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Evaluate This!
A Compelling Technique to Measure and Evaluate Training Results

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Introduction

Many health, safety and environmental (HSE) and training professionals conduct training designed to create change and provide value to their organization. In today's world, training solely for the sake of training is not acceptable. Training must provide value and benefit – both to the learner and to the organization.

Measuring the impact of training has long been a challenge for the HSE professional, but there is a relatively new method that offers a better solution. The *Success Case Method* (SCM) is a robust approach to evaluating the bottom-line value of training in a way that is reliable, compelling and persuasive to senior managers.

SCM is also highly effective in measuring any other organizational intervention – such as implementing a new work procedure, launching a new selection and hiring process, or establishing a new performance management system.

Traditional Approach to Learning Measurement

To appreciate the promise of this method, it is helpful to review the training professionals' traditional approaches to measurement. One method commonly used is simply the "gut-level" feeling that this particular training course (or intervention) is valuable and worthwhile; reasoning that participants must be learning a lot, therefore creating value for the organization. While there may be some truth to this anecdotal approach, it is hardly compelling to management.

Most training professionals are familiar with Don Kirkpatrick's four-level training evaluation model (see figure 1). At the conclusion of training, many participants complete a Level 1 Evaluation "Smile Sheet," where they are asked about the style of the trainer, the room temperature, location and other aspects of the training session. This is the Reaction Level, and merely collects initial perceptions of the learner.

In Level 2 Evaluation, participants are evaluated on learning transfer, or skills attainment. This evaluation method is typically a cognitive test – such as a multiple choice exam, or some “true/false” questions. Other types of Level 2 Evaluations could include a “hands-on” skills test, where the student actually performs a task, in a certain way, within a given time, under certain conditions. The Fire Service does an outstanding job of this, which has resulted in a complete standardization of skill levels across nearly every fire department in the United States.

Level 3 Evaluation measures the application of skills in the workplace by asking “Does the learner effectively use these new skills?” This is measured by observable behavior. While this is relatively easy to measure, it is rarely done. The ability of the learner to apply a new skill in the workplace is subject to many organizational forces.

Kirkpatrick’s Level 4 Evaluation is infrequently used. This level measures impact to the organization. This could be quantified by reduced turnover, increased production, or myriad other performance measures. Because there are many variables that contribute to performance, a direct correlation to training can be difficult to prove.

Kirkpatrick & Phillips Levels of Evaluation	
Level 5	Return on Investment
Level 4	Organizational Impact
Level 3	Application of Skill (back on the job)
Level 2	Transfer of Learning (skill learned in class)
Level 1	Reaction

Figure 1 – Traditional Levels of Training Evaluation

Jack Phillips later introduced Level 5 Evaluation called Return on Investment (ROI). This provides the ultimate impact of training – measured in dollars and cents. This methodology will tell an organization exactly what value is created (or not) by the specific training intervention. While not exceedingly complex, this process does require an investment of time and planning. Parsing out specific contributions of the actual training event from other organizational influences in employee performance can be very challenging, and some professionals question if it is even possible. Yet some organizations have been successful with this approach to measure training value (or other performance interventions).

Utilization of these five levels, however, seems to be an insurmountable challenge to many organizations. These evaluation methods can be onerous, elaborate, costly and difficult to use.

Although the benefits can be tremendous, they are rarely used past Level 2.

Success Case Method – A New Way

The *Success Case Method*, developed by Dr. Robert Brinkerhoff, offers an extraordinary new tool to measure and evaluate training in a credible and compelling way. SCM provides actionable results that help us make strategic decisions about training. The process provides the ROI and business-case data we need to enlist management support – at all levels – for our training efforts. With SCM, we not only discover the value of training, but we assist leaders in understanding the roadblocks that can inhibit optimal performance of the organization.

Many training professionals use a model that defines the stages of learning (Figure 2). Twenty-five percent of the outcome of training is determined before the participant enters the classroom. If the learner is "sent to training because it is mandatory," there is a pretty specific expectation on both the learner and the manager who "sent them." On the other hand, if the learner fully understands why they are in the training session, what the benefit is to them (WIFM) and what his/her supervisor expects as a result of attending, the pump is primed for an excellent learning experience.

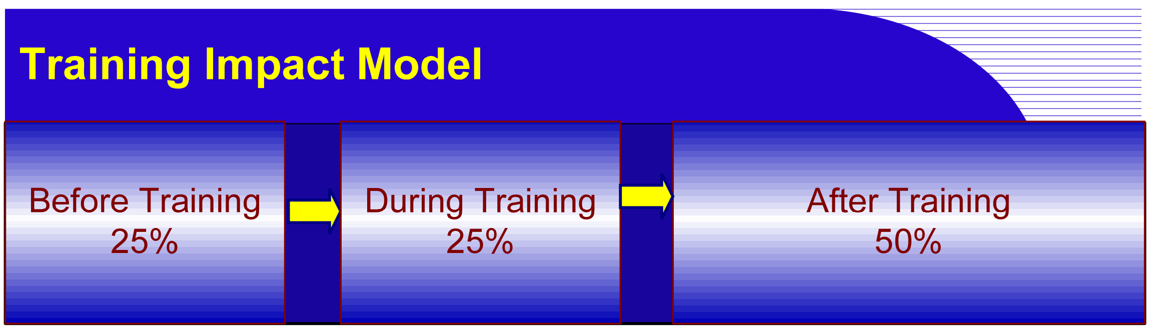

Figure 2 – Training Impact Model

The next twenty-five percent of the value is garnered during the actual training event, which is dependent upon the quality of instructional design, instructor preparation and the quality of instructional delivery. A dynamic instructor without concrete and relevant information, however, has no value.

The remaining fifty percent of the value of training is realized after the training event. New skills can be successfully applied if, 1) there is an expectation that the learner will perform, 2) there is coaching and reinforcement of the new behaviors, 3) behaviors are relevant to the success of the organization (alignment) and, 4) barriers for performance have been removed. If, however, a learner comes out of class and finds it difficult to apply the new skills, the learning initiative is likely to fail.

The Success Case Method builds on this principle by examining a very predictable distribution curve of training impact (Figure 3). Some learners will use their new skills and achieve extraordinary results. Some learners will not use their new skills at all. The vast majority (in the middle of the bell curve) try to use their skills without results, run into a barrier or find it easier to simply use "the old way" of doing things.

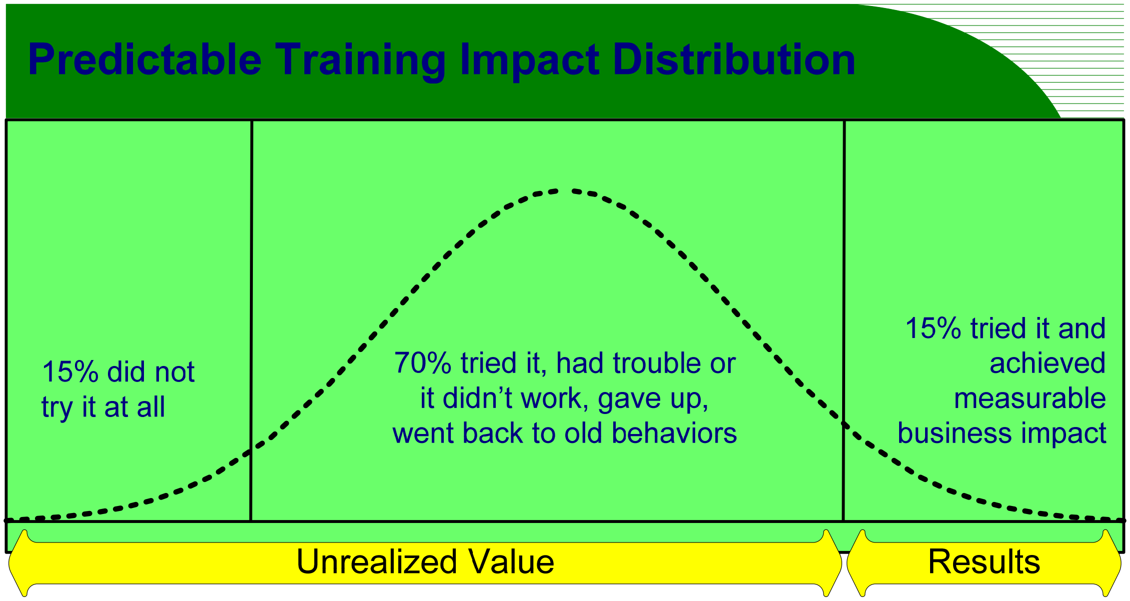

Figure 3 – Predictable Training Impact

We know that elements of supervisory support, reinforcement and feedback, relevance of the training and reducing the risk for trying the new behavior will have far more impact on organizational performance than the acquisition of new skills. These elements create alignment between the training intervention and the performance management system. There can be failures in the training stage of the process but over 80% of the failure of training to produce results is caused by the organizational factors. SCM recognizes and evaluates all of these variables to identify factors that help or hinder performance, then provides the necessary knowledge to support recommendations to enhance performance.

Using SCM allows the training professional to identify high performers and the reasons for their success, while pinpointing barriers for the remainder of the workplace.

<u>Using Success Case Method</u>
The five steps to Success Case Method are:

1. Focus and plan the evaluation
2. Create an impact model
3. Design and conduct a user survey
4. Conduct interviews
5. Develop conclusions and recommendations

Step One – Focus and Plan the Evaluation

The basis of the evaluation is driven by the unique needs of each situation. This will be highly variable between organizations and will depend on the type of intervention (e.g. training, coaching, job aid, etc.). The learning professional must posses a thorough understanding of the stakeholder's needs and the purpose for the study. Then he or she can design a process that produces a meaningful report. In the words of Stephen Covey – “Begin with the end in mind.”

Step Two – Create an Impact Model

The impact model describes the behaviors and results that would occur should the learner apply their new skills in the workplace. What are the business goals? What are the key results? What are the critical actions? What is the value of this intervention? All training is designed with the specific intent to elicit a change. In this step, the learning professional quantifies the impact of the change – in very specific and measurable organizational results.

Step Three – Design and Conduct a User Survey

The user survey is designed to yield two results. Identifying, 1) where learners are on the continuum of success (see Figure 3), and 2) who are the most (and least) successful in applying the new skills. This information will supply interview candidates for the next step.

Step Four – Conduct interviews

The interviews are the very core of the process. Employees who have applied their new skills to achieve results, and employees who are not able to apply the training in any usable fashion are interviewed. Through this process the learning professional gathers stories of the participants. These stories tell the value of training (the new skills and knowledge the learners were able to apply to achieve positive results) and the barriers to their success.

Step Five – Develop Conclusions and Recommendations

In the final step, the training practitioner will identify findings, draw conclusions and develop recommendations, by determining:

- What impact (if any) was achieved?
- Was the success widespread or limited? What were the results?
- Was there variation in the organization? Did some groups engage, but not others?
- Did all of the training apply, or were some parts more (or less) easily implemented?
- What organizational factors were responsible for success (or failure)? If there were stellar results in one department, what drove success? If there weren’t results in another department, what were the barriers?
- What value was achieved? What business results (e.g. ROI) were realized?
- What is the remaining opportunity? Using the bell curve (figure 3), what value could be realized if everyone had applied the skills to the same degree as the high performers? Should resources to drive success, drive execution, and obtain results be invested in the rest of the participants?
- What is the financial performance? Were desired ROI or cost benefit ratios achieved?

Putting Success Case Method to Work – A Project Plan

We have used the following methodology to plan a SCM project.

1. Determine the purpose of the study

   This enables the evaluation team to focus and design the study in such a way to ensure that stakeholders get the breadth and depth of desired information. Some key purposes might include:
   a. Document impact of training to ensure that training is achieving desired results
   b. Estimate ROI
   c. Create examples of success to market the program
   d. Document actions of early adopters to apply to later participants
   e. Refine and improve the program based on past participation
   f. Assess value of program
   g. Determine actual impact of program
   h. Assess impact of pilot before moving to larger adoption
   i. Develop awareness of contextual factors that support or inhibit successful application
   j. Make a business case for line managers to actively support the program – through coaching and feedback – in order to help employees achieve desired business impacts

   Each of these calls for slightly different data and a slightly different approach.

2. Determine key stakeholders and make sure their needs are being met by the study.

3. Define the population of participants to study (e.g. all participants, remote site workers only, etc.) and define any needed sampling parameters.

4. Establish a schedule for the study. Are there any deadlines or time constraints for contacting participants?

5. Confirm resources are available for the study. This includes necessary and time-consuming resources for initial survey design and administration, interviews, draft reports and conclusions. When budgeting time for interviews, we recommend allowing for three hours for each 45 minute interview. This includes time for interview preparation, scheduling the interview, conducting the interview, reflecting on information, and writing up notes. This does not include any travel time at all. Telephone surveys have been used quite successfully in the past.

6. Finalize Success Case Strategy

   This step is to synthesize all the information collected in the previous steps and map out a strategy, timeline and budget.

Stakeholder Need and Purpose	***SCM Strategy***	***Timeline***
Illustrating Impact A large telecommunications company invested in mandatory supervisory training. Initial reports are that the program is popular, but the senior leaders want hard evidence regarding impact. Senior managers are reluctant to send their people to something that doesn't pay off, especially with tight budgets, labor shortages and increased workloads	Selected random samples of training participants. Send survey to sample asking them to note (from a list) supervisory actions they had tried and what beneficial results, if any, had been achieved. Documented success in each of several major categories (e.g. using skill to avert a lawsuit, using skills to increase production).	Program design – 2 weeks Survey design and distribution – 2 weeks Survey receipt and initial data study – 2 weeks Select, schedule and conduct interviews – 4 weeks Collate data, form conclusions, prepare draft report – 3 weeks Edit and release final report – 1 week
Determining Scope of Impact and Unrealized or Potential Impact A financial services company had invested a lot of money in training employees to use emotional intelligence skills. Anecdotal evidence showed that some parts of the organization were probably using the training a lot and getting good results, while others seemed not to be using the training very much. The study was conducted so the training department could decide a) whether to revise the training to get greater impact, or b) what steps should be taken to assure more impact.	Use a survey to identify extreme samples of successful applications and samples of those who were not using the training. Collected representative Success Case examples from extreme groups of people getting a great deal of value and no value at all. An analysis of workplace factors that were consistently related to differences in impact led to suggestions for changing the training, for changing how supervisors managed participant entry into the program and for how managers supported application of the skills (coaching and feedback, providing expectations, measuring use of skills). These changes were estimated to double the scope and value of the training impact.	Program design – 3 weeks Survey design and distribution – 1 week Survey receipt and initial data study – 3 weeks Select, schedule and conduct interviews – 2 weeks Collate data, form conclusions, prepare draft report – 3 weeks Edit and release final report – 1 week

Figure 4: Sample Success Case Purpose and Strategy

7. Construct a training impact model

   Generally the impact model (Figure 5) starts with business goals (unit and company level) to which the training was meant to contribute. Then identifies the results that the on-the-job application of skills was intended to produce. Followed by the major ways in which learning outcomes were to be applied in job behaviors. To the beginning, which identifies knowledge and skills outcomes participants are intended to master.

Start Here
← Work this way

Capabilities	Actions / Behaviors	Results	Business Need

Figure 5 – Impact Model

   All items in a column should be structured the same way. For example skills and knowledge might always use the prefix "ability to . . . ." Or job results can be written as past-tense outcomes, for example "accurate records completed." Job results should be nouns, measurable outcomes (e.g. a 5% increase in sales). Behaviors always begin with a verb.

   The last step in creating the impact model is to validate it. Since the impact model is the guide for data collection, analysis, and reporting, errors on the model may lead to collecting data on the wrong skills, behaviors or goals. Or worse yet, data that has no value to stakeholders.

8. Design the SCM survey.

   The basic steps to design and implement a SCM survey are as follows:

   a. Determine the survey population.
   b. Plan survey access, distribution and return (e.g. SurveyMonkey, hard copies).
   c. Determine the nature and scope of data to collect.
   d. Construct the survey items, using the impact model as a reference.
   e. Identify a scoring scheme.
   f. Distribute and follow-up on the survey.

9. Analyze survey results

Sort responses into three groups – high success, low success and “in-between.” This may possibly call for revised scoring scheme. These results are sorted into buckets as illustrated below: High Success; Medium Success and Lo/No Success.

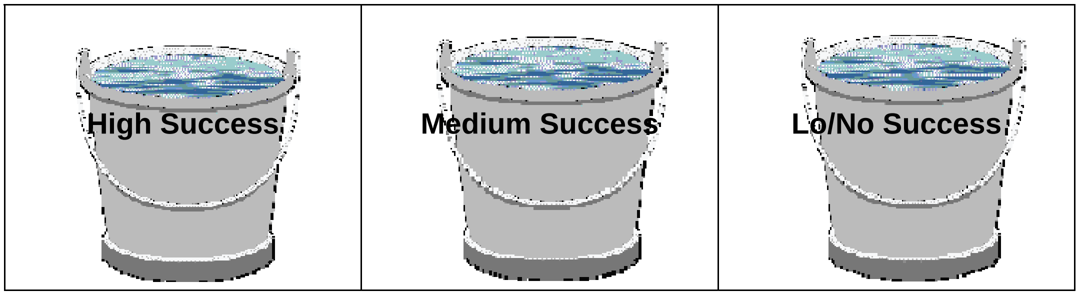

Figure 6 – Results Buckets

Since usually only one out of every two interviews will actually result in a reportable story, the candidate pool for success stories should be at least twice the number of final cases to be documented. If fewer than three of the initial six turn out to be valid Success Cases worthy of documentation, we may have to dig a little deeper into lower scoring responses.

We also search among the low-scoring candidates to develop an understanding of the factors and characteristics that seem to influence a lack of impact. Thus, we repeat the sort of the scoring process we use for high successes with the lowest. While we are not looking for low success “stories,” we are trying to understand, validate and document the factors that impeded impact.

This data is then sorted in one of four major ways. The most commonly used approaches are:

Sorting Approach	***When to Use It***
Identify a few of the top scores as successes	Just trying to capture and document a few of the most dramatic Success Cases
Identify very top and very bottom scores as successes and non-successes	Want to illustrate the impact of the program, and also to explore factors that seem to support and inhibit success.
Sort respondents into demographic or other categories (job location, role, unit, type of impact). Then identify highest (and maybe lowest) scores in each category.	Want to illustrate and/or analyze impact in each of several organizational units or other categories (e.g. units or length of time on job)
Sort scores into categories that define varying levels of success or application that led to different sorts of impacts that vary according to value in the organization.	Where need to illustrate impact, along with numbers or proportions.

10. Choosing interview candidates.

    Interview candidates are then chosen according to the preferred results from the data sort.

11. Analyze data to estimate nature and scope of impact

    Looking across all survey respondents to summarize distribution scores in order to make useful estimates about scope of impact. Develop frequency distribution tables, which form the basis for study findings. Cross tabulate frequency distribution by survey respondents across desired categories.

12. Conduct SCM interviews

    This is the heart of the process, finding out the stories and documenting them in a valid and credible way. Because there are only a few stories that will be told, you need to make sure that the few are the absolute best. These need to be documented objectively and completely so they do not lose their persuasive power because they are not credible or cannot be defended as accurate or truthful.

    The steps for completing SCM stories are:

    a. Plan the interview protocols/process and questions you will ask.
    b. Conduct interviews.
    c. Document the most interesting and noteworthy stories.

Determining the best interview questions will require revisiting the impact map and developing a causal analysis framework. This is in order to pose and eliminate some of the rival hypotheses that have to be considered (e.g. did the participant gain the skills, knowledge and/or abilities (SKA) in class, or already have it? Could the performance have occurred without the SKA? Were there other incentives put into play at the same time that could have caused the change?).

The interview process is another “bucket-filling” process. The interviewer needs to ask questions and guide the conversation in order to “fill” each bucket with sufficient information about the category. When each bucket is filled, the interview is complete.

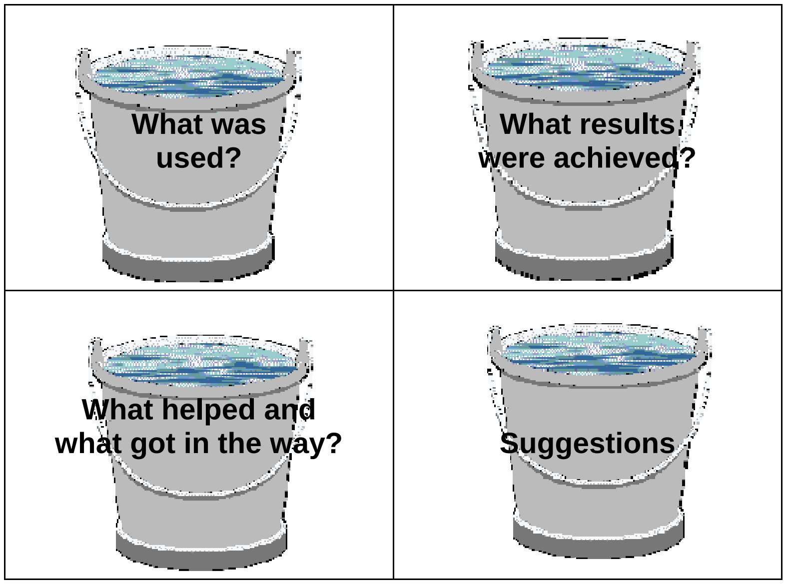

Figure 7 - Success Case Interview Buckets

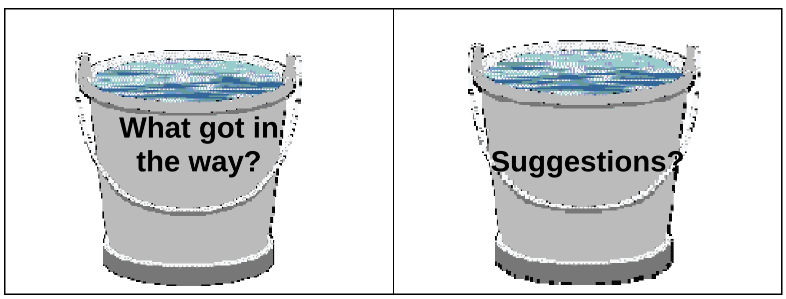

Figure 8 - Non-Success Case Interview Buckets

13. Draw Compelling Conclusions

    The original purpose for the study will drive the major conclusions, but the common range of conclusions typically include (in increasing level of complexity):

    a. What, if any, impact was achieved?
    b. How widespread is success?
    c. Did the training work better in some parts of the organization or with some types of participants?
    d. Were some parts of the training more successfully applied?
    e. What systematic factors were associated with success (or lack of success)?
    f. What is the value of the outcomes achieved?
    g. What is the unrealized value of the training?
    h. How do the benefits compare to the cost?

SCM Project Overview

Project Step	Resources Required	Start Date	End Date	Scope/ Hours of Effort	Person Responsible
1. Determine the purpose of the study					
2. Determine key stakeholders and make sure their needs are being met by the study.					
3. Define the population of participants to study (e.g. all participants, only remote site, etc.) and define any needed sampling parameters.					
4. Establish a schedule for the study					
5. Confirm resources are available for the study					
6. Finalize Success Case Strategy					
7. Construct a training impact model					
8. Design the SCM survey					
9. Analyze survey results					
10. Choosing interview candidates.					
11. Analyze data to estimate nature and scope of impact					
12. Conduct SCM interviews					
13. Draw Compelling Conclusions					

Summary

The Success Case Method provides the training professional with a whole new way to measure the success of training programs. We can learn how many individuals were able to use and apply the learning to a positive benefit and derive the specific value of those benefits to the organization.

We can describe the impact and value of our training programs, one participant at a time. It allows a shift from a focus in training to measuring the performance of our organizations. Once we begin to measure the effectiveness and performance in our organizations, and can clearly articulate these results to senior managers, we truly add value to the professional team.

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