Return on Investment in Training

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INTRODUCTION

In 1992, the economist, Gary *Becker,* won the Nobel prize for his work that demonstrated the importance to organizations of *human capital* and of training, in particular. Despite the importance of *human capital* to the long-term health and growth of organizations, they continue to under-*invest* in training (*Becker*, 1993). In *The Human Equation*, Jeffrey *Pfeffer* (1998) explained why, "Training is an *investment* in the organization's staff, and in the current business milieu, it virtually begs for some sort of return-on *investment* calculations" (p.89). In other words, because organizations do not adequately measure the *value* that training adds, they fail to reap the benefits of fully *investing* in training. This article shows you how to measure your return on *investment* in training.

BACKGROUND

Traditionally, there have been two methods to evaluating training, *Kirkpatrick's* and *Phillips*'. The *Kirkpatrick* Method (1994) involves four levels of evaluation. First, how did people react to the training? Second, what did people learn from the training? Third, of what they learned, what did they transfer to their jobs? Fourth, what was the business impact of this transferred learning?

There are, however, several problems with the *Kirkpatrick* method. For example, it is possible for people to learn things even when they have a negative reaction to the training. In other words, *Kirkpatrick's* method implies an unnecessary hierarchy. Another problem is that *Kirkpatrick's* method requires that you specify what was learned and how what was learned was transferred, and yet it is a psychometrically challenging problem to measure learning, more so, transfer of training (Baldwin & Ford, 1988). Finally, many of the benefits of training, such as networking, effects on employee morale, and knowledge sharing, are neglected by this method.

The *Phillips'* method is summarized by his book *Return on Investment* (1997, p. 186) in which he surveys participants with the following five questions. "As a result of this program, what specific actions will you attempt as you apply what you have learned? Please indicate what specific measures, outcomes, or projects will change as a result of your actions. As a result of the anticipated changes in the above, please estimate (in monetary *values*) the benefits to your organization over a period of one year. What is the basis of this estimate? What confidence, expressed as a percentage, can you put in your estimates?" *Phillips* then multiplies the estimated *value* times the estimated percentage of confidence, sums these numbers, and concludes that this is the estimated *value* of the training.

But this method also has problems. For example, even experts working in their area of expertise are notoriously bad at making estimates of the type demanded of them by *Phillips* (*Eddy*, *Hasselblad*, & *Schachter*, 1992). Also, nobody knows the future so the estimates have no empirical basis. Furthermore, if you ask people how confident they are in their estimates of *value*, then by the same logic you should also ask them how confident they are in their estimates of confidence, and so on *ad infinitum*. Since there is no basis to be 100% confident, this leads to an infinite regress, which, in turn, leads to a final estimate that approaches zero. Finally, since the ratings are subjective, the final result has no credibility with stakeholders.

MAIN FOCUS: HOW TO MEASURE YOUR TRAINING

You can follow a simple four-step process to achieve valid *measurement* of your training efforts:

1.   Since all *measurement* presupposes a theory (*Snow & Wiley*, 1991), you must state explicitly your theory of the effects of the training. This sounds more difficult than it is, because you of-

fered the training — and somebody paid for it — for a reason, such as to improve sales.
2. Based on your theory, create the final report with fake data. An example is shown in Figure 1. This forces you to be explicit about your theory of training. In this case, the graph shows that you believe that more training will increase hourly sales.
3. Show the mock final report to your stakeholders and ask them if it answers the questions they have about the training. If not, what would? Iterate until

they agree that you are asking the right questions of the training and presenting the information in a way they can understand.
4. Collect data. Replace the fake data with real data. Having finished the report before you collected data, you can immediately focus on what the data means, rather than having to first spend time wrestling data into place.

There are two important rules to follow with this method. First, use hard data. Soft data is: Did you en-
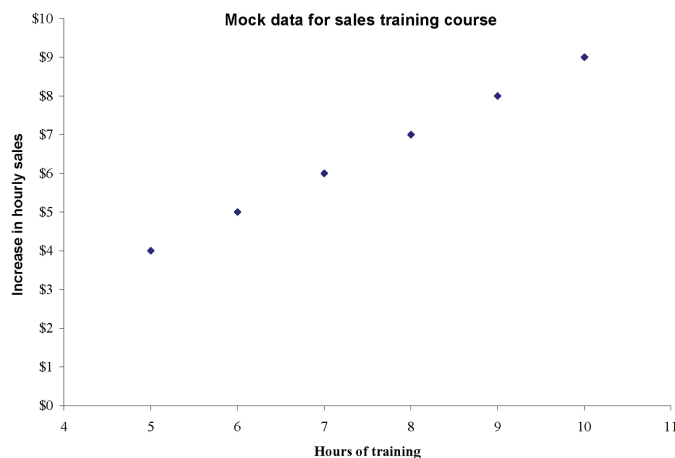
Figure 1.

Mock data for sales training course

Table 1.

Hours A	Sales A	Hours B	Sales B	Hours C	Sales C	Hours D	Sales D
10	$8.04	10	$9.14	10	$7.46	8	$6.58
8	$6.95	8	$8.14	8	$6.77	8	$5.76
13	$7.58	13	$8.74	13	$12.74	8	$7.71
9	$8.81	9	$8.77	9	$7.11	8	$8.84
11	$8.33	11	$9.26	11	$7.81	8	$8.47
14	$9.96	14	$8.10	14	$8.84	8	$7.04
6	$7.24	6	$6.13	6	$6.08	8	$5.25
4	$4.26	4	$3.10	4	$5.39	19	$12.50
12	$10.84	12	$9.13	12	$8.15	8	$5.56
7	$4.82	7	$7.26	7	$6.42	8	$7.91
5	$5.68	5	$4.74	5	$5.73	8	$6.89

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