

# The comparative value of three different methodologies for measuring the return on investment from a leadership program

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An evaluation was conducted in 2003 of a major leadership program within Centrelink—the Senior Executive Leadership Program (SELP). The evaluation consisted of three separate studies of SELP: a Return on Investment (ROI) study, a Return on Training Investment (ROTI) study and a Value for Money (VFM) study. This paper reports on the comparative value of each of these three different approaches. Specifically, it aims to highlight the different nature and benefits of each approach in order to assist organisational decision-makers to make informed decisions about whether they should use any one, or more, of these three methodologies in the future.

## Introduction

The Return on Investment (ROI) study investigated whether the first Senior Executive Leadership Program (SELP) program conducted within Centrelink in 2003 generated returns which outweighed the costs. The Return on Training Investment (ROTI) study focused on a small number of expected outcomes and related performance measures. The Value for Money (VFM) study investigated whether SELP provided Centrelink with value for its outlay.

The studies highlighted the different nature and benefits of each approach. Besides informing future decision-making regarding SELP, this comparison of a diversity of evaluation methodologies was designed to assist Centrelink staff to make informed decisions about whether they should use any one, or more, of these three methodologies.

To protect confidentiality, the following paper excludes any sensitive internal data concerning Centrelink. Instead, to influence evaluative practice, the paper focuses on the application of the three methodologies and the broad findings pertaining to use.

This deliberate modelling of the three methodologies was recommended in a review of Centrelink's evaluation of learning (Mitchell 2002) and supports suggestions tabled by the Australian National Audit Office report (2002). The Mitchell (2002) review was commissioned by the Centrelink Virtual College, whose charter as a registered training organisation includes ensuring that learning within Centrelink is evaluated thoroughly.

## Background: the Senior Executive Leadership Development Program (SELP)

The SELP program was designed in 2002, launched in 2003 and continues to be delivered to the organisation's 90 Senior Executive Officers and those nominated as potential Senior Executives through a succession planning process. The organisational outcomes sought from SELP are to:

- 1 Achieve close alignment with organisational goals.
- 2 Provide more cohesive support for organisational growth in line with the document *Strategic Direction 2002–2007*.
- 3 Develop inclusive ways of working at the strategic level.
- 4 Recognise and respond to the challenges of complexity and diversity across Centrelink.
- 5 Drive future business.
- 6 Foster Centrelink's emerging role within the community.
- 7 Improve the competitiveness of aspiring leaders for more senior positions within Centrelink and the Australian Public Service.

The structure of the SELP program included an induction session, prereading, a 360-degree appraisal questionnaire, a five-day residential program, peer partnering, coaching, and various other follow-up activities. Up to 20 senior executives participated in each program group.

Three studies focused on the first cohort of SELP participants (called hereafter SELP1) who attended a residential program in March–April 2003 and undertook follow-up activities that continued until December 2003. In addition to other data collection, six of the 20 participants in SELP1 were interviewed after three months and seven were surveyed after three months and six months. To increase rigour, colleagues of each of the seven participants were also interviewed, to check their assessment of the impact of SELP1 on the participants. Additional interviews were conducted with a presenter from the residential program and two of the executive coaches.

In designing and undertaking the three studies, the external evaluator worked closely with both the Dean of the Centrelink Virtual College, and Centrelink's SELP Program Director.

### The three studies

#### Return on Investment (ROI) study of SELP1

The return on investment (ROI) study investigated whether the Senior Executive Leadership Program (SELP1), conducted within Centrelink in 2003, generated returns which outweighed the costs.

### Definition and benefits

Pepper and Christie (2000) define the ROI process as showing the bottom-line impact of training and development programs and corporate initiatives. ROI also serves as a tool to demonstrate accountability within the organisation. The term 'return on investment' originates from the finance and accounting field (Moy 2001), so it is easier to apply the concept to a professional development program that leads to quantifiable outcomes

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(such as an increase in sales) than to professional development programs that lead to improved leadership or interpersonal skills.

Phillips (1997) suggests that there are four theoretical benefits of an ROI study. These are to:

- measure the contribution of specific programs to corporate objectives and in that process, to determine if the benefits (expressed in monetary terms), outweigh the costs
- enable the setting of priorities, based on a program's level of contribution to meeting corporate objectives
- enable a focus on results
- alter management perceptions that training is an investment and not an expense.

These four potential benefits were compared subsequently with the results of this ROI study in the final report (Mitchell 2003).

Shandler (1996, p. 101) notes that the increased interest in measuring the costs and benefits of training is due to a paradigm shift in training over the last 10 years. Training is now often linked to specific business needs and it addresses specific objectives. In a time when new business needs are being driven by global competition and new technologies, accountability of all business functions is increasing. This new corporate reality requires an organisational mindset that measures changes in business results attributable to training. In commissioning this study, Centrelink demonstrated such a mindset.

### Methodology

Two optional methodologies were considered for this ROI study. There was a choice between the conventional accountancy-based approach of Phillips (1997) or the approach of Doucouliagas and Sgro (2000), who have customised ROI studies to suit the context of training. The decision was taken to use the model advocated by Doucouliagas and Sgro (2000), as they draw on a number of methods

for calculating the ROI on training (including embedding ideas from Kirkpatrick 1998). The four steps in their ROI model guided this current ROI study and are set out below (Table 1).

The major benefit of the multi-dimensioned ROI model provided by Doucouliagas and Sgro (2000) is that evaluations can be carried out at the completion of each of the four steps. Hence, in future, Centrelink can decide whether it wants to move on from Step 1 to Step 2 or 3 or 4 for different ROI evaluations. In the 2003 study, this model was modified, to suit the Centrelink context and the data available. The flexibility of this four-step model is recommended for Centrelink, in preference to the Phillips model.

### Conclusions re the ROI

The above methodology provided the following findings but particularly, that the value of the benefits of SELP1 outweighed the costs, so the investment was positive and worthwhile. While feedback from SELP1 led to improvements being made to the design of subsequent SELP groups, SELP1 itself was also well-planned, well-designed and well delivered. Different participants reported benefits from one or more components of the program, such as the prereading, capability appraisal, residential program, executive coaching and peer partnering. Most of the surveyed participants in SELP1 were highly motivated to improve their leadership practice. They were also driven by a sense of satisfaction when they used their new behaviours.

Hence it is no surprise that—in relation to the demanding set of performance indicators identified by Centrelink before the program commenced—most of the outcomes sought from SELP1 were achieved. The costs for the specially customised SELP1 are within industry standards for leadership programs that include a residential component, executive coaching and individual appraisal, while the tangible and intangible benefits of SELP1 are extensive.

Because dollar amounts cannot easily be attributed to the qualitative benefits of SELP1, it is not possible to provide a full statistical summary of the return on investment for Centrelink. However, it is possible to demonstrate that SELP1 was a worthwhile investment, which has generated significant benefits. The outcomes of SELP1—particularly the new skills, knowledge and attitudes about leadership acquired by participants—are likely to impact positively on Centrelink’s future performance.

### Comments on the ROI methodology

Table 1 summarises the methods used and the findings from this ROI study, using the four steps provided by Doucouliagas and Sgro (2000).

Table 1 reveals a clear sequence for collecting and analysing data, exploring other variables besides the learning program and then calculating the ROI. The absence of data that could be expressed in monetary terms is due to the nature of the learning program—a leadership development program—and is not a criticism of the model.

**TABLE 1: SUMMARY OF METHODS AND FINDINGS AT EACH OF THE FOUR STEPS OF THE DOUCOULIAGAS AND SGRO (2000) MODEL FOR THE SELP ROI STUDY**

FOUR STEPS	SUMMARY OF METHODS AND FINDINGS
1 Collect the relevant qualitative and quantitative data.	Extensive qualitative and quantitative data was collected and recorded.
2 Compare pre- and post-training performance/behaviour.	Comparison of pre- and post-training performance and behaviour showed that changes in SELP1 participants were strongly positive, across a range of leadership characteristics.
3 Explore the impact of other interventions on change in performance or behaviour through a multivariate analysis technique.	A number of intervening variables assisted the achievement of SELP1 outcomes, including the motivation of the participants, participants’ sense of satisfaction at using the new skills, internal changes to Centrelink and opportunities to practise in the workplace.
4 Calculate the ROI.	The comments of participants involved in the study as well as this external, independent evaluation showed that the ROI was positive for Centrelink.

**TABLE 2: THEORETICAL AND ACTUAL BENEFITS OF UNDERTAKING THIS ROI STUDY**

THE FOUR THEORETICAL BENEFITS OF AN ROI STUDY (FROM PHILLIPS 1997)	THE ACTUAL BENEFITS IDENTIFIED IN THIS ROI STUDY
To measure the contribution of specific programs to corporate objectives and, in that process, to determine if the benefits (expressed in monetary terms), outweigh the costs.	SELP1 patently contributed to Centrelink objectives and the benefits were pronounced and could be said to exceed the costs.
To enable the setting of priorities, based on a program's level of contribution to meeting corporate objectives.	SELP1 contributed so well to Centrelink's expected outcomes, Centrelink could be confident that improving the SELP model continually for leadership development can assist in meeting corporate objectives (existing in 2003).
To enable a focus on results.	This ROI study underlined the positive results from SELP1 for the participants, their colleagues and Centrelink.
Can alter management perceptions that training is an investment and not an expense.	The data from this study provided extensive proof of a range and volume of benefits that qualify SELP1 for the category of an investment, not an expense.

Even without the availability of monetary measures, and accepting that ROI studies are time-consuming, there are benefits from conducting ROI studies. Phillips (1997) identified four major benefits of conducting ROI studies. These are listed in Table 2, together with comments in relation to this ROI study.

**Return on Training Investment (ROTI) study of SELP1**

This Return on Training Investment (ROTI) study examined the achievement of two outcomes from the Senior Executive Leadership Program (SELP1) conducted within Centrelink in 2003, following the methodology proposed by Moy and McDonald (2000).

The two program learning outcomes analysed were: Outcome 1, cohesive support for Centrelink's growth, in line with its *Future Directions 2003–2006*; Outcome 2, recognise and respond to challenges of complexity and diversity in Centrelink.

**Definition and benefits**

Moy (2001) suggested that, because ROI has a history of being applied in the business world to problems that are expressed purely in quantitative terms, the concept of Return on Training Investment (ROTI) is more appropriate to learning programs where benefits are difficult to quantify. ROTI studies involve the selection and close consideration of a small number of key qualitative and quantitative learning outcome measures, with a focus on the use of existing enterprise data, where appropriate and feasible (Moy & McDonald 2000, p. v).

**Methodology**

The methodology for this ROTI study was based on that described by Moy and McDonald (2000, p. 18) who recommend the use of four steps: using multiple data sources; consulting with multiple stakeholders; collecting information over a time period; and using both financial and non-financial outcome indicators.

This methodology was applied to SELP1 as follows:

- The use of multiple data sources (a number of qualitative and quantitative data sources should be used). The qualitative data in this study included material from open-ended questions in both interviews and surveys. Quantitative data was obtained from survey and interview questions that involved giving a rating or making a choice.
- The involvement of multiple stakeholders (sources of evidence may come from a wide range of stakeholders): for this ROTI study six categories of stakeholders were interviewed. These comprised: a sample of participants; a number of their colleagues; Centrelink Virtual College staff; staff from the external provider of the program; and two of the executive coaches.
- The collection of time delay information (i.e. information should be collected before the training commences, immediately it finishes, after three months and after six months). This suggested sequence was followed.
- The use of dual indicators (both financial and non-financial indicators should be used). For the purposes of this ROTI study, not all of the

**TABLE 3: INDICATORS FOR TWO KEY OUTCOMES SOUGHT FROM SELP1**

OUTCOMES SOUGHT	FINANCE-RELATED OR POTENTIALLY QUANTIFIABLE INDICATORS	NON-FINANCIAL INDICATORS
1 Provide cohesive support for Centrelink's growth, in line with its <i>Future Directions 2003–2006</i> .	Greater efficiency	Staff satisfaction
2 Recognise and respond to the challenges of complexity and diversity across Centrelink.	Team results	Effective decision-making

indicators identified beforehand by Centrelink were used. Instead, a selection was made of a small number of indicators. As specific finance-related indicators were not identified before the SELP project commenced, two indicators that were potentially quantifiable and did have finance implications were chosen: greater efficiency and team results. Non-financial indicators used in the study were staff satisfaction and effective decision-making. These indicators are outlined in Table 3.

The actual outcomes in relation to the indicators cited in Table 3 are discussed in the full report (Mitchell 2003).

**Conclusions re the ROTI study**

The qualitative and quantitative data in the ROTI study showed that SELP1 definitely provided participants with skills that have allowed them to support Centrelink's growth cohesively, in line with its *Future Directions 2003–2006*. Also, SELP1 has helped participants to a considerable extent in recognising and responding to complexity and diversity. As a result, it can be concluded that the Return on Training Investment for the SELP Program is positive and ongoing.

**Comments on the ROTI methodology**

One of the challenges with ROTI studies has been ascribing monetary values to benefits. In this study it was not possible to convert to monetary value the reduction in expenses or the improvement in teamwork, as appropriate data were not available. However, sufficient data were available to acknowledge the benefits and some of the data were quantitative.

ROTI is more straightforward to undertake than ROI, yet provides valuable and easily understandable information to guide future decision-making. Moy (2001) noted that most enterprises do not have the need, resources or expertise to use rigorous, highly technical approaches for evaluating returns on training. Centrelink might also find it difficult to justify the costs in undertaking numerous conventional ROI studies frequently, particularly if the ROI studies only identify quantitative benefits.

ROI has a narrower, quantitative meaning within business contexts (Moy 2001, p. 39). Hence, it was recommended that ROTI studies be undertaken by Centrelink more frequently than ROI studies.

**Value for money (VFM) study of SELP1**

The Value for Money (VFM) study investigated whether SELP1 provided Centrelink with value for its outlay.

**Definition and benefits**

The Australian National Audit Office (ANAO 2002) defines *value for money* as a judgement of the worth of funds expended in the light of the benefits received (p. 84). Types of VFM evaluation types noted by the ANAO include:

- cost comparisons between internal programs and those available commercially
- benchmarking against other Australian Public Service agencies
- assessment of value for money based on participant and supervisor feedback (p. 85).

The potential benefits of VFM studies include the quick feedback they provide to decision-makers and the public demonstration that the expenditure of funds has been evaluated using comparative data.

**Methodology**

To ensure thoroughness, the methodology for this VFM study involved the use of the three types of VFM evaluations listed by ANAO (2002)—cost comparisons, benchmarking and an assessment of value for money—but with some variations, as follows:

- Cost comparisons. ANAO (2002) refers to cost comparisons between internal programs and those available commercially. For this study, comparisons were made between different commercial options, based on figures provided by the Project Director.
- Benchmarking was conducted against another Australian Public Service agency which has invested in a leadership program. Figures provided by the Project Director for a similar

**TABLE 4: COMMENTS ON ALTERNATIVE APPROACHES—BASED ON THE CENTRELINK STUDY**

TYPES OF STUDIES)	MAIN CONCLUSIONS
Return on Investment (ROI)	ROI studies are difficult to undertake and are resource intensive. Even without the availability of monetary measures, and accepting that ROI studies are time-consuming, there are benefits from conducting ROI studies, such as those set out by Phillips (1997). The four-step model for ROI studies from Doucouliagos and Sgro (2000) provides a clear sequence for collecting and analysing data, exploring other variables besides the learning program and then calculating the ROI.
Return on Training Investment (ROTI)	ROTI is more straightforward to undertake than ROI yet provides valuable and easily understandable information to guide future decision-making. As with ROI studies, one of the challenges with ROTI studies is ascribing monetary values to benefits. However, unlike ROI studies, ROTI studies can accommodate qualitative data.
Value for Money (VFM)	VFM studies are straightforward to undertake compared with ROI and ROTI studies but still yield important data. This positive view of VFM studies aligns with the position taken by the Australian National Audit Office (ANAO 2002) which recommended the frequent use of VFM studies.

leadership program conducted within another agency were analysed and compared with the SELP1 cost.

- Based on participant feedback, an assessment of value for money was made. The feedback from the participants—in response to the various evaluation instruments used in the evaluation—was analysed. Additionally, periodic discussions were conducted with the SELP Project Director and the Dean of the Virtual College, who had ongoing contact with many of the participants.

To refine the VFM study further, a series of investigative questions guided the VFM research.

**Conclusions re the VFM study**

The data collected shows that SELP1 provided value for money, as well as the value for money expected. The main benefits for Centrelink included improvements to communication, decision-making, teamwork and innovation and an increase in staff satisfaction with their work.

It was straightforward to determine that SELP1 was value for money, as its costs compared favourably with:

- four other shortlisted offers received as a result of a competitive public tender process conducted by Centrelink for this program
- a similar leadership program conducted within another agency
- external leadership programs that include a residential component, offered by leading external institutions.

Feedback from participants consistently

confirmed value for money, although participants provided a number of suggestions about how the ‘value for money’ could be improved. These suggestions have been taken up during the continuing enhancement of the program.

**Comments on the VFM methodology**

This study showed that Value for Money studies are straightforward to undertake compared with ROI and ROTI studies and they yield important data. This finding supports the ANAO (2002) which recommended the frequent use of VFM studies.

**Consolidated conclusions**

Table 4 provides a consolidated summary of the main conclusions on the use of each of the three different methodologies from the Centrelink study. The conclusions have been determined by the outcomes which have been valued and implied by the methods used in the study.

Table 4 also sets out key features of each approach and this could provide organisational decision-makers with a useful reference point when trying to make decisions about whether they use any one, or more, of these three methodologies in the future.

**Recommendations**

A range of recommendations was tabled as a result of the three studies described above. The first recommendation was that VFM studies of learning programs be conducted regularly, given their simplicity, low cost and immediate value.

The second recommendation was that Centrelink undertake ROTI studies more frequently than ROI studies, as ROTI studies only attempt to analyse a small number of performance measures, yet yield valuable data—a selective, targeted approach to evaluation. The third recommendation was that Centrelink undertake ROI studies infrequently, given their complexity and the time and resources required; and instead, undertake ROTI and VFM studies more regularly.

Finally, Centrelink was advised to provide a briefing for stakeholders of SELP based on this current set of studies, to promote discussion about how the findings will influence the development of future leadership programs and to promote awareness of the advantages and limitations of ROI, ROTI and VFM studies. This briefing and the promotion of the value of the different types of studies were conducted in 2003–2004.

### Note

A number of Centrelink's plans and strategies cited in this paper have changed since the original research was undertaken and since the paper was delivered in October 2004.

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