



Best Practices

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Is It Worth the Cost? Calculating the ROI of Training

By THINQ's Research Department

Human Resource professionals maintain that there is significant value in training. Intuitively, we believe that the benefits of training to the individual employee are well worth the investment. Yet only recently has the emphasis in corporate training shifted from training the individual to meeting the organizational and strategic needs of the corporation. With this shift, there has been increased pressure on Human Resource and Training professionals to demonstrate the worth of their programs.

Most of us believe that there are many ways in which training benefits organizations. But how do we go about proving this? How do we measure the benefits of training versus the cost? The task seems overwhelming. Phillips suggests that we measure these benefits through the use of a modified version of Kirkpatrick's evaluation model. Each level of measurement is dependent on the previous level and each level is linked to the others. Without this link it is difficult to isolate the effect of training or to conclude with any degree of confidence that training is responsible for any improvements in performance. Thus, a corporation cannot measure return of investment (the fifth level) of training without taking accurate measures at the other four levels. Phillips' five-level model is as follows:

Level

I. Reaction and Planned Action: What are participants' reactions to the training and what do they plan to do with the material?

II. Learning: What skills, knowledge, or attitudes have been changed or acquired and to what extent?

III. The Job Application: Did participants apply what they learned in training on their jobs?

IV. Business Results: Did this on the job application produce measurable results?

V. Return on Investment: Did the monetary value of the produced results exceed the cost of training?

Level I is usually measured by what trainers' term "happy sheets". They are frequently surveys or questionnaires that measure whether the training was meaningful or enjoyable. They also should include sections on how the employee plans to use this training.

Level II is usually measured by what we term achievement tests. These tests measure if the employee learned the information or skill presented and to what degree he or she learned it.

Level III is measured by observer ratings and observations. These ratings measure the degree the employee applies what was learned to his/her job. Observers, usually managers and supervisors, should be thoroughly trained in the evaluation system and a measure of consistency should be made between raters.

Level IV is the measurement of specific measurable business results attributed to the training. These results may include increases in productivity, increases in efficiency, decreases in absenteeism and occupational accidents, and decreases in customer complaints. Measurement of this result should isolate the effects of training from other extraneous events. These can be done statistically or through control groups.

Level V is the measurement of ROI (return on investment). There are several ways to calculate ROI for training. Three of the most common formulas cited in the literature are:

(1) $ROI = \text{Total Administrative Costs for Present Training Program} - (\text{minus}) \text{Total Administrative Cost of New Training Program}$

(2) $ROI = \text{Total Cost of Training \% (divided by) The Number of Students}$

(3) $ROI (\%) = \text{Net Benefits of Training (in dollar amounts) \% (divided by) Total Training Program Costs} \times (\text{multiplied by}) 100$

Each of the above formulas reflects a different concept for return on investment. The first formula reflects the concept of ROI as the amount saved by implementing a new training program or method of training in place of an older one. It is not really a measure of ROI, but rather a measure of projected net savings. Although cost savings are certainly important, ROI encompasses much more. Under this formula, the total administrative costs of the proposed program is subtracted from the total administrative cost of the existing system (instructors, materials, classroom space, etc.). The result is the net savings projected by the new system. As mentioned above, this does not give a true measure of return on investment.

The second formula reflects ROI as the cost per student for training. This is also useful, but again it is not a true measure of return on investment. Both formulas, although frequently cited as measures of return on investment, do not measure what monetary value or profit is derived from your training investment. Only the third formula provides you with this information.

In order to calculate this ROI, the tangible benefits of training need to be determined and a monetary value needs to be assigned to these benefits. Benefits such as increased productivity (units produced, items sold, forms processed, tasks completed, etc.), improved quality (less scrap, less waste, less rework of product, less defects, etc.), reduced turnover, reduction in lost-time injuries, reduction in workers compensation insurance claims and increase in customer satisfaction as reflected in an increase in repeat sales must all be assigned a monetary value. These benefits are often termed 'hard benefits,' as the results can easily be converted to a monetary value. Other training benefits are more difficult to convert and are often termed 'soft benefits.' Training results, such as improved communication, enhanced corporate image, improved conflict resolution, increased sensitivity to human diversity, improved employee morale and increased employee loyalty are harder to assign a monetary value.

Prior to developing a training plan and measuring ROI, corporations must first develop a clear mission statement along with comprehensive strategic and performance goals to arrive at that mission. These goals must be clearly defined and measurable. Once these goals are established, a needs analysis should be performed on what knowledge and skills need to be acquired to reach these goals. Once this analysis has been done, a training program can be structured towards meeting these strategic goals. This, they state, is critical to the accurate measurement of ROI. It is these strategic and performance goals that are later used as criteria for the measurement of ROI. Without them, an organization has no established baseline for measuring return on their training investment.

The above formulas calculate Return on Investment after the fact (retrospective ROI). This is extremely useful to determine if your training dollars were wisely invested. It is also useful historical data on which to build a predictive model for ROI (projected ROI). Some training professionals argue that "predictive ROI" is far more useful than "retrospective ROI".

Accounting professionals look at the Operating Income divided by the Average Operating Assets to determine the return on investment. However, some accounting professionals fail to examine training investment in a positive light. Training investment usually ends up on the expense side of a balance sheet without any further

consideration. The accounting model defines capital as a form of wealth used to produce more wealth. Often this model fails to categorize humans (employees) as capital. The journal Performance Improvement devised a working model for calculating ROI, which yields a predictive value for ROI while at the same time taking into account humans as capital.

There are six steps to this model of ROI:

1. Calculate Potential for Improved Performance
2. Calculate Estimated Training Costs
3. Calculate the Worth Analysis
4. Train
5. Calculate the True Cost of Training
6. Calculate the Organizational ROI (all performance indicators)

Under this model the potential for performance improvement is measured by dividing the worth of what the exemplary performer produces by the typical performer. The training costs include materials, travel, salary, facilities and lost opportunities. Worth analysis is the comparison of initiating training against potential outcomes. Training involves the analysis, design, developing, implementation, and evaluation of materials. Calculating the true cost of training takes into account the actual costs incurred while going through the total process. True cost of training mirrors step two, but reflects actual figures. Calculating the organizational ROI looks at two options: estimating the percentage of impact likely due from training, and the value of results against training costs only on projects where training was the major performance intervention. In simplified terms, the ROI can be summed up as the gain divided by the investment.

Summary and Conclusions: Corporations constantly review their return on investments (ROI) for future decisions. The likelihood that a corporation will continue to invest in training depends greatly on the benefits it receives as a result of that training. In the past, corporations have viewed training as a necessary expense rather than an investment. Emphasis was on cutting the cost of this expense by making it more efficient. However, now corporations are beginning to view training as an investment. Knowledge and skills are being viewed on equal basis with monetary assets. Increasingly, training departments are being asked for hard data to prove the effectiveness of their programs. Obtaining an accurate measure of ROI is a powerful method for demonstrating the effectiveness of your training.

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