**Unit -4 Training Measurement**

**Introduction**

Training effectiveness measures the impact of training on the trainee’s knowledge, skills, performance, and the company’s ROI. The training’s goals and objectives should be determined before training occurs, allowing these to be clearly and accurately measured.

For example, the trainee’s productivity, sales numbers, and overall mood and happiness might be measured before the training occurs, and then once again after it has taken place. This demonstrates the quality and effectiveness of the training provided and enables businesses to either continue doing more of the same or pivot their approach.

Using scientifically validated techniques to evaluate the effectiveness of training programs is known as training effectiveness management.

**Meaning**

Training effectiveness measures the impact of training on the learner’s knowledge, skills, performance, and the company’s return on investment. To measure training effectiveness accurately, it is crucial to define the training’s goals and objectives clearly before implementation.

**Reasons for measuring training effectiveness**

1. To determine if the training benefits employees.

Perhaps the most important reason for evaluating training effectiveness is to see if it benefits your employees’ skills and performance. Additionally, it provides them with a clear idea of what they’ve achieved and the path they need to take to get to the next level.

When it comes to learning and development (L&D), feedback and encouragement are crucial. Virtually all employees need positive encouragement for the things they’ve done well and want to know how to improve.

Without measurements in place, your employees are likely to feel that their learning at work is purposeless. Evaluating your training effectiveness helps you communicate to your employees where the company is today and where it aims to go, along with the skills necessary to get there. Consequently, managers and employees can come together and discuss the results, helping employees feel empowered and part of the broader vision.

2. To see the effect on business performance and determine the training’s ROI.

The ultimate goal of all training programs is to boost business performance and see a return on your investment. Changes in productivity, sales, and profits can all be tracked and measured, and you would hope to see an increase in all of the above.

Studies have shown that organizations who regularly invest in training perform higher than those who don’t, but it must be the right type of training, and it must be meticulously tracked and measured.

For example, it’s difficult to determine whether the training in question was responsible for an increase in sales, or if it was the result of something else, like a marketing campaign or a boost in the economy. This is why it’s important to examine things like learning transfer and noticeable behavioral changes that may have taken place since the training program.

3. To uncover issues in the training process and improve it.

When you invest valuable resources like time, money, and energy into your training programs, it’s essential to measure whether they’re working or not. But your intentions for your training will be unique to your business and your long-term goals. This is why you need to define clear objectives at the start. If you fail to do this, then any results you receive will be meaningless because you don’t have a target in sight.

If a particular training program is highly effective, it can be implemented across the board, from executives to managers and new hires. This helps unite the company with shared goals. In addition, if training fails to produce any desirable results, you need to determine why and where this breakdown happens and then make adjustments accordingly.

For example, in the ADDIE model of instructional design, evaluation is an integral part of each phase of learning development process. That enables L&D professionals and trainers to continuously improve the training to achieve learning goals.

**Benefits of Measuring Training Effectiveness**

Organizations measure the effectiveness of training programs for a variety of reasons. The advantages and benefits of measuring training effectiveness include:

To determine if training benefits employees.

To determine the ROI of a training program based on the effect on business outcomes and performance.

To identify and improve issues in training programs.

To make informed decisions on which programs to continue, and to get an idea of the potential of future programs.

To hold everyone accountable to the standard your company has set for training.

Models For Training measurement Evaluation

1.Reaction level:

programme evaluation involves two general approaches -formative evaluation also known as internal and summative evaluation also known as external evaluation .Likewise reaction evaluation is a type of formative evaluation when the results are used for programme modification and the redesign of contents, course material and presentations.

The main purpose of reaction evaluation is to enhance the quality of training programmes, which in turn leads to improved performance by measuring the participant’s reactions to training programme.

2.Learning level:

Evaluation at this level wants to differentiate between what they already knew prior to training and what they actually learned during the training programme. In other words it can be said that learning evaluation is the measurement of the increase in the knowledge or intellectual capability from before to after the learning experience. The evaluation should focus on measuring what was covered in the training even

3.Behaviour level:

Behaviour evaluation is the extent to which the trainees applied the learning and changed their behaviour, and this can be immediately and several months after the training, depending on the situation. This level evaluation wants to measure the transfer that has occurred in the learner’s skill to apply what he has learned in the classroom. Change in the job behaviour is difficult and interpret than reaction and learning evaluation.

4.Result level:

Result level evaluation is the effect on the business or environment resulting from the improved performance of the trainee. Level four outcomes are not limited return on training investment (ROI). It can also include others major results that contribute to the well functioning of an organisation, it includes any outcome that the most people would agree is good for the business.

5. Context evaluation:

It involves evaluation of training and development needs analysis and formulating objectives in the light of these needs. It is aimed at determining the extent to which goals and objectives of the programme matched the assessed need of the organisation whether needs assessment is accurately identified an actual and legitimate need of organisation and relevant work culture.

6. Input Evaluation:

Input evaluation involves an examination of the intended content of the programme. It is designed to assess the extent to which programme strategies, procedures, and activities support the goals and objectives identified in the needs assessment and context evaluation. It involves evaluation of determining policies, budgets, schedules and procedures for organising programme.

A properly designed and conducted method of evaluation provides useful insights of the effectiveness of the training. This also enables an organization to monitor and modify the training program.

**Methods of training measurement**

Some useful methods of evaluating training effectiveness are as follows:

**1. Observation Method**

Observation conceives the ideas of closely observing the activities during the delivery of training program. Under this method, direct observation tales place on order to assess the changed knowledge, skills and attitudes of the participants. During observation, the errors and mistakes in actual work situation are carefully observed and recorded. Finally, the effectiveness of training can be evaluated through the reaction of trainees.

**2. Test-retest Method**

Test-retest method is another important method of evaluating training effectiveness. Under this method, the trainees are given a test before the conduction of training program to assess their existing knowledge, skills and attitudes. And after training program also, a similar test is conducted to assess their changed behavior. Then the comparison is made between trainees' level of knowledge, skills and attitudes before and after the training program. If a considerable change is observed in the behavioral interaction of the trainees, the training is said to be effective.

**3. Pre-post Performance**

It is similar to the pre-test method. But here, the concentration is given on the analysis or evaluation of actual job performance. Under this method, the actual job performance is first rated before any training is provided. After the training program is completed, the participant's job performance is evaluated. Then the increased performance of the trainees is attributed to the instruction.

**4. Experimental Control Method**

In this method of evaluating training effectiveness, participants are first divided into two groups, the first is control group and the second is experimental group. Members of control group work on the job but they do not go under any instruction, they have no clear guidance at work. On the other hand, members of the experimental group are given the instruction and guidance at work. Finally, at the conclusion of training, the performance of these two groups is reevaluated. If the training is really effective, the performance of experimental group will have improved substantially more than that of controlled group. On the other hand, if the difference remains unchanged, the training will be considered unsuccessful.

**Scale of measurement in training**

Likert Scale

The Likert Scale provides a range of responses that indicate whether the training participant agrees or disagrees with the statement. Generally there are five answers, indicating the variations of agreement or disagreement. The five answers are disagree strongly, disagree somewhat, neutral, agree somewhat, and agree strongly. Using this scale enables you to objectively determine the effectiveness of the training, based on the statistics of the response calculations. Questions will have to be worded so that they can be answered on this scale.

Kirkpatrick Evaluation

The Kirkpatrick Evaluation measures the success and effectiveness of the training program at various stages after the completion of the training. There are four levels in the Kirkpatrick method, beginning with an evaluation conducted immediately after training is completed and continuing through to the final level, which measures results such as improved work performance that occurred as a direct result of the training. The second level measures the amount of knowledge that was gained from the training. The third level measures behavioral changes that were a direct result of the participant's training program.

Open-Ended Questions

Open-ended questions allow you to gather information from the training participants that is not quantifiable. An open-ended question is one that does not provide options for answers but rather solicits write-in answers. Using open-ended questions on training evaluations allows participants to express opinions or provide suggestions. You would use open-ended questions to solicit ideas for future training programs, for example. These answers cannot be included in data spreadsheet to show results but can prove useful in developing future programs to meet trainees' specific needs.

**Post-Training measurement**

In this method the participants’ performance is measured after attending a training program to determine if behavioral changes have been made.

**Pre-Post Test approach:**

Most commonly used approach towards measurement of effectiveness of training is Pretest Post test approach this approach performances the employees is measured prior to training and if required training is provided. After completion if the training again the performance is measured this is compared with performance before training if evaluation is positive e.g. increase in productivity that means that training is effective.

**Pre- Post Training Performance with control group Method:**

Under this evaluation method, two groups are established and evaluated on actual job performance. Members of the control group work on the job but do not undergo instructions. On the other hand, the experimental group is given the instructions. At the conclusion of the training, the two groups are re-evaluated. If the training is really effective, the experimental group’s performance will have improved, and its performance will be substantially better than that of the control group.

**Training system**

* Self-paced online employee training and development programs
* Training on the management of virtual teams
* Personalized training programs based on employees’ needs
* Mobile app training programs
* Usage of knowledge-sharing systems for all employees
* Retraining and reskilling to keep up with changing technology
* The widespread availability of online learning courses
* Training for first-time managers and leaders
* Training on diversity and inclusion
* Collection of employee data to improve training programs
* Interactive training programs and walkthroughs
* Training with real-time feedback from employees

**Task of training system**

1. Increase company productivity

You might want to consider upskilling your employees. Training them to use advanced tools and technology might improve their efficiency. Moreover, being more confident in their abilities will make them more motivated to work.

Also, they’ll be able to face challenges and adapt to changes quickly. Aside from that, you’ll also be promoting a culture of learning in your workplace. The act of learning together can help your employees bond with each other better.

All of these factors might contribute greatly to your company’s productivity.

2. Improve product or service quality

Training and development programs are an opportunity for experts within your organization to share their techniques. Within a short span of time, employees will get to learn tips and best practices for their work.

This will allow them to create better products or provide more satisfying services. Additionally, adequate training of employees involves giving them the same set of instructions. This leads to uniformity in their methods and output.

3. Lessen employee turnover

Research has shown that training and development has a positive impact on employee turnover. Workers will surely appreciate your company’s investment in their development. This will strengthen their sense of job satisfaction, belongingness, and commitment.

Training and development programs might also lead them to have a better relationship with the organization. As a result, it’ll decrease their intentions to leave and increase your company’s workforce retention. It’s a win-win situation for everyone.

4. Decrease costs and errors

If your company has highly trained employees, there are few to no mistakes being made every day. As a result, less time and resources are spent on redoing incorrect work.

Also, product malfunctions and improper delivery of services are generally frowned upon. They might involve additional expenses, too. Properly trained employees know how to use materials efficiently. Thus, your company will spend less because waste and spoilage are minimal.

This applies to machinery as well. A trained employee will know how to take care of equipment. This will lead to lesser breakdowns and a longer lifespan for your machinery.

**DYNAMICS OF TRAINING SYSTEM**

Training is an important tool for the organizational development. A trained employee will become more efficient and productive than an untrained. It has been endorsed by many researchers that training is dynamic in its nature and by the time training is going to become need of time and this is the reasons that organizations considering its importance invest on trainings of their employees so that their efficiency may be improved and the organizations may get their goals through their trained employees as the trained employees perform better than untrained. Organizations are agreed that due to trainings of employees their losses go down due to efficient and effective performance / working oftheir employees. The dynamics of training also emphasized on the employee’s efficiency, job satisfaction, motivation, innovation, organizational commitment and abridged turnover. It is agreed principle that training shapes the person and reduces lacuna in his professional life.

**1. TRAINING AND MOTIVATION**

The motivation is the basics of training. It encourages the individuals and organizations emotions to perform better to achieve their goals well in time. In the organizations, the motivation is done when appreciation of work is given by the employer to its employees during the job. Training and motivation are inter dependent on each other that is why both go parallel and form a better human resource product. Through training process the individuals are motivated not only to learn the new ideas, knowledge, skills and techniques about their job for proving themselves worthy of a job but also to improve their overall attitude / behavior towards their management, coworkers, subordinates, customers and competitors as well. The motivation has correlation with the inner feelings of individual and shapes the individual‟s behaviors towards various activities by him. It is also said that the training emphasizes initially on human behavior to set individual‟s inclination towards the required job performance which can only be improved only by motivation tool. When the organizations provide congenial working environment to their employees, assures for their safety and security and address their problems at work and fulfill their basic needs and morally encourage them they perform better and as such organizational goals are achieved. Many business entities invest for new training methods likewise motivation based learning programmes. Many surveys have been conducted by researchers for knowing the factual impact of motivation based trainings on organization and individual performance and such surveys have ascertained that motivation based trainings have long-term impact on performance of organization and individual.

It is also very important for the organization that when they conduct training program they must taken into consideration the value adding training content and material which may properly cover the training need assessment.

According to researchers Sylvie and Sire (2001) the every human have different set of skills and talents and it is responsibility of organization to manage the expertise / competencies of their employees keeping them motivated through effective trainings to sharpen their skills for the betterment and success of organization.

**2. TRAINING AND JOB SATISFACTION**

The research studies have established that the job satisfaction leaves through impact on individual‟s performance. It has been defined by chermerhorn. Junior, ET al., (2005), job satisfaction is a factor which determines positivity and negativity of an individual about his job. It has been found through many surveys that it becomes difficult for an individual when he is not satisfied with his job and may perform better therefore the globally recognized business organizations feel it necessary to conduct trainings on the job satisfaction factors. It is understood that when individual is satisfied with his current job he can even go for improvement in his current performance. As there are many factors which badly affect the job satisfaction i.e lack of proper heed towards employees‟ motivation / appreciation on his better work performance, equality of employee rights, health care, salary incentives, employee safety & security, job protection, merit based career growth and provision of congenial working environment and other fringe benefits. The job satisfaction is related to professional life of individual and for a human the professional life is as important as his personal life. It is therefore said that when one is satisfied with his job he can even motivate co-workers and subordinates and may do maximum to get recognition by the employer. As for as the impact of training on job satisfaction is concerned the many studies have ascertained that training improves the job satisfaction level of an individual.

**3. TRAINING AND ORGANIZATIONAL CHANGE**

No one organization can deny the importance of role of the training in the organizational change towards the organizational development / productivity. It is also an established theory by a management researcher Coulter (2005) that the organizational change is that any alteration in the Performance of human resource, arrangements, systems or technology. It has been found that the sustainable development and desired performance standards are achieved by using training methodology, up to date knowledge and most modern machinery with qualified human resource.

Organizational changes are of two types; one is reactive and other one is proactive. The reactive is that change which takes place for revising the organizational structure/systems, technology /machinery, human resource for solving the sudden problems. The reactive changes are preferred by the organizations in comparison of proactive change applications. The proactive change is considered well before the occurrence of performance gap / expected occurrence of problems as such organizations go for proactive change applications to put in order themselves for avoiding occurrence of certain problems in future. Most of the organizations have observed that the proactive change approach is better than the reactive approach for the sustainable development of organization and also the proactive change approach may be more economical than the reactive change approach. Here a question that why organizational change is required? In answer, it is said that there are some certain external and internal forces which create the need for organizational change. The external factors are including mostly the business competition in market places, enforcement of government laws, rules, regulation and policies, latest technology, labor markets, national / international economic issues etc. The Internal factors include the labour issues, changing technology, employee attitudes, diversified workforce, strategic plans, financial issues, productivity issues. According to Snyder and Cummings (1998) that the capabilities of organizations for change are essential for its endurance. This ability to change is allied with organizational learning.

Organizations learn from their past experience. According to Schein (1999) that if management of any organization does not pay proper heed to the problems and necessary organizational needs requiring proactive or reactive change in the structure, technology or employees attitude, it may generate anxiety and cause fall down of organization. A lady researcher Ms. Antonacopoulou (2001) hypothesized that there are significant interrelationships among training, learning and change. She identified that paradoxically managers believe that training was a abates to learning in that the formation, timing and matching with learners needs, but managers have to accept that learning is ongoing and essence of training and she further specified that the structured training is constantly not a learning break.

**4. TRAINING AND TURNOVER**

Many research studies have proved that the training reduces the turnover rate in organization. It is said that the employee turnover means the employee-leaving ratio of an organization. it is very necessary to find out that why an individual quits / gives up his/her job. According to Leininger (2004), there are number of distinctive characteristics that include higher pay and finding a better career prospect make employees to leave their job. Besides, the reasons of leaving organization may be of different types but mostly these include lack of training, incapability of employee to perform job, career advancement, lack of merit based performance appraisal, frustration due to deprivation of employee legitimate rights, uncongenial working environment, lack of motivation / appreciation, lack of incentive / fringe benefits, favoritism, nepotism, lack of employee-management relationship. Therefore, the training option only remains there for solving many such problems because training bridges the gap between the need and its realization/fulfillment. Here are some examples: an untrained employee is like a dull school student who prefers to remain absent and likely to be a school drop-out unlike other students who are good at studies and enjoy schooling. An incapable / unproductive worker is frustrated by failure and is likely to dump his work than those who are capable of producing / productive.

Chughtai and Zafar (2006) carried out survey on the impact of the organization's commitment to the dimensions of organizational results. It included employee performance, business plans and job satisfaction, pay, promotion, supervisors‟s attitude, work safety, and training opportunities The researchers collected data from 125 university teachers (male & female). Data was analyzed on multiregression basis to test the application to the relationship. It was found that training opportunities are positively correlated with organizational commitment. It was also seen that lowest variation of satisfaction showed significant effect on organizational commitment, and training opportunities. Further observed that efficiency and commitment were related to business intention; and said that employees have to be better performers with the level of commitment and love to work on their respective working places that concluded.

**5. TRAINING AND ORGANIZATIONAL COMMITMENT**

Mowday, Spears and (1979), Porter show commitment to its employees' involvement in the

organization and determine the relative strength of the individual. "Organizational commitment is that not to leave the organization and further sais that the organization and the employee has a psychological connection. (Allen & Meyer, 1996), the organizational commitment is regarded as profits and investments by getting done the individual activities.

Meyer and Allen (1991), emphasized on more commitment, and three different mechanisms: (i) affective commitment (ii) normative commitment (iii) continued commitment. Kantor (1968), divided organizational commitment into three sections (i) continuance dedication (ii) commitment (iii) consistency control participation. The researchers feel that the responsibility of retention of an employee in the organization depends on organizational commitment. However, the continuation of employees, leaving organization results into employees “went costs”.

**Importance of Effective and Dynamic Employee Training**

* Design your training for adult learners.
* Develop interactive training.
* The two keys to keep learners engaged.
* Ask questions.
* Facilitate activities like a pro.
* Create training that works.

**Dynamic training methods**

* One of the most effective methods to show your employees that you value them is to provide them with training. It demonstrates that you care as much about their well-being and development as they do about your company's. Employees that are well taken care of will never desire to work somewhere else.
* Training can be used as a preventative measure to prepare people for expected and unforeseen changes and challenges in the workplace. It only makes sense to keep our staff prepared in times like ours, when trends are always changing due to online innovation.
* There is no better way to produce future leaders than to train the most talented individuals available. Employees will have a clear career path, resulting in lower attrition and discontent.
* Employees are a significant and most important component of a company's assets, and caring for them entails caring for the firm as a whole. Therefore, any business organization that invests their time and money in its employees' education or Training & development can only succeed in achieving their business goals and advance further.

**Types of Training system**

Find below few important types of training system in HRM:

Technical training is a form of instruction that teaches new employees about the technology components of their jobs.

Quality training is the process of familiarizing personnel with the methods for preventing, identifying, and removing non-quality goods in a manufacturing environment.

Skill Training is the next type of training, which involves developing the ability to execute the job.

Soft skills training is another form of training requires to improving the employee’s soft skills that are personality traits, social graces, communication skills, and personal routines that are used to define interpersonal interactions.

Professional training is the sort of professional education necessary to stay current in one's line of work.

**Benefits of training system**

* Investing in staff training and development boosts work satisfaction and morale.
* Employee turnover is reduced.
* Inspires employees to work harder.
* Improves process efficiency, resulting in financial benefit.
* Aids in the adoption of new technology and processes.
* Increases strategy and product innovation