

EVALUATION IMPACT STUDY of the Contract Associate Empowerment Learning Program

A Global Telephonic Systems
Learning Engagement

By

The GTS Global Learning Network

Copyright 2004, the ROI Institute. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means without the permission of the Institute.

This is an example of an impact study report. Names, dates, and company information have been changed. If you have questions about this example please contact Ron Stone at the ROI Institute. ron@roiinstitute.net

Source: Stone, Ron Drew

Table of Contents

Table of Contents	2
Background	3
Business/Performance Opportunity.....	3
Target Audience	3
Objectives	3
Job Performance	3
Business Results.....	4
Learning Solution	4
Course Information	4
Learner Completions	5
Cost of the Learning Solution.....	5
Evaluation Process	5
Learners' End of Course Feedback - Level 1	6
Learning Post Tests – Level 2.....	7
Follow-up Job Application/Implementation – Level 3	7
Follow-up Business Results – level 4	7
Post-Training Evaluation Results	8
Impact on Job Performance - Level 3.....	8
Impact on Business Results - Level 4	8
Calculation of Return on Investment - ROI - Level 5.....	10
Analysis and Results	12
Methodology.....	12
ROI Interpretation	12
Results	13
Conclusion	13
Appendix A - L-1 and L-2 Evaluation Data	14
Appendix B - L-3 Post Training Questionnaire Response Data	16
Appendix C - Phillips ROI Methodology	18
Appendix D - Data Collection Plan and ROI Analysis Plan	20

Background

Business/Performance Opportunity

A new process was created that permits Directors of the Sales Centers (DSC) of Global Telephonic Systems (GTS) to sign custom contracts in the Sales Centers rather than sending the electronic contract to Headquarters for review, authentication and signature. As part of this process, Contract Associates will be empowered to perform certain activities that had been the responsibility of the Global Custom Contract organization in headquarters. This supports the goal of bringing work closer to the individuals who are gathering the information and presenting it to the customers and should reduce the time from client signature to DSC signature, resulting in services being provisioned and billed earlier. It also saves approximately \$120,000 in postage costs since custom contracts will no longer be mailed to headquarters.

Target Audience

The total audience trained consists of 128 Contract Associates located in each of the Sales Centers throughout the Global Network

Objectives

Job Performance Objectives

“Focus is on the participant, work setting, and support mechanisms for applying learning”¹

To support the new process for contract signatures, Contract Associates must perform the following activities:

- Analyze the contract packages and validate the information in the predetermined critical fields.
- Create a Post Sale Customer Signature (PSCS) record.
- Apply the accept/reject distribution process for each record.
- Assemble a complete package of documents for DSC signature.
- Organize documents for post sale signature distribution.

¹ [How to Measure Training Results](#), Jack Phillips and Ron Drew Stone, McGraw-Hill, 2002, p. 5

Business Results Objectives

“Focus is on the impact of the training process on specific organization outcomes”²

The major benefits expected to result from the implementation of the new process and the training to support the Contract Associate activities within the process are:

- Reduce the number of days from Customer Contract Signing to DSC Contract Signing from the current baseline of 12 days to 10 days by three months after implementation) and to 8 days by December 31.

The interval within this total cycle time to be impacted by the new performance of the Contract Associates is “from the time the Customer Record (CR) is received to the time the DSC signs the contract.”

- Maintain or increase the percentage of contracts with no defects at 85%*.
Note: The original target stated in the Measurement Plan was 80%, but it was revised upward based on analysis of the results in the previous quarter.

The Learning Solution

Course Information

A half-day instructor-led course was developed to address the skills and knowledge required to support the job performance objectives. Because the audience was dispersed in Sales Centers throughout the Global Network, the training was delivered via WebNet Meeting with live demonstration of the PSCS tool.

S2604 – Contract Associate Empowerment

Learning Objectives for the course were:

- Describe the process for Contract Package Validation – Pre PSCS record.
- Determine accurate information for the Inventory Control and Invoicing form.
- Outline the steps involved in the creation of the PSCS Record Process.
- Identify criterion that determines package “Accepted” or “Rejected”.
- Determine steps for “Certify the Customer and Obtain Sale Signature”.
- Distinguish between correct and incorrect documents needed to compile a complete package for DSC signature.
- Explain the process for compiling documents and identify appropriate email distribution list for Post-Sale Signature Distribution.
- Recognize the process for contract tracking from Post-Sale Signature Distribution to Population of Billing Invoice.
- Identify key elements of PSCS Standard Operating Procedure & Post GTS Signature Handoff

² [How to Measure Training Results](#), Jack Phillips and Ron Drew Stone, McGraw-Hill, 2002, p. 6

Learner Completions

From February 1 through May 1, a total of 128 Contract Associates completed five sessions of the training. This represents 100% of the target audience.

Cost of the Learning Solution

Total cost to design, develop and deliver the training was \$28,000.

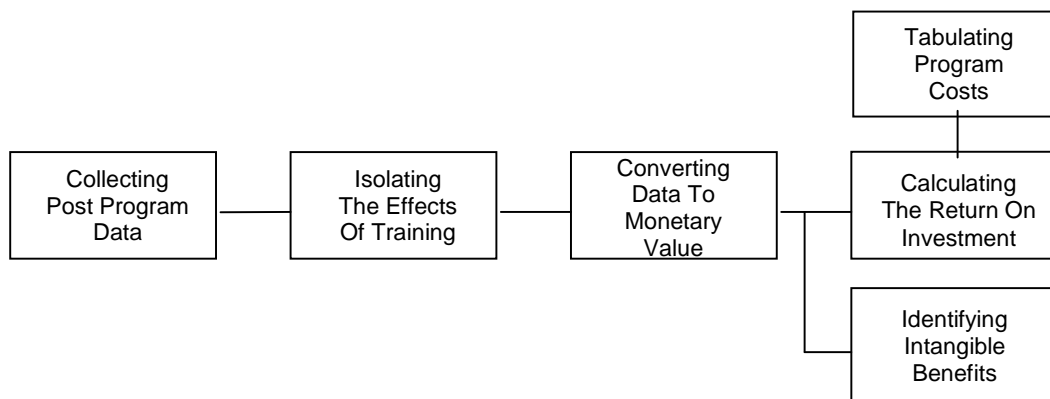
Course Development and Materials	\$33,000
Instructor preparation, coordination, and delivery (all sessions) *	\$ 7,000
Participants' loaded salaries (128 x \$624 per day per employee @1/2 day	\$39,936
Facilities	\$ 2,454
Total Cost to GTS Learning Network	\$82,390

* There were no travel expenses for the instructor.

Evaluation Process

The ROI Methodology

This study was completed using the Phillips ROI methodology. This methodology is the most widely accepted process to evaluate the business impact of training. To understand the ROI process it is helpful to examine the key steps involved in developing the ROI. **The ROI Methodology is detailed in Appendix C.** The ROI Model below briefly illustrates the process and highlights the issues addressed in this study. The first step is the collection of baseline data and then follow-up data is collected after a program has been conducted. A variety of post-program data collection methods are available. Perhaps the most important step in the model focuses on the issue of isolating the effects of training. In every organizational situation, a variety of factors influence the output measures of organizational or business impact. Training is only one of many influences which will drive a particular measure. One or more strategies must be selected to isolate the effects of training.



The next step in the ROI model is converting data to monetary values. Output measures must be converted to dollar values so they can be compared to the cost of the program to develop the ROI. All fully loaded costs which are related directly or indirectly to the training program are included in the ROI calculation. This includes participant salaries and benefits while away from work to attend the training.

Finally, the costs and benefits come together in an equation for the ROI. Net benefits (the program benefits minus costs), are divided by the total investment in the training program. This provides an ROI formula comparable to ROI calculations for other investments which typically show the net earnings divided by the average investment. A final step lists intangible benefits which are very important but not translated into monetary values for the program benefits. In this study, intangible benefits are identified and reported as well as the tangible results.

The key decisions involving the application of the ROI model involve selecting specific methods to collect data, isolate the effects of training, and convert data to monetary values. These are the three most difficult and critical steps in the process and are addressed in the next sections. ***It is helpful and instructive to view the evaluation of training using a framework of evaluation levels. As shown beginning in the next sections, an evaluation is conducted at five different levels.***

Learners' End of Course Feedback - Level 1

*Level-1: "Focus is on the training program, the facilitator, and how application might occur."*³

Students' immediate end-of-class feedback on all aspects of the learning event was very positive:

- All of them were confident they would be able to apply the skills on the job.
- All agreed (with 81% strongly agreeing) that the course met its objectives.
- They all found the course materials relevant and useful.
- 69% rated the course excellent over all, and the remaining 31% said it was very good. This is much higher than the average score on this question.
- Learners' comments stated that the live demonstration of all steps in using the PSCS tool was of particular value.

Contract Associate Empowerment Program S2604	% Strongly Agree	% Agree	% Neutral	% Disagree
I am confident I will be able to apply the skills I have learned in this course on my job.	69%	25%	0	0
This course effectively addressed the identified learning objectives.	81%	13%	0	0
I consider the course materials relevant and useful.	81%	13%	0	0
I consider the instructor effective.	75%	13%	0	0
	% Excellent	% Very Good	% Average	% Fair / Poor
Overall, I would rate this learning experience:	63%	37%	0	0

The L-1 feedback questionnaire response data is in **Appendix A**.

³ How to Measure Training Results, Jack Phillips and Ron Drew Stone, McGraw-Hill, 2002, p. 4

Learning Post Tests - Level 2

Level 2: "Focus in on the participant and various support mechanisms for learning" ⁴

Learners' mastery of the content and skills in the class was assessed by a 12-question end-of-course test. All learners passed the test. The average number of attempts at the test was 1.15 and the average score achieved was 93%

A summary of the L-2 evaluation data is at the end of **Appendix A**.

Follow Up Job Application/Implementation - Level 3

Level 3: "Focus is on the participant, work setting, and support mechanisms for applying learning"

To determine whether people were performing the activities required on their jobs, learners were asked to answer a follow-up questionnaire two months after finishing the learning event. The questions on the questionnaire were reviewed and approved by the client Subject Matter Experts to verify that they correctly described the key behaviors to be supported by the course. Requests to complete the questionnaire were sent by the client representatives about 8 weeks after the training. Highlights of Job Application/Implementation results are reported on page 6 under *Post-Training Evaluation Results*.

The L-3 questionnaire response data is in **Appendix B**.

Follow Up Business Results - Level 4

Level 4: "Focus is on the impact of the training process on specific organization outcomes"

The actual number of days for the activities involved in contract signings, and the average days elapsed from Customer Contract Signing to GTS Contract Signing overall, are shown on the PSCS Weekly Performance Report prepared by the process team.

The percentage of contracts without defects is noted on the row titled "Percentage Accuracy" on the report for "Performance Metrics for CA Custom Contracts Cycle Time and Accuracy" created by the Customer Service process team.

Highlights of Follow-up Business Results are reported on page 6 under *Post-Training Evaluation Results*.

⁴ [How to Measure Training Results](#), Jack Phillips and Ron Drew Stone, McGraw-Hill, 2002, p. 4

Post-Training Evaluation Results

Impact on Job Performance - Level 3

A total of 82 participants completed questionnaires reporting their post-training job performance. This is a 64% response rate.

The self-reports of ability to perform the critical activities for their new role were very positive:

- All of them were able to analyze contract packages and validate the information in the critical fields, and to input the required contract data in PSCS.
- 96% could assemble a complete package of documents for DSC signature.
- 92% could organize documents for a post sale signature distribution.
- 89% could apply the accept/reject distribution process for each record.

Participants reported that the greatest contribution to their ability to perform these functions came from the Contract Associate Empowerment training (36% of a possible 100%).

Other performance support was:

- Help from supervisor, peers or SME (27%)
- Online documentation or other performance support tools (19%)
- Previous experience doing similar work (18%)

Eighty four percent of the participants reported that they had no difficulties performing these new functions. The *sixteen percent* cited hindrances such as:

- Incomplete or confusing processes and procedures (mentioned by 11% of the respondents)
- Insufficient on-the-job support from supervisor, SMEs, etc. (6%)
- Technical problems with the systems (3%)

No one indicated that the training was not sufficient, or that the required applications were difficult to use.

Impact on Business Results- Level 4

Impact on Cycle Time:

The cycle time for custom contracts for the time the customer signs the contract to the date the contract is submitted to Headquarters had decreased month over month since the training began in February:

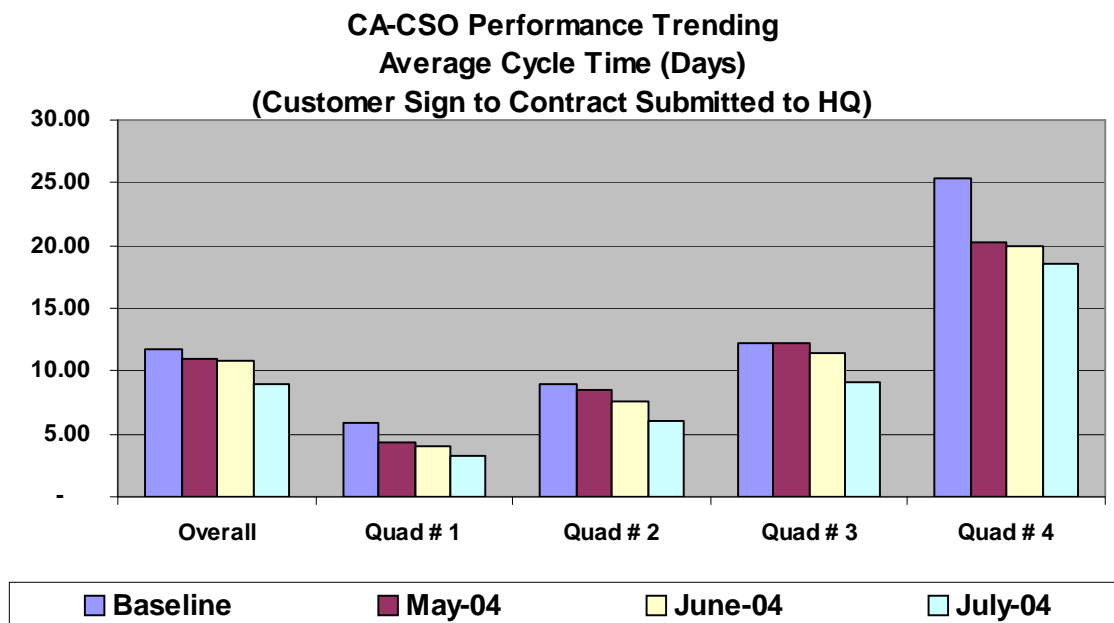
- *Average number of days has been reduced from 11.68 to 9.03*
- *Cycle time was reduced by 2.65 days*
- *Cycle time has been reduced by 23%*

There was steady improvement overall and for each performance quadrant.

	Baseline	May-04	June-04	July-04
Overall	11.68	10.96	10.78	9.03
Quad # 1	5.92	4.34	3.99	3.32
Quad # 2	8.97	8.50	7.61	5.99
Quad # 3	12.23	12.21	11.47	9.09
Quad # 4	25.42	20.29	19.98	18.50

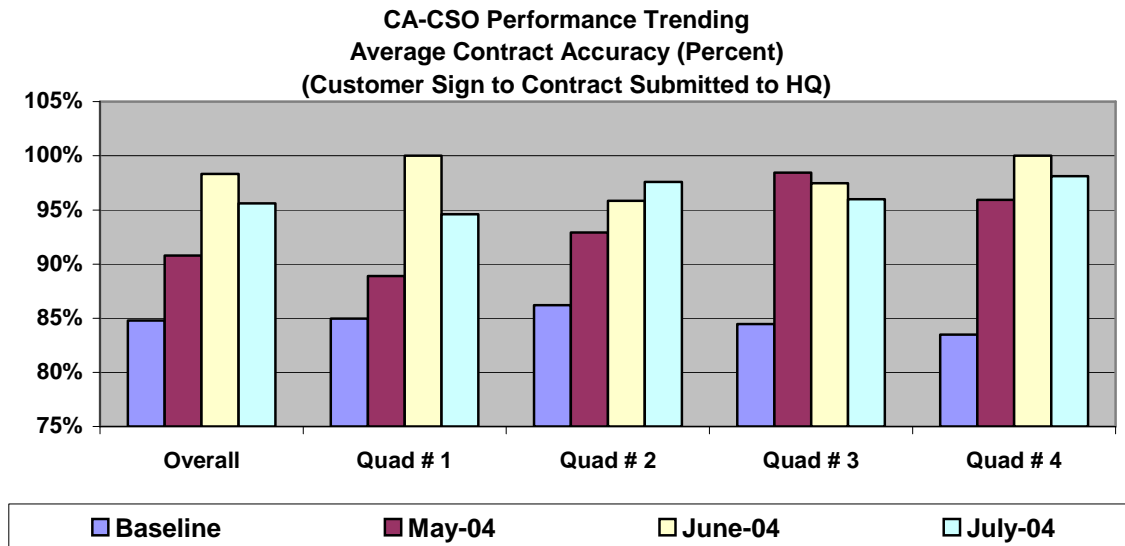
The client estimated that 30% of the reduction in overall cycle time from customer signature to submission to Headquarters was due to the training provided by GTS Learning Network. The other factors contributing to the decrease in time were; help from peers, online documentation and other performance support tools, and previous experience doing similar work.

The reduction in overall cycle time due to the training was 0.8 days (2.65 x 0.3).



Impact on Quality:

Contract accuracy was significantly above target for May, June and July.



	Baseline	May-04	June-04	July-04
Overall	85%	93%	98%	96%
Quad # 1	85%	89%	100%	95%
Quad # 2	86%	93%	96%	98%
Quad # 3	84%	98%	97%	96%
Quad # 4	83%	96%	100%	98%

The client Subject Matter Expert stated that the ***“The bottom line is that the quality of the Contract Associates work was not degraded by moving some of the functions to the branches. The quality of the CA work is on target and continues to improve.”***

Calculation of Return on Investment - ROI - Level 5

A positive ROI reflects:

- 1) There must be a training need.
- 2) A feasible training solution must be implemented at the right time, for the right people, at a reasonable cost
- 3) The training solution must be supported and applied in the work setting.
- 4) Linkage must exist to one or more organizational measures.⁵
- 5) The monetary benefits from the training exceed the cost of the training.

⁵ How to Measure Training Results, Jack Phillips and Ron Drew Stone, McGraw-Hill, 2002, p. 220

All training for this project was completed by May 1st. While we initially projected results through the end of the year, the client is able to provide statistics in all the required categories for successive one-month periods. We were able to look at the performance record of the learners over a three-month period. Based on the information we received, we were able to provide the following results/calculations:

- The average cycle time reduction was 2.65 days
- There were an average of 177 custom contracts processed monthly (May, June, July)
 - Since the average cycle time reduction was 2.65 days, this means that 50% of the contracts were below that target with a 2.65 days reduction or better and 50% were above that target...higher than 2.65 or no cycle time reduction at all. The measurement plan called for only considering the contracts that actually had a reduction. So, 50% of 177 (88 contracts) is used in the calculations.
- The contract negotiation management team stated that custom contracts range in value from \$200,000 to \$500,000
 - Since contract values vary by client type (Signature vs. Enterprise) the lowest value provided by the contract team is used in the calculations: \$200,000 per year which is \$548 per day.
- Postage savings of \$120,000 per year will be realized
 - This amounts to \$10,000 per month
- The training isolation factor is 30% as submitted by client
- Cost of the training solution including learner time off the job = \$82,390

88 contracts monthly	x	2.65 dys	x	\$548/dy	=	\$ 127,794	accelerated billing
						\$ 10,000	Monthly postage savings
						\$ 137,794	monthly benefit to the business
						\$1,653,528	annualized benefits
							(137,794 x 12)

\$1,653,528 x 30% influenced by training = \$496,058

$$ROI = \frac{(Total\ benefits - Program\ cost)}{Program\ cost} \times 100 = \frac{\$496,058 - \$82,390}{\$82,390} \times 100 = 502\% ROI$$

1

⁶The Bottomline on ROI, Patricia P. Phillips, Jack J. Phillips, (Series Editor), CEP Press Atlanta, GA, 2002

Analysis and Summary Results

Methodology

The follow-up results *regarding participants' ability to perform the critical activities of their new role* were analyzed from questionnaires administered to participants. The *percentage of contracts without defects* was analyzed from the "Performance Metrics for CA Custom Contracts Cycle Time and Accuracy" report. The *actual number of days for the activities involved in contract signings*, and the *average days elapsed from Customer Contract Signing to GTS Contract Signing overall*, were analyzed from the PSCS Weekly Performance Report. Data were analyzed at six levels.

- Use of Phillips Methodology for Evaluation of Training Impact and ROI Calculation - Return on Investment (Level 5). See Appendix C for details on the methodology.
- Measured Business Impact (Level 4)
- Measured Performance Improvement (Level 3)
- Measured Skill/Knowledge Acquisition (Level 2)
- Measured Learner Reaction/Satisfaction (Level 1)
- Measured Learner Participation (Level 0)

This analysis level learning solution was developed and delivered via technology to accommodate the needs of a widely dispersed audience.

ROI Interpretation

When developing the actual ROI, a conservative approach is always taken. If monetary benefits have a subjective component, they are adjusted downward. If program costs contain estimates, they are adjusted upward. This conservative approach builds credibility and makes the resulting calculation more reliable.

The formula used for the ROI is the same basic calculation used to evaluate other investments such as investments in equipment and plants. Thus, the target rates used for other investments could be compared to these percentages in this study. However, because this process is not precise, a different target rate is often suggested. For most organizations involved in calculating return on investment of training programs, coaching interventions, and change initiatives, a target rate of 25% is recommended. Thus, if a program is not generating at least a 25% return on investment in the first year, it could be considered to be an undesirable investment. Using this standard, the ROI of 502% achieved for the Contract Associate Empowerment Learning Program is extremely good.

Estimating the return on investment for a training program can be a very difficult process. The exact value will never be known, just as the impact of an advertising program will never be known precisely. However, the process used in the above calculations is becoming a generally accepted technique for measuring interventions. Credible sources such as contract associates, the client, and client reports provided the information. There was no pressure to respond or to provide a certain type of data. In addition, several other considerations and adjustments were made to produce more conservative estimates.

1. The contract negotiation management team provided the value for custom contracts.

2. Only the benefits captured in the first year are utilized, although there may be second and third year benefits.
3. The benefit value is reduced to reflect the percentage linked directly to the Contract Associate Empowerment Learning Program based on the clients estimate.
4. The total benefits are based only on the data furnished by the reliable sources.
5. The costs are fully loaded, including estimated salaries and benefits for each participant for the time the participants were in training.

With these adjustments and considerations outlined above, it is safe to assume that the ROI value reflected in the study have been achieved.

Summary Results

After two months of using the new tool and process, the business expectations were realized:

- Contract Associates were using the new system and process effectively and were able to reduce cycle time to the target set for system roll out. Client anticipated a 2-day reduction at the beginning of the roll out.
- Contract Associates are divided into 4 groups based on the clients they support. All four groups showed at least a 2-day improvement in their cycle time numbers.
- Individuals maintained contract quality. System errors were generated initially but were quickly identified and fixed.
- All contracts are being supported by the system and postage costs are eliminated.
- ROI of 502%.
- Intangible benefits resulting from this training are:
 - Contract Associates report being more satisfied in their job. They attribute this to their ability to fulfill the new requirements set out by management and the increased challenge of completing the contract process.
 - Because they are now better trained in interacting with customers, Contract Associates are better candidates for job rotation and promotion.

Conclusion – Recommendations – Next Steps

Conclusion: In addition to the training, three design components contributed greatly to the results. *Client Support*; GTS Learning Network had good support for this project both from the process teams and the client organization. *Super-users*; Super-users were identified at the beginning and provided valuable input to the design team. *Open Mike Sessions*; Process team members were engaged during the training sessions and then sponsored an “open mike” call two days after each training event to address questions about the tool and/or process. The client was pleased with the results and has shared them with the staff.

Recommendations and Next Steps: All Contract Associate groups will continue to be monitored for quality and cycle time improvement. If a specific group is falling below target, individualized plans will be developed to help get that person/group back on track.

Appendix A

Level 1 Feedback Questionnaire Response Data

S2604 Contract Associate Empowerment
Summary of L-1 Responses
 Total Submitted: 109
 Feb 1 - May 1

QUESTION	Mean	Strongly Agree	Agree	Neither	Disagree	Strongly Disagree	N/A
01 This course is applicable to my job	4.93	88%	6%	0	0	0	6%
02. I am confident I will be able to apply the skills I have learned in this course on my job.	4.73	69%	25%	0	0	0	6%
03. This course effectively addressed the identified learning objectives.	4.87	81%	13%	0	0	0	6%
05. Pre-course material was relevant and useful.	4.73	75%	13%	6%	0	0	1
06. The course materials presented were accurate and complete.	4.60	69%	19%	0	6%	0	6%
07. Overall, I would consider the course materials relevant and useful:	4.87	81%	13%	0	0	0	6%
09. The instructor presented the information in a manner that was easy to understand	4.87	81%	13%	0	0	0	6%
10. The instructor was able to provide insightful, real world experience.	4.67	69%	19%	6%	0	0	6%
11. The instructor involved students in the learning experience.	4.60	56%	38%	0	0	0	6%
13 The instructor managed student questions effectively	4.87	81%	13%	0	0	0	6%
14. Overall, I consider the instructor effective.	4.86	75%	13%	0	0	0	13%
29. Overall, I would rate this learning experience:	4.63	Excellent	Very Good	Average	Fair	Poor	N/A
		63%	37%	0	0	0	0

Length of the class was:

Just Right: 66% Too Long: 33%

Pace of the class was:

Just Right 90% Too Fast: 10%

Most valuable parts of the learning experience:

- Watching the instructor, provide the hands on examples and walking through the process in the tool.
- Viewing PSCS Tool Live
- The reference materials

- The most valuable part of the learning experience was being able to see how the PSCS tool functions from A to Z. From initiating to implementation of a custom contract.
- The training also provided some great insights on how much time and money we can save on rolling this out to the field.
- The loading of the PSCS tool examples that were provided.
- All information was relevant to job.
- Using WebNet Meeting
- Process steps
- The Matrix Handoff Guide

Least valuable parts of the learning experience:

- Class was way too long - should have been broken up into two days
- It was all valuable.
- I found that every part of the training had value.
- None
- none
- None
- None, actually
- Everything was very pertinent and valuable.

Comments or suggestions for improving the course:

- I wish that I had screen prints to coincide with the process.
- A full day and more examples and background information for new Contract Associates-it is always assumed that the Contract Associate has been in the job for months. I thought the examples were great.
- I personally would have loved to have a live contract to process during the training to work one real time with the presenters.
- 1 Pager for the Process (Step by Step Guide), in addition to the flow chart.

Level 2 Evaluation Data

Post Test Results (L-2)

- Total learners passing test: 128
- Average number of test attempts: 1.15
- Average percent correct: 91%
- 12-question test

Appendix B

L-3 Post-Training Questionnaire Response Data Course S2604 – Contract Associate Empowerment Program

To what extent do you agree/disagree that you were able to correctly perform these activities after the training?		Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree	Not Applicable
		(5)	(4)	(3)	(2)	(1)	
Analyze contract packages and validate the information in the critical fields.	Mean: 4.68						
	%	68%	32%	0	0	0	0
Input the required contract data in PCS.	Mean: 4.71						
	%	68%	27%	0	0	0	5%
Apply the accept/reject distribution process for each record.	Mean: 4.57						
	%	64%	23%	9%	0	0	5%
Assemble a complete package of documents for DSC signature.	Mean: 4.64						
	%	68%	27%	5%	0	0	0
Organize documents for a post counter signature distribution.	Mean: 4.62						
	%	64%	27%	5%	0	0	5%

Relative percentage by which each of these factors supported successful job performance (according to participants)	Average Percent
Training in Contract Associate Empowerment course	36%
Help from supervisor, peers or SME	20%
Online documentation or other performance support tools	19%
Previous experience doing similar work	18%
Other	7%

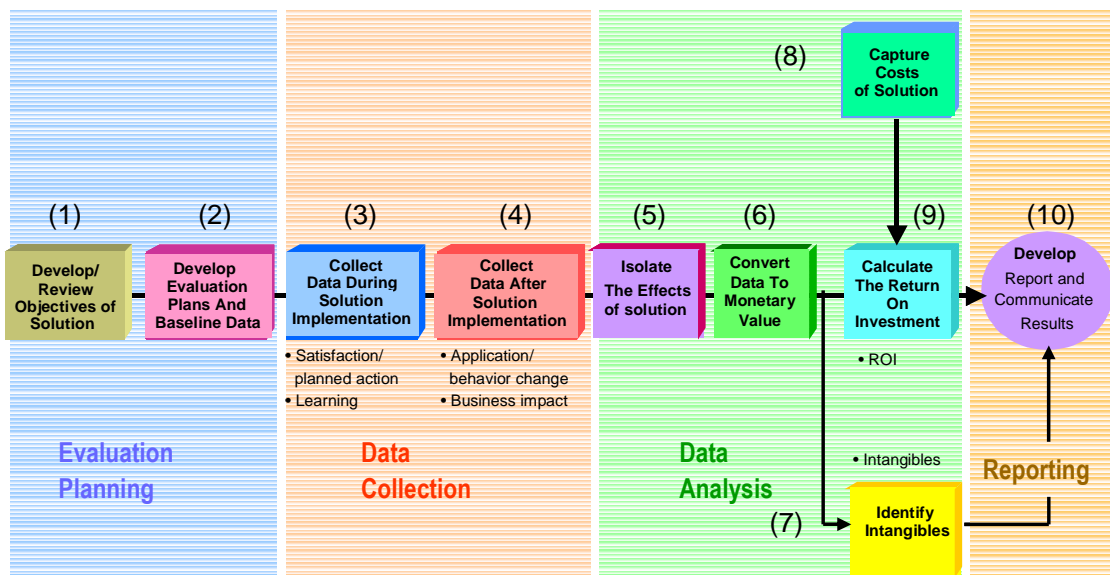
Factors in the work environment that caused difficulty in performing Contract Associate work	Percent of respondents
Processes & procedures are confusing or not complete	5%
Not enough on-the-job support from my supervisor, SMEs, etc.	9%
Technical problems with the systems	6%
The required systems are difficult to use	0
Training was not sufficient	0
No problems performing this work	80%

Comments and suggestions about the Contract Associate Empowerment training:

- There was little support before. Now that we have lost our lead person. it will become more difficult to get answers to questions submitted to the CA Empowerment broadcast.
- It was very good.
- It was very helpful to have the Process Engineer, attend the training to address on-the-spot questions.
- The participant guide is an invaluable tool that I reference daily. The CA Empowerment distribution also assists with day to day questions.
- Please consider the length of the training and allow more than one ten minute break. I think the length of the training was fine considering the amount of information we needed to cover.
- The handbook with each product scenario was both helpful and very well thought out. I use it daily.

Appendix C

THE PHILLIPS ROI METHODOLOGY™



The Phillips ROI Methodology shown above is applied through a 10 step process. In step #1, the planning is initiated and the specific business drivers of the solution are identified. Discussion and decisions revolve around how the solution will satisfy the business drivers. Business measures are clearly identified. The objectives are established/revised to ensure that stakeholders agree on the application/behavior change and the business impact measures to be influenced.

In step #2 the detailed planning process takes place. The purpose of the evaluation is clearly defined and baseline data is developed/collected. If the purpose is to calculate the ROI, the entire ROI Process (10 steps) will be followed. If the purpose is only to determine behavior change, then the evaluation will stop short of collecting business impact data and calculating the ROI. If the purpose is to determine business impact, then data will be collected at all levels. Step #2 includes determining the data collection strategy and developing the necessary detail planning documents that specify how steps #3 through #10 will be carried out.

Step #3 begins the implementation of the data collection strategy that was planned in step #2. In step #3 the client organization usually collects the L-1 and L-2 data during the solution implementation (satisfaction/planned action and learning). This data is later reported along with follow-up data from step #4 (application/behavior change and business impact) collected by the process. Business impact data is converted to monetary values to calculate the ROI.

Throughout the process, data is collected at all levels to show a chain of impact up to the highest level that satisfies the purpose of the study.

Step #5 begins the data analysis phase of the process. The effects of the solution are isolated to determine the extent that the business measures were influenced by the solution.

Step #6 is applied when the purpose of the evaluation includes calculating the ROI. If stakeholders have determined that there is no interest in the ROI calculation for a specific initiative, then the business impact and behavior change data is reported minus the calculation. Data from step #7 (intangible benefits) are reported along with business metric improvements. Barriers and enablers to implementation/behavior change are also reported.

Any improvement in behavior and business metrics influenced by the solution (isolation) is reported in step #10. When the ROI is calculated (step #9), the costs (step #8) are compared to the benefits that are converted to a monetary value from step #6. Additionally, all of the data from steps #3, #4, #5, and #7 are also reported.

Conclusions and recommendations are also reported. Conclusions address information such as, what caused the results, and what worked and what did not work. Recommendations address next steps and how the findings can be used to implement improvement.

Throughout the process of a follow-up study, data on behavior is always collected. Behavior change is one of the major key variables that determines if or how much the business metrics improve. Why behavior does or does not change and how it changes is of major interest. Data collection instruments and methods are carefully planned and developed to collect the most credible data from the most reliable sources to determine the contribution.

When applying the Phillips methodology to collect, analyze, and report data, the following twelve Guiding Principles are systematically and consistently applied.

1. When a higher level evaluation is conducted, data must be collected at lower levels.
2. When an evaluation is planned for a higher level, the previous level of evaluation does not have to be comprehensive.
3. When collecting and analyzing data, use only the most credible sources.
4. When analyzing data, choose the most conservative among alternatives.
5. At least one method must be used to isolate the effects of the project/initiative.
6. If no improvement data are available, it is assumed that little or no improvement has occurred.
7. Estimates of improvement should be adjusted for the potential error of the estimate.
8. Extreme data items and unsupported claims should not be used in ROI calculations.
9. Only the first year of benefits (annual) should be used in the ROI analysis of short-term projects/initiatives.
10. Project/program costs should be fully loaded for ROI analysis.
11. Intangible measures are defined as measures that are purposely not converted to monetary value.
12. The results from the ROI methodology must be communicated to all key stakeholders.

Appendix D

Data Collection Plan

PURPOSE OF THIS EVALUATION:

Determine contract specialists' proper use of the process and determine if quality maintained or improved and measure improved turnaround.

Program/Project: CONTRACT ASSOCIATE EMPOWERMENT

Responsibility: _____

Date: _____

Level	Broad Program Objective(s)	Measures	Data Collection Method/Instruments	Data Sources	Timing	Responsibilities
1	SATISFACTION/PLANNED ACTION Positive reaction to the training	Average rating of 4.0 out of 5.0 on quality, quantity, and usefulness	Standard feedback questionnaire	Participants	End of program	Program coordinator
2	LEARNING Use the functions in the Post Customer Signature system.	Demonstrate use of each step of the process	Participant performance demonstrations observed by local Subject Matter Experts	Participants performance tests	During training	
3	APPLICATION/ IMPLEMENTATION Analyze the contract packages and validate the information in predetermined critical fields. Assemble a complete package of required documents for DSC signature	Apply the accept/reject distribution process for each record Create and process the record	Monthly reports Follow-up questionnaire Monthly reports	Client reports Participants Client reports	3 months after training 2 months after training 3 months after training	Bob S. Bob S.
4	BUSINESS IMPACT Reduce the number of days from customer contract signing to global telephonic contract signing Maintain or increase the percentage of contracts with no defects	Improve from current baseline of 12 days to 8 days by end of year Improve to 80% no defects from current baseline of 78%	PSCS Weekly Performance Report Monthly reports on accuracy for all branches and all products	Internal clients	3 months after training 3 months after training	Bob S.
5	ROI TARGET: at least 25%	Comments: _____				

ROI ANALYSIS PLAN

Purpose of This Evaluation: _____

Program/Project:

CONTRACT ASSOCIATE EMPOWERMENT

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
Improve contract signing turnaround from current baseline of 12 days to 8 days by end of year	Client estimate	Standard value of custom contracts using the low range (\$200,000)	Needs assessment Program development	Job satisfaction Customer satisfaction	Directors Training department Participants Operations management	Process change	Client may not be willing to estimate the value of quality improvements (defects) so any reduction in defects may be an intangible.
Improve to 80% no defects from current baseline of 78%	Client estimate	Not determined. No standard value. May be an intangible	Program material Facilitation & coordination Participant salaries plus benefits	Quality improvements (defects)			
			Training overhead Evaluation				