



A Study of on the Job Training Effectiveness: Empirical Evidence of Iran

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Abstract

Training is essential to the growth and economic well-being of a nation. This need for training pervades all levels of industry, for a national level where a country's well being is enhanced by training, to each company where productivity is improved, down to the individual whose skills are enhanced and as a result improve their position in the workplace. In other words, Training is one of the most pervasive methods for enhancing individual productivity and improving job performance in the work environment (Goldstein and Ford 2002; Gupta and Bostrom 2006). Training effectiveness must cause behavior change (i.e. skill transfer for job performance), thereby resulting in organizational performance (Goldstein and Ford 2002). The results of this study shows that on the job training is strongly affects to more creativity, achieving organizational objectives and improves work quality.

Keywords: Job training, Effectiveness, Creativity, Iran

1. Introduction

Any organization that wants to succeed, and to continue to succeed, has to maintain workforce consisting of people who are willing to learn and develop continuously. Training and developing human capital is tremendously important in the effective management and maintenance of a skilled workforce. Training is one of the ways of improving organization's effectiveness. In order to implement right training methods, organization should be aware of the training methods and their effectiveness. Study provides conceptual framework of determining which methods to use when developing training program. Training is widely understood as communication directed at a defined population for the purpose of developing skills, modifying behavior, and increasing competence. Generally, training focuses exclusively on what needs to be known. Education is a longer-term process that incorporates the goals of training and explains why certain information must be known. Education emphasizes the scientific foundation of the material presented. Both training and education induce learning, a process that modifies knowledge and behavior through teaching and experience. The research model described here pertains to both training and education. Therefore, in this document, "training" refers to both processes.

Training is a part of the human resource development, along with the other human resources activities, such as recruitment, selection and compensation. The role of human resource department is to improve the organization's effectiveness by providing employees with knowledge, skills and attitudes that will improve their current or future job performance. In order to implement the right training methods, the training specialist should be aware of the pros and cons and effectiveness of each training method. Besides, for evaluating training effectiveness, measurement should be done according to the models.

2. Training

The verb "to train" is derived from the old French word *trainer*, meaning "to drag". Hence such English definitions may be found as; to draw along; to allure; to cause; to grow in the desired manner; to prepare for performance by instruction, practice exercise, etc. Training can be described as "providing the conditions in which people can learn effectively". To learn is "to gain knowledge, skill, ability" (King, 1968:125). In view of the sense knowledge refers to the information

we acquire and place into memory, how it is organized into the structure of what we already know and to our understanding of how and when it is used. Thus knowledge can be seen as three distinct types; declarative, procedural and strategic (Kraiger and Salas, 1993:311). Declarative Knowledge is a person's store of factual information about a subject matter. Procedural knowledge is the person's understandings about how and when to apply the facts that has been learned. Strategic Knowledge consists of the person's awareness of what he knows and the internal rules for accessing relevant facts and procedures to be applied toward some goal. Strategic knowledge is used for planning, monitoring, and revising goal-directed activity (Blanchard and Thacker, 1998:6).

Skill is the capacities needed to perform a set of tasks that are developed as a result of training and experience (Dunette, 1976:8). A skill is a proficiency at doing something beyond just knowing what something is about. Abilities have been defined as general capacities related to performing a set of tasks that are developed over time as a result of heredity and experience (Flesihman, 1972:28).

To understand the function of training in a company, it is needed to ask the question of what training is state for the company. Training is an "opportunity" for learning and it is accomplished by providing employees with opportunities to learn how to perform more effectively and by preparing them for any changes in their job. Training focuses on the acquisition of knowledge, skills and attitudes needed to perform more effectively on one's current job.

Role of training may be seen as "ensuring that the organization has the people with the correct mix of attributes, through providing appropriate learning opportunities and motivating people to learn, and thus enabling them to perform to the highest levels of quality and service" (Bentley, 1990:25). Training must be therefore managed as a frontline business activity. The investment in people, both in developing and maintaining the appropriate 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.

Training activities and businesses objectives are related to each other as links. Effective training program helps organizations to achieve their objectives. General objectives of training activities are; orienting new employees to the organization and their job, helping employees perform their current jobs well, helping employees qualify for the future jobs, keeping employees informed of changes within the organization, providing opportunities for personal development (Drummond, 1989:165). Here the authors going to briefly explain on the job training.

3. Training methods

Many training techniques are created almost every year by the rapid development in technology. Deciding among methods usually depends on the type of training intended, the trainees selected, the objectives of the training program and the training method. Training is a situational process that is why no single method is right for every situation. While some objectives could be easily achieved through one method, other objectives could necessitate other methods. Many training programs have learning objective in more than one area. When they do, they need to combine several training methods into an integrated whole.

Training methods could be classified as cognitive and behavioral approaches. Cognitive methods provide verbal or written information, demonstrate relationships among concepts, or provide the rules for how to do something. These types of methods can also be called as off the job training methods. On the other hand, behavioral methods allow trainee to practice behavior in real or simulated fashion. They stimulate learning through behavior which is best for skill development and attitude change. These methods can be called as on-the-job training methods. Thus; either behavioral or cognitive learning methods can effectively be used to change attitudes, though they do so through different means. Cognitive methods are best for knowledge development and behavioral methods for skills (Blanchard and Thacker, 1998:277). The decision about what approach to take to training depends on several factors that include the amount of funding available for training, specificity and complexity of the knowledge and skills needed, timeliness of training needed, and the capacity and motivation of the learner.

To be effective, training method should; motivate the trainee to improve his or her performance, clearly demonstrate desired skills, provide an opportunity for active participation by the trainee, provide an opportunity to practice, provide timely feedback on the trainee's performance, provide some means for reinforcement while the trainee learns, be structured from simple to complex tasks, be adaptable to specific problems, encourage positive transfer from training to the job (Woods, 1995:180).

3.1 Off-The-Job Training Methods

Training which takes place in environment other than actual workplace is called off-the job training. Off-the-job training is usually designed to meet the shared learning needs of a group rather than a particular individual's needs. Lectures, computer-based training, games and simulations are the common forms of off-the-job training methods.

3.2 On-The-Job Training Methods

The purpose of the on-the-job training session is to provide employee with task-specific knowledge and skills in work area. The knowledge and skills presented during on-the-job are directly related to job requirements. Job instruction technique, job rotation, coaching and apprenticeship training are the common forms of on-the job training methods. Fully on-the-job training theoretically does not involve any off-the-job training. However, it is very rare for 100% of training to take place as part of the productive work of the learner.

Job instruction training is a structured approach to training, which requires trainees to proceed through a series of steps in sequential pattern. The technique uses behavioral strategy with a focus on skill development, but there are usually some factual and procedural knowledge objectives as well. This type of training is good for task oriented duties such as operating equipment. The instructor or supervisor prepares a job breakdown on the job, while watching an experienced worker perform each step of the job. Job instruction technique consists of four steps, preparation, present, try out and follow up (Blandchard and Thacker, 1999:306).

Job rotation is the systematic movement of employees from job to job or project to project within an organization, as a way to achieve various different human resources objectives such as: simply staffing jobs, orienting new employees, preventing job boredom or burnout, rewarding employees, enhancing career development, exposing employees to diverse environments (Woods, 1995:188). Excellent job rotation program can decrease the training costs while increases the impact of training, because job rotation is a hand on experience. Job rotation makes individuals more self-motivated, flexible, adaptable, innovative, eager to learn and able to communicate effectively. One of the possible problems with the rotation programs is the cost, because job rotation increases the amount of management time to spend on lower level employees. It may increase the workload and decrease the productivity for the rotating employee's manager and for other employees. Job rotation may be especially valuable for organizations that require firm-specific skills because it provides an incentive to organizations to promote from within (Jerris, 1999:329).

Coaching is the process of one-on-one guidance and instruction to improve knowledge, skills and work performance. Coaching is becoming a very popular means of development, and often includes working one-on-one with the learner to conduct a needs assessment, set major goals to accomplish, develop an action plan, and support the learner to accomplish the plan. The learner drives these activities and the coach provides continuing feedback and support. Usually coaching is directed at employees with performance deficiencies, but also used as a motivational tool for those performing well. Coaching methods solve precise problems such as communication, time management and social skills. Executive coaching generally takes place on a monthly basis and continues over a period of several years. Often, coaches are brought in where there is a change in the structure of the company, when a team or individual is not performing well or where new skills are required. Coaching assumes that you are fine but could be even better (Kirwan, 2000).

Apprenticeship is one of the oldest forms of training which is designed to provide planned, practical instruction over a significant time span. Apprenticeship was the major approach to learning a craft. The apprentice worked with a recognized master craft person (McNamara, 2000).

4. Training methods

Bostrom et al. (1988) have identified two specific training methods called the conceptual models and motivational planning and management. Conceptual models are the frameworks for conveying the basic concepts of the system to be learned. They provide a basis for forming mental models. Mental models are mental or internal conceptual representations of the software package (Foley, 1980; Bentley, 1994). They aid users in making inferences about the system, reasoning about it, and guiding actions.

Conceptual models can be classified as the analogical and abstract models. Analogical representations present the system to be learned in terms of another system. For example, a spreadsheet serves as an analogy for a modeling language. Abstract models are synthetic representations of a system. A mathematical model is an example of an abstract model. Structural conceptual models are aimed at developing knowledge about the structure of the system to be learned, while functional conceptual models provide information about how a command can be used.

Motivational planning and management is the recognition of the ways that a trainee can be motivated to learn the system, and to have a high motivation to continue to learn the system after training. The objectives of a motivational planning approach include developing the confidence of success, managing reinforcement, connecting the instruction to important needs and motives, and arousing and maintaining curiosity and attention. This approach should be used before, during and after the training process. Before training, instructors can assess the needs and experiences of trainees, and use this information for motivational management. During training, the goal is to design learning materials and tasks to generate the outcomes proposed. Two broad approaches to the overall design of the training session are called syntactical (traditional) and application training. The syntactical training emphasizes syntax through a specific language related examples and general exercises. The application training focuses on giving the trainees a view of how

they can solve their own problems using the relevant software. Trainees are asked to bring their problems to work on during training. These approaches may be integrated. For example, application training could be utilized early in training to demonstrate the usefulness of the software for solving trainees' problems.

5. Research objectives, questions and hypotheses

Since the main objective of this study is the degree of effectiveness of on the job training on Iranian managers the below questions were postulated in this study:

Q1: is on the job training improves the degree of managers' creativity?

Q2: who much on the job training fits with companies' policy?

Q3: how much caused on the job training to improve personal managers' ability?

Q4: how much caused on the job training to achieve organizational goals?

Q5: how much caused on the job training to work improvement in company?

According to above questions the research hypotheses are as below:

H1: from managers' viewpoint training can increase managers' creativity.

H2: from managers' view point, training can economical benefits with accord to company policy.

H3: from managers' view point, training can increase abilities and creativity of managers.

H4: from manager's point of view, training can be very effective in achieving organizational objectives.

H5: from manager's point of view, training can improve work quality.

6. Research methodology

So far, for finding accurate answers to the research questions, Five point Likert's scale questionnaire was designed and developed among the 120 top managers in Tehran province. Out of 120 questionnaires only 80 usable questionnaires were return. At first time the authors analyses the bio data of participants which shows in Table 1. Out of 80 participants 52 were male and 28 were female. Regarding the age of participants, the majority age of participant stood at 36-45 years old (55 participants, 69 per cent).

Insert Table 1

Regarding experience, least number of participants had lee than 5 years experience (14 per cent); majority of participants had experience between 6-10 years (60 per cent of participants. With reference to educational background in Table 1, 55 per cent of participants had got B.S and associate diploma and master holders stood equal.

The field of the study of participants was another interesting area in this study. As table 1 showed 40 per cent of participants had management field. In is very interesting to note that majority of participants (managers) had field of science and the least per cent of participants had humanities field.

Result analyses

In order to giving correct answers to research questions, the hypotheses of the study are tested in Table 2.

Regarding to the first hypothesis as table showed the null hypothesis strongly rejected and H_1 is accepted. In other words, from managers' viewpoint training with 95% confidence level can increase creativity.

Testing results of the second hypothesis

With regard to above table the second hypothesis is also accepted and null hypothesis is rejected. So according to these results it can say from managers' view point, training with 95% confidence level can effect on economic accord with company policy.

Insert Table 2

About testing the third hypothesis, as the results of table 2 showed this hypothesis also accepted and it can concluded the rejection of null hypothesis.

So, from manager's point of view, training with 95% confidence level can increase abilities and creativity of managers.

As before claimed the fourth hypothesis is: from manager's point of view, training can be very effective in achieving organizational objectives.

With reference to the results of Table 2 it shown that this hypothesis is also accepted and null hypothesis is rejected; so, from manager's point of view, training with 95% confidence level can be very effective to achieving organizational objectives.

Regarding the testing of the last hypothesis, as it clear in the above table this hypothesis also strongly accepted and null hypothesis is rejected, so it can concluded that from manager's point of view, training with 95% confidence level can be improve work quality.

7. Conclusion

Training is a substantial organizational investment getting a satisfactory return on investment means linking the training function and activities to the company's overall business activity. The investment in people, both in developing and maintaining the appropriate skills, is 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. The improved performance of individuals leads directly to profit. Such a payback can be rapid and significant, yet it is rarely measured or presented in financial terms.

If an organization wants highly motivated, up to date, creative and productive workforce, they need to start and build a strategy for the future. This strategy has to recognize that corporate performance is totally dependent upon the performance of the organization's people. This leads to a clear commitment to invest in these people through training. The results of this study showed that on the job training has positive affect on managers' creativity, achieving organizational objectives, economical benefits. With such advantages that training dedicates to organizations, any organization those have high ambitions, have to conduct such training for achieving those benefits.

Organization which implements training gives emphasis on; what percentage of employees have individual challenge, growth and learning plans, the number of hours of training that the average worker gets each year.

A training program is not complete until you have evaluated methods and results. A key to obtaining consistent success with training programs is to have a systematic approach to measurement and evaluation. Recognition of the training methods and measurement techniques are crucial for the organization's training success.

References

- Bentley T. (1990). *The Business of Training*, 2nd edition, McGraw Hill Book Company, New Jersey.
- Bentley, T. (1994). *Facilitation: Providing Opportunities for Learning*. London: McGraw Hill.
- Blanchard P.N and j. W Thacker. (1998). *Effective Training: Systems, Strategies and Practices*, Prentice Hall, New Jersey.
- Bostrom, R. P and C, Brown. (1994). Organizational designs for the management of end-user computing: Reexamining the contingencies. *Journal of Management Information Systems*. *Spring*, 10 (4), pp.183-211.
- Drummond K. E. (1989). *Human Resource Management for the Hospitality Industry*, Van Nostrand Reinhold, NY.
- Dunette M. (1976). *Aptitudes, Abilities and Skills*, Randy Macnally, Chicago.
- Fleishman E. (1972). On The Relation between Abilities, Learning and Human Performance. *American Psychologist*, Vol. 27, p. 1017
- Foley, J. R. and R. A. Clifton. (1990). Locus of control, organization climate, and participation in staff development: A study of college instructors. *The Canadian Journal of Higher Education*, 20 (2), 45- 59.
- Goldstein, I.L., and J.K. Ford. (2002). *Training in Organizations: Need Assessment, Development, and Evaluation*, (fourth ed.). Wadsworth.
- Gupta, S., and R.P. Bostrom. (2006). End-User Training Methods: What We Know, Need to Know, ACM.
- Jerris, L. A. (1999). *Human Resources Management for Hospitality*, Prentice Hall, New Jersey.
- Kind, D. (1968). *Training within the Organization*, Cox & Wyman Ltd.
- Kirwan, T. H. (2000). *Coaching Champion*, Management Today, November.
- Kraiger, F and E. Salas. (1993). Application of Cognitive, Skill based and Affective Theories of learning Outcomes to New Methods of Training Evaluation. *Journal of Applied Psychology*, Vol. 78, No. 2, pp. 42-56.
- Mcnamara, C. (2000). Various Ideas for Learning Activities and Documentation Results. [Online] Available: www.mapnp.com
- Woods, R. (1995). *Human Resources Management*, AHMA, Michigan.

Table 1. Bio data of participants

Variable	Item	Frequency	Percentage
Gender	Male	52	65%
	Female	28	35%
Age	Below 35	12	15%
	Between 36-45	55	69%
	Above 46	13	16%
Experience	Less than 5 years	11	14%
	Between 6-10 years	48	60%
	More than 11 years	21	26%
Educational Background	Associate diploma	18	22.5%
	B.S	44	55%
	M.S	18	22.5%
Field of the study	Management	32	40%
	Science	40	50%
	Humanities	8	10%

Table 2. Results of testing hypotheses

Hypotheses	Average	Mode	S.D	T- Test	Sig.	Result
First hypothesis	3.86	4	0.808	7.523	0.000	Accepted
Second hypothesis	3.60	4	1.06	3.969	0.000	Accepted
Third hypothesis	3.80	4	0.904	6.261	0.000	Accepted
Fourth hypothesis	3.61	4	0.857	4.95	0.000	Accepted
Fifth hypothesis	3.74	4	0.751	6.97	0.000	Accepted