Show me the money!
Demonstrating the ROI in Training Programs

Patti P. Phillips, Ph.D., CPLP
President & CEO
patti@roiinstitute.net
www.roiinstitute.net
YOU WILL LEARN

- Calculate the ROI for training interventions
- Identify common pitfalls in calculating ROI and how to avoid them
- Best practices for isolating program effects and converting measures to money
What is ROI?

BCR = \frac{\text{Program Benefits}}{\text{Program Costs}}

ROI = \frac{\text{Net Program Benefits}}{\text{Program Costs}} \times 100
Try it!

Program Benefits = $750,000
Costs = $425,000

What is the BCR?
What is the ROI?
TRY IT!

\[
BCR = \frac{\$750,000}{\$425,000} = \\
\]

\[
ROI = \frac{\$750,000 - \$425,000}{\$425,000} \times 100 = \\
\]
TRY IT!

$\text{BCR} = \frac{\$750,000}{\$425,000} = 1.76:1$

$\text{ROI} = \frac{\$750,000 - \$425,000}{\$425,000} \times 100 = 76\%$
SOMETIMES THIS HAPPENS

BCR = \frac{\$750,000}{\$425,000} = 0.76 \times 100 = 76\%
TRY IT!

\[
BCR = \frac{\$750,000}{\$425,000} = 1.76:1
\]

\[
ROI = \left( \frac{\$750,000 - \$425,000}{\$425,000} \right) \times 100 = 76\%
\]
<table>
<thead>
<tr>
<th>Levels of Evaluation</th>
<th>Measurement Focus</th>
<th>Typical Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 Inputs</td>
<td>The input into the project in terms of scope, volume, efficiencies, costs</td>
<td>Participants, Hours, Costs, Timing</td>
</tr>
<tr>
<td>1 Reaction</td>
<td>Reaction to the project or program, including the perceived value</td>
<td>Relevance, Importance, Usefulness, Appropriateness, Intent to use, Motivation to take action</td>
</tr>
<tr>
<td>2 Learning</td>
<td>Learning to use the content and materials, including the confidence to use what was learned</td>
<td>Skills, Knowledge, Capacity, Competencies, Confidence, Contacts</td>
</tr>
<tr>
<td>3 Application</td>
<td>Use of content and materials in the work environment, including progress with actual items and implementation</td>
<td>Extent of use, Task completion, Frequency of use, Actions completed, Success with use, Barriers to use, Enablers to use</td>
</tr>
<tr>
<td>4 Impact</td>
<td>The consequences of the use of the content and materials expressed as business impact measures</td>
<td>Productivity, Revenue, Quality, Time, Efficiency, Customer Satisfaction, Employee Engagement</td>
</tr>
<tr>
<td>5 ROI</td>
<td>Comparison of monetary benefits from program to program costs</td>
<td>Benefit-Cost Ratio (BCR), ROI%, Payback Period</td>
</tr>
</tbody>
</table>
POLL QUESTION:
WHAT LEVEL IS THE HIGHEST TO WHICH YOU HAVE EVALUATED YOUR PROGRAMS?
<table>
<thead>
<tr>
<th>Levels of Evaluation</th>
<th>Measurement Focus</th>
<th>Typical Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 Inputs</td>
<td>The input into the project in terms of scope, volume, efficiencies, costs</td>
<td>Participants, Hours, Costs, Timing</td>
</tr>
<tr>
<td>1 Reaction</td>
<td>Reaction to the project or program, including the perceived value</td>
<td>Relevance, Importance, Usefulness, Appropriateness, Intent to use, Motivation to take action</td>
</tr>
<tr>
<td>2 Learning</td>
<td>Learning to use the content and materials, including the confidence to use what was learned</td>
<td>Skills, Knowledge, Capacity, Competencies, Confidence, Contacts</td>
</tr>
<tr>
<td>3 Application</td>
<td>Use of content and materials in the work environment, including progress with actual items and implementation</td>
<td>Extent of use, Task completion, Frequency of use, Actions completed, Success with use, Barriers to use, Enablers to use</td>
</tr>
<tr>
<td>4 Impact</td>
<td>The consequences of the use of the content and materials expressed as business impact measures</td>
<td>Productivity, Revenue, Quality, Time, Efficiency, Customer Satisfaction, Employee Engagement</td>
</tr>
<tr>
<td>5 ROI</td>
<td>Comparison of monetary benefits from program to program costs</td>
<td>Benefit-Cost Ratio (BCR), ROI%, Payback Period</td>
</tr>
</tbody>
</table>
The Framework Serves Three Purposes

- Needs
- Evaluation
- Objectives
Program Alignment

Start Here

1. Reaction Needs
2. Learning Needs
3. Application Needs
4. Impact Needs
5. Payoff Needs

End Here

Input Needs

0 → Input Objectives
1 → Reaction Objectives
2 → Learning Objectives
3 → Application Objectives
4 → Impact Objectives
5 → ROI Objectives

Program Alignment and Forecasting

The ROI Methodology

AG: 2
**Program Alignment**

**Start Here**

1. **Reaction Objectives**
   - Program receives favorable rating of 4 out of 5 on need for program, relevance of the program, and the practicality of program

2. **Learning Objectives**
   - Be able to demonstrate the use of counseling skills

3. **Application Objectives**
   - Counseling discussions conducted in 95% of situations when an unexpected absence occurs

4. **Impact Objectives**
   - Reduce absenteeism to 5% six months after course

5. **ROI Objectives**
   - ROI of 25%

**End Here**

**Payoff Needs**
- Absenteeism is costing $10,000 monthly.

**Business Needs**
- Unexpected absenteeism is 9% and growing; benchmark data is at 5%

**Job Performance Needs**
- Discussions between team member and supervisor are not occurring when there is an unplanned absence.

**Learning Needs**
- Deficiency in counseling/discussion skills.

**Preference Needs**
- One-day counseling skills workshop must provide usable necessary and relevant skills; facilitator-led; participants are supervisors

---

- Monitor absenteeism records for six months

- Follow-up questionnaire to participants to check frequency of discussions – three months

- Skills practice session during program

- Reaction questionnaire at the end of program

---

- Program receives favorable rating of 4 out of 5 on need for program, relevance of the program, and the practicality of program

- Counseling discussions conducted in 95% of situations when an unexpected absence occurs

- Be able to demonstrate the use of counseling skills

- Reduce absenteeism to 5% six months after course

- ROI of 25%

---

**Project**

**Business Alignment and Forecasting**

**The ROI Process Model**

**V Model Example**
ROI METHODOLOGY PROCESS MODEL

Evaluation Planning
- Develop Objectives of Solution(s)
- Develop Evaluation Plans and Baseline Data
  - Input/Indicators

Data Collection
- Collect Data During Solution Implementation
  - Reaction
  - Learning
- Collect Data After Solution Implementation
  - Application
  - Business Impact

Data Analysis
- Isolate the Effects of Solution
- Convert Data to Monetary Values
- Calculating the Return on Investment
  - ROI
- Identify Intangibles

Reporting
- Capture Costs of Solution
- Develop Report and Communicate Results

© 2017 Copyright ROI Institute, Inc.
GUIDING PRINCIPLES

1. Report the complete story
2. Conserve evaluation resources
3. Use the most credible sources of data
4. Choose the most conservative alternatives
5. Isolate the effects of the program
6. Assume no data, no improvement
7. Adjust estimates for error
8. Throw out the extreme and unsupported claims
9. Use first year benefits for short-term programs
10. Include fully-loaded costs
11. Report intangible benefits
12. Communicate results to all stakeholders
Chain of Impact

- Reaction
- Learning
- Application & Implementation

*Isolate the Effects of the Program*

- Impact
- Intangible Benefits
- ROI

AG: 0
# Data Collection

<table>
<thead>
<tr>
<th>Method</th>
<th>Level 1</th>
<th>Level 2</th>
<th>Level 3</th>
<th>Level 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surveys</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Questionnaires</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Observation</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Interviews</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Focus Groups</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Tests/Quizzes</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Demonstrations</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Simulations</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Action planning/improvement plans</td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Performance contracting</td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Performance monitoring</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>

AG: 6-7
Techniques to Isolate Program Effects

Method
1. Control Groups
2. Trend Line Analysis
3. Forecasting Methods
4. Participant Estimates
5. Manager Estimates
6. Sr. Management Estimates
7. Expert Input
8. Customer Input

* Survey of Users, N = 235
What is ROI?

BCR = \frac{\text{Program Benefits}}{\text{Program Costs}}

ROI = \frac{\text{Net Program Benefits}}{\text{Program Costs}} \times 100
FIVE STEPS TO THE MONEY

1. Unit of Measure: 1 First Aid Treatment
2. \( V = $300 \) standard value
3. \( \Delta = 6 \) incidents per month
   (isolation: experimental versus control)
4. \( \Delta P = 6 \times 12 = 72 \)
5. \( V \times \Delta P = $300 \times 72 = $21,600 \)
Data Conversion Techniques

• Converting output to contribution – standard value
• Converting the cost of quality – standard value
• Converting employee’s time – standard value
• Using historical costs/existing data
• Using internal and external experts
• Using data from external databases
• Linking with other measures
• Using participants’ estimates
• Using supervisors’ and managers’ estimates
• Using staff estimates
FIVE STEPS TO THE MONEY

1. Unit of Measure: 1 Grievance
2. $V = $6,500 Director Labor Relations
3. $\Delta = \text{reduction in grievances and average of 7 per month due to the program}$
4. $\Delta P =$
5. $V \times \Delta P =$
FIVE STEPS TO THE MONEY

1. Unit of Measure: 1 Grievance

2. \( V = $6,500 \) Director Labor Relations

3. \( \Delta = \) reduction in grievances and average of 7 per month due to the program

4. \( \Delta P = 7 \times 12 = 84 \) per year

5. \( V \times A\Delta P = 84 \times $6,500 = $546,000 \)
WHAT IS ROI?

$$BCR = \frac{$546,000}{\text{Program Cost}} =$$

$$ROI = \frac{$546,000 - \text{Program Cost}}{\text{Program Cost}} \times 100 =$$
Typical Intangibles

- Adaptability
- Awards
- Agency brand
- Career minded
- Caring
- Collaboration
- Communication
- Conflicts
- Corporate social responsibility
- Decisiveness
- Engagement

- Image
- Innovation
- Job satisfaction
- Leadership
- Networking
- Organizational climate
- Organizational commitment
- Sustainability
- Stress
- Talent
- Teamwork
Fully-Loaded Program Costs

- Assessment Costs (Prorated)
- Development Costs (Prorated)
- Program Materials
- Instructor/Facilitator Costs
- Facilities Costs
- Travel/Lodging/Meals
- Participant Salaries and Benefits
- Administrative/Overhead Costs
- Evaluation Costs
WHAT IS ROI?

**BCR** = \(\frac{\$546,000}{\$375,000}\) = 1.46

**ROI** = \(\frac{\$546,000 - \$375,000}{\$375,000}\) \times 100 = 46%
Work Engagement
Controllable waste, rework, and engagement.
Isolation: Comparison group and estimates; Data conversion: Standard value
Benefits: $1,265,565; Costs: $253,761
ROI = 399%

eLearning Sales
Close ratio, revenue, customer satisfaction
Isolation: Estimates; Data conversion: Standard value
Benefits: $1,857,000, Costs: $606,600
ROI = 206%

Safety Leadership
Injuries, hazmat violations, property damage, OSHA citations, first aid
Isolation: Estimates; Data conversion: Standard values, expert input, estimates
Benefits: $538,939; Costs: $128,057
ROI = 321%

Safety Incentive
Accident frequency rate, annual disabling accidents
Isolation: Estimates; Data conversion: Expert input
Benefits: $345,898; Costs: $72,172
ROI = 379%
## SAMPLE OPERATIONS REPORT FOR L&D

<table>
<thead>
<tr>
<th>Effectiveness Measures</th>
<th>Unit of Measure</th>
<th>2015 Actual</th>
<th>Plan</th>
<th>Jun YTD</th>
<th>to Plan</th>
<th>Forecast</th>
<th>to Plan</th>
<th>2016 Comparison</th>
<th>Comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 1: Participant Feedback (All programs)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quality of content</td>
<td>% favorable</td>
<td>76%</td>
<td>80%</td>
<td>79%</td>
<td>1% below</td>
<td>79%</td>
<td>1% below</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quality of instructor</td>
<td>% favorable</td>
<td>80%</td>
<td>85%</td>
<td>86%</td>
<td>1% above</td>
<td>85%</td>
<td>on plan</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relevance</td>
<td>% favorable</td>
<td>72%</td>
<td>78%</td>
<td>73%</td>
<td>5% below</td>
<td>75%</td>
<td>3% below</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alignment to goals</td>
<td>% favorable</td>
<td>68%</td>
<td>75%</td>
<td>69%</td>
<td>6% below</td>
<td>71%</td>
<td>4% below</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total for Level 1</td>
<td>Average of measures</td>
<td>74%</td>
<td>80%</td>
<td>77%</td>
<td>3% below</td>
<td>78%</td>
<td>2% below</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Level 1: Sponsor Feedback (Select programs)</td>
<td>% favorable</td>
<td>66%</td>
<td>80%</td>
<td>68%</td>
<td>12% below</td>
<td>75%</td>
<td>5% below</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Level 2: Learning (Select programs)</td>
<td>Score</td>
<td>78%</td>
<td>85%</td>
<td>83%</td>
<td>2% below</td>
<td>85%</td>
<td>on plan</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Level 3: Application rate (Select programs)</td>
<td>% top two boxes</td>
<td>70%</td>
<td>75%</td>
<td>70%</td>
<td>5% below</td>
<td>72%</td>
<td>3% below</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Actual application (after three months)</td>
<td>% who applied it</td>
<td>51%</td>
<td>65%</td>
<td>55%</td>
<td>10% below</td>
<td>63%</td>
<td>2% below</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Level 4 (Select programs)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Estimate by participants (end of course)</td>
<td>% contribution to goal</td>
<td>20%</td>
<td>25%</td>
<td>15%</td>
<td>10% below</td>
<td>20%</td>
<td>5% below</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Level 5 (Select programs)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net benefits</td>
<td>Thousands $</td>
<td>$546</td>
<td>$800</td>
<td>$250</td>
<td>31%</td>
<td>$650</td>
<td>81%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ROI</td>
<td>%</td>
<td>29%</td>
<td>35%</td>
<td>25%</td>
<td>10% below</td>
<td>30%</td>
<td>5% below</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Center For Talent Reporting
www.centerfortalentreporting.org
### Efficiency Measures

<table>
<thead>
<tr>
<th>Efficiency Measures</th>
<th>Unit of Measure</th>
<th>Actual</th>
<th>Plan</th>
<th>Jun YTD</th>
<th>to Plan</th>
<th>Forecast</th>
<th>Comparison to Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Participants</td>
<td>Number</td>
<td>109,618</td>
<td>147,500</td>
<td>67,357</td>
<td>46%</td>
<td>145,000</td>
<td>98%</td>
</tr>
<tr>
<td>Total Unique Participants</td>
<td>Number</td>
<td>40,729</td>
<td>45,313</td>
<td>36,998</td>
<td>82%</td>
<td>44,000</td>
<td>97%</td>
</tr>
</tbody>
</table>

### Courses Taken by Type of Learning

<table>
<thead>
<tr>
<th>Type of Learning</th>
<th>% of total</th>
<th>ILT only</th>
<th>E-learning only</th>
<th>vILT only</th>
<th>E-learning only</th>
<th>Blended only</th>
<th>Total courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>ILT only</td>
<td>% of total</td>
<td>56%</td>
<td>25%</td>
<td>40%</td>
<td>15% below</td>
<td>33%</td>
<td>8% below</td>
</tr>
<tr>
<td>vILT only</td>
<td>% of total</td>
<td>3%</td>
<td>12%</td>
<td>9%</td>
<td>3% below</td>
<td>10%</td>
<td>2% below</td>
</tr>
<tr>
<td>E-learning only</td>
<td>% of total</td>
<td>35%</td>
<td>48%</td>
<td>39%</td>
<td>9% below</td>
<td>42%</td>
<td>6% below</td>
</tr>
<tr>
<td>Blended only</td>
<td>% of total</td>
<td>6%</td>
<td>15%</td>
<td>12%</td>
<td>3% below</td>
<td>15%</td>
<td>on plan</td>
</tr>
<tr>
<td>Total courses</td>
<td>% of total</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Utilization of E-learning Courses

| Available | Number | 60 | 74 | 65 | 88% | 70 | 95% |
| Taken by more than 20 | Number | 50 | 70 | 19 | 27% | 55 | 79% |
| % taken by more than 20 | %     | 83% | 95% | 29% | 66% below | 79% | 16% below |

### Reach

| % of employee reached by L&D | %     | 85% | 88% | 72% | 16% below | 88% | on plan |
| % of employees with development plans | %     | 82% | 85% | 84% | 1% below | 90% | 5% above |

### Course Management

| Total Developed | Number | 22 | 36 | 18 | 50% | 36 | 100% |
| Number Meeting Deadline | Number | 16 | 33 | 12 | 36% | 28 | 85% |
| % Meeting Deadline | %     | 73% | 92% | 67% | 25% below | 78% | 14% below |
| Total Delivered | Number | 143 | 178 | 99 | 56% | 180 | 101% |
Seamless Integration

LEARNING STRATEGY

Assess the Business Needs

Optimize Results

Tell the Story

Make it Credible

Determine the Cause

Identify Solution

Make Solution Matter

Make Solution Stick
How can you get started?

✓ Assess your readiness for ROI
✓ Identify stakeholders and their data needs
✓ Determine the purpose of your evaluation practice
✓ Identify programs suitable for ROI
✓ Build capability in the ROI Methodology
How can you get started?

- Assessing your readiness for ROI
- Identifying stakeholders and their data needs
- Determining the purpose of your evaluation practice
- Identifying programs suitable for ROI
- Building capability in the ROI Methodology

**Remember:**
- Hope is not a strategy.
- Luck is not a factor.
- Doing nothing is not an option.

The time is now to move from activity to results…….
Show me the money!
Demonstrating the ROI in Training Programs

Patti P. Phillips, Ph.D., CPLP
President & CEO
patti@roiinstitute.net
www.roiinstitute.net