support, and approve the program or solution (i.e., executives/senior management).

evaluate only to Level 3. However, we do need to establish a chain of impact at the levels below Level 3. When a higher level evaluation is conducted, data must be collected at lower levels to establish this chain of impact. This reinforces the effort to report the complete story of program success.

Barriers to ROI Implementation

Although progress has been made, significant barriers inhibit the implementation of the ROI concept. Some of these barriers are realistic, while others are actually myths based on false perceptions. Each barrier is briefly described in the following subsections.

Costs and Time

The ROI Methodology adds additional costs and time to the evaluation process of programs, although the added amount is not excessive. A comprehensive ROI process can be implemented for 3% to 5% of the overall training budget. This barrier alone often stops many ROI implementations early in the process. The additional investment in ROI could perhaps be offset by the additional results achieved from these programs and the elimination of unproductive or unprofitable programs.

Lack of Skills and Orientation for WLP Staff

Many learning and performance improvement staff members neither understand ROI nor have the basic skills necessary to apply the process within their scope of responsibilities. Measurement and evaluation is not usually part of the preparation for the job. Also, the typical learning program focuses not on results but more on the learning process. Staff members attempt to measure results by measuring learning. Consequently, a tremendous barrier to implementation is the change needed for the overall orientation, attitude, and skills of the WLP staff.

Faulty Needs Assessment

Many of the current programs are not based on an adequate needs assessment. Some of these programs have been implemented for the wrong reasons based on management requests or efforts to chase a popular fad or trend in the industry. If the program is not needed, the benefits from the program will be minimal. An ROI calculation for an unnecessary program will likely yield a negative value. Lack of a needs assessment is a realistic barrier for many programs.

Fear

Some WLP departments do not pursue ROI because of fear of failure or fear of the unknown. Fear of failure appears in many ways. Designers, developers, facilitators, and program owners may be concerned about the consequence of

a negative ROI. They fear that ROI will be a performance evaluation tool instead of a process improvement tool. Also, they worry that the ROI process will stir up the traditional fear of change. This fear, often based on unrealistic assumptions and a lack of knowledge of the process, becomes a realistic barrier to many ROI implementations.

Discipline and Planning

A successful ROI implementation requires much planning and a disciplined approach to keep the process on track. Implementation schedules, evaluation targets, ROI analysis plans, measurement and evaluation policies, and follow-up schedules are required. The learning team may not have enough discipline and determination to stay on course. This becomes a barrier, particularly when there are no immediate pressures to measure the return. If the current senior management group is not requiring ROI, the learning team may not allocate time for planning and coordination. Also, other pressures and priorities often eat into the time necessary for ROI implementation. Only carefully planned implementation will be successful.

False Assumptions

Many WLP staff members have false assumptions about the ROI process, which keep them from attempting ROI. Typical of these assumptions are the following:

- The impact of learning cannot be accurately calculated.
- Operating managers do not want to see the results of learning and development expressed in monetary values.
- If the CEO does not ask for the ROI, he or she is not expecting it.
- “I have a professional, competent staff. Therefore, I do not have to justify the effectiveness of our programs.”
- Learning is a complex, but necessary activity. Therefore, it should not be subjected to an accountability process.

These false assumptions form realistic barriers that impede the progress of ROI implementation.

Benefits of ROI

Although the benefits of implementing the ROI Methodology may appear obvious, several distinct and important benefits can be realized.

Measure Contribution

The ROI Methodology is the most accurate, credible, and widely used process to show the impact of learning. The learning team will know the specific contribution from a select number of programs. An ROI study will deter-

mine if the benefits of the program, expressed in monetary values, have outweighed the costs. It will determine if the program made a contribution to the organization.

Establish Priorities

Calculating ROI in different areas will determine which programs contribute the most to the organization and allow priorities to be established for high-impact learning. Successful programs can be expanded into other areas—if the same need is there—ahead of other programs. Inefficient programs can be designed and redeployed. Ineffective programs may be discontinued.

Focus on Results

The ROI Methodology is a results-based process that brings a focus on results with all programs, even for those not targeted for follow-up measurement or an ROI calculation. The process requires instructional designers, facilitators, participants, and support groups to concentrate on measurable objectives; that is, what the program is attempting to accomplish. Thus, this process has the added benefit of improving the effectiveness of all learning and development programs.

Earn Respect of Senior Executives and Sponsor

Developing ROI information is one of the best ways to earn the respect of the senior management team and the sponsor (the person who really cares about the program). Senior executives have a never-ending desire to see ROI. They will appreciate the efforts to connect training to business impact and show the actual monetary value. It makes them feel comfortable with the process and makes their decisions much easier. Sponsors who often support, approve, or initiate programs in training and development and performance improvement see ROI as a breath of fresh air. They actually see the value of the learning in terms they understand and appreciate.

Alter Management Perceptions of Learning and Development

The ROI Methodology, when applied consistently and comprehensively, can convince the management group that learning is an investment and not an expense. Managers will see WLP as making a viable contribution to their objectives, thus increasing the respect for the function. This is an important step in building a partnership with management and increasing management support for WLP.

These key benefits, inherent with almost any type of impact evaluation process, make the ROI process an attractive challenge for the WLP function.

THE EVALUATION PUZZLE

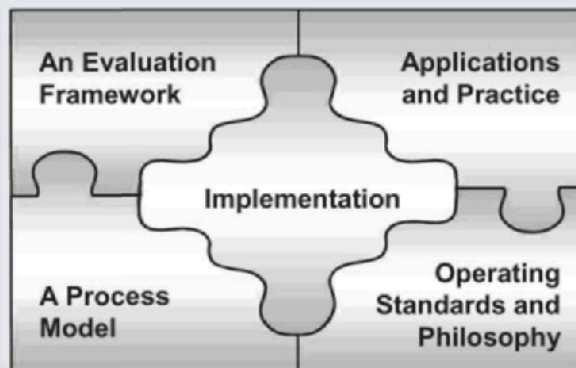
When considering implementing measurement and evaluation as an ongoing process to bring results-based training to your organization, there are a number of important factors to consider. To help us understand these factors, imagine a puzzle in which the whole represents the sum of the component parts. This puzzle represents all the building blocks (the important factors) necessary to successfully implement measurement and evaluation in organizations. As shown in Figure 1–1, this puzzle has five pieces.

1. *Evaluation framework*: The first piece of the puzzle is the evaluation framework. The five-level framework represents a way in which data are categorized. Using defined categories (types of data) makes it is easy for us and our target audience to understand and communicate about the data. Table 1–5, presented earlier, illustrates the five-levels that serve as a framework for the ROI Methodology.

Briefly, these five levels of evaluation represent the full extent of the results of the program. They represent what we call a chain of impact, suggesting that in order to achieve a positive ROI, this chain of impact is critical. Specifically, participants (1) have a positive reaction to the program; (2) acquire the knowledge, develop the skills, and/or change their attitudes and perceptions; (3) begin to use the new knowledge, skills, and attitudes on the job; (4) impact key business performance measures through the applied knowledge and skills; and (5) generate a return on investment based on the monetary value of business improvement measures compared to the cost of the solution.

A positive result at one level does not guarantee positive results at the other levels. When we have less-than-desired results at any given

FIGURE 1–1
EVALUATION PUZZLE



From Phillips, J. J. *Return on Investment in Training and Performance Improvement Programs*, 2nd ed. Woburn, MA: Butterworth-Heinemann, 2003. Used with permission.

level of evaluation, we can review this chain of impact to see what happened. It is necessary to look at the full picture, report complete results, and not limit findings exclusively to the financial success of the program.

2. *Evaluation process model:* The second piece of the puzzle is the evaluation process model. The model includes 10 steps and a systematic methodology that leads the way to a successful, comprehensive evaluation. This is the Phillips Methodology of planning the evaluation and collecting, analyzing, and reporting the data. This includes the use of a method to isolate the effects. The model is shown in Figure 1–2, and an overview of the process is provided.
3. *Operating standards and philosophy:* The third piece of the puzzle represents the operating standards and philosophy, which we call guiding principles. These standards, shown in Table 1–8, help guide our decisions in data collection, data analysis, and reporting of data as measurement and evaluation takes place.

The standards allow for consistency and must be addressed as the ROI process is applied. The guiding principles serve as our decision-making tool. They provide a conservative approach to the analysis and keep the process credible in the eyes of stakeholders. For example, in the event a questionnaire is administered to 100 people and only 50 respond (a 50% response rate), what should be done with the missing data? Guiding Principle 6 clearly states that if no improvement data are available for a population or from a specific source, it is assumed that little or no improvement has occurred. On the other hand, when costs are tabulated, the cost for the entire 100 participants is considered, as noted in Guiding Principle 9, which says the cost of the solution should be fully loaded for ROI analysis. These standards help keep us consistent, keep us credible, and allow us to replicate the process.

4. *Implementation:* The fourth piece of the puzzle is implementation. Implementation holds the other four pieces together through integrating and sustaining the methodology over the long term. It is through implementation that organizations explore ways to ensure that the methodology becomes a routine part of the training activities and assignments. As part of this process, priority actions and evaluation targets are set, policies and procedures are developed, roles are assigned, and WLP staff are trained in the methodology. Training can be accomplished through books, certification, developing case studies, and participating in networks. Mechanisms are developed to provide technical support for questionnaire design and data analysis.

Strategies must also be developed and continuously implemented to improve management commitment and support for the ROI process. The ROI process can fail or succeed based on these implementation issues. Part Three of this fieldbook is devoted to this important topic.

5. *Case Applications and Practice:* The final piece of the puzzle represents utilization to develop a history of application, build experience with ROI, and show how it works in the organization. This is accomplished through impact studies that capture the full scope of a program's success

and its value to stakeholders, participants, and the organization at large. The result is ROI experience and case studies that are used to demonstrate the contribution of WLP initiatives. Although case studies from other organizations are certainly beneficial, they will not be sufficient to convince your management of the payback of training in your organization. It is more important to obtain success with the ROI process within your organization and document and communicate the results as impact studies. In addition to showing the benefits from training expenditures, these studies form the basis of actions needed to improve training programs and processes. Your own organization will benefit from the studies you conduct on your training interventions.

Your management will embrace your efforts to show how training really contributes to the organization. We encourage you to begin with a very simple study—set yourself up for a win. While we are all often eager to go out and save the world with the new process that we have learned, we encourage you to quietly and methodically develop your first ROI study. Start small and move from simple to complex.

In addition to developing your own case studies and using them as learning tools, you can also learn from case studies developed by others. The American Society for Training and Development (ASTD) has published five casebooks edited by Jack Phillips. These case studies are used in conferences and workshops so that others can learn from the work of their peers. In Chapters 2 through 8 of this fieldbook, a case study will be presented to help you see how it is done. Case scenarios will also be used throughout this fieldbook to reinforce learning and challenge your thinking. The CD-ROM that accompanies this book makes additional case studies available for your use.

THE ROI MODEL

The ROI model, as shown in Figure 1–2, provides a systematic approach to ROI calculations. A step-by-step approach keeps the process manageable so users can tackle one issue at a time. The model provides a logical, systematic process that flows from one step to another. Applying the model provides consistency from one ROI calculation to another. Each step of the model is briefly described here.

Two specific elements are important to evaluation success and are outlined in this section.

Purpose

Although evaluation is usually undertaken to improve the WLP process, several distinct purposes can be identified. Evaluation is planned to:

- Improve the quality of learning and outcomes.
- Determine if a program is accomplishing its objectives.