

ROI of Training and Development Programmes: Challenges and Developments

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Abstract—The emerging need of the human resource management department of organisations to respond to the demand by top management to justify its existence, is posing a challenge before them to discover how to provide an acceptable and satisfying response to their concern. Numerous guides have been developed to assist human resource professionals to find directions in this regard and apply various methodologies to work in those directions to prove what they have delivered. One of the areas gaining considerable attention in the present scenario is training and development intervention of the human resource department of an organisation. The objective of this paper is to address the issues confronted by these professionals while attempting to calculate ROI of training and development programmes which demand huge amount to be invested in by any organisation. The paper seeks to attempt to increase the understanding of what challenges come in the way of conducting an ROI evaluation, how can the same be dealt with and thereby facilitate measurement of ROI in training and development programmes.

Keywords—Evaluation; Return on Investment (ROI); Training and Development.

Abbreviations—Return on Investment (ROI).

I. INTRODUCTION

THE establishment of human resource management as a separate function in most of the prestigious organisations confers a responsibility on it to respond to the stakeholder's demand to measure its worth to justify its existence. Of all the functional areas of the human resource department, training and development department is receiving increasingly more and more attention of the stakeholders due to huge resource deployment towards this function of the department. ROI evaluation is becoming one of the critical issues faced by the training and development department. Rohs discovered that most of the professionals in the field show a concern that they must eventually show a return on the investment made by them to justify the upward trend depicted by training and development expenditure. The ROI of a training and development programme may be measured using the formula:

$$ROI = (Benefits - Cost) / Cost * 100$$

ROI measurement is one of the ways to evaluate the effectiveness of a training and development programme. The literature on evaluation of training and development programmes is dominated by Kirkpatrick's approach. However his approach doesn't readily address the question of whether the training and development programme is worth

the cost incurred in conducting the programme. In 1991, Jack Phillips thus added this 5th level to the Kirkpatrick approach, called ROI or Return on Investment which introduced for the first time the need for an organisation to use mathematical and statistical techniques in determining costs and benefits of an HR intervention [Sachdeva, 2014].

In the absence of a comprehensive approach to calculate ROI in training and development activity, even big established organisations find a choice to be made a difficult decision when need to cut down on their training budget. This is attributable to their inefficiency to discover the training and development programmes which are working extremely well, are absolutely ineffective or ones which need to be revamped [Phillips, 2011].

Measurement of ROI of such training and development programmes provides a mechanism to accomplish this objective and at the same time validate training and development department's decision based on precise data to establish the value of a particular programme, providing rationale why the same has been continued or discontinued, what the programme is expected to deliver post expenditure incurred on conducting the same.

To achieve these objectives it is significant that an organisation recognizes the resistant nature of both HRD professionals and top management to plan and implement

ROI evaluation of these programmes and takes a move to identify the underlying reasons for their resistance, other barriers, challenges recent trends and developments in the field of ROI evaluation and the requisites of successful ROI evaluation to enable organisation to identify and improve their weaker areas.

II. BARRIERS TO ROI EVALUATION

2.1. Resistance on Part of HRD Professionals [Phillips, 2011]

2.1.1. Inability to Measure ROI

- They are not aware of the information to be collected.
- They find it difficult to deal with a number of variables affecting the change.
- They are not aware of the business problems their training and development programmes are supposed to address which leads trainers to provide wrong ROI metrics [Peak & Berge, 2006]
- Absence of or unstructured training needs analysis makes it difficult for them to identify the parameters relevant to ROI measurement.
- Even those inclined to measure ROI may be loaded with other activities leaving no time with them to do ROI measurement.

2.1.2. Unwillingness to Measure ROI

- There is lack of support and motivation from the top management.
- They tend to avoid introducing and dealing with over complications in the evaluation process.
- Attitudinal Issues: They generally have the attitude that it is sufficient enough to restrict to Level 2 or Level 3 evaluation of the programme if at all required by the management to evaluate. In relation to ROI analysis, they believe that:
 - There is no need to justify my existence
 - This is none of my jobs
- They fear lest the training and development programme reflects low or negative ROI and rather create criticism for their work than justifying their efforts.
- Lack of ROI policy, procedures, ROI model and lack of cooperative colleagues and administrative staff are some other factors which restrict the use of ROI methodology [Davis].

2.2. Resistance on Part of Top Management

- Resources constraint the ROI evaluation activity. The process of ROI is considered to be involving high expenditure for it to be implemented [Phillips, 2011].
- It is a time consuming process. An accurate and credible evaluation up to and including level 5 requires organisations to commit to allocate trained staff to work in this direction [Skillnets Ltd., 2005].

III. ISSUES OR CHALLENGES IN CONDUCTING ROI EVALUATION OF TRAINING AND DEVELOPMENT PROGRAMMES

3.1. Assessment of Benefits

- Compared to determining the cost of conducting a training and development programme, it is hard to assess the benefits arising out of it. This is primarily attributable to the difficulty involved in converting the outcome to monetary terms. Conversion of programmes outcomes to monetary terms requires identification of a unit of measurement and its conversion to a monetary value [Lynch et al., 2006; Subramanian et al., 2012].
- Sometimes the programme conducted contributes indirectly to the organisation, for instance where supervisors are trained to take the best out of their subordinates, the real impact of their application of knowledge gained through programme is difficult to be measured being indirect in nature [Subramanian et al., 2012].
- Benefits also accrue overtime and optimal time to evaluate is ambiguous [Lynch et al., 2006].

3.2. Isolating Effect of Training and Development Programmes

- Many environmental factors such as market conditions, system changes, incentives offered to employees may influence the post training performance. ROI calculation requires determining the method for isolating the effect of training and development programmes so that it may be ensured that the ROI figure represents the benefit arising out of the training and development intervention alone and not any other factor which may have influence on the outcome obtained [Buelow, 2008; Subramanian et al., 2012].

3.3. Determining Cost

- Subramanian et al., (2012) states that defining different cost categories and ascertaining how certain costs should be prorated are also challenging decisions to be made by an organisation while measuring ROI.
- Costs of the programme should be fully loaded for ROI analysis [Phillips & Phillips, 2011].

3.4. Differing Treatment

- Value of ROI differs for managers at different levels and in different departments. It is not valued alike at all levels of the organisation [Peak & Berge, 2006]. Thus there is a need for an agreement to be reached at by various stakeholders while analyzing the results [Matalonga & Feliu, 2012].

3.5. *Intangible Benefits*

- The expected intangible benefits are not captured in the ROI figure which is considered to be a pure financial figure.

3.6. *Risk Element*

- There is a risk of liberal estimation when participants or their superiors are asked to provide an estimate to reflect the value of the training and development programme [Buelow, 2008].

IV. FINDINGS OF RESEARCHERS AND DEVELOPMENTS MADE IN THE FIELD OF ROI EVALUATION

4.1. *Requisites of Successful ROI Evaluation*

- Implementation of ROI process in a cost effective and systematic manner requires proper planning around a proven framework, realistic evaluation targets and shared responsibilities for major steps [Subramanian et al., 2012]. It is important that the responsibility of performing ROI evaluation as well as the responsibility of low ROI figure is shared amongst trainees, trainers, supervisors and top management. A low ROI figure may be a result of inefficient performance of role by any of these. Attention should be paid to improve this ROI figure than trying to hold someone responsible for low ROI.
- HP (2004) proposes to include the ROI process in the early phase of planning cycle for the programme. This facilitates linking ROI measurement to training needs analysis which highlights the expected benefits and outcomes from the programme.
- Measurements should be undertaken at each level to facilitate identification of the weak link in the chain of impact as given by Phillips to establish, for instance, if the learning is weak or application of learning in the area is required to be improved on [Bailey, 2005].
- Isolation of Training and Development Programmes Impact
 - Many a times ROI calculation is done on the basis of participant's estimates of their contribution to the organisation, their estimate of the percentage of impact attributed to training and development programme alone excluding other factors which may influence their performance, and the confidence level they have on their estimates. Participants shouldn't be asked to provide estimates to isolate the training impact, unless they are capable of providing such estimates of cost or value of the unit of measure improved, by applying the skills learned in the programme [Subramanian et al., 2012]. It must be ensured that they are capable enough to have an insight into the

relevant variables, lest the ROI measurement will have no purpose and the credibility of the figure will become a concern.

- From the standpoint of credibility, it is important to use one or more isolation strategies to separate the business impact of the training and development programme from the impact of other factors [Bailey, 2005].

Some of the isolation techniques are as follows:

- *Control Groups*: The outcomes of pilot group of participants in a programme are compared with the outcomes of a control group of participants who are not participating in the programme. This is the most effective way to isolate training and development programme's impact.
- *Trend Lines*: Trend lines are commonly used to project expected business impact data into the future. Such projections are compared with the actual data after the programme to see if the training and development programme has yielded improvement.
- *Participant's/ Stakeholder's Estimates*: Participants are asked to estimate the amount of improvement directly related to a training and development programme. Since it is the participants who have received the training and are personally involved in applying the new skills and knowledge to the workplace, they are often in the best position to assess the programme's relative impact. The supervisor's, subordinate's, management or expert estimates may also be used for the purpose.
- *Forecasting*: Forecasts based on previous results of similar programmes may also be applied to ROI measurement while trying to isolate the programme's impact.
 - Of all the methods available to isolate the training impact, the most commonly used method i.e. Control group can't be used when a programme is rolled out simultaneously in all regions [Phillips & Phillips, 2011].
 - A limitation to using the trend analysis to isolate the training impact is that it can't be used where there are other factors contributing to growth. The limitation though may be overcome by using estimation obtained through mail in survey as suggested by Phillips & Phillips (2011).
- Buelow (2008) proposed conducting a Level five analysis for only one or two high profile, high impact programmes each year. He further recommended that in order to measure ROI individually and organisationally a baseline needs to be established with respect to the skill level, training costs and expected profits. This may help to compare the result expected and the one actually obtained.
- One of the issues that ROI measurement is hindered with is that Return on investment of a training and development programme may have different meaning

for different people involved. HP (2004) points out that depending on the variability, the perceptions of different stakeholders including the board, finance department, unit manager, training and development manager regarding the achievement of their perceived goals targeted by the programme, value placed by them to the ROI of the programme may differ. This necessitates that it is well understood what the client actually considers is ROI and which views of success are critical to the measurement process. This helps achieve a balance of their differing viewpoints.

- ROI evaluation has so far been ignored primarily for the resources the activity requires. Davis stated that once the planners or organizers establish a proven method, the political power issues leading to lack of time, budget and resources get reduced. Thus one of the ways to overcome this barrier is to work in cooperation with other colleagues, administrative staff and other departments.

4.2. Criticism to ROI Evaluation

- ROI measurement suggests the evaluation process to be accounting oriented. This tends to mislead the human resource department to measure the efficiency of the solution rather than measuring the effectiveness of the programme [Anderson & Woodill, 2004]. They have criticized the ROI analysis and claimed there is something beyond ROI. They have referred to the effectiveness being a function of intangible benefits arising from the programme such as improved job satisfaction, organisational commitment, teamwork, customer service, reduced complaints and conflicts. These intangible benefits are difficult to be quantified and be represented by a number.
- Wilson (2004) has criticized the positioning of ROI as level 5. He states that this approach is based on estimates rather than real measures or results. He argued that retrospective estimation of potential benefits or extensive measurement of post training changes can't allow us to design future interventions and programmes to maximize the value they add, and their efficiency at achieving it.
- Willyerd (1997) opined that unlike ROI which only reports on the past, the scorecard directs an organisation towards future success by setting and balancing objectives for each of these perspectives and thereby creates drivers of future financial performance.
- Brown (2001) suggested that the level of evaluation should be guided by the reason behind the evaluation of training. He stated that if the purpose of evaluation is to ensure a correlation between training and a specific outcome, the highest level of evaluation i.e. level 5 evaluation may be required. However, if it is to achieve higher customer satisfaction, employee morale etc., surveys, interviews and other methods may provide the evidence in support of the training and development programme.

Despite these criticisms, ROI measurement is gaining momentum and its demand by stakeholders is evident due to the fact that merely stating that there is no objective way to convert programmes benefits into monetary terms should not be considered as a case for doing nothing at all. ROI measurement is significant for the organisation to justify its training and development expenditure, budget allocation to the department, future planning and decisions for training and development department.

4.3. Scope of ROI Evaluation

- Phillips (2003) observed the progression of ROI implementation through various sectors namely manufacturing, service, health care, nonprofit, public and educational sector in the order as specified to reflect how the process has evolved within the different sectors. He found that the implementation and application of ROI methodology is spreading amongst all kinds of organisations.
- Other than training and development programmes ROI methodology in an organisation may also be applied to recruiting strategies, retention strategies, technology implementation, orientation systems, safety and health programmes, wellness and fitness initiatives, productivity and efficiency, sales and profitability, customer service and satisfaction, organisational climate, culture and practices [Phillips, 2003].

4.4. Recent Trends in ROI Evaluation

- With technological advancement, organisations are now more inclined to use e-learning method to provide training to its employees in view of its promising results, lower per employee training cost and just in time training feature. This has necessitated that traditional methods of evaluating training and learning must be adapted and re-examined with an eye to their applicability to e-learning environment [Galloway, 2005]. He further concludes that the most ideal way to evaluate such technology based learning would be to use a hybrid of the Kirkpatrick and ROI models. According to Galloway (2005), e-learning rather equips training professionals with the capability to prepare a business case for their efforts and results who often find it difficult to measure ROI of training activities.
- Peak & Berge (2006) wrote a paper with a purpose to discuss why e learning evaluation has evolved to include ROI calculations. He states that the high cost of e learning and the added versatility of learning management systems to capture data have both stimulated the interest of the business leaders to push training activity to address this need and measure business result.
- Another point to be considered in view of this trend is that with the use of online training, a programme now contributes to the benefits arising from the programme even years after the programme is launched and conducted, though this was not the case with traditional

classroom based training and development programmes [Subramanian et al., 2012]. Expressing ROI as an annualized figure limits capturing the long term effects a programme may have. Thus the same needs to be considered and accommodated for while calculating the ROI of such e learning programmes to determine its real impact.

- Another example of a combined classroom and online training programmes may be found to be implemented by American Express in 2003 [American Express, 2003]. ROI was found to be nearly 75% greater, in case of blended learning combining both online and classroom learning than ROI resulting from the online courses and instructor led classroom training held separately. American Express, Talent Acquisition & Development (2003) further points out that such differences created by mode of delivery in the ROI figure disappear if there exists a high transfer climate. It was observed that the reason behind blended approach providing higher ROI was that sustainability tools and conversation starters are built right into the training design when blended approach is followed.

4.5. ROI Measurement

- According to Rohs, cost of programme design, training material supplied to participants, trainer's cost, facilities cost, travel costs, salaries of participants including employee benefits, administrative and overhead costs are the main cost categories to be considered while calculating cost of a training and development programme.
- While converting data to monetary value the organisation first needs to convert output to contribution, calculate the cost of rework, cost of damages, cost of addressing grievances and legal costs involved, establishing the value of employee time, measuring sales cycle time, time saved due to programme, calculating profit margins. This further provides a base to conduct ROI analysis. In order to arrive at a figure in respect of these, historical costs, estimates provided by experts, participants or managers may be used [Buelow, 2008].
- The absence of a formal guide or model to facilitate ROI measurement has severally been questioned. One the reasons behind the same may be that all training and development programmes are different and there can't be one way that fits all programmes to measure their ROI. In view of this, Davis has proposed to train the training staff on Phillips methodology so that they may develop insight into creating ROI policies and procedures and thereby resolving the issue of lack of an industry model in this regard. This may lessen the problems in the measurement of ROI if not eliminate them altogether.
- Based on the review of literature it may be summarized that creating awareness in the organisation about ROI, developing a culture of measurement and accounting

among training staff, communicating results of the training and development programme to training staff and the whole organisation should be viewed as significant steps to measurement of ROI.

V. CONCLUSION

ROI is a very popular metric because of its versatility and simplicity. It is based on the approach that only an investment with positive ROI should be undertaken. Presence of another investment opportunity with a higher ROI should serve as an indicator for a move required in favour of such investment opportunity. However, this performance measure has yet not found the right and well deserved place in field of training and development analysis conducted by human resource department of an organisation. It is a measure which not only enables evaluating a particular training and development programme investment but also provides for a base for comparison of the efficiency of expenditure made in varied training and development programmes by the organisation.

According to Skillnets Ltd (2005), the focus of management on ROI reflects the ongoing emphasis on improving professionalism of trainers and the drive for greater accountability. It further adds that the efficiency and effectiveness of a training and development programme can be improved significantly with the formation of a cost effective and rigorous ROI system, in which business strategic practices of planning and evaluation are applied to such programmes evaluation.

Sachdeva (2014) provides a synthesis of literature in the field of evaluation highlighting the gaps in literature which direct to give serious attention to measurement of Return on Investment of training and development programmes.

It is primarily the lack of emphasis on evaluation that the effort and resources invested in developing human capital is viewed as an expense and not as an investment [Lynch et al., 2006]. ROI results once obtained may be used to establish its place as an investment yielding positive utility and based on the degree of such positive utility to further market training and development programmes by their providers in future. ROI calculation of training and development programmes makes the managers realize that the training function is providing viable contribution to their objectives. At the same time, it enables identification of the programmes contributing the most to the organisation and thereby setting priorities at the time of budget allocation to the function.

The paper thus attempts to make top management more supportive and eager to implement systematic ROI measurement and recognize the issues in the area. It also intends to draw attention of researchers to the field and work towards providing comprehensive approach to calculate ROI of all possible kinds of training and development programmes including not only sales training, technical training but also customer satisfaction training, personality development training, time management training, change management training which are faced with issues of quantitative analysis. The researchers in future must focus on all forms of training;

classroom training or online training and devising ways to meet the challenges highlighted in view of new trends and developments in the area of training and development.

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