



Return On Investment (ROI) Calculator Guide



Foresight Management Development

WHITE PAPER





HOW TO CALCULATE THE RETURN ON INVESTMENT OF YOUR TRAINING INITIATIVES

One of the most common questions I receive about our success in calculating the value and results of our management training program is: "how do you calculate the investment value or the return on your investment?" We use a combination of three key methods or tools:

- 1 Standard accepted accounting principles formula commonly used to calculate return on investment:

$$\text{ROI (\%)} = \text{Net Program Benefits divided by Program Costs} \times 100$$

- 2 The Phillips method (created by Jack J. Phillips, Ph.D.) which help identify and organize data into hard data and soft data, providing source examples to extract a variety of potential data sources:

$$\text{Benefit/Cost Ratio} = \text{Program Benefits divided by Program Costs} \times 100$$

- 3 The Foresight Management Development Process which mixes the first two methods in a simplified step-by- step instruction providing instructional examples, to help identify and convert data sources into monetary value.

Hard Data Examples

OUTPUT

- Revenue Generated
- Units Produced
- Items Assembled
- Units/Items Sold
- Forms Processed
- Loans Approved
- Patients Processed
- Inventory Turnover
- Students Graduated
- Output Per Hour
- Productivity
- Work Backlog
- Shipments
- New Accounts Opened

COST

- Unit Costs
- Budget Variances
- Liability Costs
- Turnover Costs
- Variable or Fixed Costs
- Overhead Costs
- Operating Costs
- Project Cost Savings
- Accident Costs
- Program Costs
- Gen.& Adm. Expense
- Sales Expense Reductions
- R&D Costs Reductions
- Number of cost reductions
- Cost by Account

TIME

- Overtime Reduction
- Time to Market
- On-time Shipments
- Meeting Time
- Work Stoppages
- Equipment Downtime
- Absentee Time
- Processing Time
- Late Reporting
- Efficiency
- Repair Time
- Learning Time
- Customer Response
- Order Response
- Project Timeline
- Time to Project Completion
- Supervisory Time
- Lost Time Hours

QUALITY

- Scrap
- Waste
- Rejects
- Error Rates
- Six Sigma
- Rework
- Shortages
- Delays
- Product Defects
- Deviation from Std.
- Product Failures
- Inventory Adjustments
- Time Card Errors
- # of Accidents
- % of Tasks Performed Properly

*Source: ©How to Measure Training Results, Phillips & Stone, 2002



Soft Data Examples

CUSTOMER SERVICE

- Customer Complaints
- Customer Satisfaction
- Customer Loyalty
- Customer Dissatisfaction
- Customer Impressions
- Customer Retention
- Customer Value
- Lost Customers

INITIATIVE & INNOVATION

- New Products & Services
- New Patents & Copyrights
- Number of Suggestions
- Successful Projects Done
- New Ideas Generated
- New Ideas Implemented
- Excessive Waste
- Suggestions Adopted
- Setting Goals & Objectives

WORK HABITS

- Absenteeism
- Tardiness
- Safety Rules Violations
- Follow-up
- First Aid Treatments
- Communication Breakdowns
- Down time
- Excessive Work Breaks

WORK CLIMATE

- Employee Complaints
- Litigation
- Number of Grievances
- Discrimination Charges
- Job satisfaction
- Employee Satisfaction

EMPLOYEE DEVELOPMENT

- Number of Promotions
- Number of Learning Programs
- Performance Appraisal Ratings
- Succession Planning Ratings
- Increased Job Effectiveness
- Number of Pay Increases



7 STRATEGIES FOR CONVERTING DATA TO MONETARY VALUES:

- 1 Convert output (performance) to contribution (from accounting and operational records).** Ex: A production team at a major appliance company is able to boost production of small refrigerators as a result of a series of highly-focused process training programs.
- 2 Convert or Calculate the Cost of Quality - If quality is measured with a defect rate (Ex: % of rejections),** the value of the improvement is the cost to replace or reproduce the product.
- 3 Convert Employee Time - Reduction in time (before and after) spent on tasks.** The unit to measure the improvement will be labor cost. Ex: Participants estimated an average time savings of 74 minutes per day, worth \$31.25 per day or \$7,500 per year (estimated salaries plus benefits). You can also use before-and-after historical costs.
- 4 Use Internal (accountants, engineers, QA manager, manufacturing managers) and External Experts -** When historical data is not available, these experts in a particular process can provide you with before and after estimates of the cost (or value) of one unit of improvement.



- 5 **Use Values From External Databases** - In some cases, you can use industry average outputs that you can compare with your output improvement. Ex: *An evaluator searching the value of turnover for chemical engineers vs. their own turnover rate used a national database to determine the value and, therefore, the savings resulting from a better-than-industry standard training program, which reduced turnover. At an annual salary of \$70,000, if the turnover were reduced from 30 chemical engineers per year, the gain of 20 would result in an annual savings of \$140,000 [$\$70,000 \times 200\% = \$140,000$ (turnover cost range based on outside industry data sources)].*
- 6 **Use Estimates From Participants** - Participants are capable of providing estimates of the cost (or value) of the unit of measure improved by applying the skills learned in the *Management Development Program*.
- 7 **Use Estimates From Supervisors and Managers** - Team leaders, supervisors or managers may be asked to provide a value for a unit of improvement linked to the *Management Development Program*.



HOW TO CONVERT A UNIT OF IMPROVEMENT TO THE MONETARY VALUE OF AN IMPLEMENTATION:

Using the example from the previous section (Use of Values From External Databases, point #5), the following is a step-by-step method to convert units of improvement to the monetary value in any implementation:

STEP 1: Determine the unit of Improvement - What measure is the program directly influencing or improving? (Ex: *increase in sales, decrease in scrap, time savings in meetings, special project implemented, time freed through prioritization of tasks, etc.*)

» Unit of Improvement: Turnover

STEP 2: Determine the Value of Each Unit - What is the value of one unit or measure? (Ex: *one unit of sales, one unit of waste, one hour of time savings, etc.*)

» Value (cost) of Each Unit: \$140,000 ($\$70,000$ annual salary \times 200% [industry average turnover rate])

STEP 3: Determine the Performance Improvement - How much did the measure change during the reported period? (Ex: *this month vs. last month, this year vs. last year, before implementation and after implementation, etc.*)

» Performance Level Change: 20. Annual retention of 20 chemical engineers due to a superior training program

STEP 4: Calculate the Improvement Value - (Step 2 \times Step 3 = monetary value, resulting from the implementation)

» Improvement Value: \$2,800,000 annually ($\$140,000 \times$ annual retention improvement of 20 engineers)



**CALCULATING THE VALUE OF YOUR TIME
IN YOUR CURRENT POSITION**

1. Annual Gross Salary: \$ _____

2. Value of Annual Benefits: \$ _____

3. Value of Other Compensation: \$ _____

Total Annual Compensation Package: \$ _____

divided by 52 (weeks/yr) \$ _____

per week; divided by 40 (hours per week) \$ _____ per hour; divided by 60 (minutes per hour)

\$ _____ per minute; divided by 60 (seconds per minute)

\$ _____ per second.

Value of One Second of My Time at Work: \$ _____



ROV CASE STUDY EXAMPLES:

- » A stainless steel fabricator in Florida had scrap waste, thus, losing \$2,000,000 per year due to poor communication between the production departments. After attending the session on Developing Effective Teams, they organized the employees in creative thinking teams, which started a weekly creative-thinking, problem-solving process that resulted in communications and process improvements. Waste was reduced by 50% after the first year (\$1,000,000 savings).
- » An insurance company applied the customer retention ideas and techniques, resulting in a retention of 2% of their customers (their average annual attrition and customer replacement rate was 5 to 10%). A 2% retention increase resulted in savings of over \$2,000,000, based on policy renewals and premium billings of \$200,000,000 (2% equals \$2,000,000).
- » A pharmaceutical company started using the Quadrants of Efficiency to prioritize their time, which resulted in a saving of one hour per day of their time (by doing more crucial work in less time). They used their extra time for planning, process analysis and redesign, and employee coaching. One hour per day (based on an \$80,000 ave. salary per year; $\$38.46 \text{ per hour} \times 5 \text{ hrs per week} \times 50 \text{ weeks} = \$9,615 \text{ per yr.}$) in productivity improvement for the company, per manager, per year (20 managers @ \$9,615 in savings per manager = \$192,300 per year).
- » A radio station developed new strategies and tactics which helped them meet an annual deficit of \$100,000 in their fundraising efforts. They also reported savings of an hour per day by prioritizing not only their own time, but the different activities they were conducting every year. The savings in time were $\$9,615 \times 10 \text{ managers} = \$96,150$, plus \$23,000 in efficiency improvements (20 minutes per day = $\$12.82 \times 10 \text{ managers} = \$128.82 \text{ per day} \times 260 \text{ work days per year} = \$33,493$).
- » Another company reported personal communications and meeting management improvements between managers, which they calculated saved them at least 15 minutes per day, per meeting (times six managers = 1,500 hours per yr. $\times \$38.46 \text{ hr.} = \$57,690 \text{ per year}$).
- » A regional blood collection and distribution organization was able to save and obtain an extension of a \$25,000 matching funds grant by using the interest-based negotiation techniques within the Conflict Resolution and Interest-Based Negotiations session.
- » Another company had a high turnover of managers (two per year). By applying the techniques on How to Recruit, Hire and Keep Winners, they eliminated the turnover by investing more time in the hiring process and not compromising their standards. According to research, hiring and letting a manager go within six months costs companies \$20,000 or more. This company saved \$40,000 just in one year by retaining their newly-hired managers.
- » An auto parts distributor, by improving their hiring and recruitment techniques and improving their Performance Feedback system and their internal/external customer experience, saved \$20,000 per manager in recruitment costs and expenses (three managers recruited that year $\times \$20,000 = \$60,000$) through their ability to hire and keep higher-quality candidates.



PROJECT IMPLEMENTATION CALCULATOR WORKSHEET

The reason we are on the payroll of our organizations is to create value for our companies. You have been selected to enroll in the Management Development Program to create more value for your company through the implementation in the workplace of what you will be learning.

This worksheet was created to assist you in calculating the return on value of skills implementation. A copy of this worksheet will be provided at the end of each workbook. You will use one sheet per monthly session to describe the project or idea that you implemented over the course of the six weeks between sessions. Using one of the criteria outlined in the Introduction to the Foresight MDP Program workbook (pages 7, 8 and 9), calculate the impact (payoff) in monetary value of each implementation next to the criteria that best applies to your project/skill/idea. Make sure to clearly define the specific value of your implemented idea or project and how you arrived at the monetary calculation. At the end of the course, a copy of your completed forms will be directed to the CEO and HR departments for their evaluation.

Working on and turning in your ROV calculations is a prerequisite for graduation in the MDP.

Month: _____ Session: _____

Scope of Project/Implementation: _____

ROV MEASUREMENT CRITERIA:

- 1 **Output** (increases in units per hour, productivity increase, time savings, gadgets processed, etc.) :
- 2 **Cost** (savings, cost reduction, etc.) :
- 3 **Time** (time saved, efficiencies, process improvement, better time, more output in less time, etc.) :
- 4 **Quality** (quality improvements, process improvements, improved efficiencies, less waste, etc.) :
- 5 **Customer Service** (customer retention, complaints reductions, improved customer experience, customer increases, etc.) :



PROJECT IMPLEMENTATION CALCULATOR WORKSHEET

- 6 Initiative & Innovation (new ideas implemented, process redesign, new products/services, etc.) :
- 7 Work Habits (reduction in absenteeism, tardiness, workplace motivation, less stress, etc.) :
- 8 Work Climate (improved motivational environment, improved communication, less complaints, etc.) :
- 9 Employee Development (promotions, improvements in performance reviews, skills improvement, etc.) :



EXAMPLE:: R.O.V. Calculation/Reporting Form

MDP SESSION: *How to Resolve Conflict and Practice Interest-Based Negotiation*

Description of Project or Idea: *Develop plan to decrease over-time and WIP inventory during times of high production demands.*

Scope of Implementation: *Meet with floor supervisors for their input on current staffing and inventory practices in preparation for high production demand. With better understanding of needs, partner with supervisors to develop and implement a plan to reduce over-time and WIP inventory for the month of July. Re-apply successes going forward.*

ROI Measurement Criteria: *Decreased OT and WIP inventory; improved communications with and between floor supervisors.*

Explanation of Formula Used to Calculate Dollar Value: *Comparison of OT costs for June vs. July; comparison of WIP inventory for June vs. July.*

Dollar Value of the Implementation: \$ *OT savings June vs. July: \$1,304.00; WIP savings June vs. July: \$153,870.*