

Training Impact Evaluation in Tourism Industry: Use of Kirkpatrick-Phillips Model

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ABSTRACT

Training is one of the most important methods for enhancing the ability of individuals and conveying organizational goals to new individual, with given importance to impact of training on organization along with associated requirements. It is also important that training is used as continuously run process for further advanced, modern and improved technology, require updating the skill and knowledge. At the same time it is also important to justify the financial investment in the training and development programs. The attempts have been made to study the various sources on evaluation of training by using available methods. The study is also used for analyzing the evaluation of training using return on investment (ROI) method.

KEYWORDS: *Kirkpatrick-Phillips Model; Process of Evaluation; Effectiveness of Training; Measuring Levels in Training; Evaluation of Training*

Introduction

Over the past few decades, India has become the tourism destination for travellers locally and from around the globe. It has been observed that the focus of Indian economy has moved from manufacturing towards more service - based industry. Tourism is one of the main drivers of the Indian economy. Tourism industry in particular is the fourth largest revenue generating source of economic growth in India. The tourism industry within itself include many different types of businesses, such as transportation companies, tour operators, travel agent, site services, hotel, resorts etc. As a labour intensive industry, organizations depend on the availability of good quality personnel to deliver, operate and manage the tourism plans, as well as for competitive advantage of the business in the global market. Hence, these industrial organizations must ensure that their employee's viz. front line staff, supervisory level staff and managerial staff is capable of providing excellent quality service to increasingly discerning customers in the global market.

Training is a process of learning through a sequence of planned and programmed behaviour. It tries to improve present job performance and prepare employees for future or intended performance. It is therefore a short term process, an activity based concept, wherein skills are learned, unlearned or relearned. The aim is to enhance individual effectiveness on the job and it involves practical application of programmed knowledge.

Importance of training for the stakeholders in tourism industry

One of the aspects of ensuring that the service staffs have the right knowledge, skills and abilities to provide top quality service to its customers, to maintain productivity and stay competitive in the business, is to provide effective training. Training will help in improving:

- Individual performance and career growth: To deliver real value, training should facilitate the ongoing improvement of organizational as well as individual capability.
- Group Staff (objective).
- Growth of Organization.

Importance of evaluation of training:

Evaluation of training means measuring the efficiency of a training program. Evaluation helps in defining the learning outcomes sharply, remove unnecessary training content and ensure that the training method meets the training needs and objectives of the learners, develop the learners performance and organizational benefits. This effectiveness is as much about short term retention as about the long term retention and application by learners.

How to evaluate the impact of training?

Evaluation of the effect of training is a systematic determination of its merit, worth and significance, using criteria governed by a set of standards. It can assist an organization to assess any objective, realizable concept/proposal, or any alternative, to help in decision- making; or to ascertain the degree of achievement or value with regard to the aim and objectives and results of any such action that has been completed. The primary purpose of evaluation, in addition to gaining insight into prior or existing state of the business, is to enable reflection and assist in the identification of future change. Evaluation is often used to characterize and appraise services. It is long term and done at the end of a period of training.

Guidelines published by Donald Kirkpatrick for measuring the effectiveness of training states four levels of measuring impact of training. The four levels of measuring namely Trainee Reactions, Learning, Behaviour and Results are recommended as a strategy for training evaluation. These four levels help organizations to compare training efforts to those in the same industry. The process of evaluation includes following steps:

- Get an overview of the programme
- Determine why you are evaluating
- Determine what you need to know and formulate questions
- Figure out what information you need to answer questions
- Design the evaluation
- Collect information/data

- Analyze information
- Formulate conclusions
- Communicate results
- Use results to modify programme

Evaluation work involves collecting and sifting between data, making decision about the correctness of the information and of inference derives from it.

Dimensions of Evaluations

Dimensions of evaluations are process evaluation, outcome evaluation and evaluation of impact of training.

- **Process evaluations:** Defining the duration period and nature of programme implementation is an important step to study outcome/result of the programme.
- **Outcome evaluations:** To study the prompt and direct behavioural effect of the programme on the participants.
- **Impact evaluation:** Study to identify long term as well as undefined programme effect.

Goals of Evaluations:

The generic objective of evaluations is to provide useful and effective feedback to a variety of people including client groups, administrators, staff and other relevant constituencies. Feedbacks is perceived 'useful' provided the suggested alternatives are helpful in decision making. Relationship between and evaluation and its impact are the most critical ones.

Approaches used in Evaluation:

Evaluation approach is a general way of conceptualizing evaluation.

- Utilization focused evaluations
- Empowerment evaluations
- Goal free evaluations
- Naturalistic evaluations
- Theory based evaluations
- Strategic Evaluations

Purposes of Evaluation

The cause of performing a study of evaluation is generally termed as Purpose of evaluation. It also relate to the intent of the evaluation. Following are the range of evaluation terms that are used in various ways:

- An activity to design, developmental, formative, and implementation of a programme
- An activity to describe the process of the programme.
- An activity to study the impact and outcome of the programme

Following activities relate to the intent of the evaluation:

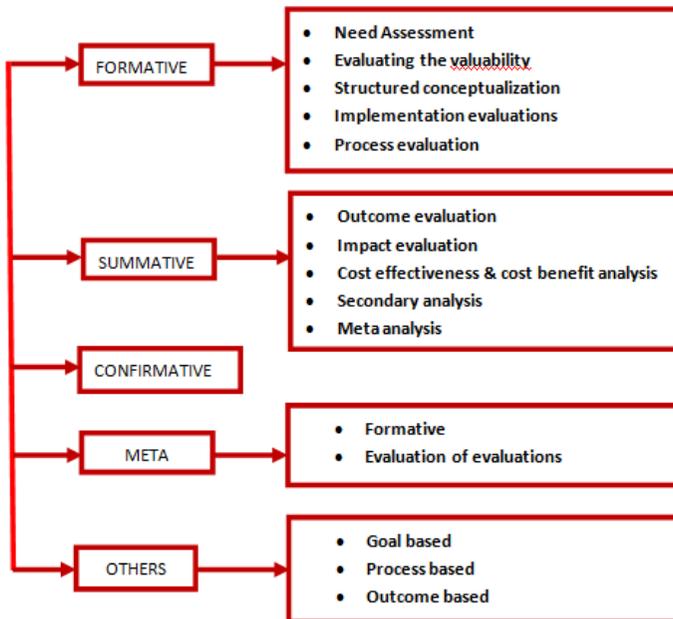
- Gain insight - It gives the required insight to clarify how programme activities should be designed to bring about the expected change.
- Change practice – In order to improve the quality, effectiveness, or efficiency of programme activities, it is important to keep changing the practices as per the requirements.
- Assess effects – To note the relationship between the activities and its consequences.

Benefits of Training Evaluation:

Evaluation acts as a check to ensure that the training is able to fill the competency gaps within the organization in a cost effective way. Some of the benefits of the training valuation as follow:

- Evaluation ensures accountability: Training evaluation ensures that training programs comply with the competency gaps and that the deliverables are not compromised upon.
- Check the cost: Evaluation ensures that the training programs are effective in improving the work quality, employee behaviour, attitude and development of new skills within the employee within a certain budget.
- Feedback to the trainer: Training evaluation also acts as feedback to the trainer or the facilitator and the entire training process. Since evaluation access individuals at the level of their work, it gets easier to understand the loopholes of the training and the changes required in the training methodology.

Fig. 1: Types of Evaluation



Formative Evaluation: Formative evaluation strengthens the object that is being evaluated; it is formed by noting the way of delivery of the programme, quality of implementation and assessment of organizational inputs. It is further divided into several types such as Needs assessment, Evaluate the value assessment, structured conceptualization, Implementation, and Process evaluation.

Summative Evaluation: It examines the effects of some objects. Summative evaluation can be subdivided into Outcome evaluation; Impact evaluation; Cost effectiveness and Cost benefit analysis, Secondary analysis and Meta analysis.

Confirmative Evaluation: Confirmative evaluation is a full scope evaluation in which the evaluation and training practitioner collects, analyzes, and interprets data related to behaviour, accomplishment, and results in order to determine the continuing competence of learners or the continuing effectiveness of instructional materials and to verify the continuous quality improvement of education and training programmes. It assesses the transfer of learning to the final beneficiary 'real world'. It follows three levels, in the first level the programme is evaluated while it is still in its draft form, focusing on the requirements of the learners and the developers. In the Second level, programmes are monitored after complete implementation, focusing on the needs of the learners and the goal of the programme. At the third level the transfer of learning to the real world is assessed.

Meta Evaluation: All the above evaluation types namely, Formative, Summative, and Confirmative evaluation contribute to Meta evaluation. Meta evaluation, evaluates the evaluation itself. The purpose of Meta evaluation is to validate the evaluation inputs process, outputs and outcomes. There are two types of Meta evaluation. In the Type one Meta evaluation, Evaluation on Formative Evaluation is performed. Type two Meta evaluations are performed after formative, summative and at least one complete round of confirmative evaluation.

Methods of Evaluation:

The framework of the methods of evaluations is referred to as 'models'. These models play an important role in identifying the procedure for evaluation. An article on "approaches to evaluation" by Deniz Eseryel provides six such general approaches viz.:

- Goal based evaluation: Seeks to determine if the goals kept in mind were achieved.
- Goal free evaluation: Seeks to find if any benefits that result from the intervention
- Responsive evaluation: A common approach that is based on client requirements
- Systems evaluation: An approach focused to know whether the intervention was efficient and effective.

- Professional review: It uses external expert appraisal
- Quasi-legal: It is used as an actual query format to present evidence to evaluate an intervention

Today most organization measures the effectiveness of the training programs. There are several approaches used to measure the effectiveness of training in an objective way. One of the popular approaches is Kirkpatrick's four levels of evaluation and Jack Phillips Return on Investment models.

Donald J. Kirkpatrick's Model of Evaluation:

The most known and applied evaluation model was developed by Donald J. Kirkpatrick. He has described four levels of training evaluation namely Reaction of Trainee, Learning, Behaviour and Result. According to Kirkpatrick, when choosing the appropriate model to include in an organizational assessment, it is essential first to identify the questions the evaluation needs to address. He identified the four-levels as:

- **Reaction of Trainees** – a measure of satisfaction; evaluation here focuses on the reaction of individuals to the training or other improvement intervention:
- **Learning** – a measure of learning ; evaluation here assesses what has been learned as measured in the end of training
- **Behaviour** – a measure of behaviour change (extent of behaviour and capability improvement and implementation/application); evaluation here measures the transfer of what has been learned back to the workplace;
- **Results** – a measure of results (the effects on the organizational environment resulting from the fellows' performance); evaluation here measures (at least tries to) the impact of the training on overall organizational results.

In the framework of the above summary of "types" of evaluation levels 1 and 2 are normally seen as part of formative evaluation, whereas levels 3 and 4 are typically associated with summative evaluation. There have also been attempts to establish a level 5 by measuring the impact at a societal level by calculating return on investment (ROI). Levels 4 and 5 are associated with Meta evaluation to achieve an ideal "full scale" evaluation

Jack Phillips Return on Investment (ROI):

In addition to the four levels layer by Kirkpatrick in his model, Jack Phillips has introduced an additional level, which focuses on real measurement of ROI. Return of Investment provides justification of the cost of training based on the return on investment and organizational impact. Hence, in addition to evaluating the satisfactory level of trainees, the fifth level introduced by Jack Phillips now focuses on improving organization performance. In an effort to provide better evaluation of ROI a range of "Contemporary" models/methods for assessing outcomes have also been developed based on Phillips ROI model. Following methodologies available for calculating ROI:

- Benefit/cost ratio
- Payback period
- Return on true value of dollars
- Present value of dollars and future value of dollars
- Utility analysis
- 360-degree feedback
- Performance teams satisfaction
- Balanced scorecard
- HRD benefit forecasting

Kirkpatrick's model did not provide a mode to determine the cost benefit ratio of training (ROI). Some of the other evaluation models/methods are: Hamblin's 5 levels; Guskey's critical level; Indiana University taxonomy; Industrial Society stages; Kearns and Miller KPMT model; Nine outcomes model; Organizational elements model; Contemporary ROI models.

Measuring Success of Training using Kirkpatrick-Phillips Model

Flow of impact: According to Phillips, when a training programme is implemented, it should create a flow of impact at the various levels beginning at Satisfaction till the last Return of Interest level as shown in Fig. 2. For calculating the result and return of investments, it is also important to evaluate the other levels at the same time. A continuous flow of impact should occur through the levels as skills and knowledge learned (level 2: leaning phase) and are applied on the job (Level 3: Impact on job) to produce business impact (Level 4: Result of training). If the effect of training at these levels individually is not measured, it becomes difficult in the end to draw a conclusion that the business results achieved were actually caused by the programme. On contrary, if the return of investment is not satisfactory from the training investment, the evaluator should be able to pin point the link between the level/stage where the flow was broken and the level where the effect was not satisfactory.

Fig. 2: Measuring levels in training using Kirkpatrick – Phillips method

5	ROI	Did the training provide a positive return on investment?
4	RESULTS	Did the training have an accountable impact on performance?
3	IMPACT	As a result of training, was there a change in the learners behaviour?
2	LEARNING	Did the learning result into knowledge transfer?
1	REACTIONS AND SATISFACTION	Did the learners enjoy the training? How satisfied were they?

Each subsequent level is predicated upon doing evaluation at lower level. A level 2 will be of marginal use, if a level 1 evaluation is not conducted. The Kirkpatrick--Phillips model is explained as follows:

Level 1: Satisfaction : To measure learners satisfaction with the training and their plan for action. In order to do this, one need to measure satisfaction using post training surveys.

Level 2: Learning : To measure whether learning transfer occurred using tests, skill practice, role playing, simulations, group evaluations, or other assessment tools.

Level 3: Impact : To measure whether the training impacted the learners daily actions and attitudes. Measuring impact requires pre training and post training surveys from those who regularly witness the behaviors the trainer wants the learner to change. These observers need to be able to provide objective feedback on the knowledge, skills, and the attitudes of the learners. For, this one needs to allow sufficient time after the training event for the observers to have enough interactions with the learners.

Level 4: Results : To measure how the training impacted performance goal. Before training results can be measured, for this learners must establish and start measuring the performance goals one desire to improve. Performance metrics are based on output, quality, costs, or time. Once the performance goals have been established, and means to improve performance goals have been provided, one need to compare the difference between the learners performance before training, with their post training performance. One need to determine the financial benefits associated with the increasing learner's performance. In order to measure impact of the training programme one need to give sufficient time to achieve the desired result.

Level 5: Return on Investment (ROI) : Measure the benefits of training against the cost of training. To do this we need to first calculate the financial value of the training that is being provided. Next, calculate the total direct and indirect cost of value invested in training.

The ROI is calculated using the program benefits and costs. The key metrics are Benefit/Cost Ratio (BCR) and ROI. The benefits/cost ratio is the total program benefits divided by the total costs. The BCR formula is

$$\text{BCR} = \frac{\text{Total Program Benefits}}{\text{Total Program Costs}}$$

The return on investment is the *net* benefits divided by total program costs, as described earlier.

$$\text{ROI} = \frac{\text{Total Program Benefits} - \text{Total Program Costs}}{\text{Total Program Costs}} \times 100\%$$

Example:

A sales training delivered to 34 retail sales associates results in an increase in sales contributing an increase in profits to the organization of Rs. 120,000 per year. The total cost of the program was Rs. 90,000.

The benefit cost ratio is

$$\begin{aligned} \text{BCR} &= \frac{\text{Rs. 120,000}}{\text{Rs. 90,000}} \\ &= \mathbf{1.33:1} \end{aligned}$$

In other words, for every Rs. 1.00 spent on the training program, Rs. 1.33 is returned.

The ROI of the program is:

$$\text{ROI} = \frac{\text{Rs. 120,000} - \text{Rs. 90,000}}{\text{Rs. 90,000}} \times 100\%$$

$$\begin{aligned} \frac{\text{Rs. 30,000}}{\text{Rs. 90,000}} &= \times 100\% \\ &= \mathbf{33\%} \end{aligned}$$

This means that every rupee spent on the training is returned and an additional Rs. 0.33 is returned as profit.

In addition to monetary benefits, most training program 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.

Typical ROI Results

Evaluations can be conducted on a wide variety of training program or any change initiative implemented in organizations. It is not uncommon for training program to show high returns on investment. In fact, investment in training programs often results in higher returns to the organization than many other investments such as capital equipment or technology.

The following are some typical results selected from real world evaluations studies. Note the wide variety of program types evaluated and the broad range of business measures, including employee turnover, reduced waste, sales and time

saving. Also, it is not uncommon for a single program to result in the simultaneous improvement of several measures.

Study/ Setting	Target Group	Program Description	Business Measures	ROI
Healthcare	Managers, Supervisors, Later all Employees	Anti-sexual Harassment Training	Reduced Turnover & Grievances	298%
Cracker Box	Managers, Manager Trainees	Performance Management Training	Reduced Turnover, Absenteeism & Waste	1,052%
Hewlett-Packard	Sales management team, Sales reps	Sales training for complex systems	Inside sales	195%
High Tech	Managers, Supervisors, Project leaders	Meeting Skills	Time savings (reduced number & duration of meetings)	506%
Nortel Networks	Future leaders	Executive Coaching	Output productivity, sales, employee retention	788%
Retail Merchandise Company	Sales associates	Retail Sales Skills	Increased sales revenues	118%

Source: Allan Bailey, Learning Design Online

Conclusion:

Training plays an important role in the realization of goals. All companies regardless of their fields have to, therefore, find ways of surging ahead of the competition by providing adequate and appropriate training which is essential for the development and implementation of effective quality systems. The evaluation of training shows that training effectiveness variables found to be related to post training attitudes were input indicators such as objectives of the organizations and training need analysis and process indicators such as training methods, size of participants, and periodical training. Moreover the effectiveness also depends on individual characteristics like listening capability, nature and self interest of trainee. Evaluation can add value to the training itself. So the organizations should make attempts to rectify the snags and laybacks that have crept into needs assessment and evaluation of training, so that training can become a powerful intervention to improve individual's performance and subsequently impact organizational

performance. It is felt and fiercely recommended that providing tourism education and training not only enables organizations to provide excellent service quality, but will also build competitive advantage for the business in a global market

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