TRAINING EFFECTIVENESS AT PT XYZ USING KIRKPATRICK MODEL AND RETURN ON INVESTMENT OF TRAINING (ROI-TRAINING)

Jonny

Accounting and Finance Department, Faculty of Economic and Communication, Bina Nusantara University,
Jln. K.H. Syahdan No 9, Jakarta Barat, DKI Jakarta, 11480, Indonesia
jonny@binus.ac.id

ABSTRACT

The goal of the research was to evaluate the effectiveness of Kirkpatrick model and Return on Investment of Training at PT XYZ. Observation was applied to this research. The result has shown several facts such as trainee's feedback score was 4,62 above 4,10 as required by the company in terms of reaction, the average final exam score was 3,66 above 3,00 as required by the company in terms of learning, the trainees' superiors' feedback score was 3,53 above 3,00 as required by the company and Return on Investment of Training (ROI-Training) was 58,88% above 15% as required by the company. With these results, the company can conclude that the program is effective in nurturing its supervisory leaders.

Keywords*:* training effectiveness, Kirkpatrick model, Return on Investment of Training (ROI-Training)

INTRODUCTION

PT XYZ is known as one of the largest and reputable companies in Indonesia. This company has been operated for almost 60 years in Indonesia with several strategic business units covering several industrial sectors in Indonesia. In management perspective, its management has realized that it may lack focus if it should control all aspects of operations of every entity of its strategic business unit. Therefore, the management has applied decentralization to all of its management of strategic business units.

Some roles of profit and cost centers have been delegated to its strategic business units by forming group and affiliated company's structure, while for responsibility center remains as part of corporate roles. One of these responsibilities is about developing and nurturing its people.

Talking about developing and nurturing people, PT XYZ has separated it into two categories which are functional and leadership sides. For functional side, the management has delegated to its both group and affiliated companies to manage what is needed to develop its people's competency while for leadership side, it has been part of corporate roles. Therefore, almost every leader of the company has to develop through its leadership program.

This decision is made especially based on the company's policy to ensure the traits of its leaders based on its leadership competency model. Based on Kaplan and Norton (2004), this leadership competency model is needed especially when the company needs to ensure the specific competencies desired from leaders. This is important because it will ensure the effectiveness of its leader to energize and sustain the transformational program needs to achieve the company's goal and strategy (Kaplan & Norton, 2004).

More about its leadership program, there is a staging which is ranging for all organizational levels such as officer, supervisor, manager, senior manager, general managers and executives. From these categories, only for officer and supervisory are handled by itself through its corporate university while the rest are handled by joint cooperation with both reputable local and international university. Therefore, every

employee in this company should undergo training along with their promotion because the company needs to ensure its effectiveness as a leader in order to pursue the company's objectives given to them.

Among those programs which are handled internally, only supervisory program requires all of its participants to submit projects resulting benefit for the company (Aprinto & Jacob, 2013). This program has been held for several decades, and the management is interested to know its effectiveness of the supervisory program regarding its result (Batt, 2000). Therefore, it is obvious that there is a research gap on whether the supervisory program handled by the company is already effective or not. This is important for the company in order to decide whether to continue internally provide the program or the company should outsource it to another training partner.

Therefore, this research question has been acted as the main topic of this article, and Kirkpatrick model has been picked out of other models for its fitness and suitability to this nature of research (Dhliwayo & Nyanumba, 2014). At the end of the article, there would be result on whether the program can be perceived as effective or not and therefore what recommendation could be drawn to overcome it. The most important part is that this recommendation is supported by concrete evidence generated by implementing the pre-mentioned model.

METHODS

In recent decades, training and development have played an important role in the company in developing knowledge, skills and abilities of its employee to cope with the ever-changing business' landscape of competition. Therefore, its effectiveness should be evaluated in order to reveal its capability in producing a desired effect for the company because as other means of investment, this activity should also be viewed as a mean of investment.

In order to do that based on Devi and Shaik (2012), there are several methods for training evaluation such as Kirkpatrick's four level model, Hamblin's five level model, Warr's framework of evaluation, Virmani and Premila's model of evaluation, Peter Bramely's model of evaluation and David Reay's approach to evaluation. Among these is Kirkpatrick model which is then selected by the company as its based evaluation to reveal whether the training is already effective or any improvement should be taken. The reason using this model aside from the other models lies on its fitness and suitability in order to address the company's problem and need.

Based on Kirkpatrick model, the determination of the effectiveness of training program which is also known as an evaluation is needed to improve future programs and to eliminate those programs which are ineffective through four logical steps (Craig, 1996). The first step is reaction: how well did the trainees like the program? The second step is learning: what

principles, facts, and techniques were learned? What attitudes were changed? Next, the third step is behavior: what changes in job behavior resulted from the program? Finally, the fourth step is results: what were the tangible results of the program regarding reduced cost, improved quality, improved quantity, and others?

Step 1 is about measuring reaction. According to Kirkpatrick (2009), reaction may best be defined as how well trainees liked the program. This can be evaluated by (1) determining what you want to find out, (2) using its written comment sheet covering items determined in (1), (3) designing the form so that reaction can be tabulated and quantified, (4) obtaining honest reactions by making forms anonymous, and encouraging trainees to write in additional comments not covered by the questions were designed to be tabulated and quantified.

It is important to determine how people feel about the programs they attend because the decisions by top management are frequently based on one or two comments made by people who have attended. On the other side, trainees who enjoy the program are more likely to obtain maximum benefit from it. However, even reactions have been effectively measured; there is still no assurance that any learning has been taken place. Therefore, next step to evaluate whether the learning is taken place is required.

After step 1, the next is measuring learning. It is defined as attitudes that were changed, and knowledge and skills learned. This can be evaluated by several guidelines such as (1) determining quantitative results of the trainees, (2) implying before-after approach to relate learning to the program, and (3) statistically analyzing the evaluation results to prove the learning in terms of correlation or level of confidence.

According to Kirkpatrick (2009), there are several suggested methods in order to evaluate where the learning is taking place or not such as (1) Classroom performance. This method may include demonstrations, individual performance of the skill being taught and discussions following role playing. (2) Paper and pencil tests may be used where principles and facts are taught rather than skills. They can be given prior program as pre-test and post-test in order to reveal the effectiveness of the learning during the program. A comparison before-and-after scores and responses can then be made to prove how much learning has taken place.

It is said that it is much more difficult to measure learning than it is to measure reaction to a program. However, if it can be proved to be effective regarding learning as well as in terms of reaction, then it can be objective data to be used in selling future programs and increasing status and position of the company. Or in the company's background, it can be an effective evidence to prove that the program is effective or not. Therefore, an effective decision can be made for the sake of the company's stability and growth for the future.

After step 1 and 2, the next is step 3 which

is about measuring behavior. There may be a big difference between knowing principles and techniques and using on the job. There are five requirements must be met for change in behavior to occur such as (1) desire to change, (2) know-how of what to do and how to do it, (3) right job climate, (4) help in applying the classroom learning, and (5) rewards for changing behavior.

The third requirement refers to the superior of the person being trained. If he or she has established a preventive or discouraging climate, no change in behavior is likely to occur even if the trainee is anxious to change and has acquired necessary knowledge and skill. If the climate is neutral and encouraging, the change in behavior is apt to take place.

This evaluation of the effectiveness of training programs in terms of behavioral changes can be done by (1) creating systematic appraisal of on-the-job-training on a before-and-after basis, (2) being appraised by one or more of the following such as the person receiving the training, the person's superior or superiors, the person's subordinates, and the person's peers or other people thoroughly familiar with his or her performance, (3) a statistical analysis to compare performance before and after and to relate changes to training program, (4) a post-training appraisal after 3 months or more so that the trainee have an opportunity to put into practice what they have learned and (5) a control group that is not receiving the training.

Although measuring changes in behavior resulting from training programs usually involves a complicated procedure. However, it is worthwhile if training programs are going to increase in effectiveness and their benefits are made clear to top management. In the company's background, an interview with the superior of the trainees is conducted in order to evaluate whether the trainee has made any changes when he came back after having the training in the company's headquarter.

After step 3, the last is step 4 in order to measure the results of training investment given by the company. As we may know, the objectives of training program can be stated in terms of results such as reduced turnover, reduced costs, improved efficiency, reduction in grievances, increase in quality and quantity of prod or improved morale. Before evaluating this, it is recommended to evaluate reaction, learning, and behavior first.

In order to measure the effectiveness of the training program in terms of result, the company can adopt Return on Investment of Training (ROI-Training) concept in which the formula can be described as follows (Aprinto, 2013):

$$ROI - Training = \frac{benefit - cost}{cost} \times 100\% \qquad (1)$$

This concept is suitable especially because the company has requisite every trainee to conduct any improvement project that can generate more benefit for the company despite its cost. This is in line with Kaplan (2004), who stated that effective leaders are those who can energize and sustain the transformation program needed to bring bright future for the company by executing its strategies towards its vision well.

RESULTS AND DISCUSSIONS

PT XYZ has appointed its corporate university to handle supervisory program for its supervisors in order to increase both competency and professionalism in leadership matters. Therefore, a batch of 30 persons from several of its affiliated companies is conducted in order to ensure the effective leadership development. In this program, there are numerous sessions created in order to develop the leadership competency of each of the participants based on company's leadership competency guidelines.

In delivering the program, the corporate university has assigned a program manager and program coordinator as a team to conduct the program management and asked several facilitators who are already in managerial positions in order to deliver the session material for the trainee. This is done especially in order to give the participant more insights regarding various industrial sectors and practical experiences regarding the conduct of leadership role in various companies.

Of course, before giving the lecture, these managers then called as facilitators are given opportunity to sit in the classes and some briefs regarding curriculum and materials to be given in their next facilitation sessions.

In the first step which is reaction, the trainees' reaction towards the program is to be further studied. Based on its guidelines for measuring the reaction, the management has determined what the companies want to find out. These may cover these following statements: (1) The program content met its stated objectives, (2) The facilitators were able to maintain and encourage participation, (3) There was appropriate use of case discussion, examples, group work and other means to aid understanding of the content, (4) The staffs were courteous, helpful and provided the trainees with professionalized attention, (5) The facilitators use practical illustration and or demonstrated an understanding of practical issues, and (6) Overall program is very helpful for the trainees in creating practical ideas to improve his or her performance.

In order to gain the written comment from the trainees, a form is created to cover the above six statements, and each of trainee was asked and encourage to give his or her honest reaction which would be represent using Likert scale such as 5 if the trainee is strongly agree, 4 if agree, 3 if neutral, 2 if disagree, and 1 if strongly disagree. Furthermore, the company has stated that its target is about 4.10 to indicate that the program is effective.

To evaluate the score, the team has provided the feedback forms consisting those six statements as

pre-mentioned before. This form is to be filled with five-scale Likert method in order to give them the opportunity to express their reaction to each of the program which is 1 = strongly disagree to 5 = strongly agree. After forms are distributed, the responses from the trainees were further tabulated as presented in Table 1.

Table 1 Reaction

No	Respondents	Responses	Score	Overall Score
1	30	140	4,67	
2	30	138	4,60	
3	30	137	4,63	
4	30	136	4,53	
5	30	139	4,63	
6	30	140	4,67	
	Total	830		4,61

From Table 1, it can be seen that the overall reaction score was about 4,62 which was above 4,10 as required by the company. Therefore, it can be concluded that the trainees liked the program. This result may lead to support the hypotheses on whether the program is effective or not. However, we need to al-so evaluate their learning as stated in the following section.

After the reaction of trainees was acquired, then the measure of learning, which is the step 2, is then deployed. In order to evaluate this learning performance, the company has constructed a paper-and-pencil test in order to evaluate the knowledge and skills learned by each of the trainees. This exam covers several sessions taught during one week supervisory programs such as leadership, coaching and counseling, managing change, problem-solving and decision making. The company also set the minimum required score to consider on whether the trainee can be considered pass the pro-gram or not and the score is above 3,00.

Based on this rule, each of trainees was tested based on 5-scale rating to ensure his or her concept mastery at the end of one-week program where the result is in Table 2.

Table 2 Learning

No	Score	Mean	N	Sum	Overall Score
1	1,00 – 1,99	1,5	0	0	
2	2,00 – 2,99	2,5	1	2,5	
3	3,00 – 3,99	3,5	23	80,5	
4	4,00 – 5,00	4,5	6	27	
	Total		30	110	3,66

Table 2 indicates that the overall score of the trainees was about 3,66 above required 3,00. Therefore, it can be concluded that the learning has taken place.

After reaction and learning have been evaluated, then the next step, which is the step 3, is to evaluate the

behavioral changes. In this company, this evaluation is conducted through interview with trainee's superior after the trainee presented his final project.

Through this interview, there are several items to be addressed such as (1) degree of project challenge, (2) mastery of concept, (3) leadership skill improvement, (4) project achievement and (5) depth of analysis and insight. For this evaluation, the company also set minimum acceptable score which is 3,00, and the result of this interview is depicted in Table 3.

Table 3 Behavior

No	Respondents	Responses	Score	Overall Score
1	30	110	3,66	
2	30	103	3,43	
3	30	103	3,43	
4	30	108	3,60	
5	30	106	3,53	
	Total	530		3,53

From Table 3, it can be concluded that the overall behavior score is 3,53 which is above 3,00. Therefore, it can be concluded that this behavior is accepted to be changed as impact of the training.

After training is conducted, in order to measure the results, which is step 4, the company usually require each of trainee to propose and implement project improvement resulting several benefits for the company as follow up of the training given to them. This project then can be treated as basis of calculation of ROI-Training as means to evaluate the effectiveness of the training program in term of result. Regarding this measure, the company has set that the minimum rate of return is 15%. Therefore, the calculation result is further detailed in Table 4.

Table 4 Results

Items	Amount
Benefit:	
IDR 14,3 mio x 30 =	IDR 429 mio
Cost:	
IDR 9 mio x 3 =	IDR 270 mio
Benefit – Cost =	IDR 159 mio
ROI-Training:	
IDR 159 mio/ IDR 270 mio =	58,88%

From Table 4 it can be derived that the ROI-Training as measure of program effectiveness in terms of results is about 58,88% above 15%. Therefore, it can be concluded as effective in terms of results.

CONCLUSIONS

After conducting the research, it can be concluded that the supervisory program at PT XYZ is effective because it is supported by the four facts. The first fact is reaction. The score is 4,62 derive

from trainee's feedback above 4,10 as targeted by the company and therefore it can be said effective in terms of reaction. The next fact is learning. The average final exam score from trainees is 3,66 above 3,00 as targeted by the company and therefore it can be said effective in terms of learning. Behavior is the third fact that is going to be discussed. The average feedback score from trainees' superiors' feedback after hearing trainee's final project presentation is 3,53 above 3,00 as targeted by the company and therefore it is effective in terms of behavior. Finally, the fourth fact is results. The ROI-Training has shown 58,88% above minimum required rate of return of 15% and therefore it can be concluded as effective.

REFERENCES

Aprinto, B., & Jacob, F. A. (2013). *Pedoman Lengkap Profesional SDM Indonesia*. PPM Manajemen.

Batt, R. (2000). Labor Market Institutions and Restructuring in U . S . Deregulated Telecommunications Services. *British Journal of Industrial Relations*, *39*(1), 1–25.

Craig, R. (1996). *The ASTD Training & Development*. (4th ed.). McGraw Hill.

Devi, V. R., & Shaik, N. (2012). Evaluating Training and Development Effectiveness – A Measurement mode. *Asian Journal of Management Research*, *2*(1), 722–735.

Dhliwayo, S., & Nyanumba, L. K. (2014). An evaluation of an on the job training program at a UK based public health care company. *Problems and Perspectives in Management*, *12*(2), 164–172.

Kaplan, R. S., & Norton, D. P. (2004). *Strategy Maps: Converting Intangible Assets into Tangible Outcomes. Boston,* USA: Havard Business School Publishing Corporation.

Kirkpatrick, B. J. (2009). The Kirkpatrick Four Levels [TM]: A Fresh Look After 50 Years 1959-2009. Retrieved February 11, 2016, from http://www.kirkpatrickpatners.com/portals/0/resources/kirkpatrick Four Levels white paper.pdf.