



## ROI FOR EFFECTIVE EVALUATION OF TRAINING & DEVELOPMENT

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### Introduction

Return on Investment (ROI) is a financial metric that can be used to evaluate training and development investments. Return on investment (ROI) has become one of the most challenging and intriguing issues facing the human resources development (HRD) and performance improvement fields. Thus, this paper discusses overall impact of ROI of Training and Development activities in evaluation of these activities of the organisation.

### Defining ROI in Training & Development

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 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 requirements to justify training budgets and investments.

## **Need for the Study**

In the last few decades, this approach has been applied to asset purchase decisions (computer systems, factory machines, or service vehicles, for example), “go-no-go” decisions for projects and programmes of all kinds (including marketing, recruiting, and training programmes), and to more traditional investment decisions (such as the management of stock portfolios or the use of venture capital).

A study of 15 countries in the Organization for Economic Cooperation and Development found that the majority of enterprises believe employee training is responsible for "productivity improvements, greater workforce flexibility, and savings on material and capital costs, improved quality of the final product or service, and a more motivated workforce."

However, many companies have not measured the benefits and related them to the cost of training in a way that reveals the rate of return on a firm's investment. Apparently there is no other workplace issue on which so much money is spent with as little accountability as training.

*(Myths & Realities No. 16: Return on Investment in Training, Bettina L. Brown, Center on Education & Training for Employment, Ohio State University, ERIC/ACVE, 2001)*

## **Why Measure ROI of A Training Programme?**

Several issues are driving the increased interest in, and application of, the ROI process, the most common being:

- The pressure from clients and senior managers which show that the return on their training investment is probably the most influential drive
- The competitive economic pressures that are causing intense scrutiny of all expenditures
- The general trend towards accountability with all staff support groups that is causing some HRD departments to measure their contribution
- To justify the existence of the training department by showing how it contributes to the organization's objectives and goals
- To decide whether to continue or discontinue the training programmes.
- ROI, and the evaluation of training, is, and always has been, an important topic to the computer industry; and it has always been problematical convincing customers, and

your own product sales and marketing departments, that training is vitally important to the customer's success with your product. For the IT industry, training on new or updated software and systems is critical to successful implementation.

- Most people believe this, and intuitively accept it. Training is usually built into plans and proposals alongside software purchases and other services. On the other hand, training is also often regarded as one of the aspects of a project that can be cut back or even removed from a project, without causing the project to fail completely; we are all familiar with the attitude that training is often the last item to be included in the project plan, and the first to be cut back when money is tight.



### **Reasons for measuring Training and Development Activities**

Why should an organization measure the progress of its training and development curricula?

Some rationale includes are as follows:

- To justify the financial investment in the training and development programs.
- To gather feedback for ongoing improvement as a program is being delivered.
- To demonstrate the link between HR programs and the company's strategy.
- To compare the effectiveness of two or more training programs.
- To meet requirements set by professional organizations or government regulations.

### **The Customer Driven Approach**

There are so many reasons for measuring program impact, it's important to consider what an evaluation is supposed to accomplish. The first step in doing so requires you to identify the real customers or stakeholders of the program. The customers include the program participants, their managers, the HR staff, and senior leaders. Each of these groups probably has different questions or expectations about the purpose of the program. Once you have identified these customers, it's a good idea to brainstorm a list of questions that each group might have about the program. For example:

- **Participants:** "Is this going to improve my skills?"
- **Managers:** "Will this program make my employee more productive?"
- **HR staff:** "Did this program address the right skill deficits?"
- **Senior leaders:** "Will this program provide a positive return on our investment?"

The questions posed by the customers will drive the types of measures that you select in the evaluation process. There is no point in spending time trying to answer questions that no one has asked. Additionally, you need to make sure that you answer the questions posed by your most critical customers.

### **Scope of the Study:**

The current paper covers the scope of conceptual context of ROI of Training and Development. Although, the interest in the topic has heightened and much progress has been made in it. It is still a challenge to calculate the ROI of Training; even the most sophisticated and progressive HRD departments and those involved with management development programs. Some professionals argue that it is not possible to calculate the ROI of many programs, while others develop measures and ROI calculations. Regardless of the position taken on the issue, the reasons for measuring the return are still there (Phillips, 1977). Most professionals involved in training and development share a concern that they must eventually show a return on their training investment and thereby abandon some of the more traditional methods of evaluating programs. Thus, this paper provides overall idea to implement step by step approach while calculating ROI of Training and Development activities.

### **Objectives of the Study**

- 1) To understand the concept of ROI of Training and Development
- 2) To identify the criteria for an effective ROI on training and development
- 3) To overview the role of ROI in evaluation of Training and Development

### **Research Methodology**

This is purely secondary base paper, where descriptive has used to derive the findings.

### **What is ROI measurement for Training?**

All training programs will have some form of effectiveness measurement, even if it is as simple as immediate feedback from the participants on “happy sheets” which provide an initial reaction to their perception of the training.

More in depth analysis of the effectiveness of training in changing positively the participants’ ability to do their job and increase productivity, or reduce costs, requires more in depth understanding of the real business purposes of the training and the real financial benefits expected by the organisation.

## **ROI as process**

ROI measurement is the process of collecting and analysing this performance data, and translating this into a measurement of real financial benefit to the organisation. This benefit is then compared to the cost of creating this benefit through training and measurement.

In many cases, ROI measurement can be linked to data collected and analysed for the purpose of Training Needs Analysis (TNA). If detailed TNA studies are done prior to the training, the data from these studies can be compared to the feedback and performance data acquired after the training takes place. In addition, the TNA is likely to highlight the expected benefits and results from the training. In this case, the change in performance may be more accurately determined.

**ROI as Perception:** So, what actually is ROI on training? It can be considered to be a perception on the part of the client of how valuable the training has been in achieving their perceived goals; and these perceptions will vary depending on whom you talk to. For example:

- The Board may see a big picture of how the training affects the company's ability to achieve its corporate goals
- The finance department may be looking to see how training stacks up financially against other ways to invest the company's money, and whether the training, as carried out, is financially more effective than alternative forms of development
- The business unit manager may be solely concerned with the impact on performance and productivity in achieving the goals of their department
- The training and development manager may be concerned with the impact training programmes are having on the credibility and status as the training function within the company and its ability to secure investment in the future to drive further business performance enhancements.

With all these potentially different viewpoints, one of the first things we need to consider with our client, is what the client actually considers is a return on investment, and which views of success are critical to the measurement process. Hopefully, there will be a balance of these viewpoints, leading to an overall value judgment based on actual measured results.

## **BENEFITS OF ROI:**

***Measures Contribution:*** ROI makes it possible for the HRD staff to know the specific contribution from a select number of programmes. It can determine if the benefits of the

programme, expressed in monetary terms, have outweighed the costs and thus whether it has made a contribution and is actually a good investment or not.

***Sets Priorities:***

By calculating ROIs in different areas, one can determine which programmes contribute the most to the organization, allowing priorities to be established for high-impact training.

***Focuses on Results:***

Measurement of ROI is a result based process which brings a focus on results with all programmes. The process requires instructional designers, facilitators, participants, and support groups to concentrate on measurable objectives – what the programme is attempting to accomplish. Thus, the process has the added benefit of improving the effectiveness of all the training programmes.

***Alters Management Perceptions of Training –***

The ROI process, when applied consistently and comprehensively, can convince the management group that training is an investment and not an expense. Managers will see training as making a viable contribution to their objectives, thus increasing the respect for the function. This is an important step in building partnership with management.

***Intangible Benefits***

In addition to monetary benefits, most training programs will have intangible, non-monetary benefits. Intangibles are those measures that cannot easily be converted to monetary values. According to Phillips, “In some programs, such as interpersonal skills training, team development, leadership, communications training, and management development, the intangible (non monetary) benefits can be more important than tangible (monetary) measures. Consequently, these measures should be monitored and reported as part of the overall evaluation. In practice, every project or program, regardless of its nature, scope, and content will have intangible measures associated with it. The challenge is to efficiently identify and report them.” (Phillips 2003)

Typical intangible variables include items such as

- ✓ Stress reduction
- ✓ Employee engagement
- ✓ Grievance reduction
- ✓ Improved customer satisfaction
- ✓ Complaint reduction

- ✓ Conflict reduction/avoidance.

### **TRENDS OF ROI:**

Many professionals argue that most models of the ROI process ignore or provide very little insight into two key elements essential to developing the ROI:

- ✓ Isolating the effects of training
- ✓ Converting data into monetary values

While most executives can logically conclude that training can pay off in important bottom-line measures such as productivity improvements, quality enhancements, cost reduction, and time savings, frustration comes from the lack of evidence to show that the process is really working. Organizations have moved from training for activity to training with a focus on bottom-line results and this shift is evident from the beginning to the end of the process.

### **The ROI Analysis Plan:**

The ROI analysis plan is a continuation of the data collection plan. This plan document captures information on several key issues necessary to develop the actual ROI calculation.

The key issues include:

- Significant data items, usually Level 4 (Business Impact), but in some cases could include Level 3 (Application and Implementation) data. However Five levels of measurement are said to be currently in practice, (Phillips, 1997a) (Annexure 1)
- The method for isolating the effects of the training and education programme
- The method for converting data into monetary values
- The cost categories, noting how certain costs should be prorated
- The anticipated intangible benefits
- The communication targets to receive the information
- Other issues or events that might influence programme implementation.

With a proper planning around a proven framework, realistic evaluation targets, and shared responsibilities for major steps, the ROI process can be implemented in a cost effective, systematic manner and can assist the resource-constrained training function to reap financial benefits that leaders understand and have come to expect. It is now strategically imperative that training be conducted with the clear understanding that if people are truly the organization's greatest asset, then training is beyond doubt, the greatest investment and must hence be utilized wisely.

## **Review of Literature:**

Many organizations around the globe are using cost saving approaches so that they can begin conducting ROI evaluation within their current budget while others are using such approaches in order to increase the number of ROI studies they conduct. General cost saving approaches for measuring programmes at the ROI level introduced by Phillips (1997a) have been proven to significantly decrease resource requirements while still providing sound, credible data. Despite these factors, establishing an evaluation culture is no easy task.

In many ways, implementing a system-wide ROI effort is similar to implementing a large-scale change initiative. The concept of ROI has been used for centuries. The 75<sup>th</sup> anniversary issue of *Harvard Business Review (HBR)* traced the tools used to measure the results in organizations. In the early issues of *HBR*, during the 1920s, ROI was the emerging tool to place a value on the payoff of investments.

In recent years, the application of the concept has been expanded to all types of investments including training and education, change initiatives, and technology (Phillips, 2000a). With increased adoption and use, it appears that ROI is here to stay. Today, hundreds of organizations, representing manufacturing, service, non-profit, and government, are routinely using ROI calculations for education and training programmes. A professional society, The ROI Network™, with over 500 members, allows practitioners an opportunity to share information and tools around ROI. The networks have been formed within the organizations to focus on the ROI and accountability issue. Almost 1,000 individuals have been certified to implement the process in their organizations. Three casebooks have been developed to show specific applications of ROI (Phillips, 1994; 1997; 2000c). A fourth casebook describes successful implementation of the ROI process (Phillips, 1998). This level of interest and activity is evidence that the ROI process is here to stay. There are good reasons why return on investment is so significant. Although the viewpoints and explanations may vary, some things are very clear. First, in most organizations, education and training budgets have continued to grow year after year. As expenditures grow, accountability becomes a more critical issue. A growing budget creates a larger target for internal critics, often prompting the development of an ROI process.

Second, Total Quality Management and Continuous Process Improvement have drawn increased attention to measurement issues.



Today, organizations measure processes and outputs that were not previously measured, monitored, and reported. This measurement focus has placed increased pressure on the education and training function to develop measures of programme success. A paper (Buckberry, 2004) has been developed to provide to members of Computer Education and Management Association (CEdMA) some basic introductory information and ideas to assist in the preparation of their own customized ROI processes. CEdMA's clients are typically purchasers of IT software and hardware, and CEdMA members are responsible for the provision of training to these clients. The question this paper addresses is, "How do we help customers understand and justify for themselves the need to invest properly and comprehensively in training, and how do we present the comparative benefits of different approaches to training?" Implementing some form of measurement process is as important for managing training programmes and investment, as it is for any other project requiring significant financial investment by a business. Training programmes consume resources (i.e., they take people's time and money), but they are also critical to maximizing the return on investment in other programmes or products (e.g., the effective introduction of software systems requires users to be able to use the systems effectively if the potential benefit of the software systems is to be realized in practice), as well as generally improving the productivity of the workforce. If ROI is to be successfully managed and measured, it is important that the process be included early in the planning cycle for the training programmes. (Buckberry, 2004).

A study was conducted by **Reed (1986)** to determine the net impact of Job Training Partnership Act (JTPA) training. (A measure of net impact expresses only those gains due to training and not those due to other reasons.) Job service applicants were chosen as a comparison group whose recent labour market experiences would parallel those of JTPA participants. All results were positive. For men who participated in JTPA in 1983-84, the estimated effect of training was an additional \$1,400 earned during 1985. It appeared likely that the benefit persisted in 1986. For white women, the estimated effect of training was an additional \$1,000 earned in 1985. A separate estimate of the impact on earnings was made for recipients of Aid to Families with Dependent Children (AFDC). For them, the effect was an additional \$1,200 in 1985 earnings. Because their initial earnings were so low, this amounted to approximately 100 per cent of the 1979 income. The reduction in AFDC grant amounts attributable to training was another measure of impact used.

Twelve months after enrollment, AFDC recipients who participated in training were 86 per cent more likely not to be receiving assistance than were their counterparts who did not participate. Collins, Collins and Jensen (2009) concluded from their study that wisely allocating financial resources is essential to the success of every health care organization. Therefore, health care managers must be able to determine if dedicating the necessary funds for employee training results in an adequate return on investment. This case study examines how training programmes can be evaluated in terms of business results and describes one method, simple regression analysis that health care managers may use, to help determine if the training was financially beneficial to the organization.

**Philips and Philips (2009)** describe the ROI methodology, a measurement process that was developed almost 30 years ago and refined over the years to the point that it is now becoming a staple for many HR functions. During difficult times in the economy, nothing is more important to top executives than knowing the true value of a particular project or programme. “Show me the money” has become a battle cry for many executives demanding that any new HR project or programme shows its value even before it is implemented and, certainly, the impact and return on investment (ROI) after it has been implemented. Around the globe, HR executives are taking a look at the ROI process as a way to show credible values, including financial ROI. This article describes why and how ROI is used to show the contribution of HR programmes and improve them further so that they can add more value, build support for HR, enhance commitments, and concretize important business relationships. This method can be used to show the value of major programmes and projects and establish HR as a business partner. With the ROI process, the HR staff and the client would know the specific contribution of an HR Programme.

### **ROI Formula**

The formula for evaluating Training investments is net programme benefits divided by cost.

### **Evaluating Training Investment = Program Benefits/Program Cost**

The ratio is usually expressed as percentage When the fractional values are multiplied by 100.

**ROI** can thus be expressed as:

$$\text{ROI (\%)} = \text{Net Programme Benefits} / \text{Programme Costs} \times 100$$

### Evaluation Levels (Modified from the Kirkpatrick 4-level model)

Evaluation Level	Description	Characteristics
<b>Level 1</b> “Did they like it?”	Measuring Reaction and Identifying Planned Actions	Measures participants’ reaction to the program, and outlines specific plans for implementation of learning to the job.
<b>Level 2</b> “Did they learn?”	Measuring Cognitive Learning and Retention	Measures skills, knowledge, or attitude changes as a result of the training.
<b>Level 3</b> “Do they use it?”	Assessing Application of the program training on the job	Measures actual changes in behaviour on the job, and specific applications of the training material.
<b>Level 4</b> “Did it impact the bottom line?”	Identifying business results from the training	Measures the business impact of the training. (e.g. measures changes in output, quality, costs, time, productivity or other business metrics)
<b>Level 5</b> “What is the return on learning investment?”	Calculating Return on Investment	Compares the monetary value of the results with the costs for the program.

In most organisations, measuring training effectiveness at all Levels 1-4 is not feasible for all participants and for all projects. In practice, the organisation must set targets for the scope of evaluations at each level, and for the critical training courses or programmes which have most importance to the success of the organisation. Typical targets for measurement activities at each level are:

- ❖ **Level 1:** 100% of participants/courses provide effectiveness data
- ❖ **Level 2:** 50-70% of participants/courses provide effectiveness data
- ❖ **Level 3:** 30-50% of participants/courses provide effectiveness data

❖ **Level 4:** 10-20% of participants/courses provide effectiveness data

❖ **Level 5:** 5-10% of actual ROI is measured, and extrapolated to the overall program.

From this, we can see that most organisations will initially only fully calculate ROI in detail on a sample of the courses and participants. It is therefore essential to identify those courses and participants who are:

- Representative of the overall population
- Taking part in important or high impact programs
- Able to accurately assess the impact of training on their jobs
- Amenable to providing the full depth of data required

### **Criteria for an Effective ROI Process**

The following criteria were developed for an effective ROI process with inputs from hundreds of education and training managers and specialists (**Phillips, 1997a**)

It must be simple, void of any complex formula.

- It must be economical with the capability to become a routine part of training and development without requiring any additional resources.
- The assumptions, methodology, and techniques used must be credible, logical and practical.
- Ideally, the process must strike a balance between maintaining a practical and sensible approach and a sound theoretical base for the process.
- The ROI process must account for other factors that influence the output variable.
- The ROI process must be applicable to both hard and soft data.
- The ROI process must be appropriate in the context of other HRD programs.
- The ROI process must be flexible enough to be applied pre and post training.
- The ROI process must include the costs of the training and measurement program.

### **The Process Model**

This basic model for a simplified implementation of ROI measurement starts by looking at the returns expected or measured, and goes on to look at the investment and cost of gaining the returns. Each organisation will need to develop its own specific ROI evaluation process, suitable to its own environment and business pressures. However, the full ROI evaluation

process can be a significant overhead in running a training operation; so it is important to develop an evaluation model that can be used in multiple situations.

### ***Identify the Returns***

It is necessary to collect data at various levels to build up a proper picture of the influence of learning (as per the Kirkpatrick model, or any other model). In order to determine which data items should be collected, and when, you need to agree with the customer your approach to the questions in Appendix 1. These questions describe some of the potential areas where returns can be achieved; it is down to you and the client to decide exactly which of these factors apply in any given situation.

Beware that, sometimes, benefits can be hidden; for example, consider the business benefits of “certification for regulatory compliance” in the ROI calculation; it may be that compliance is seen as a pure overhead cost of doing business; but in this case, training can reduce the cost of compliance (and the costs of non-compliance), and provide benefits in enabling new business activities, or better quality of customer service resulting from the compliance-training etc. Examples of such factors may be

- How can you quantify “competitive advantage” resulting from a more highly trained and competent workforce, resulting in shareholder value?
- Competitive advantage is probably seen differently by every organisation; what constitutes competitive advantage may perhaps be better seen as a compilation of factors, such as quality, cost, customer satisfaction; but there may be intangible elements such as “company image in the market” which amounts to more than the sum of the individual components of competitive advantage.
- How can you quantify the value of improvement in managers’ long term decision making resulting from improved techniques in situational analysis and decision making?
- This may require some quite sophisticated analysis; maybe this can be determined by offering simulation exercises, or role/game playing, and deriving a score from that.

### ***Identify the Investment***

You now need to calculate the cost of investing in this training. Investment can conveniently be split into 2 significant components

- Money spent on the training/learning

- Time and effort used

See Appendix 1 for a checklist of specific items that should be considered to calculate the costs

There are then other factors which could be considered, but might prove difficult to quantify; should they be ignored for purely ROI calculation purposes (they should not however be ignored when considering the overall success of the training/learning activity)? Examples of such factors may be

- You may need to invest a measure of existing goodwill with your “client departments or teams/individuals” and overall management commitment to training/learning, which may be enhanced or degraded, depending on the outcome.

### **Step 1: Create an ROI Measurement Plan**

To achieve the ROI measurement requires that the ROI process is planned early, and that two planning documents are prepared:

#### **The Data Collection Plan**

- State the objectives of the training / learning
- State the objectives of each phase of data collection at each evaluation Level
- Identify any previously used metrics, values or methodologies used by the client, and determine their suitability for the current exercise
- Select the appropriate evaluation methods
- Identify the audiences who will be surveyed for data
  - i. The learner
  - ii. The manager (focused on levels 3 and 4)
  - iii. The analyst (for analytically determined performance-change data based on available performance measurement data)
- Set the timing for the data collection
  - i. Pre-training data collection (benchmarking the current situation)
  - ii. Post-training data collection (comparative data (“apples to apples comparison”))
    - 1) immediately post-training (initial reaction and assessment) focused on levels 1 and 2
    - 2) at a later date when the effect of the training has had time to make itself felt in the learner’s job performance – focused on levels 3 and 4
- Allocate responsibilities for data collection and analysis

- The ROI Analysis Plan (This is a continuation of the Data Collection Plan, capturing information on the key items needed to develop the actual ROI calculation.)
  - List Significant Data items (usually Level 4 or 3) to be collected
    - i. Benefit Factors
    - ii. Cost Factors
  - Methods to isolate effects of the learning/training from other influences
  - Methods to convert data to numerical values
  - Intangible benefits
  - Other influences
  - Communication targets

### **Step 2: Collect Data**

As described above, data will have to be collected at various points in the training process, to be able to carry out effective ROI calculations. The following notes may be helpful in planning your data collection exercise.

1. Identify the purposes of the evaluation. State clearly what the evaluations are to measure and what the goals of the training are intended to be. Be as specific as possible about the goals of the training, and make sure these goals address the performance enhancement, business improvement or cost savings expectations.
2. Select the evaluation instruments and methodology. Identify how the data will be collected and analysed (see below for different methods of data collection)
3. Establish the timing for the data collection. Decide whether pre-training analysis is required, or post training analysis, or both. (eg pre-training and multiple post-training assessments may be necessary to effectively identify the skills changes in Levels 2, 3 and 4.)
4. Carry out the data collection at the levels 1-4 indicated above

### **Step 3: Isolate the effects of training**

Once the training program is complete, it is essential to identify which performance improvements have resulted from the training, and which improvements are co-incidental and may not be directly relevant to the training.

Tools to isolate the effects of training can include:

- **Control Groups:** Comparing the change in performance of a group which has undertaken training, to the performance change of a similar, untrained group, can provide a factoring value by which the total measured change can be adjusted.
- **Trend lines:** These show the trends in performance change, which would have been expected if the training had not taken place; these can be compared to actual improvement measurements. Draw a trend line, derived from previous performance data, and extend into the future; then compare this later with the actual data derived from the results of post-training evaluation.
- **Mathematical forecasting:** This may be appropriate where there are several factors to consider in the change in performance (e.g. sales increase due to training, and an increase in marketing expenditure). It may be possible to calculate the expected trend due to the marketing intervention and calculate the difference as being due to the training ;
- Participants' estimates of the impact.
- Supervisors' or managers' assessments of the impact of training on measured performance improvement.
- Senior management estimates of the overall value of training programs on the business, taking into account other factors they are aware of Having isolated the effects of training, it may be necessary to adjust the numeric results of the data collection exercise to reflect the fact that estimates may be "inflated"; on average, individuals may believe that training has resulted in a 25% performance improvement; in practice it may be less than that, as the group concerned may have a tendency to **over**-estimate the effects of the training. Taking a conservative approach, and applying an adjusting factor, may help to reduce bias in the survey data.

#### **Step 4: Convert data to monetary value**

In this stage it is important to estimate the financial value of the various changes resulting from the training, and to identify the total costs incurred in implementing the training program.

There are various strategies for estimating the value of performance changes:

- Output data converted to profit contribution or cost savings
  - Direct costs saved
  - Increased volumes of output produced



- Timeliness of output
- Cost of quality calculated and quality improvements converted to cost savings or increased profitability
- Cost savings (salaries and overheads) in reductions in participants' time in completing projects.
- Internal or external experts may be able to estimate the values of the performance improvements gained.
- Participants or their supervisors/managers can estimate the cost savings or value of increased productivity

Having calculated the direct financial value of the performance enhancements, it is also necessary, wherever possible, to estimate the value of the more “intangible benefits”, such as:

- Increased job satisfaction, and the benefits of increased staff retention and reduced recruitment costs
- Increased organisational commitment
- Improved teamwork
- Improved customer service
- Reduced problems and complaints
- Reduced conflicts

To calculate the cost of the training program, ensure you include:

- Cost of external training services purchased
- Cost of training materials supplied
- Cost of internal training staff involvement
- Cost of facilities used for the program
- Travel, accommodation and other incidental costs
- Salaries and benefits of the participants
- Administrative and overhead costs of the training function.
- The costs of carrying out the ROI on the training program.

### **Step 5: Calculate the ROI**

ROI can be expressed in 3 different ways

#### **1. Benefit/Cost Ratio**

$$\text{BCR} = \text{Program Benefits} / \text{Program Costs}$$

BCR uses the total benefits and the total costs, and are expressed as a ratio i.e. - 10:1

## **2. ROI %**

$$\text{ROI} = \frac{\text{Net Program Benefits}}{\text{Program Costs}} \times 100$$

In ROI, the costs are subtracted from the total benefits to produce net benefits, which are then divided by the costs. This shows the net benefits to the company after the costs are covered.

## **3. Break-even time**

$$\text{Break-even time} = \frac{\text{Investment}}{\text{Benefits}} \times \text{Period in months}$$

It is possible for business benefits to last more than 1 year, but in most cases, the effect of training is more difficult to assess over longer periods, so typically 1 year benefits are calculated. Longer term programs can be measured over multiple years.

Calculating ROI requires that business results data must be converted to monetary benefits. It is important to be able to allocate financial value to results such as

- Improved productivity
  - Time saved
  - Output increased
- Enhanced quality
- Reduced employee turnover
- Decreased absenteeism
- Improved customer satisfaction

## **Conclusions:**

By understanding this basic conceptual phenomenon one can easily go for successful implementation of ROI evaluation. So, one need to understand that it is not a backward-looking audit of training but a tool to ensure that future training is targeted and it should be effective. It is not principally about cost saving but about objective evaluation and re-engineering of Training and Development programmes to meet the needs of the 21st Century global economy. The use of ROI of Training and Development with systematic way ensures the training efficiency and effectiveness. The steps of ROI Analysis plan helps in ensuring the outcomes of the training. The defined criterion of Training will ensure the returns of the program.

## **References:**

- 1) Phillips, J J (1997). *Handbook of Training Evaluation and Measurement Methods*, 3rd Edition, Houston, TX: Gulf Publishing.
- 2) Phillips, J J (1997). *Return on Investment in Training and Performance Improvement Programs*, Butterworth Heinemann.
- 3) Phillips, J J (1997a). *Return On Investment in Training and Performance Improvement Programs*. Houston, TX: Gulf Publishing.
- 4) Patterson, T.J. (1998). Commentary II: a new paradigm for extension administration. *Journal of Extension*, 36(1), <http://www.joe.org/joe/1998february/comml.html>.
- 5) Phillips, J.J. (1997). *Return on Investment in training and performance improvement programs*. Houston: Gulf Publishing Company
- 6) Senge, P.M. (1990). *The Fifth Discipline. The art and practice of the learning organization*. New York: Doubleday.
- 7) Training Evaluation-Industry Report: *Who's Learning What?* (1996, October). *Training Magazine*, p.63.
- 8) Goldwasser, D. "Beyond ROI." *Training* 38, no. 1 (January 2001): 82-90. Keenan, W., Jr. "Sales Training ROI?" *Industry Week* 249, no. 11 (June 12, 2000): 23.
- 9) Lachnit, C. "*Training Proves Its Worth.*" *Workforce* 80, no. 9 (September 2001): 52-56.
- 10) Buck Berry, Norman (2004). "*Summary Process for Measuring ROI of Training,*" Version Draft 5, May 2, Prepared for CEDMA Europe.
- 11) Collins, Sandra K; Collins, Kevin S and Jensen, Steven C (2009). "Determining Return on Investment for Training Using Simple Regression: A Hypothetical Case Study for the Health Care Industry," *The Health Care Manager*, 28(1), 30-37.
- 12) Hasset, J (1992). "Simplifying ROI," *Training*, September, 54. Kirkpatrick, D L (1975). *Techniques for Evaluating Training Programs,* *Evaluating Training Programs*, Alexandria, VA: American Society for Training and Development.
- 13) Phillips, J J (1994). *In Action: Measuring Return On Investment, Vol. 1*. Alexandria, VA: American Society for Training and Development.
- 14) Phillips, J J (1996). "How Much is the Training Worth?" *Training and Development*, 50(4), pp. 20-24.
- 15) Phillips J J (1996). *Accountability in Human Resource Management*, Gulf Publishing Co.