

15 CHAPTER

Measuring ROI in Leadership Development

Linear Network Systems

This program represents a comprehensive leadership development initiative for first-level managers in a technical environment. The payoffs for the program included productivity, defined as the percent of on time production, voluntary turnover, and absenteeism. The program is very data rich and the analysis follows all of the issues around the ROI Methodology, including forecasting. The study is arranged in parts which makes it easier for self study.

PART A

Background

Linear Network Systems (LNS) is an important supplier to the telecom industry, producing a variety of network equipment. A publicly held company, LNS has been operating for more than 15 years with manufacturing and support facilities scattered throughout the USA and Canada. The company has been very successful and stable.

Although LNS has been a very profitable company, it recently experienced competitive cost and quality pressures, that caused some deterioration in sales. Although several factors are related to the decline, senior management is concerned about the ability of the first-level management team to lead today's workforce. The President of LNS, asked the Human Resource Development

This case was prepared to serve as a basis for discussion rather than an illustration of either effective or ineffective administrative and management practices. All names, dates, places, and organizations have been disguised at the request of the author or organization.

Manager, Pam O’Kelly, to provide appropriate training.

For several months, LNS has been attempting to develop these team leaders. Several team-building sessions had been conducted. The president felt that the leaders were experiencing some difficulty in making the transition to leadership and that they needed to develop leadership skills to motivate team members to improve productivity.

Situation

O’Kelly contacted a consulting firm to inquire about potential leadership training. The principal consultant suggested that a needs assessment be conducted to determine specific training needs and also to determine if other issues need to be addressed. LNS officials reluctantly agreed to a needs assessment. They were convinced that training was needed and wanted the “standard leadership training” program. After some convincing, the consultant conducted the needs assessment using four methods:

1. Reviewing operational performance documents
2. Interviewing a sample of first-level managers and middle managers
3. Observing a small sample of first level managers on the job
4. Administering a questionnaire to all first- and second-level managers

The assessment identified a lack of skills and a need for significant leadership training. Most of the skills focused on understanding and motivating employees, setting goals, and providing feedback.

The Program

A six-module, 24-hour training program was proposed for one plant as a pilot group. All first- level operating and support managers would be trained at the same time. The program would be conducted in six four-hour segments scattered over a one-month period. Between sessions, participants would be requested to apply the new skills so that there would be transfer of training to the job. Initially, the program was planned to focus on the following areas:

- Understanding employee needs
- Motivating employees for improved performance
- Counseling employees

- Solving problems with employees
- Providing appropriate leadership behavior
- Inspiring teamwork

The program was labeled “Leadership for Improved Performance” and was planned for all 16 supervisors in the pilot plant. A follow-up evaluation was planned several months after the training was completed. If the program were effective, LNS would offer it throughout their organization.

Discussion Questions

1. How important is the needs assessment for this situation? Is the resistance to a needs assessment typical? At what levels should the needs assessment be conducted?
2. At what levels should this program be evaluated?
3. Should the objectives of the program be modified? If so, how?

PART B

Needs Assessment

An improper or inadequate needs assessment may result in a program designed to address skills that are not needed or are already in place. The needs assessment was conducted at Level 4 (business needs), Level 3 (job performance needs), and Level 2 (skill and knowledge needs). Without a multiple level needs assessment, it would be more difficult to evaluate the program designed to change job behavior (Level 3) and drive business impact improvement (Level 4). Thus, the needs assessment became a very critical issue for identifying performance deficiencies at all three levels and was an important component in LNS’s plan to develop first-level managers.

Business Performance Measures

The needs assessment identified several business performance measures where improvement was needed, all related to inadequate leadership skills. These included the following data items:

- Productivity (measured by the percentage of shipments met)
- Employee turnover
- Absenteeism

There was some skepticism among senior management that productivity could be enhanced through leadership training, although most of the first-level managers agreed that they could boost productivity with improved teamwork. Employee turnover was high and, although there were many factors that influenced turnover, most managers felt that turnover was a variable under their control. Finally, absenteeism was extremely high, particularly on second shifts and on Mondays and Fridays.

LNS had developed an adequate measurement system, which monitored, among other variables, productivity, turnover, and absenteeism measures by the production unit. Each first-level manager received absenteeism and turnover data monthly, and productivity measures were available weekly for the production departments. Support departments can significantly influence the measures by providing excellent support and assistance.

Top management approved the leadership program proposal, including the structure and timing.

Evaluation Levels

Because LNS management was interested in the accountability of training, and the consulting firm was eager to show results of training, both parties were anxious to conduct an ROI evaluation for this project. ROI data can be very convincing for marketing a program to other groups. With this approach, business impact data would be collected, converted to monetary values, and compared to the program cost to develop the ROI (Level 5). In addition, Levels 1, 2, and 3 data would be collected to measure reaction, learning, and application. Thus, all five levels of evaluation were pursued.

There was another important reason for evaluating this program at all five levels. Because this program is linked to key organizational measures, a success would show a direct linkage to the company's bottom-line. A significant payoff to the company would clearly show management that leadership training is a high impact process and that it can make a difference by improving important business performance measures.

Objectives

Because Levels 3 and 4 data must be collected, it is essential that specific objectives be measurable and directly related to the Level 3

and 4 data obtained from the needs assessment. Therefore, program objectives were revised to include the following. After attending this program, participants should:

- Be able to describe and identify applications for two motivational models
- Be able to describe and identify applications for two leadership models
- Set measurable performance goals each month for each employee
- Apply performance feedback skills each day with each employee.
- Reduce employee turnover from an average annual rate of 29 to 25 percent in four months
- Reduce absenteeism from a weekly average of 5 to 3 percent in four months
- Increase productivity by 2 percentage points in 4 months

The specific targets were difficult to develop and required the complete cooperation of the plant manager and the department heads.

Discussion Questions

1. What is your reaction to these objectives? Do you think this program could influence each measure?
2. What are the recommended post-program data collection methods
3. Complete the data collection plan for evaluation (See Figure 1).

PART C

Data Collection Plan

The consultant and the HRD Manager decided that the action planning process would be utilized in the follow-up evaluation. First-level managers should know how to develop action plans and their managers should be able to provide assistance and support with the process. The action plan would show how the newly acquired skills are applied to improve measures such as productivity, turnover, and absenteeism. A portion of the program allowed for a discussion of

Figure 1. Evaluation plan: data collection

Data Collection Plan

Program: Leadership for Improved Performance **Responsibility:** _____ **Date:** _____

Level	Objective(s)	Measures/Data	Data Collection Method	Data Sources	Timing	Responsibilities
1	Reaction/Satisfaction					
2	Learning					
3	Application/Implementation					
4	Business Impact					
5	ROI	Comments: _____ _____ _____				

action plans, and the program facilitator was required to approve the action plan verifying that it meets basic requirements. A model action plan would be provided to help ensure that supervisors understand the process.

After discussions with management, it was felt that within four months supervisors should be able to apply leadership skills to achieve measurable results. Although a six-month time frame was recommended, senior management indicated that they might want to proceed with the program in other plants before six months and therefore preferred a three-month period. Four months was a compromise.

Because all of the action plans involve different time frames, each participant was asked to provide a progress report in four months, or in some cases, the completed project. This would provide a snapshot of the performance improvement within that time-frame.

Although the action plan, by design, collected Levels 3 and 4 data, a follow-up questionnaire was planned to gain more evidence of on-the-job behavior change (Level 3). Responsibilities for data collection at Levels 1 and 2 usually rest with the facilitator and that was the case here. The Area Training Coordinator was assigned the responsibility for collecting the questionnaire data (Level 3) and monitoring performance (Level 4). The data collection plan is presented as Figure 2.

Isolating the Effects of Training

One of the most important challenges facing program evaluators is determining the specific technique that isolates the effects of the training program, recognizing that other factors may influence outcome measures at the same time the program is being conducted. This is one of the most important issues (usually raised by management) when they want to know exactly how much of the results are related specifically to the program.

Discussion Questions

1. What method(s) should be used to isolate the effects of training?
2. Should more than one technique be used to isolate the effects of training? Please explain.

Figure 2. Evaluation plan: data collection

Data Collection Plan

Program: Leadership for Improved Performance Responsibility: _____ Date: _____

Level	Objective(s)	Measures/Data	Data Collection Method	Data Sources	Timing	Responsibilities
1	Reaction/Satisfaction <ul style="list-style-type: none"> Positive reaction Identify planned actions 	<ul style="list-style-type: none"> Average rating of at least 4.2 on 5.0 scale on quality, usefulness and achievement of program objectives 100% submit planned actions 	<ul style="list-style-type: none"> Standard feedback questionnaire 	<ul style="list-style-type: none"> Participants 	<ul style="list-style-type: none"> End of program 	<ul style="list-style-type: none"> Facilitator
2	Learning/Skills <ul style="list-style-type: none"> Knowledge on motivational models Knowledge on leadership models Skills for motivating employees Knowledge/skills on providing counseling Knowledge/skills on measuring employee performance Problem solving skills Knowledge/skills on teamwork Leadership behavior skills 	<ul style="list-style-type: none"> Demonstrated ability to provide employee feedback/motivating/problem solving/ leadership skills Scale of 1 to 5 on assessment of knowledge 	<ul style="list-style-type: none"> Skill practice Facilitator assessment Participant assessment 	<ul style="list-style-type: none"> Participants Facilitator Participants 	<ul style="list-style-type: none"> During program 	<ul style="list-style-type: none"> Facilitator
3	Application and Implementation <ul style="list-style-type: none"> Extent of skill use Frequency of skill use Success with skill use Setting performance goals Complete all steps of action plan 	<ul style="list-style-type: none"> Scale of 1 to 5 on assessment of application The number of steps completed on action plan 	<ul style="list-style-type: none"> Follow-up questionnaire Action plan 	<ul style="list-style-type: none"> Participants Participants 	<ul style="list-style-type: none"> 4 months after program 4 months after program 	<ul style="list-style-type: none"> Area Training Coordinator
4	Business Impact <ul style="list-style-type: none"> Reduce employee turnover Reduce employee absenteeism Increase productivity 	<ul style="list-style-type: none"> Voluntary turnover - 29% to 25% Unplanned absenteeism - 5% to 3% Percentage of shipments met - improve by 2% 	<ul style="list-style-type: none"> Action plan 	<ul style="list-style-type: none"> Participants 	<ul style="list-style-type: none"> 4 months after program 	<ul style="list-style-type: none"> Area Training Coordinator
5	ROI <ul style="list-style-type: none"> 25 percent 	Comments: _____ _____				

PART D

Isolating the Effects of Training

In discussions with management and participants in the training program, two factors were identified which could have an influence on each of the business performance measures, in addition to the training program. First, the implementation of the total quality management program placed emphasis on improving all three measures in this case. Quality was defined in a broad sense, including being at work (absenteeism), remaining with the company (turnover), and ensuring that customer shipments were on time (productivity).

The second factor was the various team-building activities that were initiated as LNS attempted to move to a team-based structure. First level managers were encouraged to use employee input, conduct meetings with employees, and to take action to improve productivity. If successful, team building should increase productivity and reduce turnover and absenteeism.

Because it was important to determine the precise impact of the training program, it was necessary to isolate the effects of training from the other two factors. One of the most effective approaches is the use of a control group arrangement in which one group receives training and another similarly situated group does not receive training. LNS explored the control group arrangement in this setting. Initially it appeared to be an excellent opportunity to use this plant location as a pilot group and select another similar plant as a control group. However, no other plant had the same product line, same type of processes, same workforce characteristics, and same environmental conditions, all important variables to reflect performance. Thus, the control group arrangement was not considered a feasible approach.

The approach utilized to isolate the effects of training was participants' estimates. Participants would be asked to indicate how much of their improvement was linked directly to this training. Participants provided the information in a portion of the action plan. Each participant was presented with a six-month average of the data prior to training to compare with post-training data. After training, managers regularly receive reports for each of the items as part of their operating data.

Converting Data to Monetary Values

The next task in setting up the ROI process is to select the technique to convert data to monetary values. The challenge facing the evaluation team is to determine the most credible and accurate techniques for placing values on each of the Business Impact (Level 4) data items.

Discussion Questions

1. What is the most appropriate technique to assign a value to productivity?
2. What is the most logical way to convert employee turnover to a monetary value?
3. What is the most appropriate method to place a monetary value on an absence?
4. For other potential improvement measures, what range of potential techniques can be used to convert data to monetary values?

PART E

Converting Data to Monetary Values

As part of the next step in the ROI process, LNS's data are converted to monetary values. The value of improved productivity was a standard value developed by engineering and production control. Each 1 percent of improvement in productivity would save the plant \$21,000, annually.

The company had no detailed historical records on turnover costs, although the company expected these costs to be significant when considering the cost of employment, recruiting, training, and lost productivity. The consultant provided information from external studies, which showed that turnover can cost one times the annual pay of the employees (100 percent of annual direct compensated). Annual wages of non-supervisory employees averaged \$31,000. Management thought that a figure of one times the annual pay would be too high for the cost of turnover since the training period was relatively short, recruiting costs were normally quite low, and exit costs were not very significant. After discussing this with senior management, the compromise figure of \$24,800 for the cost of

turnover (80 percent of annual direct compensated). This appeared to be a very conservative estimate. Sixteen first-level managers were trained in this program, and they supervised a total of 385 employees.

The consultant located previous studies about the cost of absenteeism in a similar manufacturing sector, which showed a range of \$89–\$210 per absence with an average of \$180. Brief estimates taken in the training session, with input from the 16 managers, yielded an average cost of \$98. This was considered the most credible value because it was developed with the focus group process, using estimates from participants (supervisors) and adjusted for error. LNS employees worked an average of 228 days per year.

Costs

The consultant also decided to include all direct costs of participant materials as well as the participants' salaries. Because the consulting firm provided standard material for the new program, development costs were insignificant. Although the first-level managers were not replaced while they were in training, the salaries and benefits of managers were included for the time during the training sessions. The average salary of the first level managers was \$47,500. The employee benefits factor was 39 percent of salaries. A total of three days were consumed in the program. The total charge for the program from the consulting firm was \$51,000, including customization time, facilitation, and needs assessment. The charge for course materials was \$185 per participant; miscellaneous refreshments and food was \$195 per participant; the use of the conference room was estimated to be \$200 per 1/2 day session, although LNS does not routinely capture and report this as a part of training. The consultant estimated the additional cost of the evaluation to be \$10,000.

Discussion Questions

1. What major cost categories should always be included in the analysis?
2. What is the total cost for the program?
3. Should any other costs be included? Please explain.

PART F

Costs

The costs to train 16 supervisors are:

Needs Assessment, Program Development, Facilitation	\$51,000
Supplies and Materials (\$185 X 16)	2,960
Food (\$195 X 16)	3,120
Facilities (6 X 200)	1,200
Evaluation	10,000
Salaries and Benefits, for the time away from routine work (\$548 X 1.39 X 16)	12,188
Total	\$ 80,468

The facilitation charge from the supplier, which totaled \$51,000, includes the costs for needs assessment, program development, and facilitation. If the program had been developed internally, these three charges would have to be developed separately. The daily salary was developed by dividing average salary (\$47,500) by the total number of week days worked ($52 \times 5 = 260$). To obtain the total salaries and benefits cost for the three-day workshop, this number is multiplied by 3, adjusted upward by the benefits factor of 39 percent (This is equivalent to multiplying the average salary by 1.39). The total for each participant is multiplied by 16 to obtain the salaries and benefits for the group.

Follow-Up

Because management was interested in knowing the results of the program as soon as possible, a four-month evaluation period was used. Data for six months prior to and four months after the program are presented in Figures 3, 4, and 5, showing the productivity, turnover, and absenteeism values for the plant. The training was conducted during a one-month period and no improvements were expected during that month. Consequently, the one-month training period was excluded from the analysis. As Figure 3 shows, productivity was enhanced after the implementation of training. According to the records of the production control department, the average percent of on-time production for six months prior to training was 92 percent. A value of 95 percent was used as post-training perform-

ance, which is the average of months three and four. Averaging the two monthly values avoids a spike in the values. The plant's annual turnover rates averaged 29.5 percent for the six months prior to training and are presented in Figure 4. Turnover was calculated monthly and was reported as an annualized value for comparison, (i.e., a 2 percent monthly turnover was reflected as a 24 percent annual turnover rate on the report). The average for months three and four yields a value of 24.7 percent. The monthly absenteeism

Figure 3. Productivity

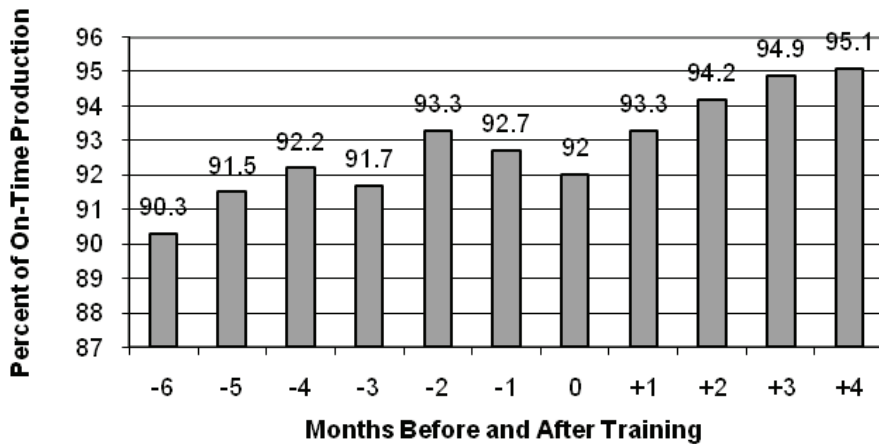
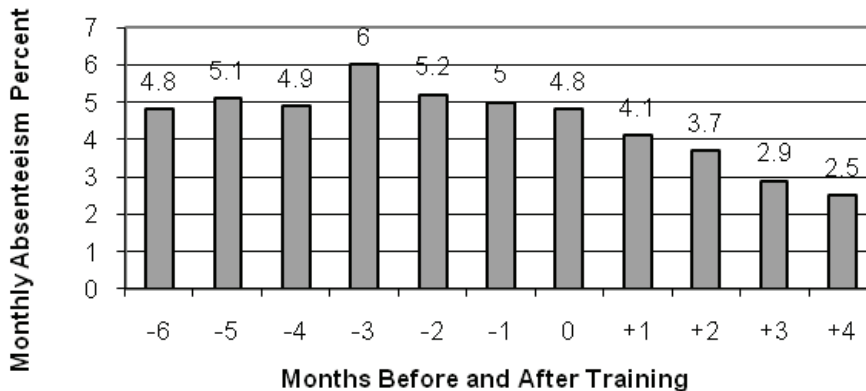


Figure 4. Turnover



Figure 5. Absenteeism



rates are shown in Figure 5. The absenteeism rate for the six months prior to training averaged 5.2 percent and was considered much too high by management. This figure includes only unexpected and unplanned absences. The average for months three and four yields a value of 2.7 percent.

In addition to action plans, supervisors completed a brief questionnaire where they estimated how much of the improvement in performance was related to each of the three factors influencing the output variables. The results are presented in Table 1.

Four of the supervisors submitted action plans focusing on measures other than productivity, turnover, or absenteeism. Three improvement areas were identified: time savings, efficiency, and direct cost savings. Table 2 shows a summary of these additional benefits.

Discussion Questions

1. Using the data in the case, complete Table 15-3 below.
2. What are the total benefits expected from the program using improvements in productivity, turnover, absenteeism, and the additional benefits?
3. What are the benefit/cost ratio and the ROI for the program?

Table 1. Contribution of Various Factors

	Training Program	TQM	Team Building	Total
Productivity (% of Schedule)	32%	49%	19%	100%
Turnover (Annualized)	72%	7%	21%	100%
Absenteeism (% Absence)	76%	4%	20%	100%

Table 2. Additional Benefits

Supervisor	Annual Improvement Value	Basis for Value	Isolation Factor	Confidence	Adjusted Value
#3	\$36,000	Improvement in efficiency of group. \$3,000/month x 12 (group estimate)	50%	85%	\$15,300
#8	\$24,000	Time savings: Improvement in customer response time (8 hours to 6 hours). Estimated value: \$2,000/month	55%	60%	\$ 7,920
#10	\$ 8,090	Time savings: Team project completed 10 days ahead of schedule. Annual salaries of \$210,500 = \$809/day x 10 days	45%	90%	\$ 3,279
#15	\$14,900	Direct cost savings	60%	90%	\$ 7,830

Table 3. Improvement in Primary Measure

	Pre-Training 6 Months Average	Post-Training, Months 3 and 4 Average	Pre-Post Differences	Participant's Estimate of Impact of Training	Unit Value	Annual Impact of Training (Estimates)
Productivity (% of Schedule)					\$	\$
Turnover (Annualized)					\$	\$
Absenteeism (% Absence)					\$	\$

PART G

The tabulations of the benefits for the program for the primary measures are shown in Table 4, 5, and 6.

Table 4. Annual Values for the Primary Measures

	Pre-training, 6 Month Average	Post-training Months 3 and 4 Average	Pre-Post Differences	Participant's Estimate of Impact of Training	Unit Value	Annual Impact of Training (Estimates)
Productivity (% of Schedule)	92%	95%	3%	.96% (3% X 32%)	\$21,000 for 1%	\$20,160
Turnover (Annualized)	29.5%	24.7%	4.8%	3.46% (4.8% X 72%)	\$24,800 for each turnover	\$330,360
Absenteeism (% Absence)	5.2%	2.7%	2.5%	1.9% (2.5% X 76%)	\$98 for each absence	\$163,446
Calculations						
Productivity:						
Savings = .96 X \$21,000 =					\$20,160	
Turnover:						
Change in number leaving in a year = 385 X 3.46% = 13.3						
Savings = 13.3 X \$24,800 =					\$330,360	
Absenteeism:						
Change in absences (Incidents) = 385 x 228 x 1.9% = 1668						
Savings = 1668 X \$98					\$163,446	

Table 5. Summary of Primary Monetary Values

Measures	Benefits
Increase in Productivity	\$20,160
Reduction in Employee Turnover	\$330,360
Reduction in Absenteeism	\$163,446
Total	\$513,966

Table 6. Summary of Other Monetary Values

Measures	Benefits
Efficiency	\$15,300
Time Savings (participant 1)	\$7,920
Time Savings (participant 2)	\$3,279
Direct Cost Savings	\$7,830
Total	\$34,329

ROI and BCR Calculations

Total Benefits: $\$513,966 + \$34,329 = \$548,295$

$$\text{BCR} = \frac{\$548,295}{\$80,468} = 6.81$$

$$\text{ROI (\%)} = \frac{\$548,295 - \$80,468}{\$80,468} \times 100 = 581\%$$

Discussion Questions

1. Are these numbers lower or higher than you expected?
Comment.
2. How do you think these estimates would compare with the values at six months after the program is conducted? One year?
3. How could the ROI process be improved?
4. What are the potential intangible benefits from this program?

PART H

ROI Analysis

The values presented in this study were much higher than management anticipated. In discussions held before implementation, the senior management team (president, director of manufacturing, and plant manager) agreed that for the program to be successful, the payoff would have to be in productivity. This senior management group even suggested that absenteeism and turnover be considered intangible data and reported as additional improvements without a conversion to monetary values. Thus, in early discussions, absenteeism and turnover, although linked directly to the skills training, were considered to be potentially low impact variables. If the original suggestion had been followed, the program would have generated a negative ROI. An important lesson was learned. Behaviorally driven Level 4 data, although considered to be soft in nature, can have a tremendous impact in the organization. And in this situation, the impact would have been considerably enhanced if more appropriate values were used for the monetary conversion of absenteeism and turnover. (Instead, lower, more conservative values were used).

An important issue evolved concerning the projection of output data six months to one year after the program. It was clear that the output was moving in the right direction and it appeared that further improvement was in store. While it is tempting to assume the variables will continue to improve, in reality, other variables usually enter the analysis and a deterioration of the output variables may be realized, unless additional training or other interventions are implemented. This is what happened in this case. Each data item continued to improve for the six months. Absenteeism tapered off and then increased slightly, turnover remained fairly constant, while productivity continued to improve, perhaps driven by the TQM and team building sessions.

As part of the evaluation process, the evaluation team (consultant, facilitators, HRD manager, and department heads) explored ways in which the process could be improved. The team discussed several issues. First, because the control group strategy most accurately isolates the effects of training, the team thought it would have been better to initiate this program in a plant that could be compared to another location in a control group arrangement. This strategy will

often develop more confidence in the process and will build a more convincing case for a high impact ROI.

A second issue was the needs assessment. The team thought it was important to have sufficient evidence of a direct connection between the Level 4 business impact measures and the planned training program. However, some team members wanted to see more evidence of how this was accomplished so that they would be more convinced about the direct linkage.

The third issue was the early follow-up. The consultants wanted to wait six months to capture the improvement, although management insisted on making a decision in four months. Perhaps a compromising solution is to capture data at four months, make the decision based on the apparent high impact level, and continue to capture data for another two months and develop an ROI impact study with six months of data, which would then be communicated to the target audience.

The fourth issue involved the apparent lack of a comprehensive evaluation at Level 3. Some team members wanted a more comprehensive assessment of actual behavior changes, which would convince them that the supervisors were actually operating differently. While this is an important issue, it was a trade-off process. A comprehensive Level 3 evaluation is time consuming and costly. When a Level 4 evaluation was planned with a specific technique to isolate the effects of training, other team members felt that a more comprehensive Level 3 was unnecessary.

Overall, the evaluation team perceived this to be an excellent ROI analysis. The process was credible with an acceptable level of accuracy.

Intangible Benefits

Other potential intangible benefits were identified including improved job satisfaction of the first-level managers, improved overall job satisfaction, reduction in stress for supervisors, and an increase in the bonus for supervisors (bonus pay is linked to productivity). While these items were considered to be important benefits of the program, they were not measured because of the additional effort required for monitoring and analysis. When intangible benefits are important and influential to the target audience, they should be monitored and analyzed in a more comprehensive way.

Interestingly, the management group initially proposed absenteeism and turnover measures as intangible benefits. If this suggestion had been followed, the improvements in absenteeism and turnover would have been presented as intangible benefits, resulting in a negative ROI. The team learned a valuable lesson. There should be an attempt to convert each intangible measure that is monitored and isolated. If the conversion process becomes unmanageable, inaccurate, or not very credible, then a data item is listed as an intangible benefit and reported without any further analysis. (Guiding Principle #11).

Discussion Questions

1. Although the ROI analysis plan is usually completed prior to pursuing the evaluation process, please take a few minutes to complete the plan shown in Figure 6.
2. Could the ROI forecast be developed on a pre-program basis? Please explain.
3. Is a forecast with reaction data possible? Please explain.
4. Would an ROI forecast with Level 2 or 3 data be possible? Please explain.
5. How should the results of this study be communicated? Please explain.

Figure 6. ROI Analysis Plan

Program: _____ Leadership for Improved Performance _____ Responsibility: _____ Date: _____

Data Items (Usually Level 4)	Methods for Isolating the Effects of the Program/ Process	Methods of Converting Data to Monetary Values	Cost Categories	Intangible Benefits	Communication Targets for Final Report	Other Influences/ Issues During Application	Comments

PART I

ROI Analysis Plan

Figure 7 shows the ROI analysis plan for the leadership development program. Each decision and strategy outlined in the various parts of this case is reflected on this form. This document is a decision-making tool for ROI analysis and is used to make specific plans for the analysis to be complete. It is completed before beginning the evaluation process.

Preprogram Forecast

A preprogram forecast could have been conducted, based on estimated improvements of the three business impact measures. A group of experts, most knowledgeable about these measures and the work context, would estimate the improvement that would be achieved with the implementation of the Leadership Program. Although the numbers may not be accurate, they would provide some insight into the value of the program, particularly when the ROI percent is calculated.

Level 1 ROI Forecast

Although it was not attempted in this case, it is possible and perhaps instructive to develop a Level 1 ROI forecast. With this process, a series of potential impact questions could be asked where participants anticipate potential changes and estimate the particular impact of changes for each of the three variables (productivity, turnover, and absenteeism). Estimates could be provided on other measures that may be driven by the program. First year values could be developed, along with a confidence percentage obtained from participants reflecting their level of certainty with the process. The data could be adjusted with this confidence level to provide a forecast of the benefit and the calculation of the ROI. Although this ROI value is subjective and often inflated, this analysis would provide some insight into the relationship between the projections at the end of the program and the actual performance four months later. Also, it may actually enhance the results because participants who make projections of performance may be motivated to meet those projections.

Figure 7. ROI Analysis Plan

Date: _____

Data Items (Usually Level 4)	Methods for Isolating the Effects of the Program	Methods of Converting Data	Cost Categories	Intangible Benefits	Communication Targets	Other Influences/ Issues
Productivity % of Shipments Met	<ul style="list-style-type: none"> Participant Estimates 	<ul style="list-style-type: none"> Direct Conversion - Company Standard Value 	<ul style="list-style-type: none"> Program Fee from Consulting Company Program Materials Food and Refreshments Facilities Evaluation Costs Salaries and Benefits of Participants 	<ul style="list-style-type: none"> Improved Team Leader Job Satisfaction Improved Employee Job Satisfaction Stress Reduction Increase in Bonus Pay 	<ul style="list-style-type: none"> Participants Managers of Participants Senior Management HRD and HR Staff Other Plant Managers Potential Clients 	<ul style="list-style-type: none"> Team building was in process Total Quality Management program has been launched Management support is good Management is very anxious to see results
Turnover (Quits and Discharges)	<ul style="list-style-type: none"> Participant Estimates 	<ul style="list-style-type: none"> External Studies Senior Management Estimate 				
Absenteeism	<ul style="list-style-type: none"> Participant Estimates 	<ul style="list-style-type: none"> External Studies Participant Estimate 				

Levels 2 and 3 ROI Forecast

At LNS, it was impossible to capture data for a Level 2 ROI forecast. For this forecast to be possible, a validated instrument must be developed to measure the performance of first-level managers in the program and have it correlated with subsequent on-the-job performance. This was not feasible in this situation.

A Level 3 ROI forecast was not considered because of the concern over the subjective assessments that must be made converting Level 3 data to monetary values. Also, the client was very bottom-line oriented and preferred to discuss performance in terms of Level 4 measures (productivity, turnover, absenteeism, etc.). While management recognized that skills must be acquired and behavior must be changed, they were less interested in discussing the extent to which changes have occurred and the value of the change. Thus, a Level 3 ROI forecast would have provided little value for the client.

Communication of Results

Communication of results from an ROI impact study is crucial to the ROI Methodology. Three documents were created: a detailed impact study, an executive summary, and brief summary, with a little more detail than the executive summary. Although there can be many target audiences, six audiences received the study results at LNS:

1. The participants (first-level managers) were provided a summary of the study results revealing what they had accomplished, collectively. The brief summary of the impact study showed how the ROI was developed.
2. The managers of the participants (middle-level managers) received a summary of the study with an appropriate explanation. These department heads for the various production and support departments were aware of the ROI impact study and were anticipating the results.
3. Senior management received executive summaries and copies of the detailed study. At LNS, this group included the president, director of manufacturing (for all plants), and the plant manager. In addition, this group received a briefing on the study results and discussed how it was developed along with its interpretation. This step is important to ensure that there is a

complete understanding of the ROI Methodology.

4. The HRD and HR staff received copies of the complete study so that they could understand how the ROI Methodology is applied to this type of program. This ROI study was part of an ongoing effort to build skills and develop strategies to increase accountability of HR programs.
5. Plant managers for the other locations received copies of the executive summary to show what can be accomplished with this type of training. Essentially, this communication served as an internal marketing tool to convince others that leadership development can improve their plants.
6. Potential clients for the consulting firm received brief summary copies of the study. This target group was unique to the consulting firm. With permission of the company, the study summary was used by the consulting firm to convince other prospective clients that leadership development can produce high impact. The name of the organization was disguised and sensitive data was slightly altered to protect the identity of the company.

Collectively, these six target audiences received information on the ROI impact study, ensuring that all important audiences understand the results and the process.

Discussion Questions

1. How can the results of this study be used to generate additional funding for measurement and evaluation?
2. How should the ROI Methodology be transferred internally in terms of responsibilities and skills?
3. How should management support for ROI be enhanced?
4. What other steps should be taken to implement the ROI Methodology at LNS?

PART J

Implementation Issues

A variety of implementation issues emerged at LNS:

- The HRD staff at LNS used the results of this study to make a request for additional funding for measurement and evaluation in the future. In essence, the plan is to use the savings generated from the studies to drive additional funding for measurement and evaluation.
- One individual was appointed as coordinator for measurement and evaluation and was asked to lead the process. Appointing a champion and a leader to implement the ROI Methodology ensures that the process works properly, is executed timely, and is supported appropriately.
- To ensure that the study can be replicated, the internal leader participated in all phases of ROI Implementation. The consulting firm worked closely with this individual to ensure that each step of the ROI Methodology was understood and could be applied in other situations.
- To help accomplish the transfer of capability, the consulting firm organized additional training for the evaluation leader to develop skills in the ROI Methodology and provide additional practice with ROI calculations.
- To help improve management support, a 2½-hour briefing was scheduled with the management team (department managers and above) at the next quarterly meeting to discuss the results of this study, and the potential opportunity for significant returns from training. This program also underscored the manager's responsibility to make training effective in the company.
- Specific targets were set where a few programs were identified for planned ROI calculations. This provided some guidance for the HRD director to focus on high priority programs.
- A policy statement was developed to capture the basic requirements for measurement and evaluation. This document described the responsibilities for all stakeholders, outlined how ROI studies would be conducted, and indicated how the results would be communicated.

Collectively, these seven actions provided adequate support to implement the ROI Methodology internally and make it a routine activity at LNS.