The Fallacy of ROI Calculations

By Dan Tobin, PhD

Over the course of the past two decades, I have received a number of calls from training directors in companies large and small, all with the same request for help: "My CEO (or CFO) has just told me that I have to produce a study to show the return on investment (ROI) for my training budget. Can you help?"

Having worked with several of these companies, and having talked at length with the other training directors who called me, I have drawn a singular conclusion: If you wait until the CEO asks for an ROI study to justify your training budget to try to demonstrate how your training group adds value to your company, it is too late - the CEO has already decided to greatly reduce your budget, or to eliminate the training group altogether, and is just using the ROI study to justify that decision.

Why I Don't Do ROI

My doctorate is in the field called "the economics of education." I spent a large part of my graduate education learning how to do ROI studies, and actually did some to earn my way through graduate school. So it isn't because I don't know how to do an ROI study that I refuse to do them. Another excuse that is often given for not doing ROI studies is that the benefits of training and education programs are often too intangible to measure in dollar terms - I don't use that excuse either.

The reason why I won't do an ROI study is that any major change effort within an organization requires not just training, but many other factors.

A Hypothetical Example

Let us look at a hypothetical example. The VP of manufacturing for a company has decided that he wants to introduce high performance work teams (HPWT) into the company's three manufacturing plants. The corporate manufacturing organization has arranged for training on HPWT, and he sends a memo to his three plant managers mandating attendance by their staffs at this training.

Plant Manager #1 reads the VP's memo and is very enthusiastic. "This is the wave of the future," he tells his staff. "I'm so psyched about this that I'm going to attend the training with you, and then we'll figure out how to make it really work here. This is going to be great!"

Plant Manager #2 isn't quite as enthusiastic, but is willing to give it a try. "Go to the training," she tells her staff, "and then we'll discuss it when you get back. If you think there is some value in this HPWT stuff, we'll try a pilot to evaluate it."

Plant Manager #3 hates the idea. "This is just another flavor of the week from corporate," he says. "Go to the training - we don't have a choice -- but don't expect anything to change once you get back."

The training is held with the mandated attendees from all three plants. Once the participants return to their respective plants, Plant Manager #1 pushes aggressively ahead to institute HPWT, and the results are great. Plant Manager #2 sets up a pilot that seems to be working well, but is so small in scope that there are no real effects on the plant's overall productivity. Plant Manager #3 changes nothing.

The question now is: "How do you measure ROI on the investment in HPWT training in this company?" My answer is that you can't do it rationally. I don't come to this conclusion because the training wasn't worthwhile. The problem here is that the corporate VP didn't set the right expectations (to use the Kirkpatricks' phrase). He had mandated attendance at the training, but had not set the expectation that all three plants would immediately

apply what they learned to their operations. The training itself was successful – the teams at plants 1 and 2 proved that by successfully applying what they learned – but you cannot measure ROI rationally because plant 2's pilot really didn't affect results and plant 3 never even tried to implement the HPWT methodology. This wasn't a failure of training, but a failure of the corporate VP's leadership.

A Correctional Example

I once received a call from the training director of a state correctional system's training academy. "I saw an article you wrote about learning organizations," the director said. "Would you be willing to do a half-day seminar on learning organizations for the state corrections commissioner and his staff, and another similar seminar for the superintendents of the state's correctional facilities?"

I replied that I could certainly do that, but suggested that we sit down and talk for a while about her goals for the program. When we met, she told me why

she wanted me to do these two seminars. She was the co-chair of a system-wide task force charged with building a new "inmate management system." The commissioner felt this was very important and had set aside millions of dollars for the project. But the task force was finding resistance and apathy toward the project throughout the correctional system, from members of the commissioner's staff to the superintendents. She had just finished reading Peter Senge's book, *The Fifth Discipline*, and had loved it. "If I could get all of the commissioner's staff and all the superintendents thinking like that, it would make things a lot easier for the task force," she told me.

"You're probably right," I replied. "But you can't teach Senge's methods in three or four hours and then expect immediate changes in behavior. It just doesn't happen. Look how long it took you just to read the book."

After more discussion and after interviewing the commissioner, several of his staff members, and a couple of the superintendents, I concluded (and the training manager concurred) that the problem was that because the correctional system had never been very successful in introducing any kind of change, people felt that the new inmate management system was doomed to failure, and they didn't want to waste their time on a project they felt would never amount to anything.

In response to this problem, I designed an intervention that included two half-day sessions (one for the commissioner and his staff and the other for the superintendents) that focused on leadership and change. In those sessions, we discussed the importance of the new inmate management system and their roles in making the new system happen. After winning the commitment of both groups, we then did a full-day action planning session with the two groups working together. The intervention was successful in getting the project back on track.

Now, how do we measure the ROI on this intervention? The customer felt that the intervention was very effective in getting the project moving - that it would never have happened without the intervention. But the cost of the intervention was miniscule in comparison to the millions that were being spent on the project itself. I would argue that there is no way to separate out the benefits of the intervention from the overall benefits of the new system, and it would be ludicrous to attribute all of the benefits of the new system to the intervention.

A Different Perspective on Training Costs and Benefits

When an automobile maker is designing a new model, he does not ask the people in charge of wheels and tires to do an ROI study to justify having wheels and tires on the new car. It is accepted that the new model will not be complete, will not work, without wheels and tires. Learning should be viewed as the wheels and tires of any organizational change effort - *no change effort can be successful without learning*.

If the automobile maker does not ask the wheels and tires department to justify its contribution to the new model on the basis of ROI, what does he ask of the wheels and tires department? Three things:

- That the wheels and tires match the *performance characteristics* of the new model - you don't want to put highway tires on an SUV.
- That the wheels and tires match the *styling* of the new model - you don't want to put fancy cast magnesium wheels on an economy family sedan.
- That the wheels and tires match the *price profile* of the new model - you don't put an ultra-expensive wheel and tire combination on a Yugo.

Similarly, you want the investment in learning to match the overall change effort, to be appropriate to the level, speed, and intensity of the change effort. More importantly, you want to ensure that your planned learning programs will actually help the change effort succeed in meeting its goals.

When the automobile maker has completed plans for the new model, he does do an ROI study to justify the *overall* investment in the model. Similarly, in any corporate change effort, ROI calculations can be useful in evaluating the overall effort

Tying Learning to Organizational Goals: The Learning Contract

If you want your training group to be valued by organizational leaders, you must start and end all of your efforts by focusing on the organization's goals. I have devised an instrument that I call a "learning contract" to guide you through this process. The learning contract can be used at the level of the individual employee, but my focus here is on how to use it to guide the training group's efforts as a whole.

The learning contract has three main sections:

- The Business Need
- The Learning Plan
- The Business Result

We'll examine each section separately. [For a more in-depth look at the learning contract, see my book: *The Knowledge-Enabled Organization: Moving from Training to Learning to Meet Business Goals* (AMACOM, 1997).]

Focus on the Business Need

Some years ago, I was contacted by the manager of a professional development group of a large IS consulting organization. To prepare for the consulting assignment, I asked the manager of this 40-person group to send me the company's last two annual reports, some of the marketing brochures the company uses with its clients, and a list of the current year's business goals for the business units that his group supported. His response: "We really don't have access to that kind of thing." My response to him: "If you don't understand the company's business goals and its strategic business initiatives, how can you possibly support them?"

To understand the business need, you need to ask three questions:

- What are the goals of the organization?
- What needs to change to meet those goals?
- What needs to be learned to make those changes?

If you can answer those questions, you will ensure that your learning plans will focus directly on the needs of the business. You will also avoid developing a training solution to a problem whose remedy isn't training.

I was once approached by a product manager in the company for which I was the training director. He told me that he had a great new product line – that the new products had been rated very highly in the industry press and that the few customers who were using the products loved them. The problem was that the company's salesforce wasn't selling the products. He asked me to develop a sales training program and then to deliver the program to the worldwide salesforce. "Tell me how much you need and I'll fund it."

After this meeting, I called several salespeople and sales managers and asked them what they needed in the training program. They told me that they didn't need training – that they knew the products well and thought they were great.

"So why aren't they selling?" I asked.

"Because they don't appear on our goal sheets. We don't get any credits toward our quotas or any points toward the annual sales awards for selling this product line, so we focus on selling those products and services that help us achieve our goals," they all told me.

I went back to the product manager, explained what I had heard from the field sales people, and told him that this was not a training problem and that he shouldn't waste his money on developing and delivering new training on his products. "Then, what should I do?" he asked. "My advice is to go talk with sales management and get them to put your products on the goal sheets for the salesforce. If you want to spend some money, put in some incentives for those who sell the most of your products."

In this case, training was not the solution to the problem. We could have spent a lot of money developing and then delivering the requested training, and it wouldn't have made a bit of difference – there would have been NO ROI, no matter how good the training was.

Focus on the Learning Plan

Once you understand the business need, you can develop a plan to meet the learning requirements associated with that need:

- What will be learned?
- How will it be learned?
- When will it be learned?
- How will the learning be measured?

The first three of these bullets are almost universally used by traditional training groups in making their plans - they relate to learning content, format, and schedules. Many training groups use some type of evaluation methods to measure learning achievement (Kirkpatrick Level 2). But this is not enough - we need to evaluate learning not just by objective methods related to the mastery of the learning content, but also on the basis of business results.

The Fallacy of ROI Calculations

By Dan Tobin, PhD

Focus on the Business Result

This is where most traditional training groups fall down. For any learning program you design, you should answer these two questions as you plan the program:

- How will learning be applied to the job and how will that application be reinforced on the job?
- What changes in business results can be expected to result from our learning efforts?

Many trainers feel that their responsibilities end when the student leaves the classroom or when a technology-based training solution is delivered to the student. The first bullet above, how learning will be applied to the job, says that the training group must work with organizational management to ensure that a plan is in place for the application of learning to the job and the reinforcement of that learning once the employee leaves the learning activity and starts to apply his or her learning to the job. This is the Kirkpatrick Level 3 evaluation – are people using what they learned in their work?

The second bullet is the payoff - the ultimate measure of the success of the training group. One of the basic tenets of program evaluation is that the goals of the program should directly connect to the evaluation measures for that program. So, if you start with the company's business goals, you should also end with the company's business goals and how the programs you design and deliver affect those business goals.

A Note on ROI

When I attended business school, I took a course on corporate financial analysis – a core requirement for all MBA students. While making a presentation based on this article several years ago, I had a flashback to that class. ROI analysis, in the corporate finance world, was done ***before*** a project was undertaken. That is, in evaluating a set of potential capital investments, the corporate finance staff projected costs and benefits over the lifetime of the proposed investment, did their discounted cash flow calculations, and derived a projected return on investment for each project. If the projected ROI met or exceeded the company's threshold, the investment would be approved. If several investment projects were being evaluated, the one with the greatest ROI would be most likely to be approved.

In the world of corporate finance, ROI is a forward-looking calculation, not an after-the-fact justification of an investment.

If Not ROI, Then What?

This article is based on a presentation I have made to conference audiences on five continents. At the conclusion of each presentation, I am typically asked: "If you don't use ROI to measure the value of your programs, then what do you use?" Throughout my 30 years in the training field, I have always used the same indicator of my success - when company management/leadership gets up and says: "We had a really good quarter or year, meeting (or exceeding) our business goals - and, by the way, we couldn't have done it without the efforts of the training group" - then I know that the training group has been successful.

Tobin's Law

This entire article can be summarized by what I immodestly call "Tobin's Law"

> *If you start and end all of your learning efforts by focusing on your organization's business goals, you will never be asked to do an ROI analysis to justify your budget.*

Dan's Bio

Dan Tobin is a consultant on corporate learning strategies and leadership development programs. He is the author of five books, including the AMA Guide to Management Development. He has 30 years of experience in the learning and development field and has founded two corporate universities. He is an adjunct professor teaching courses on leadership, organization development, and team building.

Dan is the former vice president of design and development at the American Management Association. He has given workshops and keynote presentations on five continents. Dan holds a Ph.D. (Economics of Education) and M.P.A. (Public Administration) from Cornell University.

Visit his website at www.tobincls.com. Dan can be reached at danieltobin@att.net.