Perspective of HR Manager on Return on Investment of employees at Large scale Industries in Marathwada Region

W.K. SARWADE¹, DIVYA SHARMA²
¹Department of Management Science, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad
²MBA Department, Maharashtra Institute of Technology, Aurangabad

Abstract -- The current research paper talks about the perspective of HR Manager towards ROI in their organization in Marathwada region. The researcher has identified the large scale industries that to in manufacturing sector to understand the measuring of the training effectiveness. ROI is viewed as excessively unpredictable and tedious, making it impossible to ascertain. Trouble in confining training as a factor that influences practices and results likewise blocks learning assessment.

Indexed Terms: Assessment, Return on Investment, Training

I. INTRODUCTION

In modern years there has been a remarkable surge in prominence on the development of the return on investment for training and development. This emphasis has caused HRD practitioners to seek a rational procedure that would enable them to develop the ROI for a specific program. Thus ROI process has become an important and essential part of evaluation. Evaluation purposes should be considered prior to developing the evaluation plan because they will often determine the scope of the evaluation, the types of instruments used, and the type of data collected.

The investment in people, both in emerging and sustaining the suitable skills, becomes a vital part of the organization’s strategy for the future. Like any investment, investment in training should produce an effective and measurable payback. Effective training enhances the knowledge, skills, attitudes and behavior of people and hence their performance.

Adapting Records to Monetary standards

To calculate the return on investment, data collected in a Result level evaluation are converted to monetary values and compared to program costs. This requires a value to be placed on each unit of data connected with the program. Ten strategies are available to convert data to monetary values; the specific strategy selected usually depends on the type of data and the situation.

1. Output data is converted to profit contributions or cost savings

In this strategy, output increases are converted to monetary value based on their unit contribution to profit or the unit of cost reduction. These values are readily available in most organizations.

2. The cost of quality

The cost of quality is calculated and here quality improvements are directly converted to cost savings. This value is also available in many organizations.

3. Employee time is saved

For training programs were employee time is saved, a participant salaries and benefits are used for the value for time. Because a variety of programs focus on improving the time required to complete projects, processes, or daily activities, the value of time becomes an important and necessary issue.

4. Historical costs

It is used when they are available for a specific variable. Organizational cost data are used to establish the specific value of an improvement.

5. Internal and External experts

Used to estimate a value for an improvement. In this situation, the credibility of the estimate hinges on the individuals expertise and reputation.

6. External Database
They are sometimes available to estimate the value or cost of data items. Research, governments, and industry databases can provide important information for these values. The challenge lies in finding a specific database related to the situation.

7. Participant estimate

The value of the data item. For this approach to be effective, participants must be capable of providing a value for the improvement.

8. Participants' supervisors provide estimates

When they are both willing and capable of assigning values to the improvements. This approach is especially useful when participants are not fully capable of providing this input or situations in which supervisors need to confirm or adjust the participants estimate.

9. Senior management provides estimates

The value of an improvement when they are willing to do so. This approach is particularly helpful in establishing values for performance measures that are important to senior management.

10. HRD staff estimates

It may be used to determine the value of an output data item. In these cases it is essential that the estimates be provided on an unbiased basis.

This step in the ROI model is very important, as it is absolutely necessary to determine the monetary benefits from a training program.

**Formulation of Program Cost**

Cost / benefit analysis equation is the cost of the program. Formulating the costs involves monitoring or developing all related costs of the program targeted for ROI calculation. Among the cost components that should be included are:

- The cost to design and develop the program, possibly prorated over the expected life of the program.
- The cost of all program materials provided to each participant.
- The cost for the instructor/facilitator, including preparation and delivery time.
- The cost of facilities for the training program.
- Travel, lodging, and meal costs for the participants, if applicable.
- Salaries plus employee benefit costs of the participants attending the training.
- Administrative and overhead costs allocated to the training program.

**Calculating the Return on Investment**

The return on Investment is calculated using the program benefits and costs. The cost/benefit ratio is the program benefits divided by cost. In formula form it is:

**CBR (Cost Benefit Ratio) = Program Benefits / Program Costs**

The return on investment uses the net benefits divided by program costs. The net benefits are the program benefits minus the costs. In formula form, the ROI becomes:

**ROI (%) = Net Program benefits * 100 / Program Costs**

A variety of environmental issues and events will influence successful implementation of the ROI process. These issues must be addressed early to ensure that the ROI process is successful. Specific action includes:

- A policy statement concerning results based training and development.
- Procedures and guidelines for different elements and techniques of the evaluation process.
- Meetings and formal sessions to develop staff skills with the ROI process.
- Strategies to improve management commitment and support for the ROI process.
- Mechanisms to provide technical support for questionnaire design, data analysis, and evaluation strategy.
Specific techniques to change or improve the organizational culture to place more attention on results.

The ROI process can fail or succeed based on the success of the implementation issues. Because implementation is crucial to a successful measurement and evaluation process.

**Industrial Training Cost - Effectiveness Model**

![Industrial Training Cost - Effectiveness Model Diagram]

**II. OBJECTIVE OF THE STUDY**

1. To analyze the practical issues before evaluating the employee performance after training program.

2. To determine whether the training and development program justifies the cost.

**Population**

Population of this study comprises the HR Manager of the certain companies in the large scale industries i.e. manufacturing sector in Marathwada region only.

**Sample Size**

Total no. of HR Manager selected is 40.

Sample is being selected through Convenience sampling.

**III. LITERATURE REVIEW**

Jack J. Phillips (2004), The author embrace about the importance of training evaluation were in many organization the hottest issue in the HRD field are evaluation, result-based training, and Return on Investment (ROI) analysis. Training and development departments are struggling to meet demands from management for profit contributions and from participants who want a program that produce results. This trend toward accountability is one of the most significant developments in the HRD field. Few of the evaluation models may appear that way, but evaluation can be simple and inexpensive.

Thomas G Reio etal (2017) Donald Kirkpatrick published a series of articles originating from his doctoral dissertation in the late 1950s describing a four-level training evaluation model. From its beginning, it was easily understood and became one of the most influential evaluation models impacting the field of HRD. While well received and popular, the Kirkpatrick model has been challenged and criticized by scholars, researchers, and practitioners, many of whom developed their models using Kirkpatrick’s theoretical framework. This article reviews several evaluation models, and also presents empirical studies utilizing the four levels, collectively demonstrating the usefulness of, but the difficulty in, implementing all four levels.

**IV. DATA ANALYSIS AND INTERPRETATION**

Measuring the effectiveness of training

Multiple response analysis is done to measure the effectiveness of the training by using formulae.
HR Manager from manufacturing was asked to tell which of the said formulae is used in their organization to measure the effectiveness of training.

Table 1: Case Summary of Measuring the Training Effectiveness

| Dimension | Cases | Missing | Total | %
|-----------|-------|---------|-------|---
| N | Perce nt | N | Percent | N | %
| Formula For Training Measuring Training Effectiveness | 3 | 85.0 | 6 | 15.0 | 0 | 0 | 100.0 |

They were given four options and were asked to choose the following option:

Hence the question i.e. for measuring the effectiveness of training, which of the following formulae is used in your organisation is Multiple Response Question and data are analyzed using Multiple Response Questions option in IBM SPSS software. Results of data analyzed are given below:

Source: Field Survey 2016

Table 2: Frequency Table of Measuring the Training Effectiveness

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Frequencies</th>
<th>Responses</th>
<th>Percent of Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>Percent</td>
<td>N</td>
<td>Percent</td>
</tr>
<tr>
<td>Formula For Training Measuring Training Effectiveness</td>
<td>No. of employees/ total No. of employee trained * 100percent</td>
<td>2</td>
<td>34.0</td>
</tr>
<tr>
<td>Number of training courses achieving the required outcomes/ Total number of training courses delivered * 100percent</td>
<td>2</td>
<td>27.0</td>
<td>8</td>
</tr>
<tr>
<td>Total benefits/ Total costs * 100percent</td>
<td>4</td>
<td>5.6</td>
<td>11.8</td>
</tr>
<tr>
<td>Any other method</td>
<td>2</td>
<td>31.0</td>
<td>67.6</td>
</tr>
<tr>
<td>Total</td>
<td>7</td>
<td>10.0</td>
<td>211.8</td>
</tr>
</tbody>
</table>

Interpretation

The above table reveals that out of the 72 YES responses, No. of employees/ total No. of employee trained * 100percent is 34.7 percent, Any other method 31.9 percent. Number of training courses achieving the required outcomes/ Total number of training courses delivered * 100percent is 27.8 percent and Total benefits/ Total costs * 100percent accounted for 5.6 percent.

Training budget as a percent of operating expenses

Table 3: Frequency Table of Training Budget

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Responses</th>
<th>Percent of Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>Percent</td>
<td>N</td>
</tr>
<tr>
<td>Training Budget</td>
<td>Decreased</td>
<td>1</td>
</tr>
<tr>
<td>Remained stable</td>
<td>6</td>
<td>15</td>
</tr>
<tr>
<td>Increased</td>
<td>1</td>
<td>42.5</td>
</tr>
<tr>
<td>Total</td>
<td>4</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Field Survey 2016

Interpretation

From the above frequency table it is observed 42.5 percent of the HR manager from various organization says that from last two years the training budget of operating expenses has been decreased and increased followed by 15 percent of them feels it remained stable for the same.

Accuracy and credibility of the cost benefit analysis

Multiple response analysis is done for Credibility of cost benefit analysis.

HR managers were asked to respond the Credibility of cost benefit analysis by asking following seven options.

Hence the question, which of the following strategies used to tackle the accuracy and credibility of the cost benefit analysis in your organization is Multiple Response Question and data are analyzed using MRQ
option in IBM SPSS software. Results of data analyzed are given below:

### Table 4: Case Summary of Credibility of Cost Benefit analysis

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Cases</th>
<th>Missing</th>
<th>Total</th>
<th>N</th>
<th>%</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credibility of Cost Benefit analysis</td>
<td>1</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>100</td>
<td>4</td>
<td>0</td>
</tr>
</tbody>
</table>

Source: Field Survey 2016

### Table 5: Frequency Table of Credibility of Cost Benefit analysis

<table>
<thead>
<tr>
<th>Credibility of Cost Benefit analysis</th>
<th>Responses</th>
<th>Percent of Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trend lines</td>
<td>3</td>
<td>20.0</td>
</tr>
<tr>
<td>Forecasting model</td>
<td>5</td>
<td>33.3</td>
</tr>
<tr>
<td>Senior management estimate</td>
<td>7</td>
<td>46.7</td>
</tr>
<tr>
<td>Total</td>
<td>1</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Field Survey 2016

The above table reveals that out of the 15 YES responses, and senior management estimate accounted for 46.7 percent, Forecasting model 33.3 percent and Trend lines accounted for 20 percent.

### Cost data of training

Multiple response analysis is done for Cost data for training evaluation.

HR managers were asked to response the Cost data for training evaluation by asking following thirteen options.

Hence the question what is the rationale for developing the cost data of training evaluation in your organization is Multiple Response Question and data are analyzed using MRQ option in IBM SPSS. Results of data analyzed are given below

### Table 6: Case Summary of Cost Data of Training Evaluation

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Cases</th>
<th>Missing</th>
<th>Total</th>
<th>N</th>
<th>%</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost Data of Training Evaluation</td>
<td>21</td>
<td>19</td>
<td>20</td>
<td>4</td>
<td>100</td>
<td>4</td>
<td>0</td>
</tr>
</tbody>
</table>

Source: Field Survey 2016

### Table 7: Frequency table of Cost Data of Training Evaluation

<table>
<thead>
<tr>
<th>Cost Data of Training Evaluation</th>
<th>Responses</th>
<th>% of Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Determine the total expenditure for training program</td>
<td>2</td>
<td>6.5</td>
</tr>
<tr>
<td>Calculate benefits versus costs for a specific program</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Improve the efficiency of the training department</td>
<td>5</td>
<td>16.1</td>
</tr>
<tr>
<td>Evaluate alternatives to a proposed training program</td>
<td>2</td>
<td>6.5</td>
</tr>
<tr>
<td>Plan and budget for next year operations</td>
<td>2</td>
<td>6.5</td>
</tr>
<tr>
<td>Collect costs even if they are not used in evaluation</td>
<td>5</td>
<td>16.1</td>
</tr>
<tr>
<td>Total</td>
<td>3</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Field Survey 2016

The above table reveals that out of the 31 YES responses, and Calculate benefits versus costs for a specific program estimate accounted for 48.4 percent, Improve the efficiency of the training department and Collect costs even if they are not used in evaluation accounted for 16.1 percent whereas Plan and budget for next year operations, Evaluate alternatives to a proposed training program and Determine the total expenditure for training program is 6.5 percent.

### Practical issues during training program

Multiple response analysis is done for Practical issues during training program.
HR managers were asked to response the Practical issues during training program by asking following eleven options.

Hence the question, what are the practical issues in legal terms faced by the organization during training program is Multiple Response Question and data are analyzed using MRQ option in IBM SPSS. Results of data analyzed are given below:

Table 8: Case Summary of Practical Issues in legal terms during training program

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Cases</th>
<th>Missing</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>Practical Issues</td>
<td>14</td>
<td>2</td>
<td>65.</td>
</tr>
</tbody>
</table>

Table 9: Frequency Table of Practical Issues in legal terms during training program

<table>
<thead>
<tr>
<th>Practical Issues Frequencies</th>
<th>Responses</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimension</td>
<td>N %</td>
<td>%</td>
</tr>
<tr>
<td>Incurring employee injury during a training activity</td>
<td>5 16.7</td>
<td>35.7</td>
</tr>
<tr>
<td>Incurring breach of confidentiality or defamation</td>
<td>5 16.7</td>
<td>35.7</td>
</tr>
<tr>
<td>Requiring employees to attend training programs they find offensive</td>
<td>9 30.0</td>
<td>64.3</td>
</tr>
<tr>
<td>Revealing discriminatory information during a training session</td>
<td>4 13.3</td>
<td>28.6</td>
</tr>
<tr>
<td>Not accommodating trainees with disabilities</td>
<td>2 6.7</td>
<td>14.3</td>
</tr>
<tr>
<td>Failing to report training reimbursement as income</td>
<td>5 16.7</td>
<td>35.7</td>
</tr>
<tr>
<td>Total</td>
<td>3 100.</td>
<td>214.3</td>
</tr>
</tbody>
</table>

Source: Field Survey 2016

The above table reveals that out of the 30 YES responses, and Requiring employees to attend training programs they find offensive is accounted for 30 percent, Incurring employee injury during a training activity, Incurring breach of confidentiality or defamation, Failing to report training reimbursement as income is accounted for 16.7 percent, Revealing discriminatory information during a training session is 13.3 percent and Not accommodating trainees with disabilities is accounted for 6.7 percent.

V. FINDINGS

- While doing the evaluation of the training to know the effectiveness, few aspects are key factors to understand as 100 percent of HR Managers said evaluation cannot be easily replicated, which is very true in practical sense. Every training has its own objective and therefore evaluation parameters cannot be easily replicated. It is also found during the research that, 60 percent HR Managers thinks that, it is always that, evaluation is too subjective and 40 percent responded that, sometimes it is too subjective. Since it is been too subjective procedure 95 percent respondents think that, it is more appropriate for certain type of organizations only.

- Evaluation is majorly based on the data and statistics which is been collected through different means and to interpret the same it is found during the research that, 90 percent respondents said successful evaluation implementation requires a degree in statistics or evaluation. 95 percent respondents said that, evaluation is addressed after the training is completed and as a result of it becomes expensive procedure as organization has already spent the money on training and has engaged their employees for the same, also to evaluate the some more man hours are required to be engaged to generate, collect, and to do the analysis of the data and ROI of training, therefore 95 percent respondents responded that, it is always an expensive procedure to be followed.

- On the same time impact and ROI evaluation is not possible for soft skills program and it is reflected in the research by rating to this at 77.5 percent that it is not possible and 22.5 percent says that, sometimes it is not possible.
During the research it is found that, in the organization training is been budgeted and in last 2 years span 42.5 percent organization has increased their training budget and same 42.5 percent organizations has reduced their training budget, whereas 15 percent organizations has kept it at stable position.

Trainings have one prominent aspect about cost, as every training irrespective of any type of training have cost to it. To do the cost benefit analysis and to arrive at accuracy and credibility of it, 46.7 percent tackle this aspect by senior management estimate which we can say as budgeted figures. Other refer forecasting models and trend lines from the data of past, both this parameters rated at 33.3 percent and 20 percent respectively.

Cost data analysis of training is a crucial and tedious task for the HR Managers, to work on this, 48.4 percent HR Managers calculate benefits versus costs for a specific program. 16.1 percent focuses on improving the efficiency of training department of the organization. To have better control on the same, 10 percent HR Managers predict future program cost as per the need of organization.

VI. CONCLUSION

There is a developing acknowledgment about significance of training in Indian organization uniquely with globalization which has postured parcel of difficulties to ventures. Survival without proficiency, adequacy and competency will be simply incomprehensible. Organization should think and should take required effort to be worldwide competitive, highly innovative as no organization will be competent to attain the quality without incessant training of its human resource. Legitimately, in this way, there is an upward pattern in interest in training in numerous associations. Be that as it may, simple increment in interest in training and training spending plan are not going to accomplish the outcomes. There are sure essentials in training which must be minded if investments need to give enough returns.

It is observed that in training evaluation procedural fundamentals predominate, with their own logic and ironic embellishments. They pursue to conciliate the prevailing providers of training funds with comforts that accelerating the training budgets can certainly be justified, that controls on expenditures are in place, and that clearing out of insignificant training does occur.

REFERENCES


