ROI Evaluation

Building the business case for people development

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Contents

Executive summary

With ROI you can use statistical evidence to justify current and future training and development projects. Imagine a business-strategy-aligned HR function with top-level management support and no threat of budget cuts in the next economic downturn.

Brandon Hall[1], a US-based learning research organisation, found that there is no other workplace issue on which so much money is spent with as little accountability as training. So far training has managed to lie under the radar, but increased shareholder scrutiny combined with the growing need for training in companies means this is about to change.

Large sums of money: £12 billion in the UK or around 1% of payroll costs are spent on training and development every year. This is made up of the very visible direct costs of training like travel expenses, and the less visible indirect costs like loss of employee output and training department salaries and rent.

Given this expenditure, organisations must believe that spending money on training will increase their business performance, either by:

- increasing their employees' job performance (i.e. human resources need updating and improving just as computers and machinery);or
- simply ensuring the employees stay with the organisation by keeping them motivated and content (i.e. training is just used to retain staff).

In both cases, the investment is treated by the management as a sum of money spent now, that will return to the organisation in the form of increased profits at some point in the future. However very few organisations actually evaluate whether the programmes they have in place actually deliver on this expectation.

In this paper we discuss:

- An overview of the dynamics of ROI of training and development (ROI), including critical success factors
- ROI as a strategic tool for HR and the organisation to achieve competitive advantage
- A methodology for assessing ROI and implementing strategic change to HR processes

The primary benefits of ROI are:

ROI is to HRD what accounting is to spending on capital assets. Thus ROI

- Validates training as a business tool—training is seen as one of the many actions an organisation can take to increase its performance and profits;
- Justifies the costs incurred in training—helps HR departments avoid being the victim of cost-cutting in the next economic downturn;
- Helps improve the design of training—programmes are continually improved on the basis of a formal evaluation rather than 'happy sheets' filled in by participants at the end of a programme;
- Helps select training methods—allows a rational selection of delivery mechanisms, from classroom-based to e-learning.

1 Brandon Hall (2000) www.brandon-hall.com, USA

What is R.O.I.?

Defining ROI

Return on Investment (ROI) in training and development (T&D) means measuring all the economic returns generated from an investment in a T&D programme. These returns are then compared with the true cost of the programme to determine an average annual rate of return of the investment. All capital assets need to earn a rate of return for the business to make a profit and stay in business, ROI is about judging the investment in T&D on similar criteria to other investment in the business.

Some *returns* can be easily measured, such as increase in sales after a sales training programme, but others such as customer/employee satisfaction, turnover rate, and complaint levels require conversion to a monetary amount. Some *costs* can also be easily measured, such as hire of training rooms, however other costs need further analysis to determine, such as the cost of administration of the T&D department.

The intense focus on performance in public companies has made ROI increasingly important. The only way to guarantee that projects and programmes receive funding is to show how they boost the bottom line. An ROI evaluation fulfils senior management's requirement to justify training budgets and investments.

Example

To illustrate, here is an example of how ROI has been applied:

Case study

170 high potential middle managers from 115 different operating companies of a multinational consumer products company were sent, in groups of 12, on a three-day development centre (DC). The DC consisted of group exercises, individual presentations, a performance management role-play with an actor, counselling about the results of 360 feedback from their co-workers, the Myers-Briggs psychometric test and individual coaching after each exercise.

We looked at what effects this had on their behaviour at work after attending the DC (using a questionnaire), the effect on retention of these high potential managers (the 'war for talent' was one of the reasons for the DC in the first place), and finally we looked at whether the profit or sales per employee of the operating companies improved as a result of them attending (using five years data on sales, operating profits and number of employees for each operating company). The use of data before and after the DC programme started allowed us to draw causal conclusions.

Results:

We found that the DC made them better at their jobs, more motivated, more satisfied and less likely to leave the organisation. It also made them more aware of the strengths and weaknesses of their management skills.

We found, by comparing this group with the whole management group, that manager turnover was significantly reduced. It was equivalent to saving around £144,000 per year on recruitment and retraining costs (assuming 40% recruitment and retaining cost per manager resigning), which compares well with the cost of running the centre of around £185,000 per year.

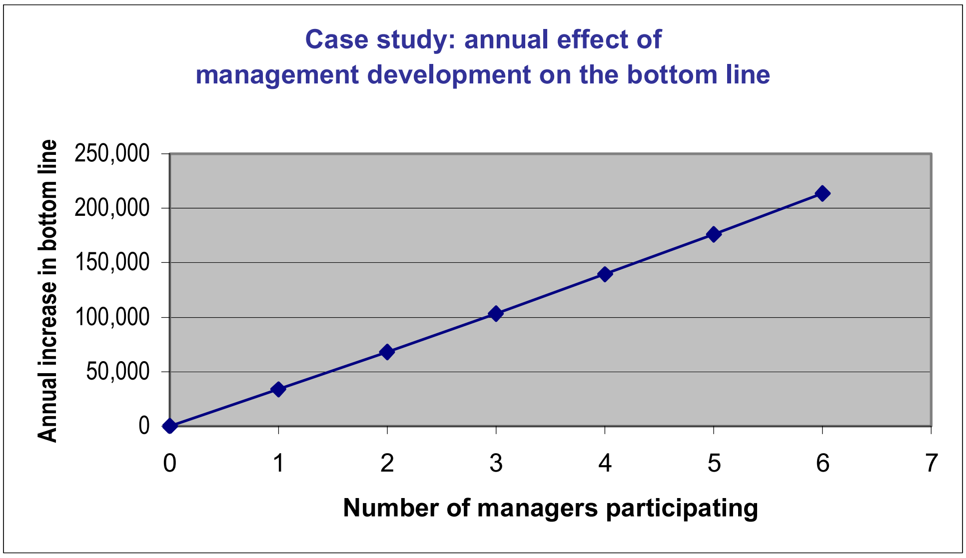
By running a linear regression model, controlling for selection effects (the more profitable operating companies sent more participants) we can say with 89% confidence that those operating companies which sent one manager on it, compared to not sending any, increased their sales per employee (productivity) by 2% in the following two years. However there was not such a significant effect for profit per employee, which is understandable given the fact that a lot of the organisations costs would be fixed in the short-term and so not as easily influenced as revenue ('top line') growth.

The productivity finding is interesting for both consultants and directors; if middle manager development boosts the topline growth, then shouldn't they make sure they are investing enough in their high potential managers? Most directors would jump at the chance to make a decision that they are 89% confident of gaining 2% on sales and a 100% confident of saving £144,000 in recruitment and retraining costs, based on an investment of £185,000 per year.

The fact is that this type of management development is a three-way sell:

- managers expect some sort of development;
- it reduces their turnover from 18% to 12.8%;
- there is an 89% chance that it also boosts sales per employee by 2% for each extra manager participating.

In summary, the ROI is 77% per year, based on the reduction in manager turnover alone. In addition to this, regression predicts that if an operating company sends one manager on the centre, instead of sending none, their sales per employee would have grown by a total of 2% in the next 2 years. If we assume a net profit margin of 12% of sales, then the following diagram illustrates the effect on net profit (the 'bottom line') for the company.



The benefits

With knowledge assets far surpassing physical assets and the increased focus on people development, senior management requires ROI analysis to demonstrate the value generated from training and related Human Resource Development programmes. In this aspect, *ROI is to HR what accounting is to spending on capital assets*. Thus ROI:

1. Validates training as a business tool; training is seen as one of the many actions an organisation can take to increase its performance and profits. This validation benefits the organisation, the HR department and the employees. The organisation benefits since it becomes more aware of the mechanisms for profitability and the HR department benefits because it is seen as a strategic partner in the business rather than a necessary but non-strategic overhead. Finally, the employees in the company benefit because the organisation validates their personal development and so managers can encourage them to attend training rather than condoning no-shows on training courses due to pressure of work.
2. Justifies the costs incurred in training. This helps HR and T&D departments avoid being the victim of cost cutting in the next economic downturn. If training is seen as one of the levers to achieve revenue growth, then there is no economic sense in reducing training if revenues fall. In fact, ROI can ensure that investment in training is targeted at the programmes that have the most impact on the organisation's performance.
3. Helps improve the design of training. In order to achieve training programmes that are effective on an organisation's bottom line, programmes can be improved on the basis of a formal ROI evaluation rather than simply relying on training evaluation forms ('happy sheets') filled in by participants at the end of a programme. If an ROI analysis flags up that a training programme is having no effect on the intended performance criteria but is having a beneficial effect on another criteria, then the programme could be re-designed or re-designated.
4. Helps select training methods. There are many ways that training can be delivered from classroom-based and on-the-job to self-study and e-learning. ROI can be used to evaluate which delivery mechanism will achieve the programme's learning objectives for the participants in the most cost-effective manner.

What next?

There are great benefits to be achieved from ROI, the question is how do you achieve them?

In order to start to answer this question, you should consider the following:

- How do I determine whether ROI is applicable to my requirements?
- How do I construct an ROI evaluation?
- What are the issues associated with designing and developing a solution?
- What products and tools do I use to support the delivery of the programme?

The rest of the paper will focus on these issues. Alternatively you can contact us to discuss your requirements in more detail.

Making ROI evaluation successful

Introduction

ROI is a relatively new concept, however its origins can be traced back to Donald Kirkpatrick's[2] publications on training evaluation. In 1959, he proposed that the outcomes of training could be assessed on four levels.

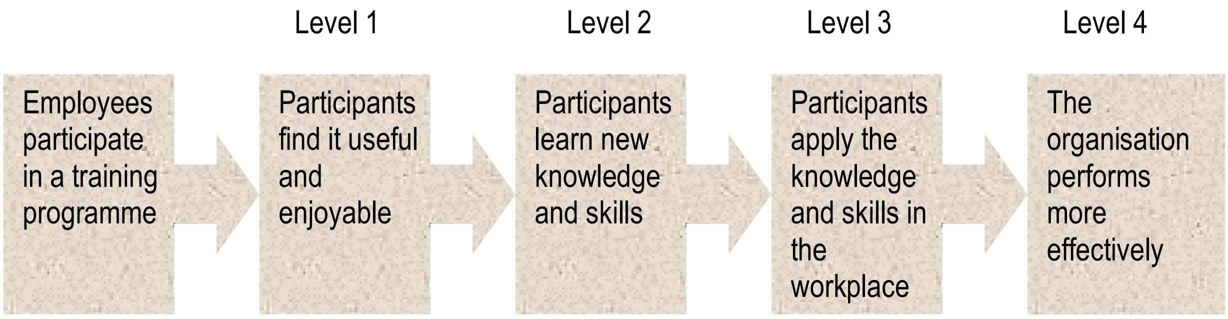
Firstly the reactions of the participants can be assessed both in terms of how useful they found it and how much they liked it. This often takes the form of "happy sheets" filled in by participants at the end of a training programme; the vast majority of training evaluation in the UK is at this level.

Secondly, one can assess the actual learning that took place on the training, such as comparing pre- and post-course test results. Thirdly, one can assess the change in behaviour of the participants back in the workplace after the training, by asking the participants themselves, or their colleagues, direct reports and superiors.

Finally, one can actually assess the change in the business performance after the training. This is the most powerful form of evaluation since it links directly with the overall objective of the training expenditure: to increase business performance. Thus ROI is a 'Level four' evaluation in Kirkpatrick's model.

There is some debate amongst work psychologists about whether the four levels logically follow each other, however the following summary model does have a feel of intuitive sense:

Diagram summarising the logical progression of Kirkpatrick's four levels



However, it was not until the mid-1990's that was ROI ranked alongside e-learning as one of the two hottest issues in HR in the US. Although they appear strange bedfellows at first, they are both concerned with cost-effective, targeted training for the geographically dispersed and e-literate knowledge economy that exists in the early 21st Century. To successfully implement ROI evaluation one needs to understand that it is not a backward-looking audit of training but a tool to ensure that future training is targeted and effective. It is not principally about cost saving but about objective evaluation and re-engineering of T&D programmes to meet the needs of the 21st Century global economy.

2 Kirkpatrick, D.L. (1959) *Techniques for evaluating training programs*, Journal of ASTD, 13 (11), 3-9.

Understanding ROI objectives

Like all implementations, once the objectives are clear the chances of success are greatly increased. These objectives need board-level buy-in for three reasons in particular:

- the results of the evaluation may produce data that has implications for the board's strategy;
- the profile of the HR department as a strategic partner is re-enforced;
- there needs to be cross-functional co-operation between HR (or T&D), Accounting and also in some cases the IT functions (this mirrors the cross-functional approach needed in e-learning, where both HR and IT functions need to work together).

Some example objectives in an organisation are that they want to:

- evaluate the ROI of a high profile training programme, which was implemented recently;
- evaluate the ROI of a conversion to e-learning for a series of knowledge-based programmes they currently deliver using a mixture of classroom and self-study learning;
- review the profile of investment in training for each organisational competency.

The criteria on which the programmes will be evaluated also have to be decided. In the example above, the criteria of growth in sales per employee was used since sales growth was a key part of the organisation's mission statement. Even though the middle managers came from disperse functions, it would be reasonable to expect that they would be focussing their management skills on meeting this criteria.

Selecting the evaluation criteria

Other criteria that could be used can be classified into hard and soft data. Hard data is objective data that can be extracted from an organisation's accounting or Enterprise Resource Planning system and is more easily convertible into a monetary amount. Soft data is more subjective and needs to be extracted from the HR or Training databases or by conducting additional research, and is not so easily convertible into monetary amounts. Examples of the types of data are set out below.

Examples of ROI evaluation criteria

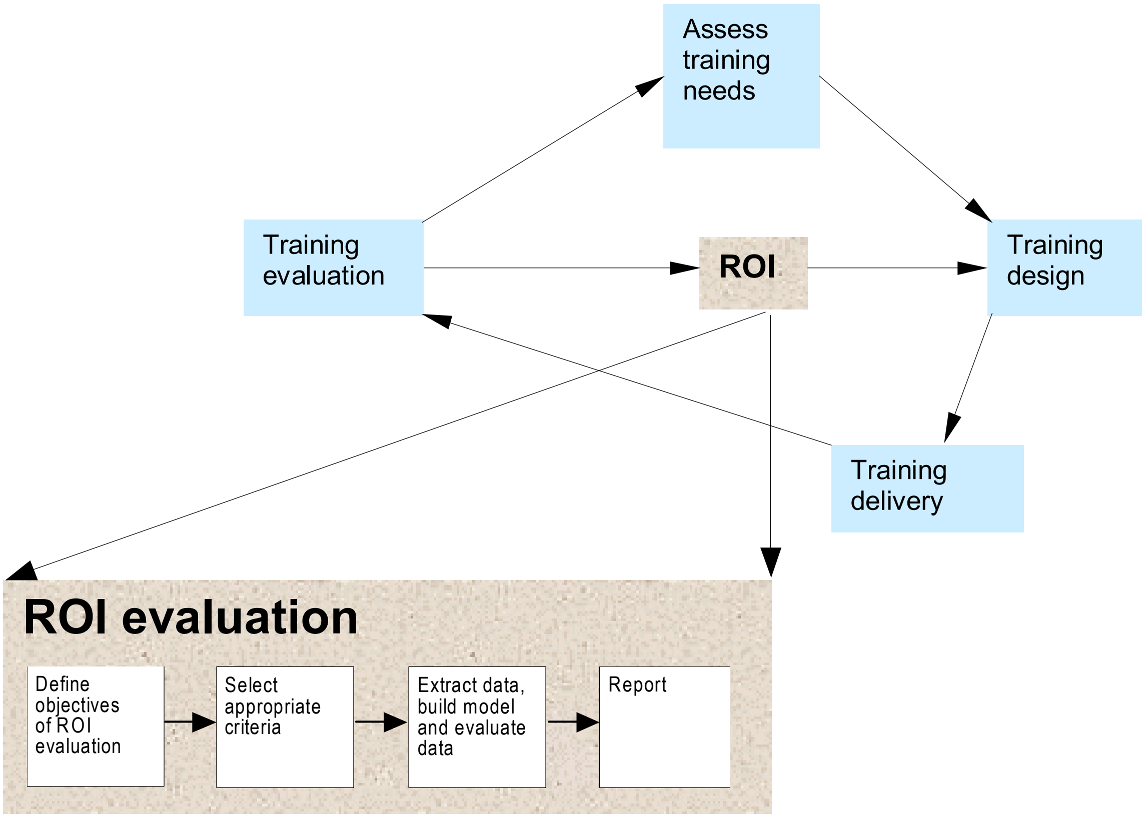
Hard data	Soft data
Output	**Work habits**
Units produced	Absenteeism
Items sold	Lateness
Data processed	Safety violations
Product mix	**Work climate and attitudes**
Productivity	Customer satisfaction
Quality	Staff turnover
Scrap produced	Job satisfaction
Products rejected	Intention to quit
Time	**Development and promotion**
Training time	Number of promotions
Product cycle time	Number of training programmes attended
Employee overtime	Days spent on training
Delays due to stock-outs	Performance appraisal ratings
Time spent on rectification of quality issues	Self-rated performance improvement
Cost	**Innovation**
Accident costs	Number of employee suggestions
Sales expenses	Implementation of new ideas
Customer turnover	360-degree feedback

The ROI dynamics

The process begins with defining the objectives of the ROI evaluation and selecting the most appropriate criteria for the evaluation. Then the actual evaluation is carried out by building a model and isolating the impact of non-training related effects. This results in a report, which both specifies the ROI of the training programmes evaluated and the plan for implementing changes in training design, assuming that the training needs are unchanged. Thus the process is a dynamic and seamless element of the evaluation phase of the training cycle, rather than simply ending with a report and leaving implementation to the HR department.

These dynamics are illustrated below:

The dynamics: how ROI works within the training cycle



Critical success factors

There are various factors that are critical to the success of an ROI evaluation project:

1 Sponsorship from a strategic HR function

An ROI evaluation will be more expensive than the more typical Kirkpatrick 'Level one' evaluation however this is compensated for by its increased validity and strategic implications. For these two reasons, there must be firm sponsorship from the HR function. This is more easily achieved if HR has already clearly aligned their functional objectives with the organisation's objectives, since ROI is simply a method of evaluating training from the perspective of achievement of organisational objectives.

2 Board level sponsorship

Sponsorship at the HR level is the first step to achieving board level sponsorship. Such senior level sponsorship is needed due to the cross-functional nature of ROI, since not all of the data will be easily accessible to the HR function. It is also needed due to the initial costs involved in the evaluation. However, the investment in a professional ROI evaluation will repay itself with increases in organisational performance from training targeted at increasing that organisational performance.

3 Readiness for change

New approaches are always the subject of some concern. There is the traditional fear of change that needs to be overcome, as well as the more deep-seated fear that may exist about the consequences of negative ROI on the HR and T&D functions. There are many false assumptions about ROI;

- 'managers do not want to see the results of training expressed in monetary values';
- 'if the CEO does not ask for the ROI, he or she is not expecting it';
- 'as a manager of HR, I have a professional and competent staff; therefore I do not have to justify the effectiveness of the programmes'; and
- 'the T&D process is a complex but necessary activity and so should not be subjected to any supposedly objective accountability process'.

4 Partnership with other functions

Just as the implementation of e-learning needs the partnership of the IT, HR and T&D functions, so does an ROI evaluation need the partnership of the accounting, resources planning and HR/T&D functions. It is important to build alliances at an early stage in the project for productive exchange of information and resources. For ROI to continue beyond the project stage, these alliances must form the basis of long-term cross-functional relationships that are of great benefit to any organisation.

5 Discipline and planning

A successful ROI implementation needs a lot of planning and a disciplined approach to keep the process on track. There need to be implementation schedules, evaluation targets, ROI analysis plans, measurement and evaluation policies and follow-up schedules. The HR function needs to have enough planning and discipline to stay the course, which again is assisted by board-level sponsorship.

In summary

An ROI evaluation is not a self-contained project by a change in focus of the objectives of training; moving from the concept of measuring learning input to measuring learning output.

ROI as a strategic tool

ROI is part of the new role of HR as a strategic partner in the organisation. It is important that HR uses a common language to communicate as a partner and the language of business is strategic and financial evaluation of all business activities. Only when HR talks this common language can it really begin to call itself strategic.

One of Professor Gratton's[3] calls to action was to 'build the business case for people'. Her idea is to "create a shared understanding of people's role in creating sustainable competitive advantage for the organisation". She also recommends developing "models to show the relationship between 'soft' measures…. and 'hard' measures such as company performance".

Research has consistently demonstrated a link between soft measures and harder measures. Mark Huselid[4] examined the relationship between high performance work practices and turnover, productivity and corporate financial performance. There were two categories; learning/application of skills and employee motivation. Both categories were related to turnover and productivity and the bottom line was that each standard deviation increases in these practices increased cash flow $3814 per employee.

In the UK, Patterson and others[5] looked at employee satisfaction within a range of aspects of work found that satisfaction accounted for 16% of the variance of subsequent increases in productivity and 5% of the variance of subsequent increase in profitability. This research was later published by the Institute of Personnel Development.

ROI evaluation is the strategic tool that helps HR build the business case for people by following on from research linking the softer people issues with the harder corporate financial performance.

3 Gratton, L. (2000) *Living strategy; putting people at the heart of Corporate Purpose*, Pearson: Harlow.

4 Huselid, M.A. (1995) The impact of human resource management on turnover, productivity and corporate financial performance, *Academy of Management Journal*, 38, 635-672.

5 Patterson, M.G., West, M.A., Lawthom, S. and Nickell, S. (1997) *Impact of people management practices on business performance*, Institute of Personal Development: London.

Methodology for evaluating ROI

There are many different methodologies for evaluating ROI and it is important to pick the most appropriate methodology for the objectives of the ROI. Some examples of possible methodologies are:

1 Use of control groups

This approach has high validity in terms of isolating the effects of the training programme. An experimental design is used; one group participates on a training programme and another group does not. Care is taken to ensure the two groups are similar in all other respects, using such techniques as randomisation. However the disadvantage is that some people do not get the benefit of the training programme. This issue can be resolved by rolling out the proposed new training programme as a 'pilot', or by using multiple control groups covering the whole organisation.

2 Modelling

This approach is more analytical and mathematical than simply drawing a trend line, since rather than a linear solution; there may be some type of curvi-linear relationship. When several variables influence the results, sophisticated statistical models need to be used. However if appropriate data and models are available, this method can be an accurate predictor of performance variables.

3 Estimation

This approach asks participants how much of their performance improvement was due to the training programme. This estimate is then adjusted for the level of confidence they have in their estimation. Thus if a participant believes that 60% of the improvement was due to the training but is only 70% confident of this, the real improvement is calculated as 42% (60%*70%). The estimations made by the learners are preferable since they should be the most aware of the reasons for improvement in their performance. However to add validity to these estimates, supervisors, colleagues or direct reports can also be asked. By weighting each of these estimates, an average 360-degree estimate is calculated. The disadvantage of this method is that it is only an estimate and the input data may be unreliable since e participants may find it hard to come up with percentage improvements and percentage confidence levels. However, it is an inexpensive and quick method, which produces data that can be easily understood by HR and the board.

Implementing strategic change to HR

Based on the results of the ROI evaluation, strategic changes can be put in place such as:

1 Redesign the current training

ROI allows T&D or HR to take a fresh look at all the T&D programmes they are running. This may include an analysis of how the T&D investment is helping the organisation achieve its key strategic objectives; how much training is invested in each organisational competency and how much measurable return is achieved for that investment.

2 Re-evaluate HR data needs for evaluation of training

The initial ROI evaluation exercise is simply the beginning of a strategic alignment of HR/T&D with the business. Once procedures for data-collection and models for analysis are in place, it is possible to carry on the evaluations year-on-year. Thus T&D can continue to evaluate the business impact of it programmes without the need for outside consultants. IN this way HR/T&D can expand its programmes to help the business meet its objectives and at the same time, it can protect itself against the threat of budget reduction in an economic downturn.

3 Form long-term alliances across functions

Communication is essential for the 21st Century organisation; both to send and receive information from its customers and potential customers, but also to send and receive information within the organisation. Organisations need to be able to quickly turn information into action and that can only be achieved by effective communication within the organisation. The channels for exchange of data and resources, enhanced by the ROI evaluation, can be built into long-term alliances that aid the organisation's ability to react quickly and effectively to changes in the marketplace.

Appendix A

About the author

Richard Naish has high level critical analysis skills gained during training as a Chartered Accountant. He also has a deep knowledge of people management issues and an innovative, strategic and flexible approach to research projects, which gives him both broad and detailed insights into client research projects.

Richard's career includes roles as Training Manager for Coopers & Lybrand, Training Designer for the television programme Business Account, Head of Management Development programmes for KPMG in Hong Kong, and Head of Financial Markets Training (Asia Pacific) for The Financial Training Company, Hong Kong. He has a BSc in Economics and Business Finance, is a Chartered Accountant, and has a Postgraduate Diploma in Psychology and MSc in Occupational Psychology.

Richard brings both research and analysis skills from his Chartered Accountancy background as well as communication skills and psychological understanding of culture from his occupational psychology background. He has 10 years experience of designing and delivering management development programmes that focus on self-insight for the participants, practice of key skills and planning transfer to the workplace. One of his strengths is experience of the cross-cultural aspects of people development, having designed and delivered management development programs in China, Japan, Malaysia and Hong Kong. These programs covered such issues such as executive coaching, succession planning and team development, using a full range of development methods from presentation, facilitation and coaching to indoor and outdoor exercises and 360-degree feedback.

Richard has developed a high-performance management development centre, and a consultancy approach designed to effectively measure the true return on investment in training and development. He works with clients, helping them to implement ROI in their organisations.

Appendix B

Jargon-buster: a glossary of ROI evaluation terms

360-degree feedback	A method of giving people feedback on their work styles and performance by asking superiors, peers and direct reports (i.e. in a 360-degree circle around the person).
Annualised manager turnover	The number of managers leaving the organisation per year, divided by the total number of managers.
Bottom line	The net profit of a company, which is usually the last (i.e. 'bottom') line of the profit and loss account ('P&L'). The P&L is published every year as part of the financial statements sent to shareholders.
Capital assets	Assets which have been bought by the company for long-term use in the business in order to make profits. Examples are buildings, offices, factories, computers and machinery.
Development centre	An event held over 1-5 days, where a person's strengths and weaknesses at their current or future job are assessed, and then developed by using several different types of management exercises.
Happy sheets	A nickname for training evaluation sheets, which participants complete at the end of a training programme. Typically they assess how useful and enjoyable the participants found the programme and thus are classified as Kirkpatrick Level One evaluation tools.
Kirkpatrick's levels	A method of classifying evaluation of training. Level One is about finding out how useful and enjoyable the training was for the participants; Level Two is about how much the participants learnt; Level Three is about whether the learning was actually applied in the workplace and Level Four is about whether the organisational results improved as a result of the participant attending the training.
Net profit margin	The sales revenue divided by the net profit; this represents how much profit the company makes on each £1 of sales.
Productivity	Productivity can be measured in many different ways, however in this paper it refers to sales revenue divided by number of employees. Thus it is the average amount of sales made for each employee in the company.
ROI evaluation	A measurement of the Return on Investment (ROI) in training. A method of evaluating training by comparing the overall economic benefits of training with the cost of the training.
Top line	The 'sales', or 'revenues' of a company, which is usually the top line of the profit and loss account (P&L). The P&L is published every year as part of the financial statements sent to shareholders.