# MEASURING



# FACT, FAD, OR FANTASY?

By Jack J. Phillips

## ROI has become a way of life in many training departments.

Editor's Note: The calculation of return-on-investment (ROI) in the workplace learning and development field started more than a decade ago. In 1994, ASTD published Measuring the Return on Investment, the first book of ROI case studies, edited by Jack J. Phillips. Since then, Phillips has written many articles and books making the case for ROI and explaining how it works. Here, he charts its growth and acceptance and offers tips for making sure it works.

A recent meeting of learning executives provided some interesting insights regarding the acceptance of ROI. The group determined that ROI was no longer a hot topic,

offering up this explanation: "If organizations want to show this level of accountability, they are doing it already. ROI has become a routine activity in the workplace."

ROI has become a mainstream process like Six Sigma and project management. To those of us who work full-time with ROI, this is good news. It has become a way of life for many training departments.

The concept of ROI began as an idea for my master's thesis. It was developed in the 1970s and refined through application and use in the 1980s. During this time, the ROI process slowly began to catch on. In the 1990s it achieved global recognition, implementation, and prominence.

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### The journey

ROI's journey took many unusual twists and turns. At conferences around the globe, ROI was debated, placed on trial, and dissected by many organizations and individuals.

At first there was resistance, which is natural when this level of accountability is expected, or demanded, by key stakeholders, including executives. As one learning executive commented, "If my programs are not working, why should I publish a study to let my clients know that?"

Still, progress was made as more organizations embraced it and began to use it.

To some, ROI became key to both personal and organizational success. One individual told us that his promotion to vice president was the direct result of his work with ROI. Another recounted how ROI helped her keep her job as her company eliminated many positions in a move from Puerto Rico to Malaysia.

Many people have been able to secure jobs and acquire meeting invitations thanks to their expertise, knowledge, and implementation of the ROI methodology. The learning manager for a large brewery indicated that his ROI presentation gave him his first opportunity to meet face-to-face with the company CEO.

In addition, many organizations give high praise to the ROI methodology for its help in relationship building and budget enhancement. Some say that it has helped them earn a seat at the table, change the image of their company's function, and build key partnerships. Others indicate that their training department budgets increased, even as other company budgets were decreasing. One organization revealed that its budget increased four-fold in two years with the use of this methodology. Another doubled its budget.

### ROI around the world

My wife, Patti Phillips, and I have devoted our careers to this issue, as have almost 100 other full-time ROI consultants around the world. We have conducted ROI certification classes in Indonesia, at a golf club in Australia, and at a cricket club in South Africa.

Studies of ROI have ranged from training for drug-sniffing dogs in Canada to beekeepers in Australia. In Jamaica, the members of the local ASTD chapter had a bake sale to pay for part of the ROI certification. The Prime Minister of New Zealand attended an ROI presentation and then wanted to learn more. The ROI methodology has been the subject of dozens of television interviews, radio shows, and at last count, at least 100 magazine articles.

#### **Current status**

ROI was still a fairly new term in 1996 as many professionals were just beginning to embrace the concept. A decade later, the ROI methodology has graduated from a hot topic to a recognized process within many organizations.

Since the first impact study, Measuring the ROI in a Cooperative Education Program, for Lockheed Martin, in 1973, more than 200 case studies have been published in books, journals, and industry publications. More than two dozen books have been published on the ROI methodology and its application. In addition, more than 3,000 organizations use the ROI methodology through planned implementation, and at least 200 government agencies are using it. Approximately 24,000 individuals have attended workshops in almost every major international city, with 4,000 attending the week-long ROI certification course.

#### Lingering questions

Although interest in ROI methodology and its use have increased, some

# The ROI Model

# Planning Data Collection



## Inputs/Indicators

- 1. Reaction and Planned Action
- 2. Learning
- 3. Application and Implementation
- 4. Business Impact and Consequences

people still argue that using ROI is difficult.

WLP professionals must show accountability for the investment in learning programs. Measuring ROI in a few significant, high-profile programs is an excellent way to show fiscal responsibility. Between 30 and 40 percent of learning and development functions in the United States use ROI as a tool. The gap between actual use and desired use is huge and underscores the misunderstandings and misconceptions of ROI as a legitimate part of measurement.

For almost two decades, we have assisted organizations with this important issue. In the past decade, we have logged many questions about ROI that are asked in conferences, workshops, and consulting assignments. Here are some of the most-debated questions: How can you communicate a program's value with a number? The ROI methodology captures six types of data, with the actual ROI calculation being only one of them. The six types of data include reaction, satisfaction, and planned action; learning; application and implementation; business impact and consequences; ROI; and intangible benefits. The intangible benefits include measures that cannot be credibly converted to monetary values.

IIIIIsn't ROI based on nothing but estimates that can be too subjective?

No. Estimates are only used when isolating the effects of a program's business impact, when converting data to monetary values, and when tabulating program costs. Estimates are used only when other methods are not available or become too time-consuming or expensive to use. Also, estimates are adjusted to improve credibility. **IIIIHow does ROI in learning differ** from the ROI used by the finance and accounting staff? The classic definition of ROI is earnings divided by the investment—no matter what the application. In the context of calculating the ROI of learning and development, the earnings become the net benefits from the program (monetary benefits minus the costs) and the investment is the actual program cost. The difficulty lies in developing the actual monetary benefits in a credible way.

and statistics to understand the ROI methodology? No. Most of the basic principles of finance and accounting do not relate to what is needed to develop the ROI in learning and development. However, it is important

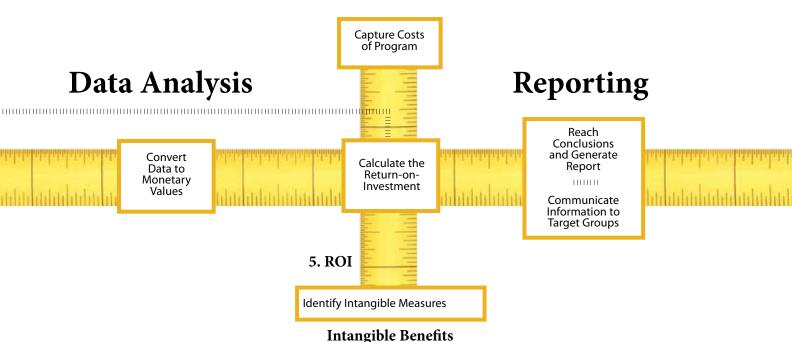
to understand issues such as revenue, profit, and cost. Only basic statistical processes are required to develop most ROI impact studies.

ROI impact studies.

""Doesn't ROI cost too much? No.

When external resources are used, the cost for an ROI study may be as little as 5 percent of the entire project. A large banking group and a large telecommunications company report that the average costs for ROI studies range from \$3,000 to \$5,000 per study. The total cost of all evaluation, including selected ROI studies, is usually in the range of 3 to 5 percent of the total learning and development budget. IIIDoes the ROI process reveal program weaknesses? Strengths? Recommendations? Yes. At low levels, data always capture deficiencies or weaknesses in a process. At the application level, the process requires collecting data about the barriers (which inhibit success) and enablers (which help success). Each study contains a section for recommendations for improvement. **IIIIIs it appropriate to calculate ROI** for every program? No. Only a few select programs should be subjected to evaluation at the ROI level. Ideal targets include programs that are very expensive, strategic, operationally focused, highly visible, involve large target audiences, and have management's attention in terms of their accountability.

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what types of applications are typical for ROI analysis? The applications vary, but usually they include a range of programs such as sales training, supervisory training, team building, executive development, communications, competency systems, software use, and leadership development.

The best way to dispel some of the myths and misunderstandings surrounding the ROI methodology is to analyze the payoffs for the organization once the ROI is calculated. Whatever the barriers, they are completely outweighed by the benefits, which include

- showing the contribution of specific programs
- showing the value of the program on a pilot basis
- justifying or maintaining budgets
- eliminating programs that are not adding value
- · redesigning or improving programs
- building relationships with key executives
- building support from the management team
- improving the satisfaction of the learning and development team.

#### **ROI** implementation

We have seen tremendous success in some organizations, and miserable failures in others. Ten critical success factors have evolved that, when addressed appropriately, can make ROI work in amazing ways. But when they are ignored, at least for the majority, failures are imminent. Overall, these 10 critical success factors represent the lessons learned by the thousands of people who have embraced the ROI methodology.

Fix the front-end analysis. Unfortunately, within too many organizations the needs assessment process is inadequate. Sometimes, its inadequacy is unknown until the ROI work begins. To develop the ROI and capture the six levels of data, objectives must include application and impact. This means that programs must be implemented with the business need in mind. Unfortunately, few learning programs have this level of performance analysis up front. Without it, programs often do not deliver value, which creates negative ROI. This creates frustration and makes practitioners realize that perhaps none of their programs are adding value. This must be addressed early in the process.

Develop the skills. While this is a given, the skill sets necessary for effective ROI are not the same skill sets used in other processes, such as leadership

development. ROI makes us think and learn things we have not learned before if our preparation did not include measurement and evaluation.

Follow the guiding principles. The standards developed for the ROI methodology are the "12 guiding principles." They provide rules for collecting and analyzing data and reporting it to various target audiences. The rules are needed for consistency, stability, and standardization. More important, the rules add credibility. The principles are based on a conservative philosophy, and when data are presented to a management team, credibility is a key issue. These standards can help secure acceptance for the data. They must be followed.

Educate management. The management team is our greatest ally, and must understand ROI. Initially, managers will say they understand ROI. Many studied it for their MBAs. They see ROI calculations for their divisions, departments, or companies. They know it is a financial measure. But they can't fully appreciate ROI for learning and development unless they understand that it is a process that not only generates the financial ROI, but also collects five other types of data. All these data sets are important for management teams to know. This will require repeated explanations and ROI briefings at every opportunity.

Plan, plan, plan. Planning is one of the most important steps of the process, but it is often either short-circuited or omitted altogether. Thorough planning of a study is absolutely essential to keep cost and time at a minimum. Collect the right quality and quantity of data. This is easier said than done. Quantity of data reflects the vast amount of information needed for an ROI analysis. If data collection is left to questionnaires, which only 50 percent of studies use, the challenge is to have an adequate response. Good return rates can be obtained, and it is not unusual for our clients to achieve a 60 to 90 percent return rate on a three-tofive page questionnaire.

Isolate the effects of the program on the data. A step that is omitted by some, and ignored or hated by others, is isolating the effects of the program on the data. Whenever a learning and development program is implemented and a business measure is influenced, the key challenge is to determine how much of the change in the measure is actually connected to the program. Perhaps the most important contribution that we have made in the last decade is to refine ways to make this determination.

Plan a face-to-face meeting with key executives for the first study. This is a difficult, but necessary step. The first ROI study in an organization often brings interest and anticipation. Executives will usually attend a face-to-face meeting. They may be curious, supportive, or cynical, but they will come. The challenge is to make sure this meeting is planned properly and executed perfectly. The meeting should educate the team about the methodology as well as the data that has been collected, analyzed, and reported. Take steps to make the cost of the process minimal. Many shortcuts can be used to keep the time and direct monetary costs to a minimum. Too often they are not used. Take shortcuts whenever necessary, and when alternatives are available, always take the one that costs the least or saves the most time.

# **ROI Methodology**

The ROI methodology is a step-by-step process tool for evaluating any program, project, or initiative within any organization. This process is simplified in the ROI process model, which provides a systematic, step-by-step approach to ROI evaluations that helps users address one issue at a time. The methodology is based on 12 guiding principles, which are necessary for a credible, conservative approach to evaluation through the different levels.

- 1| When conducting a high-level evaluation, collect data at lower levels.
- 2 When planning a high-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 use of extreme data items and unsupported claims when calculating ROI.
- 9 Use only the first year of annual benefits in ROI analysis of short-term solutions.
- 10| When analyzing ROI, fully load all costs of a solution, project, or program.
- 11| Intangible measures are defined as measures that are purposely not converted to monetary values.
- 12 Communicate the results of ROI methodology to all key stakeholders.

### Make plans to sustain the process.

With any change comes a need to sustain it. Early in the implementation, processes must be put into place to make ROI evaluation routine and important. Otherwise, it will become a nuisance and an add-on activity that may quickly cease if the ROI champion leaves the organization.

### Other applications

One of the most unexpected developments is the use of the ROI methodology in other fields. Originating in learning and development, it quickly moved to HR, consulting, information technology, marketing, project man-

agement, meetings and events, higher education, and many other fields.

While the journey has been difficult, challenging, and certainly stressful at times, it has been extremely rewarding. As I reflect upon the difficulties experienced, as well as the successes enjoyed, I hope ROI will continue to make a difference in this field.**T+D** 

**Jack J. Phillips** is founder of the ROI methodology and chairman of the ROI Institute; jack@roiinstitute.net.

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