

ROI Case Study



INTERNATIONAL CAR RENTAL

AN IMPACT STUDY ON LEADERSHIP DEVELOPMENT

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

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Profile

International Car Rental (ICR) operates in 27 countries with 27,000 employees. The US division has 13,000 employees and operates in most major cities in the United States. The auto rental business is very competitive and several major firms have been forced into bankruptcy in the past few years. The industry is very price sensitive and customer service is critical. Operating costs must be managed carefully for the company to remain profitable. Senior executives are exploring a variety of ways to improve ICR and they perceive that developing leadership competencies for first-level managers would be an excellent way to achieve profitable growth and efficiency.

The Need

A recent needs assessment for all functional areas conducted by the learning and development staff determined that several leadership competencies were needed for first-level managers. The needs included typical competencies such as problem solving, counseling, motivation, communication, goal setting, and feedback. In addition to developing these competencies, the L&D staff attempted to link the competencies to job performance needs and business needs. However, the senior management team did not want the L&D staff to visit all locations to discuss business needs and job performance issues. The senior executives were convinced that leadership skills are needed and that these skills should drive a variety of business measures when applied in the work units. The L&D team was challenged to identify the measures influenced by this particular program. Additionally, top executives were interested in knowing the impact and maybe even ROI for a group of US participants in this program.

This challenge created a dilemma. The L&D staff members realized that for a positive ROI study to be generated, the program should be linked to business needs. However, in reality they did not have the time, resources, nor the encouragement to conduct a more comprehensive analysis linking the need for the leadership development to business needs. The team was faced with the challenge of connecting this program to business impact. They thought that perhaps the participants themselves could help with this task.

Attempting to address the needs, the L&D staff developed a new program, the Leadership Challenge, designed for team leaders, supervisors, and managers who are responsible for those who actually do the work (i.e., the first level of management). Program participants may be located in rental offices, service centers, call centers, regional offices, and headquarters. Most functional areas are represented such as operations, customer service, service and support, sales, administration, finance and accounting, and IT. Essentially, this is a cross-functional program for this important job in the organization.

The Leadership Challenge involves four days of off-the-job learning with input from the immediate manager who serves as a coach for some of the learning processes. Before attending the program, participants must complete an on-line pre-work instrument and read a short book. Because few senior executives at ICR had challenged the L&D staff to show the business impact of this program, two groups of 18 were evaluated, for a total of 36 participants.

Business Alignment

In an attempt to link the program to business needs and job performance needs, prior to attending the program, each manager was asked to identify at least two business measures in the work unit that represent an opportunity for improvement. The measure should come from operating reports, cost statements, or scorecards. The selected measures had to meet an additional two-part test.

1. Each measure had to be under the control of the team when improvements were to be considered, and
2. Each measure had to have the potential to be influenced by team members with the manager using the competencies in the program. A description of the program was provided in advance including a list of objectives and skill sets.

While there was some concern about the thoroughness of the needs assessment, it appeared appropriate for the situation. The initial needs assessment on competencies uncovered a variety of deficiencies across all the functional units and provided the information necessary for job descriptions, assignments, and key responsibility areas. Although very basic, the additional steps taken to connect the program to business impact were appropriate for a business needs analysis and a job performance needs analysis. Identifying two measures needing improvement is a simple business needs analysis for the work unit. Restricting the selected measures to only those that can be influenced by the team with the leader using the skills from the program essentially defines a job performance need. (In essence, the individual leader is identifying something that is not currently being done in the work unit that could be done to enhance the business need.) Although more refinement and detail would be preferred, the results of the assessment process should suffice for this project.

Objectives

The L&D staff developed the following objectives for the program:

1. Participants will rate the program as relevant to their jobs.
2. Participants will rate the program as important to their job success.
3. Participants must demonstrate acceptable performance on each major competency.
4. Participants will routinely use the competencies with team members.
5. Participants and team members will drive improvements in at least two business measures.

Questions for Discussion

1. Discuss the approach for needs assessment and business alignment.
2. Should this program be evaluated to show business impact and ROI? Explain.
3. Complete the attached data collection plan, Figure 1.

DATA COLLECTION PLAN

Program: The Leadership Challenge **Responsibility:** Learning & Development Staff **Date:** 2003

Level	Objective(s)	Measures/Data	Data Collection Method	Data Sources	Timing	Responsibilities
1	Reaction/Satisfaction <ul style="list-style-type: none"> • Participants rate the program as relevant to their jobs • Participants rate the program as important to their job success 	<ul style="list-style-type: none"> • 4 out of 5 on a 5-point rating scale 	<ul style="list-style-type: none"> • 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 <ul style="list-style-type: none"> • Participants demonstrate acceptable performance on each major competency 	<ul style="list-style-type: none"> • 2 out of 3 on a 3-point scale 	<ul style="list-style-type: none"> • Observation of skill practices • Self Assessment via questionnaire 	<ul style="list-style-type: none"> • Facilitator • Participants 	<ul style="list-style-type: none"> • End of Program • End of Program 	<ul style="list-style-type: none"> • Facilitator • Facilitator
3	Application/Implementation <ul style="list-style-type: none"> • Participants routinely use the competencies with team members 					
4	Business Impact <ul style="list-style-type: none"> • Participants and team members drive improvements in at least two business measures 					
5	ROI <ul style="list-style-type: none"> • Achieve a 20% ROI 	Comments: _____ _____ _____ _____				

Figure 1 – Partially Completed Data Collection Plan

ROI Appropriateness

With the business and job performance needs complete, this program became a good candidate for the ROI. Without these two steps, it would be difficult to conduct a successful ROI study. A consideration for conducting the ROI study is identifying the drivers for ROI analyses. In this case, the senior team was challenging the value of leadership development. An ROI study should provide convincing evidence about a major program. Also, this is a highly visible program that should be evaluated at this level. It was strategic and expensive. Consequently, the L&D staff pursued the ROI study and an ROI objective of 20% was established.

ROI PLANNING

Data Collection Plan

Figure 2 shows the completed Data Collection Plan. Although several data collection methods were possible, the team decided to use a detailed follow-up questionnaire to reflect the progress made with the program. Focus groups, interviews, and observations were considered too expensive or inappropriate. The L&D team explored the possibility of using the 360° feedback process to obtain input from team members, but elected to wait until the 360° program was fully implemented in all units in the organization. Thus, the questionnaire was the least expensive and least disruptive method.

The questionnaire would be sent directly to the participant three months after program completion. At the same time, a shorter questionnaire would be sent to the participant's immediate manager. Initially, a six-month follow-up was considered instead of a three-month follow-up shown on the plan. However, the L&D staff thought that six months was too long to wait for results and too long for managers to make the connection between the program and the results.

Questions for Discussion

1. What topics should be explored in the follow-up questionnaire?
2. How can a response rate of 70% be achieved for a five-page anonymous questionnaire to this target audience?

DATA COLLECTION PLAN

Program: _____ Responsibility: _____ Date: _____

Level	Objective(s)	Measures/Data	Data Collection Method	Data Sources	Timing	Responsibilities
1	Reaction/Satisfaction <ul style="list-style-type: none"> • Participants rate the program as relevant to their jobs • Participants rate the program as important to their job success 	<ul style="list-style-type: none"> • 4 out of 5 on a 5-point rating scale 	<ul style="list-style-type: none"> • 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 <ul style="list-style-type: none"> • Participants demonstrate acceptable performance on each major competency 	<ul style="list-style-type: none"> • 2 out of 3 on a 3-point scale 	<ul style="list-style-type: none"> • Observation of skill practices • Self Assessment via questionnaire 	<ul style="list-style-type: none"> • Facilitator • Participants 	<ul style="list-style-type: none"> • End of Program • End of Program 	<ul style="list-style-type: none"> • Facilitator • Facilitator
3	Application/Implementation <ul style="list-style-type: none"> • Participants routinely use the competencies with team members 	<ul style="list-style-type: none"> • Various measures (ratings, open-ended items, etc.) 	<ul style="list-style-type: none"> • Questionnaire • Questionnaire 	<ul style="list-style-type: none"> • Participants • Participants' Manager 	<ul style="list-style-type: none"> • 3 months 	<ul style="list-style-type: none"> • L&D Staff
4	Business Impact <ul style="list-style-type: none"> • Participants and team members drive improvements in at least two business measures 	<ul style="list-style-type: none"> • Various work unit measures 	<ul style="list-style-type: none"> • Questionnaire 	<ul style="list-style-type: none"> • Participants 	<ul style="list-style-type: none"> • 3 months 	<ul style="list-style-type: none"> • L&D Staff
5	ROI <ul style="list-style-type: none"> • Achieve a 20% ROI 	Comments: _____ _____ _____ _____				

Figure 2 – Completed Data Collection Plan

Questionnaire Topics

While the topics explored may vary considerably, Figure 3 (next page) shows the e-mail questionnaire used with this group. Important areas explored included application of skills, impact analysis, barriers to application, and enablers. A similar questionnaire that explored the role of the manager in the coaching process was sent to the next level managers without the questions on the impact data.

To improve the response rates, a variety of techniques were explored; Figure 4 shows the twelve techniques that were used by the group to obtain a response rate of 81%. One of the most important techniques was to review the questionnaire with participants — question by question — at the end of the four-day workshop, clarifying the issues, creating expectations, and gaining commitment to provide data. Third party collection was achieved by using automated external data collection. Essentially, the data are sent by email to the data collector's server.

STRATEGY FOR INCREASING RESPONSE RATES

- Provide advance communication about the questionnaire.
- Clearly communicate the reason for the questionnaire.
- Indicate who will see the results of the questionnaire.
- Show how the data will be integrated with other data.
- Communicate the time limit for submitting responses.
- Review the questionnaire at the end of the formal session.
- Allow for responses to be anonymous – or at least confidential.
- Provide two follow-up reminders, using a different medium.
- Have the introduction letter signed by a top executive.
- Enclose a giveaway item with the questionnaire (pen, money, etc.).
- Send a summary of results to target audience.
- Have a third party collect and analyze data.

Figure 4 – Techniques to Increase Return Rates

Questions for Discussion

1. What is the recommended method for isolating the effects of the program?
2. How can the data be converted to monetary value?
3. What period of time should be used for the monetary benefits? Three months? Six months? One year? Two years?
4. Complete the ROI analysis plan, Figure 5.

FOLLOW UP QUESTIONNAIRE

Program Name _____

End Date of Program _____

Our records indicate that you participated in the above program. Your participation in this follow-up survey is important to the continuous improvement of the program. Completion of this survey may take 45 to 60 minutes. Thank you in advance for your input.

CURRENCY

1. This survey requires some information to be completed in monetary value. Please indicate the currency you will use to complete the questions requiring monetary value. _____

PROGRAM COMPLETION

2. Did you complete partially complete not complete the program? If you did not complete, go to the final question.

REACTION

	Strongly Agree			Strongly Disagree		
	5	4	3	2	1	n/a
3. I recommended the program to others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. The program was a worthwhile investment for my organization.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. The program was a good use of my time.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. The program was relevant to my work.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. The program was important to my work.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. The program provided me with new information.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

LEARNING

	Strongly Agree									Strongly Disagree		
	5	4	3	2	1	n/a						
9. I learned new knowledge/skills from this program.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>						
10. I am confident in my ability to apply the knowledge/skills learned from this program.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>						
11. Rate your level of improvement in skill or knowledge derived from the program content. A 0% is no improvement and a 100% is significant improvement. Check only one.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	

APPLICATION

	Strongly Agree									Strongly Disagree		
	5	4	3	2	1	n/a						
12. To what extent did you apply the knowledge/skills learned during the program?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>						
	Frequently (exceptional)									Infrequently (unacceptable)		
13. How frequently did you apply the knowledge/skills learned during the program?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>						
	High									Low		
14. What is your level of effectiveness with the knowledge/skills learned during the program?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>						
15. Rate the effectiveness of the coach.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>						
	Very Critical									Not Critical		
16. How critical is applying the content of this program to your job success?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>						
	Very Well									Not Well		
17. To what extent did you stay on schedule with your planned actions?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>						
18. What percent of your total work time did you spend on tasks that require the knowledge/skills presented in this program. Check only one.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	

BARRIERS/ENABLERS TO APPLICATION

19. Which of the following deterred or prevented you from applying the knowledge/skills learned in the program? (check all that apply.)
- no opportunity to use the skills
 - lack of management support
 - lack of support from colleagues and peers
 - insufficient knowledge and understanding
 - lack of confidence to apply knowledge/skills
 - systems and processes within organization will not support application of knowledge/skills
 - other
20. If you selected "other" above, please describe here.
-

21. Which of the following supported you in applying knowledge/skills learned in the program? (check all that apply.)
- opportunity to use the skills
 - management support
 - support from colleagues and peers
 - sufficient knowledge and understanding
 - confidence to apply knowledge/skills
 - systems and processes within organization will support application of knowledge/skills
 - other

22. If you selected "other" above, please describe here.

RESULTS – 1 st Measure

23. Please define the first measure you selected and its unit for measurement. For example, if you selected "sales," your unit of measure may be "1 closed sale."
-
24. For this measure, what is the monetary value of improvement for one unit of this measure? For example, the value of a closed sale is sales value times the profit margin ($\$10,000 \times 20\% = \$2,000$). Although this step is difficult, please make every effort to estimate the value of a unit. Put the value in the currency you selected, round to the nearest whole value, enter numbers only. (e.g. \$2,000.50 should be input as \$2,000.)
-
25. Please state your basis for the value of the unit of improvement you indicated above. In the closed sale example, a standard value, profit margin, is used, so "standard value" is entered here.
-
26. For the measure listed as most directly linked to the program, how much has this measure improved in performance? If not readily available, please estimate. If you selected "sales," show the actual increase in sales (e.g., 4 closed sales per month, input the number 4 here). You can input a number with up to 1 decimal point. Indicate the frequency base for the measure.
- daily weekly monthly quarterly

RETURN ON INVESTMENT – 1 st Measure

27. What is the annual value of improvement in the measure you selected above? Multiply the increase (question 26) by the frequency (question 26) times the unit of value (question 24). For example, if you selected "sales," multiply the sales increase by the frequency to arrive at the annum value (e.g. 4 sales per month $\times 12 \times 2,000 = \$96,000$). Although this step is difficult, please make every effort to estimate the value. Put the value in the currency you selected, round to nearest whole value, enter numbers only. (E.g. \$96,000.50 should be input as 96,000.)
-
28. List the other factors that could have influenced these results.
-
29. Recognizing that the other factors could have influenced this annual value of improvement, please estimate the percent of improvement that is attributable (i.e. isolated) to the program. Express as a percentage out of 100%. For example, if only 60% of the sales increase is attributable to the program, enter 60 here.
- _____ %
30. What confidence do you place in the estimates you have provided in the questions above? A 0% is no confidence, a 100% is certainty. Round to nearest whole value, and enter a number only (e.g. 37.5% should be entered as 38).
- _____ %

RESULTS – 2 nd Measure

31. Please define the second measure you selected and its unit for measurement. For example, if you selected "sales," your unit of measure may be "1 closed sale."
-
32. For this measure, what is the monetary value of improvement for one unit of this measure? For example, the value of a closed sale is sales value times the profit margin ($\$10,000 \times 20\% = \$2,000$). Although this step is difficult, please make every effort to estimate the value of a unit. Put the value in the currency you selected, round to nearest whole value, and enter numbers only (e.g. \$2,000.50 should be input as \$2,000).
-
33. Please state your basis for the value of the unit of improvement you indicated above. In the closed sale example, a standard value, profit margin, is used, so "standard value" is entered here.
-
34. For the measure listed as most directly linked to the program, how much has this measure improved in performance? If not readily available, please estimate. If you selected "sales," show the actual increase in sales (e.g., 4 closed sales per month, input the number 4 here). You can input a number with up to 1 decimal point. Indicate the frequency base for the measure. _____
- daily weekly monthly quarterly

RETURN ON INVESTMENT – 2 nd Measure

35. What is the annual value of improvement in the measure you selected above? Multiply the increase (question 34) by the frequency (question 34) times the unit of value (question 32). For example, if you selected "sales," multiply the sales increase by the frequency to arrive at the annum value (e.g. 4 sales per month x 12 x 2,000=\$96,000). Although this step is difficult, please make every effort to estimate the value. Put the value in the currency you selected, round to nearest whole value, and enter numbers only (e.g. \$96,000.50 should be input as 96,000).

36. List the other factors that could have influenced these results.

37. Recognizing that the other factors could have influenced this annual value of improvement, please estimate the percent of improvement that is attributable (i.e. isolated) to the program. Express as a percentage out of 100%. For example, if only 60% of the sales increase is attributable to the program, enter 60 here.

_____ %

38. What confidence do you place in the estimates you have provided in the questions above? A 0% is no confidence; a 100% is certainty. Round to nearest whole value, and enter a number only (e.g. 37.5% should be entered as 38).

_____ %

39. What other benefits have been realized from this program?

40. Please estimate your direct costs of travel and lodging for your participation in this program. Put the value in the currency you selected, round to nearest whole value, and enter numbers only (e.g. \$10,000.49 should be input as \$10,000).

41. Please state your basis for the travel and lodging cost estimate above.

FEEDBACK

42. How can we improve the training to make it more relevant to your job?

Thank you for taking the time to complete this survey!

Figure 3 – Questionnaire for Leaders

ROI ANALYSIS PLAN

Program: _____ 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

Figure 5 – Blank ROI Analysis Plan

ROI Analysis Plan

The completed ROI Analysis Plan is shown in Figure 6. This Plan details the specific issues that must be addressed and the particular techniques selected to complete the ROI analysis.

Method of Isolation. The method of isolation proved to be a challenge. Since the managers represent different functional areas, there was no finite set of measures that could be linked to the program for each participant. Essentially, each manager could have a different set of measures as he or she focused on specific business needs in the work unit. Consequently, the use of a control group was not feasible. The trend line analysis and forecasting methods proved to be inappropriate for the same reason. Therefore, the evaluation team had to collect estimations directly from participants on the questionnaire. Question 29 isolates the effects of this program using an estimate. Question 30 adjusts for the error of the estimate. The challenge is to ensure that participants understand this issue and are committed to providing data for this isolation.

Converting Data to Monetary Value. The data conversion is obtained directly from participants as they are asked to identify or estimate the value of their data. In the planning, it was assumed that there were only a few feasible approaches for participants to place monetary value on measures. Since there was little agenda time to discuss this issue the L&D staff had to rely on easy-to-obtain data using three options. The good news is that in this organization, as with many others, standard values have been developed for the measures that matter and that was the first option. If it's a measure that the company wants to increase, such as productivity or sales, someone has placed a value on that measure to show the contribution of the improvement. If it's a measure the company wants to reduce, such as turnover, accidents, or absenteeism, someone has more than likely placed a monetary value to show the impact of these critical measures. Consequently, the participants were asked to use standard values if they were available.

If these were not available, participants were asked to call an internal expert who knew more about that particular measure. In many cases, this was an individual from the department furnishing a particular report. After all, the data came directly from the operating reports; essentially, this is expert input. If neither a standard was available nor experts identifiable, the last option was for the participants to estimate the value. Since this is a measure that matters to the participant he or she should have some perception about the value of improving it.

The actual amount is entered on Question 24. Then, Question 25 provides the basis for showing the details for how that value is developed. Question 25 is very critical. If left blank, the business impact measure is removed from the analysis under the principle of not using an unsupported claim in the analysis. Incidentally, the participants were informed about this principle as the questionnaire was reviewed with them at the end of the workshop.

ROI ANALYSIS PLAN

Program: _____ **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
Varies, depending on measures selected	<ul style="list-style-type: none"> Participant estimate 	<ul style="list-style-type: none"> Standard value Expert value Participant estimate 	<ul style="list-style-type: none"> Needs Assessment (Prorated) Program Dev. (Prorated) Facilitation fees Pro. materials Facilitation & coordination Meals and refreshments Facilities Participant salaries & benefits – for time away from work Mgrs salaries & benefits – for time involved in program Cost of overhead evaluation 	<ul style="list-style-type: none"> Job satisfaction for first level managers Job satisfaction for team members Improved teamwork Improved communication 	<ul style="list-style-type: none"> Participants (first level managers) Participants’ managers Senior executives L&D staff Prospective participants Learning & development council members 	<ul style="list-style-type: none"> Several process improvement initiatives are on-going during this program implementation 	<ul style="list-style-type: none"> Must gain commitment to provide data A high response rate is needed

Figure 6 – Completed ROI Analysis Plan

Costs. The costs for the program were typical – analysis, design, development, and delivery components – and represented the fully loaded costs containing both direct and indirect categories.

Other Issues. The L&D team anticipated some intangible benefits and, consequently, added a question to identify improvements in these intangible benefits (Question 39). To ensure that all the key stakeholders are identified, the evaluation team decided on which groups should receive the information in the impact study. Six specific groups were targeted for communication. The remainder of the ROI analysis plan lists other issues about the study.

RESULTS

Twenty-nine questionnaires were returned, for an 81% response rate. Participants provided a rich database indicating success at each level of evaluation.

Reaction

Table 1 shows the reaction from the Follow-Up Questionnaire. Although some initial reaction was collected at the end of the workshop using a standard reaction questionnaire, the team decided to collect and present to the senior team the reaction obtained in the follow up. Each of the reaction measures exceeded the goal of a 4.0 rating, except for the issue about the amount of new information which was slightly less than the desired level.

REACTION DATA	
ISSUE	RATING*
Recommended to Others	4.2
Worthwhile Investment	4.1
Good Use of Time	4.6
Relevant to My Work	4.3
Important to My Work	4.1
Provided Me with New Information	3.9

*Rating: 1 = Strongly Disagree; 5 = Strongly Agree

Table 1 – Reaction from Participants

Learning

Although several skill practices and self-assessments were taken during the workshop to measure learning, the team decided to present the learning data directly from the Follow-Up Questionnaire. As shown in Table 2, the learning measures met or exceeded expectation in terms of the amount of new skills and knowledge and confidence in using them. Also, the average skill or knowledge improvement was 48% (Question 11).

LEARNING DATA	
ISSUE	RATING*
Learned New Knowledge/Skills	4.3
Confident in My Ability to Apply New Knowledge/Skills	4.1

*Rating: 1 = Strongly Disagree; 5 = Strongly Agree

Table 2 – Learning from Participants

Application

Table 3 shows application data obtained in the Follow-Up Questionnaire. The applications exceeded expectations and the effectiveness of the coach rating was a particular highlight. The time spent on task requiring the use of knowledge/skills averaged 43% (Question 18). The participants' managers received the Questionnaire primarily about the coaching component and they reported success. They routinely coached the participant when requested and frequently reinforced the use of the use of the skills.

APPLICATION DATA	
ISSUE	RATING*
Extend of Use of Knowledge/Skills	4.3
Frequency of Application of Knowledge/Skills	3.8
Effectiveness with Using Knowledge/Skills	4.3
Effectiveness of Coach	4.7
Criticalness to Job	4.2

*Rating:1 = Lowest; 5 = Highest

Table 3 – Application from Participants

Barriers and Enablers

Much to the surprise of the staff, the barriers were minimal and the enablers were strong. The program enjoyed good management support and was tailored to the job environment. Thus, there were few barriers that prevented the transfer of learning and the enablers were built into the program. Tables 4 and 5, respectively, show the barriers and enablers.

BARRIERS	
BARRIERS	FREQUENCY
No Opportunity to Use Skills	24%
Lack of Support from Colleagues and Peers	17%
Insufficient Knowledge and Understanding	17%
Lack of Management Support	10%
Lack of Confidence to Apply Learnings	7%

Table 4 – Top 5 Barriers Identified by Participants

ENABLERS	
ENABLERS	FREQUENCY
Management Support	55%
Opportunity to Use Skills	51%
Confidence to Apply What Was Learned	38%
Support from Colleagues and Peers	34%
Sufficient Knowledge and Understanding	34%

Table 5 – Top 5 Enablers Identified by participants

Business Impact

Business impact data (level 4) are shown in Table 6. This table shows specific improvements identified directly from the questionnaire, by participant number, for the first 15 participants. To save space, the remaining 14 participants are included as a total. Usually, each participant provided improvements on two measures. The total for the second measure is shown at the bottom of Table 6. The linkage between the questions in the Questionnaire and the columns in this table are highlighted. The total annual improvement for each measure is reported first. Incidentally, the specific measure was identified and could be reported as well, but to reduce confusion only the measure categories were reported. The heading “Converting Data to Monetary Value” shows the extent to which the three options were used to convert data to monetary value. Most participants selected “Standard” as standard values were readily available. The column of “Other Factors” indicates the number of other factors that were contributing the results. In most cases several factors were present. No more than four other factors were identified in any section. In a few cases there were no other factors. In summary, the standard values were used 71% of the time and other factors were identified 85% of the time.

							Total Monetary Benefits
	Q27	Q23	Q25	Q29	Q28	Q30	Q27xQ29xQ30
Participant Number	Annual Improvement	Measure	Converting Data to Monetary Value	Contribution from Program	Other Factors	Confidence Estimate	Adjusted Value
1	\$ 13,100	Sales	Standard	60%	3	80%	\$ 6,288
3	41,200	Productivity	Expert	75%	1	95%	29,355
4	5,300	Sales	Standard	80%	1	90%	3,816
6	7,210	Cost	N/A	70%	2	70%	3,533
9	4,215	Efficiency	Standard	40%	3	75%	1,265
10	17,500	Quality	Expert	35%	4	60%	3,675
12	11,500	Time	Standard	60%	2	80%	5,520
14	3,948	Time	Standard	70%	1	80%	2,212
15	14,725	Sales	Standard	40%	3	70%	4,123
17	6,673	Efficiency	Estimate	50%	3	60%	2,002
18	12,140	Costs	N/A	100%	0	100%	12,140
19	17,850	Sales	Standard	60%	2	70%	7,497
21	13,920	Sales	Standard	50%	3	80%	5,568
22	15,362	Cost	N/A	40%	4	90%	5,530
23	18,923	Sales	Standard	60%	1	75%	8,515
Total for the items above							\$ 101,039
Total for the next 14 items							\$ 84,398
Total for 2 nd measure							\$ 143,764
Total Benefits							\$ 329,201

Table 6 – Business Impact

Costs

The total cost of the program, using a fully loaded analysis, is shown in Table 7. The needs assessment was prorated over four years, based upon the anticipated life cycle of the project. A thousand managers in the US would attend this program in the four years before another needs assessment was conducted. Program development was prorated over three years assuming that the delivery could change significantly in that time. The remainder of the costs are directly charged and include the delivery expenses, the salaries for the participants (the first level managers) as well as their managers (second level). The training and education overhead was allocated using a figure of \$625 per day of training.

PROGRAM COST SUMMARY	
Cost of Item	Cost
Needs Assessment (prorated over 4 years)	\$ 900
Program Development (prorated over 3 years)	2,000
Program Materials (\$120/participant)	4,320
Travel, Meals, and Lodging (\$1,600/participant)	57,600
Facilitation and Coordination (\$4,000/day)	32,000
Facilities and Refreshments (\$890/day)	7,120
Participant Salaries (plus benefits) for time and program	37,218
Manager Salaries (plus benefits) for time involved in program	12,096
Training and Education Overhead (allocated)	2,500
ROI Evaluation (36 participants)	5,000
Total	\$160,754

Table 7 – Fully Loaded Costs

Questions for Discussion

1. Using a total benefit on both measures and the fully loaded cost of the program, calculate the benefit cost ratio and the return on investment.
2. Are the impact and ROI data credible? Explain.
3. What should be the strategy for communicating this data?

ROI Analysis

The benefit cost ratio is calculated as follows:

$$\text{BCR} = \frac{\text{Total Benefits}}{\text{Total Costs}} = \frac{\$329,201}{\$160,754} = 2.05$$

The return on investment is calculated as follows:

$$\text{ROI} = \frac{\text{Net Total Benefits}}{\text{Total Costs}} = \frac{\$329,201 - \$160,754}{\$160,754} = 105\%$$

MAJOR ISSUES

Credibility of Data

The data were perceived to be very credible by both the L&D staff and senior management group. Credibility rests on eight major issues:

1. The information for the analysis is provided directly from the new managers. The managers have no reason to be biased in their input.
2. The data are anonymous since no one has had to provide his or her name on the questionnaire. This helps remove the opportunity for potential bias.
3. The data collection process is conservative, with the assumption that an unresponsive individual has realized no improvement. This concept – no data, no improvement – is ultra conservative in the data collection.
4. The L&D staff did not assign complete credit to this program. The participants isolated a portion of the data that should be credited directly to this program.
5. The data were adjusted for the potential error of the estimate. Estimates are used to isolate the effects of the program on the individual data.
6. Only the first year of benefits are used in the analysis. Most of the improvement should result in second and third-year benefits.
7. The costs of the program are fully loaded. All direct and indirect costs are included, including the time away from work for the participants and managers.

The data is a balanced profile of success. Very favorable reaction, learning, and application data were presented along with business impact, ROI, and intangibles. Collectively, these issues made a convincing case for the program.

Communication Strategy

To communicate appropriately with the target audiences outlined in the ROI analysis plan, three specific documents were produced. The first report was a detailed impact study showing the approach, assumptions, methodology, and results using all six data categories. In addition, barriers and enablers were included in the study, along with conclusions and recommendations. The second report was an eight-page executive summary of the key points, including a one-page overview of the methodology. The third report was a brief, five-page summary of the process and results. These documents were presented to the different groups according to the following schedule:

Audience	Document
Participants	Brief summary
Managers of Participants	Brief summary
Senior Executives	Complete study, executive summary
L&D Staff	Complete study
Learning & Development Council	Complete study, executive summary
Prospective Participants	Brief summary

Because this was the first ROI study conducted in this organization, face-to-face meetings were conducted with the executives. The purpose was to ensure that executives understand the methodology, the conservative assumptions, and each level of data. The barriers, enablers, conclusions, and recommendations were an important part of the meeting. In the future, after two or three studies have been conducted, this group will receive only a one-page summary of key data items. A similar meeting was conducted with the learning and development council. The council members who are usually middle and upper level executives and managers are advisors to the L&D department. Finally, a face-to-face meeting was held with the learning and development staff where the complete impact study was described and used as a learning tool.