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LEARNING

LEARNING INSIDE & OUT.

How to measure financial
return on investment
in your business initiative

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Please note that, for the sake of simplicity, the term 'programme' is used throughout this booklet to refer to a project, programme, event, training, e-learning course, process, etc.

Foreword

Few people prove the value of the initiatives they implement, or predict their value in advance, so it is easy to over-invest in initiatives that sound good without ever considering what effect they will have on your business or whether they will truly add value.

Use the steps in this guide to measure your initiative's effectiveness and bottom-line contribution so that you know the extent to which it provides a good-value return on the company's investment in it.

Measuring financial return on investment (ROI) means your business will be less likely to continue supporting ineffective initiatives, and more likely to benefit from efficiency gain opportunities.

Complete Learning Solutions is New Zealand's only partner for the internationally-acclaimed ROI Institute™, and all advice in this booklet is based on the institute's ROI Methodology™.

This tried and tested framework can be used on many different types of initiatives, including:

Roles
- Human resources
- Learning and development
- Programme management
- Engineering
- Public relations/ Communications
- Marketing
- Risk management
- Ethics
- Compliance

Courses/Events
- Training
- e-Learning
- Meetings
- Events
- Conferences

Projects
- Organisational development
- Organisational consulting
- Technology
- Systems
- IT implementation and upgrades
- Change management

Programmes
- Leadership
- Coaching/mentoring
- Policies, procedures and processes
- Recognition, incentive and reward
- Employee engagement
- Health and safety
- Wellness, fitness and other health initiatives
- Quality, Six Sigma, Lean
- Talent management and retention
- Public policy
- Social
- Sustainability

Determining the financial contribution of 'overhead' initiatives has often been incorrectly dismissed as being too difficult. Understanding how, and being able to demonstrate, your organisation's return on its investment for any initiative – whether that be training, change projects or programmes – will benefit you – the employee who leads the initiative, the professions involved, and the organisation as a whole.

Best wishes
Beryl Oldham
Managing Director, Complete Learning Solutions

The 10-step ROI Methodology Model and Framework

The 10-step ROI methodology model (shown in the diagram below) is a robust, results-based way of evaluating effectiveness and measuring bottom-line contribution for a wide range of programmes.

Evaluation Planning

1 Conduct a needs assessment and develop programme objectives → **2** Plan for evaluation

Data Collection

3 Collect data during programme implementation → **4** Collect data after programme implementation

Data Analysis

5 Isolate the programme's effects → **6** Convert data to monetary values → **7** Identify intangible benefits

8 Tabulate the programme's costs → **9** Calculate the ROI

Reporting

10 Report data to key stakeholders

ROI Evaluation Framework

The methodology's evaluation framework is designed as a sequence of ways by which to evaluate programmes, with Level 5 (determining financial ROI) being the most thorough evaluation and Level 1 (determining reaction) being the most basic.

Data must be collected from lower levels before a higher evaluation level is conducted, which means a Level 5 evaluation requires data collected from each of Levels 1–4, as well as cost input data for the ROI calculation.

ROI Evaluation Framework

Level	What you need to find out
Level 5: ROI	• What is the programme's financial contribution?
Level 4: Impact	Establish impact objectives that reflect the following criteria: • What is the business need? • What are the desired outcomes? • How will the programme benefit the business? • What will be different in terms of business results? • How much of any change in business results can be attributed to the programme? • Can the business results be converted to monetary values? (If they cannot, then it will not be possible to calculate Level 5: Financial ROI)
Level 3: Application	Establish application objectives that reflect the following criteria: • What is the performance need? (What performance is required to enable the required business impact at Level 4?) • How will the programme affect performance? (What learning objective from Level 2 must be applied on the job?) • What will be different in terms of workplace performance and/or change(s) in behaviour?
Level 2: Learning	Establish learning objectives that reflect the following criteria: • What is the learning need? (What learning is required to enable on-job performance at Level 3?) • What are the learning objectives? • What will be the resulting change in skills, attitudes and/or knowledge?
Level 1: Reaction	Establish reaction objectives that reflect the following criteria: • What is the participant/manager/stakeholder need? • How will we know the programme meets participants' and stakeholders' needs and is considered worthwhile?
Cost inputs	Include costs such as: • Analysis, design, development, implementation and evaluation expenses • Venue, travel and accommodation expenses • Administrative expenses • Time costs for those involved, including salaries and wages Level 5 (financial ROI) calculations will not be possible unless all programme cost inputs are collected. However, it is possible to conduct lower-level evaluations without knowing costs.

Step 1: Conduct a Needs Assessment and Develop Programme Objectives

Many programmes are unnecessary, poorly targeted or badly designed because they are not clear about which needs or opportunities will be realised when they are implemented. Get your programme off to a strong start by undertaking a needs analysis before doing anything else. Being clear about the need then enables meaningful objectives and measures to be set.

Conducting a Needs Analysis

As shown in the Business Alignment Model on the following page, a robust needs analysis will consider the different types of needs related to the proposed programme; it will also establish objectives relating to each need category. There are six different types of need categories that are directly associated with each ROI evaluation level. The need categories should be addressed in the following order:

Payoff needs: Questions to ask include: Is there an opportunity for a positive payoff? Is this a problem that is financially worth solving or an opportunity worth exploring?

Business needs: Questions to ask include: What specific business impact measures will this programme influence? What will be different in terms of business performance as a result of this programme?

Performance needs: Questions to ask include: What should the participants do or stop doing to change their performance in order to meet the business needs? What changes in people's performance are expected if they apply the new knowledge or skills gained on this programme?
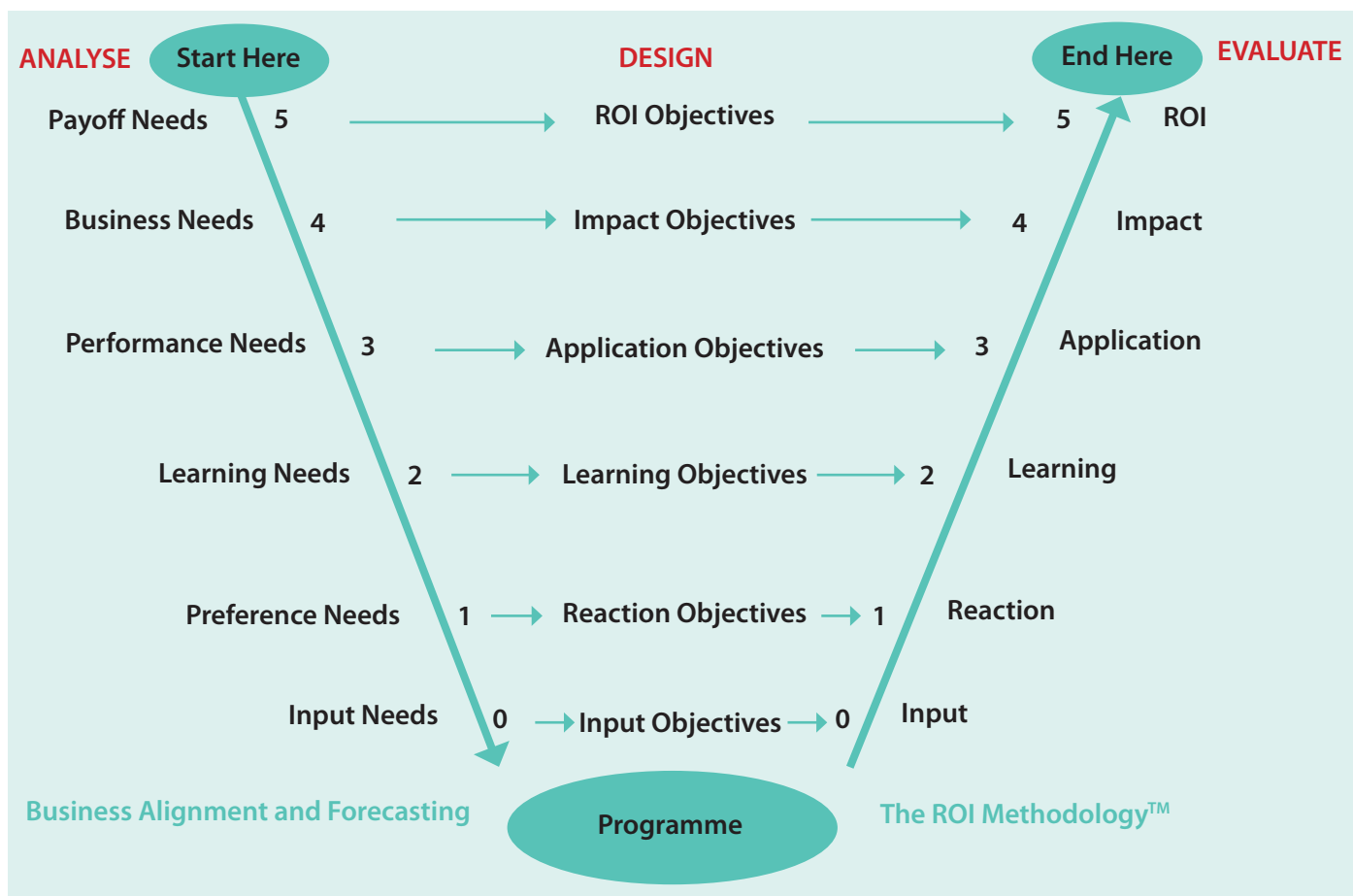
Learning needs: What specific knowledge, skills or information do participants need for the new process / role / policy, etc.?

Preference needs: How should the stakeholders, including the participants, perceive the programme in terms of value and need?

Input needs: What costs are associated with the programme?

As shown in the Business Alignment Model below, the programme should be evaluated at each need level, based on the associated objectives. This will enable any issues to be identified and addressed before progressing to the next stage.

Business Alignment Model

Developing Programme Objectives

The following examples are from a study that was conducted to measure the ROI of a leadership development programme.

Evaluation begins with being clear about the programme's objectives. Programme objectives must go beyond typical learning objectives and include up to five levels of data, which are as follows:

1. Reaction objectives: Reaction objectives describe the desired immediate reaction to the programme, highlighting issues that are important to its success and emphasising planned action, if feasible.

Reaction objectives example

After completing this programme, all participants should rate the following items 4 or 5 on a 1–5 rating scale:
 • I learned new knowledge and skills in the workshop
 • The workshop content was relevant to my role
 • I intend to use the leadership techniques introduced during the workshop
 • I intend to have regular performance development conversations with my staff (at least bimonthly)
 • I would recommend this workshop to others

2. Learning objectives: These objectives communicate expectations for obtaining new information, skills and knowledge, and describe competent performance connected with learning.

Learning objectives example

After immediate completion of this programme, all participants should:
 • Achieve a leadership simulation test score average of at least 75%
 • Demonstrate the five key attributes of leadership
 • Use the GROW coaching model in performance development conversations

3. Application objectives: Application objectives describe performance outcomes, including use of skills and knowledge, on-the-job performance changes, and programme implementation.

Application objectives example

Two months after completing this programme, all participants should:
 • Provide feedback in situations where performance is substandard
 • Provide positive feedback in situations where performance meets or excels expectations
 • Complete all action plan items
 • Conduct regular one-on-one performance development chats with each staff member (at least bimonthly)
 • Use the GROW coaching model in performance development conversations

4. Impact objectives: These objectives describe the consequences of applying skills or implementing the programme, and are expressed as specific measures of output, quality, cost, time and satisfaction.

The business objectives for implementing this programme are:

As a result of implementing this programme:
 • Reduce voluntary turnover by 20% in 12 months.
 • Increase the next staff climate survey's overall results by 5%.
 • Increase customer satisfaction ratings by 10% in 12 months.

5. ROI objectives: These objectives set the acceptable level of monetary benefits versus costs of the programme, and may be expressed as a ROI percentage.

ROI objectives example

After calculating the benefits and the costs, the programme should:
 • Achieve at least a 25% return on investment within the first year

Handy hint: Make sure your objectives are 'SMART' – Specific, Measurable, Achievable, Realistic, Timebound. For example:

Not SMART: Participants will feel the training was beneficial

SMART: At least 95% of participants will rate the training as 'very helpful' or 'extremely helpful'

Step 2: Plan for Evaluation

Planning, which typically involves key stakeholders, begins as soon as it is decided that an impact/ROI study should be conducted. All important decisions for the study should be made early through evaluation planning. This step involves completing the following three documents, all of which are discussed in more detail below:

 • Data collection plan
 • ROI analysis plan
 • Evaluation plan

Data Collection Plan

Data collection planning answers the following fundamental questions about data collection: what, how, who, when, where, and how much? We have populated the table below with suggestions you may find useful. Use this as a template to develop your data collection plan.

Level	Action	Measures	Data Collection Methods	Data Sources	Target Date	Responsibilty
1	**Reaction and planned action** List reaction items to measure	• Satisfaction • Importance • Relevance • Intent to use • Would recommend	• Questionnaire • Survey	• Participants	On completion of intervention	• Programme lead • Facilitator/co-ordinator • Evaluator
2	**Learning and confidence** List learning objectives	• Pre- and post-testing • Assessments • Skill practices • Simulation results	• Test results • Questionnaires	• Facilitators • Managers • Participants	On completion of intervention	• Programme lead • Facilitator • Evaluator
3	**Performance** List application objectives	• Action plan completed • Applied learning • Performance results • Barriers and enablers identified	• Action plans • Questionnaires	• Participants • Managers	6–16 weeks post intervention (ideally about 12 weeks post)	• Managers • Evaluator
4	**Business goals** List business objectives	• Business improvement • Productivity and efficiency • Customer satisfaction • Engagement scores • Participant estimates and confidence ratios	• Business performance management systems • Organisational surveys • Financials • Customer surveys • Control groups • Trend analysis • Estimate and confidence questionnaires	• Managers • Financial accountants • Performance measurement team • Participants	Pre- and post – ideally 6- and 12-month intervals pre-and post-intervention (participant estimates and confidence ratios may be collected with Level 3 data)	• Managers • Evaluator • Financial accountants
5	**ROI** State ROI objective	• Standardised ROI calculation based on monetised performance measures	• Business performance management systems and business financial records • Tabulation of programme costs	• Evaluator • Financial accountants • Commercial manager • Programme leads	Pre- and post – ideally 6- and 12-month intervals pre- and post-intervention	• Evaluator

ROI Analysis Plan

The ROI analysis plan details how business measure improvements will be isolated to the programme and converted to monetary value. Cost categories, intangible benefits and target audiences for communication are also identified.

ROI analysis plan example

Data Items (Usually Level 4)	Methods for Isolating Programme Effects	Methods of Converting Data to Money	Cost Categories	Intangible Benefits	Communication Targets for Final Report	Other Influences/ Issues During Application	Comments
• Sales growth • Productivity/ operational efficiency • Direct cost reduction • Retention of key staff members • Customer satisfaction	• Estimates from executives (Use this method for all data items)	• Standard values • Expert input • Executive estimates (Use these methods for all data items)	• Initial needs assessment • Coaching fees • Travel costs • Executive time • Administrative support • Administrative overhead • Telephone expenses • Facilities evaluation	• Increased commitment • Reduced stress • Increased job satisfaction • Improved customer service • Improved teamwork • Improved communications	• Executives • Coaches • Senior executives • Coaching supplier • Learning and development team • Programme participants and their managers	• A variety of initiatives will influence the impact measures, including our Six Sigma process, service excellence programme, and our efforts to become a great place to work	• Securing commitment from executives to provide accurate data in a timely manner is extremely important

Evaluation Plan

This plan details each step of the evaluation, all of which should be taken to be able to ascertain the true return on the programme's investment. Here's an evaluation plan example:

	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan onwards
Decide to conduct ROI study	■											
Complete evaluation planning	■											
Design evaluation instruments	■											
Pilot test evaluation instruments		■										
Collect data from Group A				■	■							
Collect data from Group B					■	■						
Summarise data							■					
Conduct analysis							■	■				
Write and print report								■				
Communicate results									■			
Initiate improvements										■		
Complete improvements											■	■
Evaluate improvements											■	■

Step 3: Collect Data During Programme Implementation

It is important to collect data at each ROI framework level, because it shows the degree to which the programme is on track with its overarching objectives. Mistakes tend to amplify, so correcting problems early can prevent costly failures and reworks later. Two types of data are collected during a programme's implementation: reaction data and learning data.

Reaction Data

Reaction data elicits feedback around how participants and other important stakeholders feel about the programme. Knowing the extent to which it is meeting their needs ensures that they remain engaged. The typical methods for capturing reaction data are:

Feedback questionnaires: Simple feedback questionnaires are a quick and inexpensive way of finding out how participants feel while enabling them to remain anonymous during the process.

Action plans: Getting participants to complete action plans provides a way of measuring their stated intention to use their new knowledge/processes, etc.

Interviews: One-on-one interviews are an effective way of getting granular feedback at the programme's outset, or further down the track.

Focus groups: Another way of getting more granular feedback. Some participants may be reluctant to voice their opinion in front of others. Focus groups are useful when it is important for participants to hear other people's views and ideas.

Reaction data typically addresses the following topics:

Programme Design

• Objectives

• Timing

• Materials

• Duration

• Location

Programme Implementation

• Delivery method

• Facilitator/co-ordinator

• Facilities/environment

• Service

Programme Value

Include questions that ascertain the extent to which participants found the programme valuable. For example, to what extent did you find the programme:

• Necessary

• Motivational

• Useful

• Relevant*

• Practical

• A good investment

• Important to success*

• Valuable

• Provided new information*

Other programme value questions focus on:

• Likelihood of recommending it to others*

• Overall satisfaction with programme

• Planned improvements as a result of the programme

• Intent to use knowledge and/or tools gained*

*There is usually a correlation between scoring levels on these items and people's likelihood of applying the programme in their jobs.

Learning Data

Learning data focuses on what participants and other key stakeholders now know or can do as a result of the programme. Learning data is captured through a variety of measurement processes, ranging from formal testing to informal self-assessments. Several methods are used, including:

Surveys and questionnaires: Determine the extent to which participants have acquired skills, knowledge and information.

Facilitation assessments: Capture ratings from facilitators or programme leaders based on observations during the programme.

Written tests and exercises: Measure changes in knowledge and skills.

Skill practices: Help assess the degree of applied learning and problem-solving skill acquisition.

Performance demonstrations: Provide direct evaluation of the ability to apply knowledge and skills.

Simulations: Enable assessment of skills and knowledge acquisition.

Team assessments: Ascertain the extent of skills and knowledge acquisition.

Skill-/confidence-building exercises: Assess skill and knowledge levels in an interactive way.

The typical topics covered by learning data are:

- Awareness
- Knowledge
- Perception
- Skills
- Competency
- Confidence

Step 4: Collect Data After Programme Implementation

Two types of data are collected after a programme is implemented: Level 3 application data (i.e. how the programme's objectives are being applied on the job) and Level 4 impact data (i.e. how applying the programme's objectives are impacting the business). Impact data includes variables such as output, revenue, errors, absenteeism, employee turnover, customer satisfaction, incidents, etc.

The following methods can be used to collect data after the programme has been implemented:

Surveys: Determine how extensively the participants have used various aspects of the programme.

Questionnaires: Usually more detailed than surveys, and can be used to uncover a wide variety of data using open-ended and forced-response questions.

Observations: Captures actual skill application and use. Observations are particularly useful in customer service programmes, and are effective when the observer is either invisible or transparent.

Interviews: Conducted to determine how extensively the programme is used – and why/why not.

Focus groups: Conducted to determine the extent to which the programme is used – and why/why not.

Action plans: Developed by participants during the programme and implemented after it is completed. Follow-up on action plans provides evidence of application and business impact success.

Performance contracts: Developed by the participant, the participant's supervisor and the facilitator, who all agree on performance outcomes.

Performance monitoring: Useful where various performance records and operational data are monitored for changes.

How to Achieve Good Response Rates for Surveys

The more responses received, the more integrity your data will have. That is why it is important to elicit as many responses as possible when undertaking surveys and implementing action plans. Ensuring your feedback instrument is well designed and well communicated will help boost response rates.

Feedback Survey Design Tips

- Keep the survey simple and as brief as possible
- Ensure the document's format and design are professional and attractive
- Keep responses anonymous – or at least confidential
- Make it as easy as possible for people to respond (e.g. include an addressed, stamped envelope with paper-based questionnaires)
- Where possible, give people a choice of response mechanisms (e.g. email, web, paper-based)
- Use local managers to distribute the feedback surveys, show support and encourage response
- Consider having a third party collect and analyse the data

Communication Before the Survey is Undertaken

- Let people know in advance that they will be asked to complete a survey

- Clearly communicate the reason for the evaluation and how the data will be used
- Indicate who will see the results
- If appropriate, let the target audience know that they are part of a carefully selected sample
- Have the introduction letter signed by a top executive
- Communicate the time limit for submitting responses
- Provide an incentive (or the chance of an incentive) for a quick response

Communication During and After the Survey

- Do one or two follow-up reminders
- Send a summary of results to the target audience
- Let participants know what actions will be taken as a result of their feedback
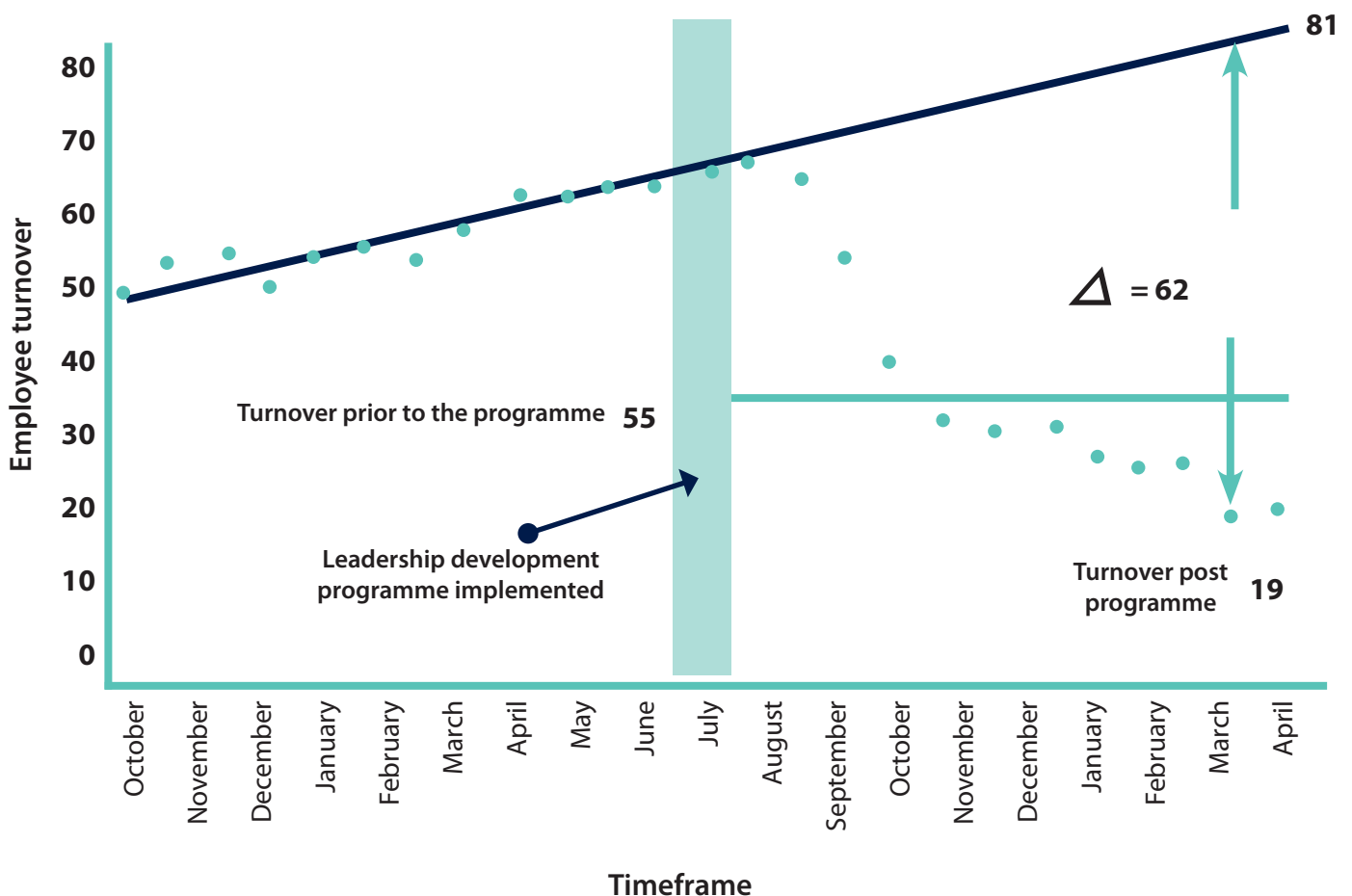
Step 5: Isolate the Programme's Effects

Isolating the programme's effects is one of the most critical steps in the ROI process, because doing this will enable you to know whether the programme – rather than some other factor – has made the difference. While it can be difficult to isolate the programme's effects from other influences, it is necessary for the study's credibility. Without this step, there is no proof that the programme is connected to a business measure.

Various techniques can be used to isolate the programme's effects, but some are more credible than others. For example, scientifically robust studies are more credible, but they are also more difficult, time-consuming and expensive to do. Programme effect isolation techniques (in order of credibility) are as follows:

Control groups are used to isolate the programme's impact. This strategy involves one group participating in a programme, while another similar group (the control group) does not. Each group's performance is monitored and evaluated in a parallel timeframe, and any performance differences are identified and quantified.

Trend lines are used to show the values of specific output variables as if the programme had not been undertaken. The projected trend is compared to the actual data after the programme is conducted. The difference represents the programme's impact if certain conditions are met.

The programme resulted in 62 staff being retained.

Forecasting models are useful when mathematical relationships between other influences and output measures are known. With this approach, the output measure is predicted using other known influences. After the programme is conducted, its impact is estimated by comparing the measure's actual performance with the forecasted value.

Other influencing factors are identified, when feasible, and the impact is estimated or calculated. The remaining, unexplained improvement is attributed to the programme.

Participants, managers and supervisors can be asked to estimate the amount of improvement related to the programme. Because these estimates are not always accurate, use a confidence percentage to adjust their estimates for error. For example, participants may be 80% confident that 60% of any improvement can be attributed to the programme. Multiplying 60% x 80% gives an adjusted improvement result of 48%.

Experts can be asked to estimate the programme's impact on performance variables.

Customers can be asked to estimate how the programme has influenced their decisions to purchase or use a product or service.

Estimates are less likely to be taken seriously, so improve their credibility in the following ways:

• Collect estimates from the most credible source

• Start with stating facts (actual improvements) before moving on to estimates

• Provide relevant background information, where appropriate

• Design estimation questions in a way that avoids influencing the answer

• Take participants' fears or worries (e.g. worried they may appear stupid if they don't think the programme has made much difference) into account and allay concerns when surveying

• Remove any extreme data items by adjusting for estimation errors (e.g. by getting rid of very high or low outlier responses)

• When reporting data, accompany it with an explanation about the methodology used to isolate the programme's effects and also show the calculations

Step 6: Convert Data to Monetary Values

Calculating the ROI requires converting one or more impact measures linked to the programme into monetary values.

> To calculate the monetary value:
> - Identify the unit of improvement, e.g. one staff member retained
> - Determine the value of each measure (*V*), e.g. $105,000 (1.5 x average annual salary) a standard value
> - Determine the measure performance change (*ΔP*), e.g. 5 staff members retained per month post-programme
> - Determine the annual performance level change (*AΔP*), 5 x 12 = 60
> - Calculate the annual improvement value (*V x AΔP*), e.g. $105,000 x 60 = $6,300,000

How to Determine a Measure's Value

There are several different ways of determining a measure's value. Apply the one(s) that best fit with your programme. Think in terms of output data and quality improvements when doing this. Output data are converted to profit contribution or cost savings, based on their unit contribution to profit or the unit contribution to cost savings. Quality improvements are directly converted to cost savings.

Here are some methods for determining a measure's value:

Standard values are commonly known and accepted values within a given discipline or organisation. For example, profit is a common financial standard value; 'complaints' is a common customer service standard value. Standard values are available for most output and quality measures.

In most organisations, around 80% of measures that matter have been converted to monetary values by the following functions:
- Finance
- Production operations engineering
- IT
- Marketing
- Customer service procurement
- R&D
- Human resources

Participants' wages plus employee benefits: Used to develop the monetary value for where the programme has saved employee time. Only include saved time that ends up being used on other productive work.
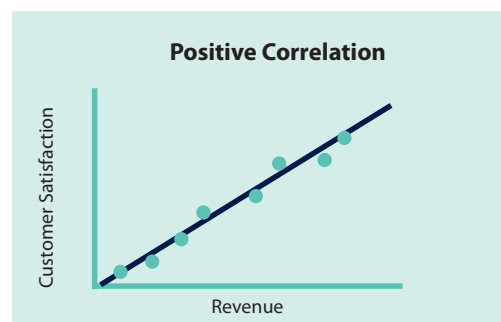
Historical costs developed from cost statements and reports: Used to calculate the value for a specific measure. Be careful, as this approach can consume more resources than should be allocated to the task.

Internal or external experts: Provide credible estimates for each measurement unit's value, based on their position, experience, neutrality, knowledge, qualifications and/or credentials.

External databases: Provide the value or cost of data items. Research, government and industry databases can provide important information for these values.

Soft measures: These are sometimes linked mathematically to other (related) measures that are easier to convert to money. For example, customer satisfaction (hard to value) is usually linked to revenue (easy to value).

Positive Correlation

Customer Satisfaction (y-axis) vs Revenue (x-axis)

Participants, supervisors and managers: Provided they are capable of quantifying the improvement's value, participants, supervisors and managers can be asked to assign values to the data item and estimate its value. Including questions about how confident they are in their opinion will enable your assessment to adjust for people's over- or under-estimations of the programme's value.

Step 7: Identify Intangible Benefits

Intangible benefits are programme-related benefits that cannot be converted to money credibly or easily. Intangible data should, however, still be collected and reported. This can be done by asking participants or stakeholders to rate the degree to which they feel something has been beneficial. Intangibles include:

- Image
- Job satisfaction
- Employee engagement
- Teamwork
- Communications
- Customer service
- Complaints
- Conflicts
- Stress
- Social responsibility
- Networking
- Partnering
- Brand awareness
- Creativity

During data collection, participants and other stakeholders may offer additional intangibles (usually unintended) that are connected to the programme. Report on these, where appropriate or where previously unrecognised trends are identified.
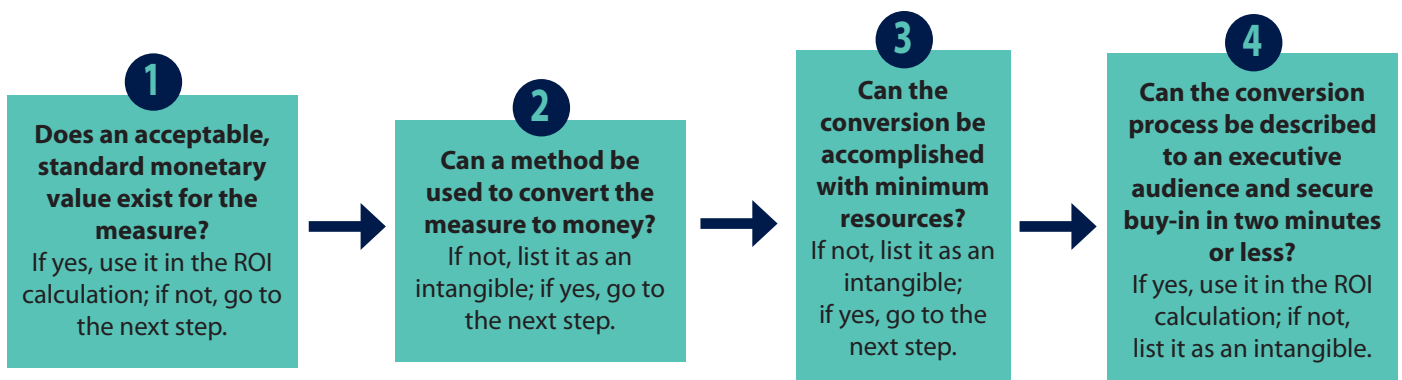
Linking the Intangibles to the Programme

The most credible source (usually participants) provides input about the programme's influence on the intangibles, as shown in the example below:

Please indicate the extent to which the programme has influenced the following measures:

Intangible Measure	Not Applicable	No Influence	Some Influence	Moderate Influence	Significant Influence	Very Significant Influence
Image	O	O	O	O	O	O
Teamwork	O	O	O	O	O	O
Brand	O	O	O	O	O	O
Engagement	O	O	O	O	O	O
Stress	O	O	O	O	O	O
Customer satisfaction	O	O	O	O	O	O
Communications	O	O	O	O	O	O
Job satisfaction	O	O	O	O	O	O

When Should Data be Converted to Money?

Use the flow diagram below to decide whether or not to convert a measure to monetary value.

1 Does an acceptable, standard monetary value exist for the measure? If yes, use it in the ROI calculation; if not, go to the next step.

→

2 Can a method be used to convert the measure to money? If not, list it as an intangible; if yes, go to the next step.

→

3 Can the conversion be accomplished with minimum resources? If not, list it as an intangible; if yes, go to the next step.

→

4 Can the conversion process be described to an executive audience and secure buy-in in two minutes or less? If yes, use it in the ROI calculation; if not, list it as an intangible.

Step 8: Tabulate the Programme's Costs

The programme's total costs are needed when calculating ROI, so all direct and indirect costs must be included. Typical cost categories are as follows:

Initial needs assessment and analysis: Possibly pro rata this over the programme's expected life.

Programme design and development: Possibly pro rata this over the programme's expected life.

Software or equipment: Identify the proportion that it was used on the programme versus other uses.

Programme or programme materials: Calculate the cost of all materials provided to each participant or consumed in the programme.

Facilitator/coach/co-ordinator: Includes preparation time as well as delivery time.

Participants' salaries plus benefits: Calculate the costs associated with the time the participants are involved in the programme.

Administrative and overhead costs: Identify the proportion of these used on the programme versus other uses.

Evaluation costs: Identify how much it costs to evaluate the programme.

Venue costs: Include venue, travel to and from the venue, and workshop catering, where applicable.

Pro Rata Example

A leadership development programme had an estimated $50,000 development cost with an anticipated 5-year life cycle. About 400 leaders will participate each year. An ROI evaluation study is undertaken to evaluate 100 participants (4 groups of 25). How much development cost should be included in the ROI study?

Development cost per participant
5 years x 400 = 2,000 participants

$$\text{Cost} = \frac{\$50,000}{2,000} = \$25$$

Development cost for ROI study
100 x $25 = $2,500

Step 9: Calculate the ROI

Return on investment (ROI) is a financial metric that represents the programme's ultimate measure of success. ROI is calculated using the programme benefits and costs.

The **benefit:cost ratio (BCR)** is the programme benefits divided by cost. In formula form, it is:

$$\text{BCR} = \frac{\textbf{Programme benefits}}{\textbf{Programme costs}} = X{:}1$$

The return on investment (ROI) calculation considers the net benefits divided by programme costs. The net benefits are the programme benefits minus the costs. In formula form, the ROI becomes:

$$\text{ROI (\%)} = \frac{\textbf{Net programme benefits}}{\textbf{Programme costs}} \times 100 = X\%$$

This is the same basic formula used in evaluating capital investments where the ROI is traditionally reported as earnings divided by investment.

The **payback period (PP)** compares the total investment (cost) to the monetary benefits to calculate the number of years (or percent of a year) needed to pay back the investment. The calculation is:

$$\text{PP} = \frac{\textbf{Programme costs}}{\textbf{Programme benefits}} = X \times 12 = X \text{ months}$$

Below is an example of an ROI calculation for a leadership development programme designed to reduce staff turnover. In Year 1 of the programme, 400 people were involved.

Specific Payoff Measure	Benefits First Year Value ($)
Employee turnover reduction	$ 6,300,000
Costs	
Initial analysis (pro-rated)	6,000
Development costs (pro-rated)	2,500
Materials (pro-rated)	74,000
Facilitation (Year 1, including expenses) Facilities/food/refreshments	840,000
400 participants @ $60 x 8 workshops	192,000
Travel	200,000
Evaluation consultant costs	6,000
Total:	**$1,320,500**

Example
Calculations

The BCR is calculated as:

$$\text{BCR} = \frac{\$6,300,000}{\$1,320,500} = 4.77:1$$

Interpretation: For every dollar invested, there is $4.77 in benefits.

The ROI is calculated as:

$$\text{ROI (\%)} = \frac{\$6,300,000 - \$1,320,500}{\$1,320,500} \times 100 = 377\%$$

Interpretation: For every dollar invested, $3.77 is returned after the investment is recovered.

The Payback Period is calculated as:

$$\text{PP} = \frac{\$1,320,000}{\$6,300,000} = .21 \times 12 = 2.52 \text{ months}$$

Interpretation: The investment will be paid back in 21% of one year or in just over 2.5 months.

Step 10: Report Data to Key Stakeholders

Reporting the study's results is an important final step in the ROI methodology. It is vital to understand the different stakeholder groups and provide appropriate information to them. Stakeholders typically include:

- Participants directly involved in the programme, who have provided data to the evaluators
- Participants' immediate managers, who need evidence of the programme's success
- Programme sponsors, who need to understand the programme's value to the organisation
- Affected employees, who need to understand how – and why - the study was developed

A variety of media can be used to communicate the programme's success, including a:

- Detailed impact study (as shown below)
- Executive summary
- Presentation at meeting
- Webinar
- Brochure
- One-page summary
- Newsletter article
- Web-based information
- Case study

Impact Study Outline
(Complete Report, usually 50–100 pages)

General Information
- Objectives of Study
- Background
- Programme Description

→ **Explaing the programme**

Methodology for Impact Study
- Levels of Evaluation
- ROI Process
- Collecting Data
- Isolating the Effects of Programme
- Converting Data to Monetary Values
- Assumptions (Guiding Principles)

→ **Builds credibility for the process**

Results
- General Information
  - Response Profile
- Reaction
- Learning
- Application of Skills/Knowledge
  - Barriers
  - Enablers
- Impact
  - Isolation Method
  - Data Conversion
- Costs
- ROI Calculation
- Intangible Benefits

→ **The results with six measures**

Levels 1, 2, 3, 4, 5 and Intangibles

Summary of Findings

Conclusions and Recommendations
- Conclusions
- Recommendations

Exhibits

Appendix One: ROI Evaluation Best Practice

Not all ROI approaches are created equal! Best-practice ROI evaluation typically exhibits the following characteristics:

ROI evaluation is undertaken for the right reasons
• Use ROI evaluation as a function or process improvement tool and not a personal performance evaluation tool.
• Conduct ROI studies selectively by usually involving 5–10% of programmes, totalling about 3–5% of the budget.

ROI data analysis is robust
• Use a variety of data collection methods (not just questionnaires).
• Aim to achieve a good (ideally 60% or more) response rate for surveys.
• Only use the most credible sources when collecting and analysing data.
• Choose the most conservative alternatives for data analysis calculations.
• Exclude extreme data items and unsupported claims from ROI calculations.
• If no improvement data are available for a population or from a specific source, then assume that no improvement has occurred.
• Adjust improvement estimates for potential error.

Effective isolation techniques are used
• The programme's effects are always isolated from other influences.
• At least one (i.e. participant impact) method is used to isolate the solution's effects, but ideally two or more isolation techniques are used.

ROI is evaluated in the right way
• Collect data at lower levels before conducting a higher-level evaluation (however, the lower level evaluation(s) do not need to be as comprehensive).
• Convert business impact data to monetary values, even for the hard-to-value.
• Document all costs incurred before, during and after the programme's implementation and evaluation.
• Use only the first year of benefits (annual) in the ROI analysis of short-term solutions.
• Be clear about which measures are purposely not converted to monetary values because they are intangible.

A strategic approach is taken
• Develop ROI evaluation targets that show the percentage of programmes evaluated at each level.
• Generate a micro-level scorecard from a specific programme, which then feeds into a macro-scorecard for the entire function.

Stakeholders are kept well-informed
• The ROI evaluation's results are communicated to all key stakeholders.

Appendix Two: Evaluation Level Decisions

It is not necessary to go to the time and expense of evaluating every programme to Level 5. This level of evaluation is usually reserved for big-ticket or high-profile initiatives. The following table provides guidelines for ROI evaluation decisions.

Level	Measurement Category	Recommended Percentage of Programmes Evaluated at this Level
0	**Inputs** Measures inputs into programmes, including the number of programmes, attendees, audience, costs and efficiencies	100%
1	**Reaction** Measures reaction to, and satisfaction with, the programme experience, ambiance, content and value	90–100%
2	**Learning** Measures what participants gained from the programme (e.g. information, knowledge, skills and contacts)	60–80%
3	**Application and Implementation** Measures progress after the programme (e.g. the use of information, knowledge, skills and contacts)	30%
4	**Impact** Measures changes in business impact variables – such as output, quality, time – and costs linked to the programme	10–20%
5	**ROI** Compares the monetary benefits of the business impact measures to the costs of the programme	5–10%

For additional information about the ROI methodology
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