

Measuring Training's ROI

ARE YOU A TRAINER WHO STILL BELIEVES THERE'S NO NEED TO CALCULATE ROI? YOU MIGHT DECIDE TO RELENT—AT LEAST SOME OF THE TIME—WITH THIS LOOK AT THE PROS AND CONS, PLUS FOUR MEASUREMENT METHODS AND CASE REPORTS.

ROI



BY SCOTT B. PARRY

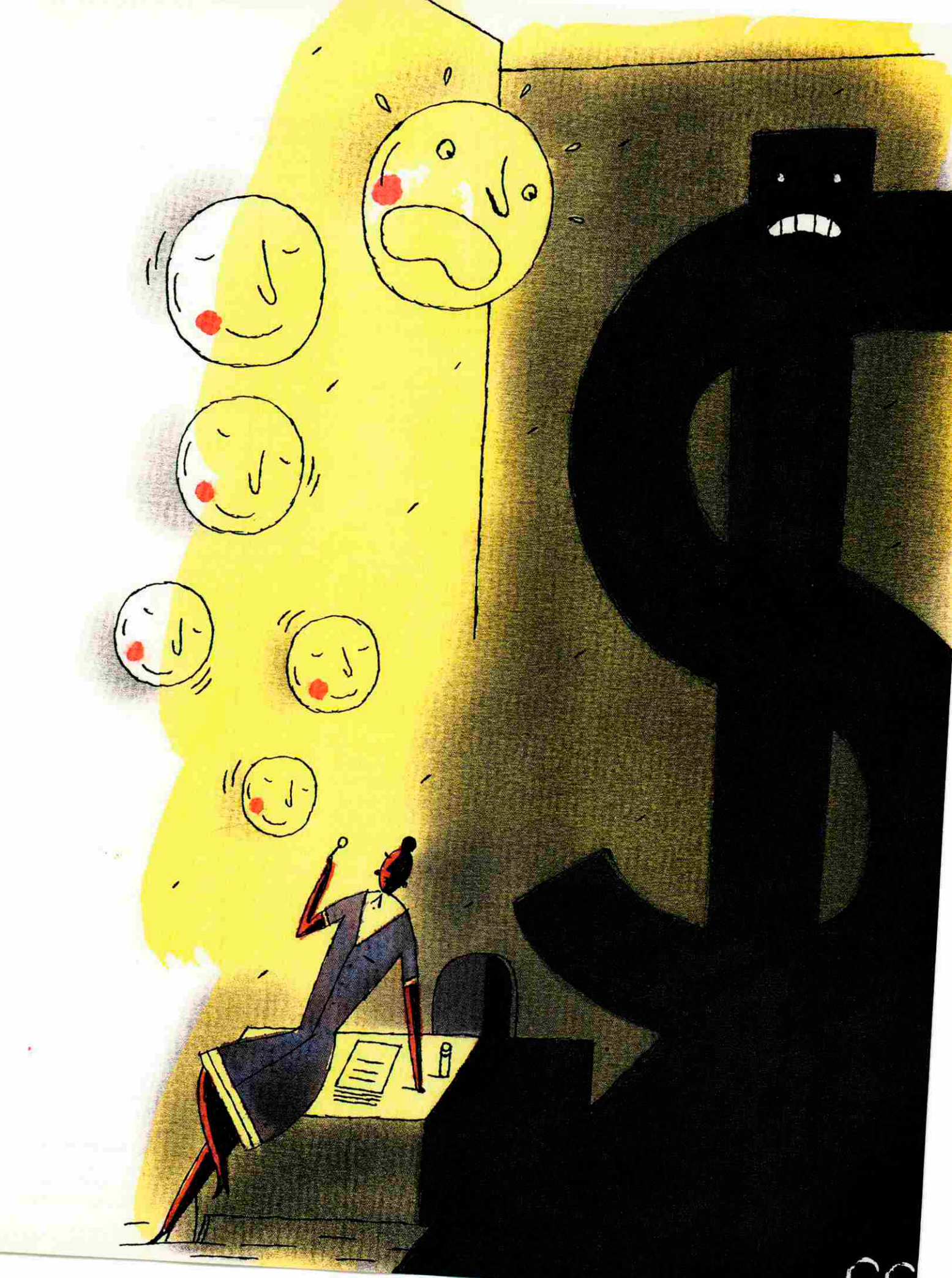
TRAINING DOESN'T COST...it pays! HRD is an investment, not an expense."

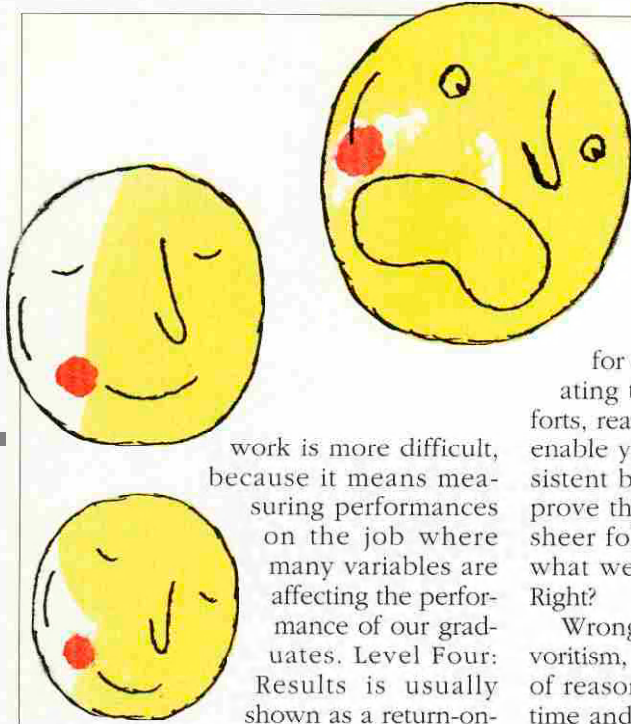
Rare is the trainer who doesn't believe this. Far more common is the trainer who doesn't believe that return-on-the-training investment can (or even should) be calculated.

Should all training programs be required to show a return-on-investment (ROI)? Not at all. However, courses of three days or more that are offered many times to reach a large number of

trainees (say 100 or more) represent a significant expense. The professional trainer should justify this expense by calculating the return on this investment.

We're talking about Level Four: Results on Donald Kirkpatrick's evaluation model, and it's the most difficult to measure. Level One: Reaction and Level Two: Learning can be measured with relative ease in class, using paper-and-pencil instruments and simulations. Level Three: Application at





work is more difficult, because it means measuring performances on the job where many variables are affecting the performance of our graduates. Level Four: Results is usually shown as a return-on-investment...the dollar value of the benefits of training over and above the cost of the training itself.

And there's the rub. Many factors make this level of measurement the most difficult by far. Here are some of the more common difficulties that are cited as reasons for not doing a level-four evaluation:

- ▶ The costs of training are known and expressed in dollars, but the benefits are often soft, subjective, and difficult to quantify and convert to dollars.
- ▶ We have enough trouble getting managers to send people to training without imposing additional requirements to collect data to document the impact.
- ▶ Costs are known up front, before training, but benefits may accrue slowly over time. At what point after training do you attempt to measure impact?
- ▶ As trainers, we lack the time and the accounting skills to do a cost/benefit analysis. Besides, our requests for data disrupt productivity.
- ▶ We probably will continue to run most of our popular training programs even if costs exceed benefits. So why bother? We're not a profit center.
- ▶ The outcomes could be damaging to the HRD staff and to budget support from top management. We may be better off not knowing.
- ▶ People at work perform the way they do for many reasons, only one of which relates to training. How can we take credit or blame for their performance?
- ▶ The very act of collecting data on the dollar value of performance will

tend to bias the information we get, making it hard for us to present a true picture.

If you've been looking for some reasons for not evaluating the ROI of your training efforts, read no further. This list should enable you to persuade the most insistent believer that any attempt to prove that training pays for itself is sheer folly! Let sleeping dogs lie—what we don't know can't hurt us. Right?

Wrong! Lest we be accused of favoritism, let's give equal time to a list of reasons why we should take the time and effort to calculate the costs and the benefits of our major training programs. Here are some supporting reasons:

- ▶ HRD budgets can be justified and even expanded when training can contribute to profit and is not seen as an act of faith or a cost of doing business.
- ▶ Course objectives and content will become more lean, relevant, and behavioral with focus on monetary results rather than on the acquisition of information.
- ▶ Better commitment of trainees and their managers, who become responsible for follow-up and ROI, and not just for filling seats.
- ▶ Action plans, individual development plans, and managers' briefings will be taken seriously, thus strengthening the trainee-manager partnership.
- ▶ Better performance by HRD staff in containing costs and maximizing benefits. They become performance managers and not just instructors.
- ▶ HRD staff has solid data about where training is effective and where it is weak, so that courses can be revised and fine-tuned to produce the best returns.
- ▶ The curriculum of courses offered can be determined on a financial basis and not just on popularity, rank of the manager requesting it, and so forth.
- ▶ Course enrollments will be serious, with trainees aware of the expectations that follow graduation. We'll get the right faces in the right places at the right times.
- ▶ By calculating ROI on the courses where it is possible, we are more apt to be trusted on the ones we can't evaluate at level four.

Four ways to measure ROI on training

Now that we've examined the pros and cons of calculating the ROI of a training program, let's look at four ways of doing so. The nature of the training and the course objectives will determine which method is most appropriate.

1. When hard data exists. Performance data is routinely collected on many jobs for which we provide training. Examples include driver safety (monetary value of reduced accidents, lower insurance); machine maintenance (fewer repairs, less downtime); sales training (increased volume, fewer returns); bank tellers (fewer "overs and shorts," more services and customers handled per hour).

Many technical training programs have data on existing performance before the course is launched. By comparing the costs of inadequate performance prior to training with the reduced costs of better performance after training, we can see the return-on-investment.

Even courses that teach "soft skills" can have a "hard data" side to performance. Examples include writing skills (time saved via shorter letters, understood without subsequent clarification); meeting leadership (shorter meetings, better follow-up); EEO and diversity (fewer grievances and lawsuits).

Notice that our examples focus on the quantitative aspects of performance—things that can be counted in minutes, dollars saved or gained, and so forth. To be sure, these courses also have qualitative aspects. But these are more difficult to measure (such as courteous driving, more professional selling, clearer writing, more participative meeting leadership). Hard data probably doesn't exist to evaluate these qualities, so we have no way of comparing pre-training and post-training performance.

Conclusion: If we want to take credit for the impact of training on workplace performance, we must establish a "bench level" of what the performance was before we launched the training program.

2. Estimates by trainees and their managers. This method is the easiest way to estimate ROI, but also the most subjective.

tive. Several months after completing each cycle of a training program, send a memo to each graduate and manager (sponsor). State the actual cost to the organization of the trainee's participation in the course. Ask the two to get together, discuss the actual improved performance that has taken place since the course, agree on a dollar value of this improvement, and project the total value over the coming year (or whatever period is appropriate to the application of the concepts and skills that were learned).

The two then send this projected dollar value in, along with a one- to two-paragraph explanation of how the estimate was made. By comparing the costs of those who responded with their dollar estimates of value added to workplace performance, we can arrive at a crude estimate of the cost/benefit ratio.

In situations where bench levels were not established before the course was launched, this method of estimating ROI has appeal. What it lacks in accuracy it makes up for in getting trainees and their managers to recognize that the responsibility for making training effective is primarily theirs and not the trainer's.

3. Action plans, managers' briefing.

During a training program, each participant prepares an action plan that spells out how the concepts and skills learned will be applied back at work. If the course involves teaching the entire job to a new employee, then the action plan will resemble a job description. If the course is for present employees (such as supervisors, team leaders, project managers), then the action plan spells out those actions the participant will take back to the job, which will differ from other participants whose needs are different.

After the training program, participants share their action plans with their managers and anyone else who is a stakeholder in their growth and development. This helps to build the participants' managers into their development—as coaches, mentors, and overseers of the implementations of the action plan. (A pre-training meeting with the participants' managers is important: to cover course objectives, how the action plans work, and how managers can help their enrollees in

the post-training follow-through.)

Several months after the training, participants and their managers come together for a two- to three-hour meeting at which each participant reports on the results since implementing the action plan, along with the cost of doing so and the value of the benefits. Managers work with their participants prior to this meeting to arrive at the dollar value of the costs and the benefits. By tallying the numbers reported by the participants and adding the cost of the course, the return-on-investment is obtained.

4. Cost/benefit analysis via accounting.

This method is the most demanding way to calculate ROI, but also the most accurate. Costs can be listed under seven categories, as noted below:

- ▶ course development (time) or purchase (price, license fees)
- ▶ instructional materials: per participant (expendables) and instructor (durables)
- ▶ equipment and hardware: projectors, computers, video ("fair share" use)
- ▶ facilities: rental of conference cen-

■ *Benefits accrue long after training, and can be projected typically one to five years* ■

ter and "fair share" use of classroom overhead

- ▶ travel, lodging, meals, breaks, shipping of materials, and so forth
- ▶ salary: of instructor and support staff (prorated), consultants' fees, and so forth
- ▶ lost productivity (if applicable) or cost of temporary replacements for participants.

These costs are of three types: one-time (such as needs analysis and design), cost per offering (such as facility rental, instructor's salary), and cost per participant (such as meals, notebooks, coffee breaks). Costs must therefore be calculated over the life of the training program.

Benefits fall into four major categories as shown below:

- ▶ time savings (less time needed to reach proficiency, less supervision

needed, and so forth)

- ▶ better quantity (faster work rate, less down time, not having to wait for help, and so forth)
- ▶ better quality (fewer rejects, lost sales, reduced accidents, lower legal costs, and so forth)
- ▶ personnel data (less absenteeism, fewer medical claims, reduced grievances, and so forth).

Benefits accrue long after training, and can be projected over the life of the trainees in the job for which they were trained (typically one to five years). While costs can be calculated by HRD managers, the benefits should be calculated by the trainees and their managers after they have had enough experience in the workplace to collect enough data to project the benefits over the payback period. A comparison of the total costs to the total benefits yields our return-on-investment.

Eight observations on conducting a cost-benefit analysis

▶ Some courses should be offered without expectation of a measurable return on the investment (such as orientation of new employees and retirement planning). Because the benefits of conducting such programs are difficult if not impossible to measure, and because organizations offer them without expectation of any tangible return on the investment, it is foolish to attempt a cost-benefit analysis.

▶ Training programs for employees whose jobs have well-defined and quantified expectations (standards, goals, quotas) are the most appropriate ones for measuring return-on-the-training investment because performance measurement systems already exist.

▶ By contrast, training for supervisors, managers, technical experts, project coordinators, and others for whom performance measurement systems do not exist are much more difficult to evaluate via level four (cost-benefit analysis). The responsibility rests with each participant to generate pretraining data and posttraining data on performance, and to assign dollar values to these two sets of data.

▶ Most cost-benefit analyses are comparative studies that show how the performance levels obtained by

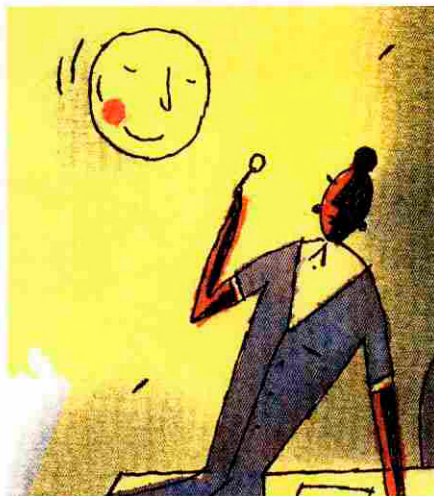
installing a new training program compare with the performance levels obtained by no training (such as safety, drugs, stress reduction) or by some alternative form of training (such as on-the-job training versus classroom, individualized versus group, centralized versus regional, and so forth). As in the third item, pretraining data on performance prior to installation of the new program may not have been collected. This must be done prior to carrying out a cost-benefit analysis.

▶ When training is conducted to accompany the installation of new equipment (procedures, products, policies, technology) and no prior training of a similar nature existed, a cost-benefit analysis is inappropriate for two reasons: There are no prior performance measures with which to compare the results of the new training; and the impact of installing the new changes makes it impossible to separate "performance attributable to training" from "performance attributable to innovation." (Examples: moving from manual to PC operations and learning to use e-mail).

▶ The costs of training are known upfront and should be calculated by HRD managers and others whose budgets are funding the program. The major unknown is based on the shelf life of the course—how many times (cycles) it will be run before it is no longer needed (such as when all eligible trainees have received it or when changes in technology have rendered it obsolete). Costs should be calculated over the shelf-life of the program.

▶ Similarly, the benefits of training should extend well beyond the final offering (cycle) of the program. Different behaviors that were "shaped" by training have different life cycles. The payback period on skills that are practiced regularly (such as time management) might be projected over the employment life of the trainee, whereas skills that are called on less frequently (such as selection interviewing in a downsized economy) may have a much shorter payback period.

▶ Although training costs are best calculated by HRD managers, the benefits should be identified, quantified, and converted to dollar values by



management (the trainees' supervisors, department heads, and so forth). There are two reasons for this: They are in the best position to observe changes in performance attributable to training; and their data is more objective and less suspect than if HRD specialists attempted to collect it.

Four examples of applications of cost-benefit analysis

▶ A rapidly growing fast-food chain had a three-week apprentice training program that prepared employees for promotion as assistant managers. The corporate HRD manager felt that training time could be reduced to one week with a formal training program at headquarters. The one-week formal program required travel and hotel costs not associated with the three-week local apprentice training program. However, the company's ability to place assistant managers in outlets two weeks earlier resulted in savings that more than offset the cost of developing the program and bringing the trainees to a central location. It also assured uniform quality of instruction which was lacking in the decentralized apprentice training that had taken place in each outlet.

▶ A major corporation had relied on two professors from the state university to conduct their supervisory training program, using their own handouts, visuals, and hands-on exercises. Some 93 supervisors went through the five-day program in classes of 15 to 16 participants each. Three years later when the company offered supervisory training again, they pur-

chased a packaged course with videos, workbooks, and instructor guidelines for their own internal instructors. Although the package cost \$27,000, they ended up saving \$16,000 (the professors had charged \$36,000 for labor and \$7,000 for materials). Moreover, post-workshop evaluations showed that transfer of training from workshop to workplace had improved significantly.

▶ A government agency ran a three-day workshop on project management with six offerings for 20 participants each. During the year following each workshop, the trainers surveyed the graduates to see how their posttraining performance on projects compared with their pretraining behavior (as assessed during the needs analysis prior to training). Factors evaluated included: percentage of projects completed on time and within budget, level of client satisfaction, and estimate of time/money saved as a result of improved project management. The agency concluded that a \$95,000 training investment had saved an estimated \$670,000. This figure did not include one reported savings of \$2 million projected over five years.

▶ An automotive manufacturer installed a management development program as part of the company's TQM/empowerment efforts and put 220 managers at an assembly plant through the program. The average length was six days. After the first day of assessment, each manager attended only those workshops that dealt with the competencies and skills that received lower scores. Six months after the training, participants were assessed again. Benefits were evaluated on three factors: the degree to which each manager's individual development plan had been implemented, the change in productivity of the manager's work group, and the improvement in scores (percentiles against nationwide norms) by each manager on the two assessments. All three measures showed that the benefits far outweighed the costs. ■

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