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Using Action Plans to Measure ROI: A Case Study

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The use of action planning to measure the return on investment (ROI) shows much promise for performance improvement (PI) interventions. Action planning is powerful, flexible, and efficient. With this approach, participants develop an action plan for improving performance during a training program or performance improvement project.

The plan is a step-by-step guide to drive application on the job.

This article describes how this process is used and presents a case study showing how one organization, a large restaurant chain, built evaluation into the performance improvement process and positioned action planning as an application tool. This project added significant value to the restaurant chain and illustrates how an evaluation can be accomplished with minimum resources. The key to success in this approach is carefully planning the evaluation, building it into the performance improvement process, and using the data to help future participants succeed with the same performance improvement project.

Evaluation Challenges

In recent years, increased emphasis has been placed on measurement and evaluation, including the calculation of the return on investment. Top executives, chief financial officers, and internal clients now ask for more accountability for training and development and performance improvement initiatives (Phillips, 2000). This challenge has professionals in our field searching for specific ways to increase the accountability with minimum additional resources.

When more-detailed measurement and evaluation are considered, a variety of barriers often surface. One major problem is that enough time is never allocated to collect, analyze, and present data in a meaningful way. Also, additional measurement and evaluation adds cost to a process that is already too expensive in the minds of some executives. Further, there is always the problem of not collecting adequate data, particularly when participants must supply the data. The quality and quantity of data always suffer when participants are reluctant to allocate time to provide evaluation data, data that help our cause and do little for participants personally.

Identifying appropriate measures to monitor is another challenge, particularly in projects where a variety of measures can be driven by a project. This is particularly true for all types of performance improvement initiatives including leadership development, management training, team building, problem solving, and innovation.

These issues, and others, often create the need for an evaluation process that minimizes resources and time, enhances the participants' role in the process, and provides sufficient quality and quantity of data for an appropriate ROI analysis. The action-planning tool described here can accomplish this feat. But first, a brief explanation of the actual ROI process.

The ROI Process

The process presented in this article is often labeled the ROI process and collects six types of data about a project, program, or solution. Figure 1 shows the six types of data collected, providing a balanced, credible approach to identifying the success of a project.

As part of the definition, a specific method or technique must be implemented to isolate the impact of the project.

The first four types of data are consistent with the traditional Kirkpatrick four levels (Kirkpatrick, 1994). At the heart of the process is a step-by-step model presented in Figure 2, which shows how data are collected, processed, and analyzed. The process starts with evaluation planning in which detailed objectives of the program

Figure 1. The Comprehensive Measurement Process used in Impact Studies

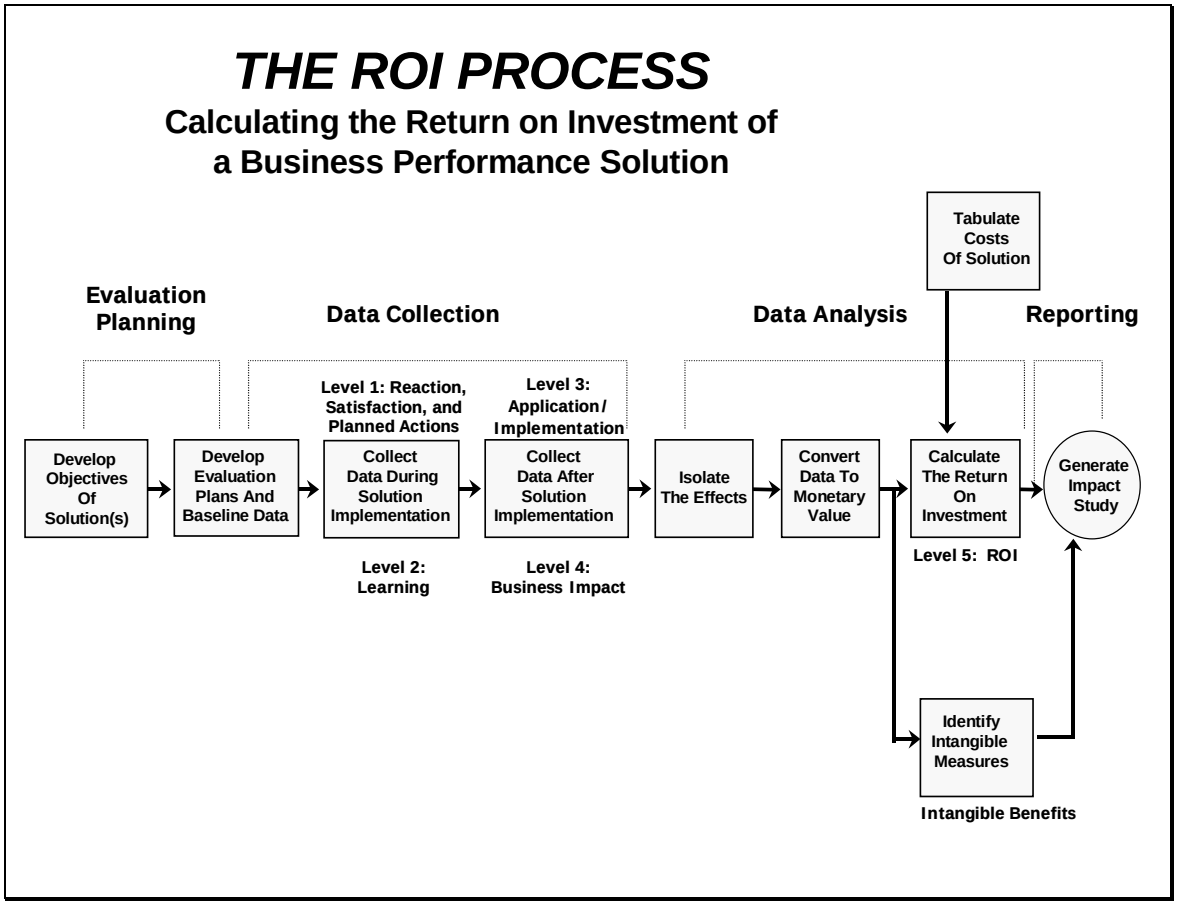
Type of Measure	*Measurement Focus*
Reaction & Planned Action	Measures participant satisfaction with the program and captures planned actions.
Learning	Measures changes in knowledge, skills, and attitudes.
Application	Measures changes in on-the-job behavior.
Business Impact	Measures changes in business impact variables.
Return on Investment	Compares program benefits to the costs.
Intangible	Identifies application and impact measures not converted to monetary value.

→ and includes a technique to isolate the effects of the program or solution. ←

or solution are developed. Evaluation plans are developed to make decisions regarding how the data are collected, processed, and analyzed. Two important outputs come through this process, a detailed data collection plan and an ROI analysis plan.

At the first level of data, reaction and planned actions are captured from participants who were involved in the program. Next, learning data are captured as specific improvements in skills, knowledge, and perceptions are measured. After the program is implemented, application and implementation data are collected to show the progress in the use and application of skills and knowledge. The corresponding business impact, which is directly linked to the project or solution, is measured. Together, these first four blocks in the process model comprise the key elements of the data collection plan.

Figure 2. The ROI Process Model



The remaining blocks are critical to the actual ROI analysis plan. The next step is to isolate the effects of the project from other influences. This process uses one or more methods to separate the influence of the performance improvement project from other factors that had an influence on the business measure.

In the next block, the business impact data are converted to monetary value and annualized to develop an annual value for the project.

The first year of value is used for short-term solutions; longer periods are used for more extensive, long-range implementation. The fully loaded costs are captured to reflect both direct and indirect costs of the solution. Monetary benefits and costs are combined in the calculation of the ROI. The intangible benefits are identified throughout the process and are tabulated after an attempt is made to convert them to monetary value. If an intangible item cannot be credibly converted to monetary value, it is left as an intangible measure and becomes the sixth type of data.

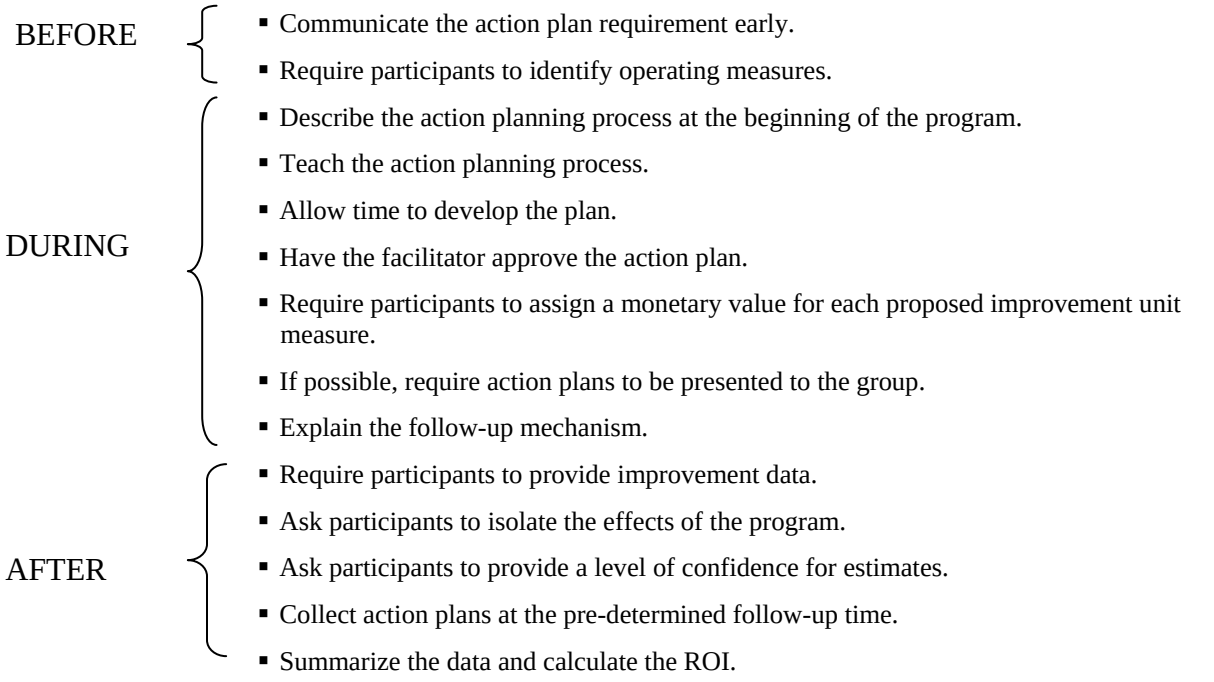
The first four types of data are collected during and after the PI solution is implemented. Two types of data (ROI and intangible measures) are developed in the process. This comprehensive measurement process is now used by thousands of organizations in all types of settings, including public sector and non-profit organizations.

Why Action Plans and How Do They Work?

The action planning process can be traced to the 1930s when the federal government used it as the participant action planning approach (PAPA) (Office of Personnel Management, 1980). In early use of the action plan, the primary focus was to develop specific plans for changing behavior following training. In this approach, participants actually complete their action plan, detailing how they will change their behavior or apply what was learned in the program. In recent years, the focus has extended beyond behavior change to include the anticipated impact driven by the behavior change (Phillips, 2003). For this new approach to be successful there must be a clear linkage between the behavior change and a predetermined business measure. The anticipated impact can be developed and actual values placed on the unit of measure linked to the program. Figure 3 shows the steps needed to integrate the action planning process into a performance improvement initiative. It begins with an early announcement of the process and with appropriate agenda time built into the program so that action planning becomes an integral part of the process. This way, action planning is not perceived as an add-on evaluation tool, but rather an application tool. The mechanics of how this is developed is best described in the detailed case study that follows (Phillips & Phillips, 2001).

The case illustrates both the simplicity of the process and the powerful impact it can have when implemented properly.

Figure 3. Sequence of Activities for Action Planning



Background of Case Study

Cracker Box, Inc. is a large, fast-growing restaurant chain located in major metro areas. In the past 10 years, Cracker Box has grown steadily and now has over 400 stores with plans for continued growth. A store manager is responsible for the operation of each restaurant. Cracker Box must develop almost 150 new store managers per year to prepare for growth and store manager turnover, which is lower than the industry average.

Store managers operate autonomously and are held accountable for store performance. Working with members of the store team, managers control expenses, monitor operating results, and take actions as needed to improve store performance. Each store records dozens of performance measures in a monthly operating report, while other measures are reported weekly.

Cracker Box recruits managers both internally and externally and requires that they have restaurant experience. Many of them have college degrees, preferably in hospitality management. The training program for new managers usually lasts nine months. When selected, a store manager trainee reports directly to a store manager who serves as his or her mentor. Trainees are usually assigned to a specific store location for the duration of manager training and preparation. During the period, the entire store team reports to the store manager trainee as the store manager (mentor) coaches the trainee. As part of the formal development process, each store manager trainee attends at least three one-week programs at the company's corporate university, which is located near the company's headquarters. These training sessions include the Performance Management Program.

Performance Management Program

The Performance Management Program teaches new store managers how to improve store performance. Program participants learn how to establish measurable goals for employees, provide performance feedback, measure progress toward goals, and take action to ensure that goals are met. Problem analysis and counseling skills are also covered. The program focuses on using the store team to solve problems and improve performance. The one-week program is residential and often includes evening assignments. Corporate university staff and operation managers facilitate the program, and they integrate skill practice sessions throughout the instruction.

Needs Assessment

The overall needs assessment for this program is in two parts. The first part is a macro-level needs assessment for the store manager job, which is similar to assessments conducted for major job groups in other organizations. The corporate university's performance consultants identified specific training and developmental needs for new managers, particularly with issues involving policy, practice, performance, and leadership. This needs assessment provided the basis for developing the three programs for each new manager trainee.

The second part of the assessment is built into this program as the individual manager trainees provide input for a micro-level, or store-level, needs assessment. The program coordinator asks participants (manager trainee) to provide limited needs assessment data prior to the program. Each participant is required to meet with the store manager (i.e., his or her mentor) and identify at least three operating measures that, if improved, should enhance store performance. Each measure must focus on changes that both the store

manager and manager trainee perceive as worthwhile. These business impact measures define the business need for the program and could include productivity, absenteeism, turnover, customer complaints, revenues, inventory control, accidents, or any other measure that need improvement. It is possible for each participant in a specific manager trainee group to have different measures.

To ensure that job performance needs are met, each participant is asked to review the detailed objectives of the program and select only measures that could be improved by the efforts of the team using skills taught in the program.

The important challenge in this step is to avoid selecting measures that cannot be enhanced through the use of the input of the team and the skills and knowledge contained in the program.

This step effectively completes the job performance needs assessment.

As participants register for the program, they are reminded of the requirement to complete an action plan as part of the application of the process. This requirement is presented as an integral part of the program, not as an add-on data collection tool. Action planning is positioned as necessary for participants to see their actual improvements and the improvements generated from the entire group. Credit for the program is not granted until the action planning process is completed and data are reported.

Why Evaluate This Program?

The decision to conduct an ROI analysis for this program was reached through a methodical and planned approach. A corporate university team decided at the outset that business improvement data would be collected from this program. This decision was based on these reasons:

- This project was designed to add value at the store level and the outcome is expressed in store-level measures that are well known and respected by the management team. The evaluation should show the value of the performance improvement in terms they understand and appreciate.
- This approach to evaluation shifts the data collection process to an application perspective. Manager trainees did not necessarily perceive that the information they provided was for the purpose of evaluation, but saw it as more of an application tool to show the impact of their training. The monetary impact and ROI calculations help to achieve this perception and remove the resistance to providing the data.
- The application and impact data enabled the store team to make improvements and adjustments. The impact of the improvement would be communicated to all team members. The ROI data helped the corporate university team gain respect from operating executives as well as the store managers.

Therefore, the team built the evaluation into the program and included a requirement to develop the ROI.

Planning for Evaluation

Planning for the evaluation is critical to saving costs and improving the quality and quantity of data collection. The planning process also provides an opportunity to

clarify expectations and responsibilities and show the client group (i.e., the senior operating team) exactly how this program is evaluated. Two documents are created: the data collection plan and the ROI analysis plan.

Data Collection Plan

Figure 4 shows the data collection plan for this program. Broad objectives are detailed along the five levels of evaluation, which represent the first five types of data collected for programs. As the plan illustrates, the facilitator collects typical reaction and satisfaction data at the end of the program. Learning objectives focus on the five major areas of the program: establishing employee goals, providing feedback and motivating employees, measuring employee performance, solving problems, and counseling employees. Learning measures are obtained through observations from the facilitator as participants practice the various skills.
Through application and implementation, participants focused on two primary areas. The first requirement was to apply the skills in appropriate situations; the second was to complete all steps in their action plan. For skill application, the evaluation team developed a follow-up questionnaire, which would be implemented three months after the program to measure the use of the skills along with certain other related issues. Six months after the program, the action plan data are provided to show the actual improvement in the measures planned.

Business impact objectives vary with the individual because each store manager trainee identifies at least three measures needing improvement. These measures appear on the action plan and serve as the documents for the corporate university staff to tabulate the overall improvement. The ROI objective for this program is 25 percent, which was the ROI standard established for internal programs at Cracker Box. This means that at least 25% return on the funds invested is acceptable. The ROI formula is discussed later. This was slightly above the internal rate of return expected from other investments, such as the construction of a new restaurant.

ROI Analysis Plan

The ROI analysis plan, which appears in Figure 5, shows how the data are processed and reported. Business impact data, listed in the first column, form the basis for the remainder of the analysis. Business measures are level 4 data items, identified on the action plans. The method for isolating the effects of the project at Cracker Box was participant estimation. The method to convert data to monetary values relied on three techniques: standard values (when they were available), internal expert input, or participant's estimate. Cost categories represent a fully loaded profile of costs; anticipated intangibles are detailed, and the communication targets are outlined. The ROI analysis plan basically represents the approach to process business impact data to develop the ROI and to capture the intangible data. Collectively, these two planning documents outline the approach for evaluating this project. Additional detail is provided later on these issues.

Developing the Action Plan: A Key to ROI Analysis

Figure 3, presented earlier in this article, shows the sequence of activities from introduction of the action planning process to reinforcement during the program. The requirement for the action plan was communicated prior to the program along

Figure 4. Data Collection Plan

Data Collection Plan

Program:_Performance Management_Program **Responsibility:** Jack Phillips **Date**:_____

Level	Objective(s)	Measures and Data	Data Collection Method	Data Sources	Timing	Responsibilities
1	**Reaction and satisfaction** ▪ Obtain positive reaction to program and materials ▪ Identify planned actions	▪ Average rating of 4.0 out of 5.0 on quality, quantity, and usefulness of material ▪ 100% submit planned actions	▪ Standard feedback questionnaire	▪ Participant	▪ End of program	▪ Facilitator
2	**Learning** ▪ Establishing employee goals ▪ Providing feedback and motivating employees ▪ Measuring employee performance ▪ Solving problems ▪ Counseling employees	▪ Be able to identify 100% of steps necessary to establish, monitor, and achieve goals ▪ Demonstrate ability to provide employee feedback, solve problems	▪ Skill practice ▪ Facilitator assessment ▪ Participant assessment	▪ Participant	▪ During program	▪ Facilitator
3	**Application and implementation** ▪ Apply skills in appropriate situations ▪ Complete all steps of action plan	▪ Ratings on questions ▪ The number of steps completed on action plan	▪ Follow-up questionnaire ▪ Action plan	▪ Participant ▪ Participant	▪ Three months after program ▪ Six months after program	▪ Corporate University staff
4	**Business Impact** ▪ Identify three measures that need improvement	▪ Varies	▪ Action plan	▪ Participant	▪ Six months after program	▪ Corporate University staff
5	**ROI** ▪ 25%	**Comments:**_____ _____ _____ _____				

Figure 5. ROI Analysis Plan

ROI Analysis Plan

Program: Performance Management Program **Responsibility:** Jack Phillips **Date**:_____

Data Items (Usually Level 4)	Methods for Isolating the Effects of the Program and Process	Methods of Converting Data to Monetary Values	Cost Categories	Intangible Benefits	Communication Targets for Final Report	Other Influences and Issues During Application	Comments
▪ Three measures identified by manager trainee and manager	▪ Participant estimation	▪ Standard values ▪ Expert input ▪ Participant estimation	▪ Needs assessment ▪ Program development ▪ Program material ▪ Travel and lodging ▪ Facilitation and coordination ▪ Participant salaries plus benefits ▪ Training overhead ▪ Evaluation	▪ Achievement ▪ Confidence ▪ Job satisfaction ▪ Permanent store assignment	▪ Store managers ▪ Participants ▪ Corporate University staff ▪ Regional operating executives ▪ VP store operations ▪ Senior VP Human resources		

Client Signature: _____ Date: _____

with the request for needs assessment information. On Monday, the first day of the program, the program facilitator described the action planning process in a 15-minute discussion, setting the stage for the week. Participants received specially prepared notepads on which to capture specific action items throughout the program. They were instructed to make notes when they learned a technique or skill that could be useful in improving one of the measures on their list of three business measures needing improvement. In essence, this notepad became a rough draft of the action plan.

The action planning process is discussed in greater detail in a one-hour session on Thursday afternoon. This discussion includes three parts: actual forms, guidelines for developing action plans including SMART (*s*pecific, *m*easurable, *a*chievable, *r*ealistic, and *t*ime-based) requirements, and examples to illustrate what a complete action plan should look like.

The program facilitator distributed the action planning forms in a booklet containing instructions, five blank action plans (only three are required – one for each measure), and the examples of completed action plans. On Thursday evening, participants completed the booklets in a facilitated session lasting approximately one and a half hours. Participants worked in teams to complete all three action plans. Each plan took about 20 to 30 minutes to complete. Figure 6 shows a completed action plan. During the session, participants completed the top portion, the left column on which they list the action steps, and parts A, B, and C in the right column. After six months, participants completed the remainder of the form – parts D, E, and F, as well as intangible benefits and comments. The senior program facilitator monitored most of these sessions. Sometimes an operations executive was present to monitor the sessions and learn about the issues confronting store operations. The involvement of operations executives provided an additional benefit of keeping the participants focused on the task. These operating executives were impressed with the focus of the program and the quality of the action planning documents.

By design, the action plan could focus on any specific steps as long as they were consistent with the skills required in the program and related to the business improvement measures. The most difficult part of developing the plan was to convert the business measure to a monetary value. Three approaches were offered to participants. First, standard values were used when they were available. Fortunately for Cracker Box, standard values are available for most of the operating measures. Operations managers and specialists had previously developed or assigned a cost (or value) to a particular measure for use in controlling costs and developing an appreciation for the impact of store level performance measures. Second, when a standard value was not available, participants were encouraged to use expert input. This option involved contacting someone in the organization who may know the value of a particular item. The program facilitator encouraged participants to call the expert on Friday morning and include the value to the action plan. Third, when a standard value or expert input was not available, participants were asked to estimate the cost or value using all of the knowledge and resources available to them. Fortunately, the measure was a concern to the trainee (participant) and the store manager (mentor who had some appreciation for the actual value. Estimation

Figure 6. Completed Action plan

Name: *John Mathews* **Instructor Signature:** _____ **Follow-Up Date:** *1 September*
Objective: *Reduce weekly absenteeism rate for team* **Evaluation Period:** *March to August*
Improvement Measure: *Absenteeism rate* **Current Performance:** *8%* **Target Performance:** *5%*

Action Items		Analysis
1. *Meet with team to discuss reasons for absenteeism – using problem solving skills*	*10 March*	A. What is the unit of measure? *One Absence*
2. *Review absenteeism records for each employee – look for trends and patterns*	*20 March*	B. What is the value (cost) of one unit? *$ 41.00*
3. *Counsel with "problem employees" to correct habits and explore opportunities for improvement*	*As Needed*	C. How did you arrive at this value? *Standard Value*
4. *Conduct a brief "performance discussion" with an employee returning to work after an unplanned absence*	*As Needed*	D. How much did the measure change during the evaluation period? (monthly value) *2.5%*
5. *Provide recognition to employees who have perfect attendance*	*Monthly*	E. What percent of this change was actually caused by this program? *65%*
6. *Follow-up with each discussion and discuss improvement or lack of improvement and plan other action.*	*31 March*	F. What level of confidence do you place on the above information? (100% = Certainty and 0% - No Confidence) *80%*
7. *Monitor improvement and provide recognition when appropriate*		
Intangible Benefits: *Less Stress, Greater Job Satisfaction*		

Comments: *Great Program – it kept me on track with this problem*

Completed 6 months after program

was possible in every case when standard values and expert input were not available. It was important to require that this value be developed during the program or at least soon after completion of the program.

The next day, Friday, the participants briefly reviewed the action planning process with the group. Each action plan took about five minutes. To save time, each team chose one action plan to present to the entire group to underscore the quality of the action planning process. The program facilitator explained the follow-up steps to the group. It was recommended that the manager trainee and the store manager discuss the document before sending a copy to the corporate university staff. Contact information was included in case a staff member had a question about the data.

Results

Results are reported in all six categories developed by the ROI process, beginning with reaction and moving through to ROI and the intangible benefits.

The results in each category are presented below with additional explanation about how some of the data were processed.

Reaction and Learning

Reaction data, collected at the end of the program using a standard questionnaire, focused on issues such as relevance of the material, the amount of new information, and intention to use the skills. The content, delivery, and facilitation were also evaluated. Figure 7 shows a summary of the reaction data on a rating scale where one is unsatisfactory and five is exceptional.

Figure 7. Reaction of program participants

Topic	Rating
Relevance of material	4.3
Amount of new information	3.8
Intention to use skills	4.6
Content of the program	3.7
Delivery of the program	4.1
Facilitation of the program	4.2

Learning improvement is measured at the end of the program using a self-assessment and a facilitator assessment. Although these measures are subjective, they provide an indication of improvements in learning. Significant improvements in both the self-assessments and facilitator assessments are usually reported. In this specific study, the facilitator assessment data revealed that all participants had acquired the skills on least at a satisfactory level.

Application and Implementation

To determine the extent to which the skills are being used and to check progress of the action plan, participants received a questionnaire three months after the program. This two-page, user-friendly questionnaire covered the following topics:

- skill usage;
- skill frequencies;
- linkage to store measures;
- barriers to implementation;
- enablers for implementation;
- progress with action plan;
- quality of the support from the manager;
- additional intangible benefits; and
- recommendations for program improvements.

Participants reported progress in each of the areas and indicated that they had significant

use of the skills even beyond the projects involving action plans. Also, store manager trainees indicated linkage of this program with many store measures beyond the three measures selected for action planning. Typical barriers of implementation included lack of time, understaffing, changing culture, and lack of input from the team. Typical enablers were the support from the store manager and early success with the application of the action plan. This follow-up questionnaire allowed manager trainees an opportunity to summarize the progress with the action plan. In essence, it served as a reminder to continue with the plan as well as a process check to see if there were issues that should be explored. Manager trainees gave the store manager high marks in terms of support provided to the program. Participants suggested several improvements — all minor — which were implemented if they added value.

Business Impact

Participants collected business impact data for each plan. Although the action plan (Figure 6) contains some Level 3 application data (the left side of the form), the primary value of the action plan was business impact. In the six-month follow-up, participants were required to furnish the following five items.

1. **Change in business measures**. The actual change in the business measure, on a monthly basis, is included in part D of the action plan. This value is used to develop an annual, first-year improvement.

2. **Estimate of percent of improvement.** The only feasible way to isolate the effects of this particular program is to obtain an estimate directly from the participants. Manager trainees monitored business measures and observed improvement. Realizing that other factors could have influenced the improvement, manager trainees were asked to estimate the percent of improvement resulting from the application of the action steps on the action plan. Realistically, they probably know the actual influences driving a particular measure, at least the portion of the improvement related directly to their actions. Each manager trainee was asked to be conservative with the estimate and express it as a percentage (part E on the action plan).

3. **Level of confidence.** Recognizing that the above value is an estimate, manager trainees were asked to indicate the level of confidence in their allocation of the contribution to this program, using a range of 0 percent (for no confidence) to 100 percent (for certainty). This is included on part F on the action plan. This number reflects the degree of uncertainty in the value and actually frames an error range for the estimate.

4. **Intangible benefits.** The participants were asked to provide input on intangible benefits observed or monitored during the six months that were directly linked to this program.

5. **Additional comments.** Participants were asked to provide additional comments including explanations.

The example in Figure 6 focuses directly on absenteeism from participant number three. This participant has a weekly absenteeism rate of 8 percent and a goal to reduce it to 5 percent. Specific action steps appear on the left side of the form. The value per absence is $41, an amount that represents a standard value. The change on a monthly basis is 2.5 percentage points, slightly below the target. The manager trainee estimated that 65% of

the change is directly attributable to this program and that he is 80% confident in this estimate. The 80% confidence estimate frames an error range for the 65% allocation, allowing for a possible 20%± adjustment in the estimate. The estimate is adjusted to the low side, bringing the contribution rate of this program to absenteeism reduction to 52% (65% x 80% = 52%), a conservative value. This particular store location, which is known because of the identity of the store manager trainee, has 40 employees. Employees work an average 220 days. The annual improvement value for this example can be calculated as follows:

40 Employees x 220 Days x 2.5% x $41 = $9,020

This is a total first-year improvement before the adjustments. Figure 8 shows the annual improvement values on the first measure only for the 14 participants in this group. (Note that participant number five did not return the action plan so that person's data were omitted from the analysis.) A similar table is generated for the second and third measures. The values are adjusted by the contribution estimate and the confidence estimate. In the absenteeism example, the $9,020 is adjusted by 65% and 80% to yield $4,690 ($9,020 X 52%). This same adjustment is made for each of the values, with a total first-year adjusted value for the first measure of $68,240. The same process .

Figure 8. Business impact data

Participant	Improvement ($ Values)	Measure	Contribution Estimate from Manager Trainees	Confidence Estimate	Adjusted $ Value
1	5,500	Labor Savings	60%	80%	2,640
2	15,000	Turnover	50%	80%	6,000
3	9,020	Absenteeism	65%	80%	4,690
4	2,100	Shortages	90%	90%	1,701
5	0	-------	-------	-------	-------
6	29,000	Turnover	40%	75%	8,700
7	2,241	Inventory	70%	95%	1,490
8	3,621	Procedures	100%	80%	2,897
9	21,000	Turnover	75%	80%	12,600
10	1,500	Food Spoilage	100%	100%	1,500
11	15,000	Labor Savings	80%	85%	10,200
12	6,310	Accidents	70%	100%	4,417
13	14,500	Absenteeism	80%	70%	8,120
14	3,650	Productivity	100%	90%	3,285
					$68,240

Total Annual Benefit for First Measure is $68,240.
Total Annual Benefit for Second Measure is $61,525.
Total Annual Benefit for Third Measure is $58,713.

is followed for the second and third measures for the group, yielding totals of $61,525 and $58,713, respectively. The total first-year monetary benefits for this group are the sum of these three values.

Program Cost

Figure 9 details the program costs for a fully loaded cost profile. The cost of the needs assessment is prorated over the life of the program, which is estimated to be three years with 10 sessions per year (30 sessions total). The program development cost is prorated over the life of the program as well, using the same basis. The program materials and lodging costs are direct costs. Facilitation and coordination costs were estimated. Time away from work represents lost opportunity and is calculated by multiplying five days times daily salary costs adjusted for a 30% employee benefits factor (i.e., the costs for employee benefits). Training and education overhead costs were estimated. Actual direct costs for the evaluation are included. These total costs of $47,242 represent a conservative approach to cost accumulation.

Figure 9. Program cost summary

Items	Cost ($)
Needs Assessment (Prorated over 30 Sessions)	1,500
Program Development (Prorated over 30 Sessions)	1,700
Program Materials, 14 @ $40	560
Travel and Lodging, 14 @ $900	12,600
Facilitation and Coordination	8,000
Facilities and Refreshments, 5 days @ $350	1,750
Participants' Salaries Plus Benefits, 14 @ 521 x 1.3	9,482
Training and Education Overhead (Allocated)	900
ROI Evaluation	10,750
	47,242

ROI Analysis

The total monetary benefits are calculated by adding the values of the three measures, totaling $188,478. This leaves a benefits-to-cost ratio (BCR) and ROI as follows:

$$BCR = \$188,478 / \$47,242 = 3.98$$

$$ROI = (\$188,478 - \$47,242) / \$47,242 = 298\% \approx 300\%$$

This ROI value of almost 300 percent greatly exceeds the 25 percent target value.

The target audience considered the ROI value credible, although extremely high.

Its credibility rests on the following principles on which the study was based:

1. The data are collected directly from the participants in concert with their store manager.
2. Most of the data could be audited in store operations to verify actual amounts.
3. To be conservative, the data include only the first year of improvements. With the changes reported in the action plans, there probably will be some second and third year values, yet they are omitted from the calculation.
4. The monetary improvement has been discounted for the effect of other influences. In essence, the participants take credit only for the part of the improvement related to this project. This estimate of contribution to the program is adjusted for the error of the estimate, adding to the conservative approach.
5. The costs are fully loaded to include both direct and indirect costs.
6. The data are included for only those individuals who completed and returned the action plans (e.g., no data appeared for participant number five in Figure 8 because that person did not return an action plan.)
7. The business impact does not include value obtained from using the skills to address other problems or to influence other measures. Only the values from three measures taken from the action planning projects were used in the analysis.

Consequently, the ROI process develops convincing data connected directly to improvements in store operations. From the viewpoint of the chief financial officer, the data can be audited and monitored. It should be reflected as actual improvement in the stores. Overall, the senior management team considered the results credible and fully supported the program.

Intangible Data

As a final part of the complete profile of data, the intangible benefits were itemized. The participants provided input on intangible measures at two time frames. The follow-up questionnaire provided an opportunity for manager trainees to indicate intangible measures they perceived to represent a benefit directly linked to this program. Also, the action plan provided an opportunity for trainees to add additional intangible benefits. Collectively, each of the following benefits was listed by at least two individuals:

- a sense of achievement
- increased confidence
- improved job satisfaction
- promotion to store manager
- stress reduction
- improved teamwork

To some executives, these intangible measures are just as important as the monetary payoff.

Communication Strategy

Figure 10 shows the strategy for communicating results from the study. All key stakeholders received the information. The communications were routine and convincing. The information to store managers and regional managers helped to build confidence in the program. The data provided to future participants were motivating and helped them select measures for action plans.

Figure 10. Communication strategy

Timing	Communication Medium	Target Audience
Within one month of follow-up	Detailed impact study	Program participants; Corporate University staff • responsible for this program in some way • involved in evaluation
Within one month of follow-up	Executive summary • including business impact data	Corporate and regional operation executives
Within one month of follow-up	Report of results (1 page) • in-store manager magazine	Store managers
After registration	Report of results (1 page) • in pre-work material	Future participants

Advantages of Action Planning

In this example, it was critical to build evaluation into the program, positioning the action plan as an application tool instead of a data collection tool. This approach helped secure commitment and ownership for the process. It also shifted much of the responsibility for evaluation to the participants as they collected data, isolated the effects of the project, and converted data to monetary values, the three most critical steps in the ROI process. The costs were easy to capture, and the reports were easily generated (from the templates) and sent to the various target audiences.

Figure 11. Typical programs where action planning can be used to develop ROI

- Executive Development
- Leadership Development
- Management Development
- Supervisor Training
- Team Leader Training
- Sales Training
- Customer Service Team Building
- Communications Problem Solving
- Creativity Change Programs
- Workout Programs
- Performance Management

This approach provides the additional advantage of evaluating programs when a variety of measures are influenced. Figure 11 lists the typical applications of the action planning approach for ROI applications (Phillips, 2002). The application can vary considerably, and the actual business measure driven can vary with each participant. Improvements are integrated after they are converted to monetary value. Thus, the common value among measures is the monetary value representing the value of the improvement.

More important, this process drives six types of data items: satisfaction, learning, application, business impact, ROI, and intangible benefits. Collectively, these six types of data provide a balanced, credible viewpoint of the success of the program and provide much needed data to make improvements

References

1. Phillips, J.J., (Ed.) (2000) *Performance Analysis and Consulting.* Alexandria, VA: American Society for Training and Development.
2. Kirkpatrick, D.L. (1994) *Evaluating Training Programs: The Four Levels.* San Francisco, CA: Berrett-Koehler Publishers.
3. Office of Personnel Management, *Assessing Changes in Job Behavior Due to Training: A Guide to the Participant Action Plan Approach*, US Government Printing Office, February 1980.
4. Phillips, J.J. (2003) *Return on Investment in Training and Performance Improvement Programs,* 2nd Edition. Woburn, MA: Butterworth-Heinemann.
5. Phillips, J.J. and P.P. Phillips (Ed.) (2001) *Measuring Return on Investment* Volume 3, "Cracker Box, Inc., Performance Management Training," Alexandria, VA: American Society for Training and Development.
6. Phillips, P.P. (2002) *The Bottomline on ROI.* Atlanta, GA: CEP Press.

ROI INSTITUTE™

The ROI Fact Sheet

Origin/Development

- The ROI Methodology™ was developed by Dr. Jack J. Phillips in the 1970s, refined through application and use in the 1980s, and implemented globally during the 1990s.
- First impact study – 1973, Measuring the ROI in a Cooperative Education Program, for Lockheed-Martin
- First public presentation on the methodology – 1978, ASTD Annual Conference
- First book published to include methodology – 1983, *Handbook of Training Evaluation and Measurement Methods,* Gulf Publishing (this was the first USA book on training evaluation)
- First one-day public workshop –1991, Birmingham, Alabama
- First two-day public workshop –1992, Johannesburg, South Africa
- First case study book published – 1994, *Measuring Return on Investment*, ASTD
- First international partnership established – 1994, Indonesia
- First public certification workshop – 1995, Nashville, Tennessee
- ROI Network organized - 1996
- First ROI Network Conference –1997, New Orleans, Louisiana
- First international ROI Network conference – 2002, Toronto, Canada
- First ROI in Government Conference – 2003, Gulfport, Mississippi, Co-sponsored by the University of Southern Mississippi
- First ROI software release – 2003, KnowledgeAdvisors
- On-line ROI certification launched – 2006, University Alliance
- ROI Certification offered as part of Masters and Ph.D. degree – Capella University, 2006.

Use

- Over 3,000 organizations are using the ROI methodology, through planned implementation.
- 2,000 organizations have formally implemented the methodology through ROI Certification™ conducted by the ROI Institute.
- approximately 5,000 impact studies are conducted annually in learning and development and human resources.
- At least 200 public sector governmental units are using the methodology.
- ROI implementation was first pursued in manufacturing, then moved to service, healthcare, non-profits, governments, and is now in educational systems

Applications

Typical applications include:

- Apprenticeship
- Career Management
- Competency Systems
- Diversity
- E-Learning
- Coaching
- Information Assurance
- Gainsharing
- Meetings and Events
- Management Development
- Leadership Development
- Organization Development
- Orientation
- Recruiting
- Safety & Health Programs
- Self-Directed Teams
- Skill-Based/Knowledge-Based Compensation
- Technology Implementation
- Total Quality Management
- Wellness/Fitness Initiatives

Articles and Publicity

- Over 60 articles have been published on the ROI methodology in major publications in 20 countries.
- The ROI methodology has been a cover story on at least 15 publications, magazines, and journals.
- At least 50 interviews in major global business and professional publications
- Over 25 radio and TV interviews in different countries

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Books

- Sixteen books have been published on the ROI methodology and its application (www.roiinstitute.net)
- Primary reference – *Return on Investment in Training and Performance Improvement Projects,* 2nd Edition, Jack J. Phillips, Butterworth-Heinemann, Woburn, MA, 2003 (originally published in 1997)
- Award winning book – *Bottomline on ROI*, Patti P. Phillips, CEP Press, Atlanta, GA, 2002 (received ISPI award)

Case Studies

- Over 100 case studies published in books, journals, and industry publications
- Four-volume set published by ASTD in 1994, 1997, 2001, and 2005
- First public sector case book – 2002, published jointly by the International Personnel and Management Association and the American Society for Training and Development
- First International case book – 2005, Ireland published by Skillnets
- International case studies under development in 12 countries

Workshops (One-Day, Two-Day, and Three- Day)

- Approximately 200 one-day workshops conducted with over 8,000 participants
- Approximately 500 two-day workshops conducted with more than 15,000 specialists and managers attending (offered in almost every major international city)
- Routine schedules of one-day, two-day, and three-day workshops offered in the USA by ASTD (www.astd.org) and through partners around the world

ROI Certification™

- Five-day workshop plus two work products lead to certification for ROI implementation
- Over 3,000 professionals have attended certification, representing over 2,000 organizations in at least 50 countries
- Certifications offered routinely about 25 times per year both internally and publicly by the ROI Institute (www.roiinstitute.net)
- On-line certification begins every month-six months duration (www.roiinstituteonline.com)

Global Implementation

- First implementation of the ROI methodology outside the USA – 1992, South Africa
- First certification in non-English language – 1995, Italy
- Implementation is accomplished through partners in various countries
- Implementation is currently occurring in 44 countries, with additional implementations planned in other countries
- Books published in 28 languages
- Twelve international case study books in development or in the planning stages

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