Website: www.ijrrjournal.com E-ISSN: 2349-9788; P-ISSN: 2454-2237

# Analysis of Return on Training Investment (ROTI) Calculation in Pilot Project Learning Program PT PLN (Persero)

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#### **ABSTRACT**

This study aims to calculate the value of the cost of return (investment) training/ Return on Training Investment (ROTI) from the strategic initiative learning program held by PT PLN (Persero) Education and Training Implementing Unit Tuntungan over the performance of increasing electricity sales at PT PLN (Persero) Pakam Customer Lubuk Service Implementation Unit 2018. The learning object of the research is the Pilot Project learning program on the performance of PLN Customer Service Implementation Unit Lubuk Pakam sales increase 2018. This study also aims to review and compare ROTI calculations has been carried out by PLN Education and Training Implementing Unit Tuntungan before (existing) with ROTI calculations that will be carried out by researchers using the Jack J. Phillips method approach to get a more reasonable / realistic ROTI value. This study involved people involved in the performance of increasing sales for whose role was to provide estimates in the calculation of ROTI consisting of Learning Participants, Direct Participants Learning Participants, Management related to sales performance improvement and Expert in sales increase performance. This study discusses more about how to obtain the value of isolation based on the estimation method listed in Jack J. Phillips's theory and also reviews the Learning Benefit value obtained from the Pilot Project learning program to increase sales performance of Customer Service Implementation Unit Lubuk Pakam in 2018. The results of this calculation will then be proposed to related management at PT PLN (Persero) to get a more reasonable value in the calculation of ROTI

especially learning about the performance of increasing sales going forward.

*Keywords:* Return on Training Investment, Jack J. Phillips, Learning Investment

### **INTRODUCTION**

The concept of Human Capital Management (HCM) as discussed by Kearns (2006) revealed that human capital management focuses on adding and creating value for human development. This encourages human capital to prioritize the importance of data retrieval, analysis, and presentation of data in order to get clear directions for taking an action.

Derek Stockley, an economist and education expert from Australia (2003) said that the importance of Human Capital Management (HCM) because business and political leaders must begin to recognize that having people with high skills and motivation can make a significant difference in performance improvement. Human Capital focuses on activities undertaken by companies / organizations to prepare for the future of the company / organization through the inculcation of knowledge or abilities in its people.

Human Capital Management (HCM) manages and develops the ability of humans to reach significantly higher levels of performance. Individuals produce, use knowledge and skills (human capital) and create intellectual capital (intellectual capital). Knowledge is enhanced through interactions with other individuals (social

capital) so that it can produce knowledge to support organizational developers (organizational capital).

From the above understanding, it can be observed together, that there is an intervention carried out by the company to its employees, in the form of an addition (inculcation of knowledge or ability), as well as the existence of the value of human development from the Human Capital Management (HCM) paradigm.

The current condition of competition requires each company to be more responsive and proactive in developing the company and its human development. In order to respond to these challenges and demands, more and more companies are now realizing how important it is to develop human resources sustainable through training programs that are designed according to company needs.

It is undeniable that the provision of training within a company involves the expenditure of money, time and energy. Decision making in companies is increasingly critical of the money spent on training annually. The company hopes that the training function is not an expense (expenditure) but actually has a significant effect (investment) on improving the performance or competence of qualified employees.

Training is the investment costs incurred by the company, this must be measured so that the results and impacts can be calculated the return on investment that has been incurred by the company (Return on Training Investment).

A training is said to be successful is not enough if the participants experience an increase in knowledge (knowledge), skills (skills) and behavior (attitude) alone. But to convince top management / Board of Directors (BoD) to want to invest the training program as an investment, management needs to calculate or predict how much the Return on **Training** Investment (ROTI = Training Investment Returns) of a training will be held. The problem is how to do the right ROTI

measurements. perhaps this is the most complicated part of the training evaluation process series.

PT PLN (Persero) UPDL Tuntungan is a unit under PT PLN (Persero) Pusdiklat or PLN Corporate University which is under an organization under the directorate of Human Capital Management (HCM). PT PLN (Persero) UPDL Tuntungan takes the role and responsibility in developing human resources in the form of education and training in the North Sumatra and Aceh regions. Business units under the auspices of UPDL Tuntungan are: PT PLN (Persero) North Sumatra Generating Main Unit, PT PLN (Persero) Aceh Regional Main Unit, PT PLN (Persero) North Sumatra Regional Main Unit, PT PLN (Persero) Generating Development Main Unit Sumatra, PT PLN (Persero) North Sumatra Development Master Unit.

In its business activities PLN UPDL Tuntungan is required to measure the return on training investment in learning strategic initiatives that are directly related to Results (measurable results) Business referring to the results of Training Need Analysis between PLN Corporate University and the Sumatra Regional Directorate (Direksum). The program that will measure its ROTI value is the Sales Project Performance Improvement Pilot Program implemented at PT. PLN (Persero) Pakam Lubuk Customer Service Implementation Unit 2018 under the PLN North Sumatra Regional Business Unit.

From the results of the review of ROTI measurements that have been carried out in the Lubuk Pakam pilot project program, there are still weaknesses in evaluating changes in the competency of exlearning participants such as changes in Knowledges, Skills and Attitudes that have not been optimally analyzed through evaluation of levels 3 and 4. In the review there are also differences ROTI calculation at the isolation stage of the effect of learning on performance improvement and the stage of financial value conversion (monetary values) in taking the value of performance

improvement (Net Learning Benefit) conducted by PT PLN (Persero) UPDL Tuntungan if referring to the calculation using the Jack J. Phillips method approach. In this study measurement of ROTI values will use the Jack J. Phillips method approach so that a review of the weaknesses of the existing calculations will compare the measurement results based on the Jack J. Phillips theory approach.

Another difference is in determining Isolation Value, PLN Corporate University in existing measurements using numbers (Base Value). The amount of Base (Base Value) / isolation of the effect of learning impact is taken based on the stipulation of the General Manager Decree number 2561.K / GM PUSDIKLAT / 2016 concerning the Determination of Base Value in the formulation of the Return on Training Investment (ROTI) calculation within the PLN Corporate University Environment.

Base value determination is the result of a quantitative survey of several management and functional levels at PT PLN (Persero). The basic value (Base Value) is the average number of perceptions (taking into account the weight of each) of all respondents on the impact of learning on performance where the assumptions that affect performance are of 5 billion, namely: Man, Method, Machine, Money and Material. The results of the recapitulation of the questionnaire in the survey showed a base value of 20.18%.

Establishing a number (Base Value) as a magnitude of the value of isolation has a positive side, namely getting the isolation value more easily because it has been determined by management through a valid SK but on the other hand has weaknesses. Determination of the value of isolation using the method of estimating Base Value is considered to be able to ignore the level understanding, application contribution to performance by learning participants which in reality is varied. In this study the isolation value will be obtained using the Estimation method according to Jack J. Phillips theory related participants are the most accurate people to be able to determine the value of the isolation effect of learning on performance improvement. Therefore, it is necessary to propose a Return on Training Investment (ROTI) measurement using the Jack J. Phillips method approach in measuring ROTI pilot project program to increase sales at PLN UP3 Lubuk Pakam in 2018 to get a more realistic value compared to the measurements that have been made (existing).

### LITERATURE REVIEW

# **Training**

Training is to improve employees' competencies (knowledge, skills behavior) to be able to do the current work or employees are able to carry out work that greater responsibilities in higher positions properly. Harjana (2002)"Training is an activity designed to improve the performance of workers in the work submitted to them". Gomes (2003) said that "Training is more as a means aimed at efforts to further activate the work of members of organizations that were less active before, reduce the negative impact due to lack of education, limited experience, or lack of confidence from certain members or groups of members ". Dessler (2006) said that "Training is an integrated process used by employers to ensure that employees work to achieve organizational goals". The statement means that an integrated and goaloriented approach to assigning, training, assessing and rewarding employee performance.

According to Hamalik (2007), training is a process that includes a series of actions (efforts) carried out deliberately in the form of providing assistance to workers carried out by professionals to training in a unit of time aimed at increasing the work ability of participants in certain fields of work in order to improve the ability of effectiveness and performance in an organization.

According to Harmein Nasution (2015) the training conducted by the company is an

investment company that aims to develop human capital which will ultimately improve company performance.

## **Training Evaluation**

Evaluation is a process or activity of selecting. collecting, analyzing presenting information that can be used as a basis for decision making and further programming. Furthermore Griffin & Nix (2001) states: Measurement, assessment and evaluation with the criteria is measurement, the interpretation description of the evidence is an assessment and the judgment of the value or implication of the behavior is an evaluation.

Measurement, evaluation and evaluation are hierarchical. Evaluation is preceded by assessment, while assessment is preceded by measurement. Measurement is defined as an activity comparing the results of observations with criteria, assessment is an activity of interpreting and describing the results of measurement, while evaluation is a determination of values or behavioral implications.

According to Suharsimi Arikunto (2004) there are two evaluation objectives namely general objectives and special objectives. General objectives are directed at the program as a whole while specific objectives are more focused on each component. Program implementation must always be evaluated to see the extent to which the program has succeeded in achieving the intended program implementation goals. Without evaluation, the programs that are running will not be seen as effective.

As such, new policies regarding the program will not be supported by data. Therefore, program evaluation aims to provide data and information and recommendations for decision makers (decision makers) to decide whether to continue, improve or stop a program.

### **RESEARCH METHODS**

This research was conducted to solve the problem of evaluating this training

is a descriptive study (descriptive study). With the aim of producing data and information that is useful to provide an understanding of the characteristics of certain employees or groups of employees in certain situations, use the results of research to make appropriate decisions regarding the characteristics certain that are found both beneficial or detrimental to the company and open up opportunities for the emergence of new ideas to the leadership of the leadership on employee empowerment.

The population in this study were all supervisors. participants. management and experts who were involved in the learning program of the Pilot Project to Increase the Sales of the Lubuk Pakam Customer Service Unit in 2018 at the PLN North Sumatra Region Main Unit. This sampling must be done in such a way that sample can truly represent (representative) and can describe the actual population. In this study sampling was not used or census because the size of the population was not too large and 100% of the population had to be involved in the study so that the accuracy of the research results would be better.

Data collection techniques in this study are interviews / interviews, namely the process of interaction or direct communication between the interviewer and the respondent. Questionnaire is a form of data collection instrument in written question format that is equipped with a column where respondents will write answers to questions directed to them. In this study a questionnaire will be designed to focus on the results of valid survey data that contain perceptions of the impact of learning for participants and supervisors of participants.

### RESULT AND DISCUSSION

The results of this study can state that the pilot project program to increase sales of the Lubuk Pakam Customer Service Implementation Unit in 2018 carried out by PLN UPDL Tuntungan has a positive impact on changes in knowledge, skills and attitudes of learning participants and also on

company performance. The measurement results of the pilot project program to increase sales of the Lubuk Pakam Customer Service Implementation Unit in 2018 obtained ROTI value of 526%, this figure shows more reasonable results when compared with the existing calculation of 8974%. This value states that the investment spent for training activities provides financial benefits of 5.26 times for companies in the form of rupiah obtained by the company through the sale of electricity. This result is in line with research conducted by Lynch et al (2006) which states that the ROTI evaluation method is a indicator in assessing programs and has a positive financial impact on the company. In addition to these findings from the results of this study also found several things, namely:

# 1. Change in Competency and Implementation of Training

Research conducted shows that extrainees generally believe that the pilot project program has strong relevance to their daily work. Research conducted shows that participants are confident in the knowledge they have received and are committed to implementing it in their work. Training participants stated that generally the training objectives had been achieved by increasing the knowledge and abilities of ex-participants in relation to the daily work they faced. The magnitude of the effect of training on increasing the ability of participants reached 18.74%.

# 2. Changes in Employee Behavior

Based on the results of interviews with leaders and employees of ex-trainees, one of the impacts of the training felt by the participants was the change in behavior. Before attending the training, participants were still unable to map and prepare business proposals for conducting probing to prospective premium customers and captive power. Participants were also

sharper in analyzing customer meter misreads that could potentially harm the company with the help of Automatic Meter Reading so as to produce savings kWh that benefit the company.

# **3.** Impact of Training on Employee Performance

In accordance with the objectives of the implementation, the main focus of the impact of the pilot project learning program to increase sales of the Lubuk Pakam Customer Service Implementation Unit in 2018 is an increase in kWh and rupiah revenue in the calculation of electricity sales. As stated above that in action learning activities the results of learning pilot project programs such as: (1) Probing Captive Power customers, (2) Probing Prospective Premium Customers (Changes in Rates) and (3) Maintenance of Meters and Follow-Up Bill (TS) due to reading errors The meter produces  $\Delta$  Learning Benefit of Rp. 3.856.618.124.

Based on these results it can be stated that the pilot project learning program increased sales of the 2018 Lubuk Pakam Customer Service Implementing Unit implemented by PLN UPDL Tuntungan significantly had a positive impact both for individual employees and for the company.

### CONCLUSION AND SUGGESTION

### Conclusion

Based on the analysis and discussion carried out, the following conclusions can be drawn:

1. There was a significant change in the competencies (Knowledges, Skills, and Attitudes) of ex-participants of the pilot learning project program on performance of PT PLN (Persero) Lubuk Pakam Customer Service Implementation Unit in 2018, after they participated in the training. This can be seen from the relatively high average change in the competency of ex-trainees (good category) as follows:

Participants' self assessment results:

Table 1: Results of Participant's self-assessment of changes in KSA.

Learning	Knowledge	Skill	Attitude
Key Account Marketing	3,61	3,50	3,56
- Team Development			
Key Account Marketing – Business Proposal	3,72	3,75	3,69
Automatic Meter Reading (AMR)	3,56	3,61	3,72

### Assessment of Participant Supervisors:

Table 2: Results of Participants 'Superiors' Assessment of KSA changes.

Learning	Knowledge	Skill	Attitude
Key Account Marketing – Team Development	3,69	3,64	3,46
Key Account Marketing – Business Proposal	3,47	3,53	3,42
Automatic Meter Reading (AMR)	3,72	3,83	3,83

- 2. The value of the Return on Training Investment (ROTI) pilot project program for increasing sales performance of PT PLN (Persero) Lubuk Pakam Customer Service Implementation Unit in 2018 in this study was 526%. This value indicates that the benefits provided by the learning program are far greater than the costs incurred for organizing the pilot project program.
- 3. Calculation of Return on Training Investment (ROTI) with the Jack J. Phillips method approach on the performance increase in electricity sales will produce a more reasonable ROTI value if the learning effect isolation technique is calculated using the Estimation method and the value of Learning Benefit is based on the results Action Learning (ROTI = 526%) when compared to the ROTI calculations that have been implemented in the pilot project program (existing) where the technique of isolating the effect of learning is calculated using the Base Value method and the value of Net Learning Benefit (Changes in the performance of the results of learning) are taken based on the difference the use of electricity based on the formula  $\Sigma$ (Rp. month (year N) - Rp. month (year (N-1))) (during the Pilot Project is implemented) (ROTI = 8974%). In the existing calculation, it is feared that many factors affect the increase in sales performance so that the calculation will be biased. Therefore, PT PLN (Persero)

UPDL Tuntungan can use ROTI calculation of sales performance by using the method suppressor in this study to get a more reasonable ROTI value.

### **Suggestion**

Based on the results and discussion, there are several suggestions that can be delivered:

**Management Suggestions:** 

- 1. The management of PT PLN (Persero) is aware that the determination of the Base Value on the value of the isolation effect performance learning on improvement has a weakness because in fact the more appropriate isolation value can be obtained from the respondent concerned not from the value of the determination of the Base Value. Therefore, by considering the time and constraints, if possible management of PT PLN (Persero) can use the estimation method in measuring Return on Training Investment (ROTI) in each Pilot Project learning program so that the value of the isolation of the effect of learning on improving performance gets a value more precise.
- 2. As stated earlier, training is not the only influencing factor employee performance improvement, but there are still six other factors (increasing employee setting work capacity, standards, performance evaluation systems, providing feedback, working conditions, and incentive systems). In connection with this, the company also

needs to pay attention to the development of these other factors so that the company's performance can improve significantly.

# **Suggestions for Further Research**

- 1. To further strengthen the results of Return on Training Investment (ROTI) measurements using the Jack J. Phillips method, it is necessary to first socialize with related respondents to increase understanding of these ROTI measurements, because the results of ROTI measurement also depend on the results of respondents' estimation on the questionnaire given .
- 2. In measuring the Return on Training Investment (ROTI) in a training program, it is very necessary to pay attention to how to convert the results of changes in performance due to training into its financial value, because it will greatly affect the results of ROTI calculations.
- 3. In measuring Return on Training Investment (ROTI) in a training program it will certainly take a long time in its implementation if it refers to Jack J. Phillips's theory, considering it can find a solution or an easier way for future researchers by integrating the results Evaluate level 1 level 4 before the ROTI measurement is carried out.

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How to cite this article: Kowara RB, Nasution H, Absah Y. Analysis of return on training investment (ROTI) calculation in pilot project learning program PT PLN (Persero). International Journal of Research and Review. 2020; 7(1): 331-338.

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