THE IMPLEMENTATION OF TRAINING AND EDUCATION THROUGH CALCULATION OF COST BENEFIT ANALYSIS

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Abstract
The purpose of this study is to measure the benefits of Leadership and Sustainability Training in the following year at the Center for Human Resource Development (PPSDM) Apparatus. This study uses a descriptive method with a qualitative approach and data collection techniques are carried out by interviews and documentation studies. The object of the research is focused on the Implementation of Level IV Leadership Training which is the fourth-tier structural position hierarchy in the rank structure for civil servants. Based on the calculation of the cost benefit analysis using the analysis of return on investment and education leadership training declared feasible as an investment in human resources at level IV structural position as an operational manager and producing intangible benefits is a change in improvement

Keywords: Cost Benefit Analysis, Leadership Training

I. INTRODUCTION
Education and training is an effort to develop human resources, especially to increase professionalism related to various work skills in accordance with the work undertaken. Dwi Atmanti (2005, p. 30) suggests that “Through training and human resource development can improve employee performance, making added value to institutions / institutions. The intended value is not merely a quantity value but also the quality of the employee towards his work, as a Human Capital in the long run, as long as the employee is considered productive. But this value is often overlooked, people often measure organizational assets tangible and measurable both fixed and liquid Asset.

Education and training play an important role in striving for human resources in Indonesia, as stated in the Government Regulation of the Republic of Indonesia Number 101 of 2000 which states that "to create human resources apparatuses who have position competence in the administration of the State and Development, it is necessary to improve the quality of professionalism, attitude and dedication and loyalty to the struggle of the nation and the State, the spirit of unity and unity and the development of Civil Servants through Job Education and Training which are an integral part of the overall employee development efforts.

Center for Human Resource Development (PPSDM) Apparatus is a Government Training Institute, where the task and function is to carry out Human Resource Development Apparatus in the fields of Leadership, Management, and Administration in accordance with Indonesian Ministry of Energy and Mineral Resources, with Ministerial Regulation No. 13/2016 concerning the Organization and Work
Procedure of the Ministry of Energy and Mineral Resources.

PPSDM organizes 64 education and training courses in 2017, including leadership training. One of the Leadership Training held by PPSDM Apparatus is Level IV Leadership Training.

The purpose of organizing Level IV Leadership Training in accordance with LAN Regulation number 20 of 2015 is to establish operational leadership competencies and form company leaders in echelon IV structural officials who will play a role and carry out the duties and functions of government in their respective institutions. Operational Leadership Competence is the ability to plan agency activities and lead the successful implementation of the implementation of these activities.

Considering the importance of implementing Diklatpim, of course there are costs incurred in large amounts. This is directly proportional to the benefits to be gained as a result of the implementation of the training and training.

Cost and Benefit Analysis is one of the tools used to measure and evaluate the use of economic resources so that they can be used efficiently so that they are able to consider the extent to which the resources used (as costs) can provide the desired results (benefits) optimally. The Education and Training Provider must be able to calculate or predict the value of Return on Investments (ROI) from a training held.

In the implementation of Education and Leadership Training held by PPSDM Apparatus in 2017 the Fund is allocated Rp. 533,200,333, - includes the fund allocation for the Changing Project design in the amount of the budget for the explanation of the change project, the debriefing of the implementation of the change project and the change project seminar.

With the large amount of budget for the implementation of Level IV Leadership Training carried out by PPSDM this Apparatus, therefore it is necessary to calculate the costs and benefits (Cost Benefit analysis) with a view to knowing the costs incurred and how much benefits are obtained both Tangible and Intangible.

the focus of the research can be described in the following research questions:

1. What is the description of the organization and the output produced from the implementation of Level IV Leadership Training in PPSDM Apparatus?
2. Judging from the Value of Benefits, What is the description of the results obtained from the Implementation of Training conducted by PPSDM Apparatus?
3. What is the value of the return on investment (Return on Investment) of the resources (Costs) that have been spent in the implementation of Level IV Education and Training?

II. METHODS

Location in this study is the Apparatus Human Resource Development Center having its address at Jalan Cisitu Lama No. 37 Bandung City. In accordance with the aim of the study that wants to describe how the analysis of the implementation of education and training at the Center of Human Resources Development of the ESDM Apparatus is Level IV Leadership Training in 2017 through Cost Benefit Analysis calculations with one of the Return on Investment analysis tools, the research design is in accordance with the research this is using descriptive research methods through a qualitative approach obtained by documentation and interview studies.

Satori and Komariah (2014) suggested that determining the sample in qualitative research is very appropriate if it is based on the purpose or problem of research, which uses the considerations of the researcher itself, in order to obtain the accuracy and adequacy of the information needed in accordance with the objectives or problems under study". For this reason in this study, the way to take samples that will become participants is done through purposive sampling, and Snowball Sampling.

According to Sugiyono (2015, p. 300) "Purposive sampling is the technique of sampling data sources with certain considerations. This particular consideration,
for example the person who is considered to know the most about what we hope for, or maybe he is the ruler so that it will make it easier for researchers to explore the object / social situation under study. While Snowball Sampling according to Sugiyono (2015, p. 300) is "Techniques of taking a sample of data sources, which in the beginning were few in number, long ago became large. This is done because of the small number of data sources that have not been able to provide complete data, then look for another person that can be used as a data source. Thus the number of samples of data sources will be even greater, such as snowballs that roll, over time become large.

From the explanation, the data needed in this study is about the implementation and results of the Level IV Leadership Education and Training Evaluation and Training in the PPSDM Apparatus as well as the budget / costs incurred. This is the background of the researcher in choosing participants in this study, especially those who are involved and know about the implementation and Evaluation of Level IV Leadership Training in PPSDM Apparatus. Participants in this study were structural and employees of the PPSDM Apparatus agency, which consisted of 4 people, namely (1) Manager of the Training and Education Provider, (2) Monitoring of Training and Education, (3) Evaluator of the Education and Training Organizer.

III. RESULTS AND DISCUSSION

In this section we will describe the various kinds of information obtained during the field based on focus which are then reinterpreted in aspects and indicators in the instruments that have been made previously. The results of research and discussion in this study were obtained through interviews and documentation study that describes the objective conditions on the analysis of the implementation of training in PPSDM Apparatus EMR through the calculation of Cost Benefit Analysis, Training is the subject of study here is the Leadership Training Level IV in 2017.

Implementation Leadership Training Level IV in PPSDM Apparatus

Center for Human Resource Development Apparatus (PPSDM Apparatus) is an Echelon II Unit Institute for Human Resources Development Agency for MEMR. In accordance with the Duties and Functions of the Institution as the implementing technical implementation unit, namely the Development of Human Resources Apparatus in the fields of Leadership, Management and Administration in accordance with the Regulation of the Minister of Energy and Mineral Resources No. 13 of 2016, this underlies the implementation of Level IV Leadership Training in PPSDM Apparatus. The reorganization process that took place in 2016, made PPSDM Apparatus not yet fully independent in implementing Level IV Leadership Training in 2017 because the institution and accreditation process has not yet been accredited starting in 2018. In 2017 the Level IV Leadership Training was still under the guidance of PKP2 I LAN. In addition, the basis of the implementation of this Level IV Leadership Training fully refers to the Regulation of the Head of LAN Number 20 concerning Guidelines for Implementing IV Diklatpim which is then stated in a Decree made by the Head of PPSDM Apparatus concerning Implementation of Level IV Leadership Training in PPSDM Apparatus.

1. Curriculum, Basic Implementation of Level IV Leadership Training in PPSDM This apparatus which fully refers to Perkalan Number 20 of 2015 as a Guiding Agency, including the Curriculum to be used. PPSDM Apparatus as the organizer of Level IV Leadership Training is not involved from the initial stages or processes in designing or formulating the Education and Training curriculum.

2. Participants in the Training, Organizing Level IV Leadership Training in PPSDM Apparatus in 2017 as many as 20 people, this is evidenced by the results of the study of the Level IV Leadership Education and Training Training Report 2017 that "Participants are State Apparatus / Echelon IV Civil Servants within the Ministry of Energy and Resources Mineral Power as
staff, Training staff include elements of Training Management, Training and Education Providers, Teaching Persons, Lecturers, Examiners, Coach and Mentors)

4. Training and Education Facilities, in Organizing Training and Education Leadership Training or other Education and Training, PPSDM Apparatus prepares the Facilities and Infrastructure needed for the implementation of the Education and Training. In accordance with the Guidelines namely Perkalan Number 20 of 2015 The infrastructure used consists of the Hall, Classroom, Discussion Room / Seminar, Sekretiat Room, Fitness Room, Computer Room, Dormitory, Library, Dining Room, and Sports Facilities. Whereas the facilities used, consisting of Tables and Chairs, Chalkboard, Flip Chart, Sound System, Tv and Video, Kompter / Laptop, LCD Projectors, Wifi Networks, Reference Books, Modules / Teaching Materials and Multimedia technology.

5. Training Schedule, this Training Schedule has been stated in the Guidelines for the Implementation of Level IV Leadership Training in Perkalan Number 20 of 2015 in the form of a Master Schedule. The organizer only breaks or lowers it from the Master Schedule that is already in the Guidelines adjusted to the schedule of Teachers, Lecturers and Resource Persons as well as schedules for Visitation and Benchmarking.

6. Financing, Level IV Education and Training Funding is purely using the National Budget through the Ministry of Energy and Mineral Resources. Based on the results of the study documents in the State Ministry / Institution (RKA-KL) PPSDM Work Plan and Budget 2017 Budget is budgeted at Rp. 533,200,333, - includes shopping for materials, Honor Output activities, shopping for consumer goods, shopping for rent, shopping for professional services, shopping for travel, and regular travel shopping. (ID260718.11.71).

Calculation of Cost Benefit Analysis Level IV Leadership Training in PPSDM Apparatus

Benefit Value

The Implementation of Level IV Leadership Training

Before calculating ROI, it is first known how much the Benefits of Costs are obtained. Based on the 2017 RKA-KL PPSDM Apparatus, the 2017 Level IV Leadership Training budget is budgeted at Rp. 533,200,333. From the amount of the cost, it is assumed that the Benefit Value will be obtained:

a. Increased Innovation Level Participants seen from the Change Project Monitoring Results obtained 95% Project Participant Change with Satisfactory Value. If it is converted to a Value of Money, it is obtained Rp.506,540,000, - with the following calculation:

$$\text{Rp}.533,200,333 \times \frac{95}{100} = 506,540,000$$

b. Increased competency and knowledge of Level IV Leadership Training participants with indications seen from the Participant Monitoring Results are 100% Graduated Participants with Satisfactory results. If it is converted to the Value of Money obtained by Rp. 533,200,000, - with the following calculations:

$$\text{Rp}.53,200,333 \times \frac{100}{100} = 533,200,000$$

c. Increased Satisfaction Society users of Level IV Leadership Training seen from the results of Community Satisfaction Evaluation in 2017 of 3.17 or 79.2% with Satisfying qualifications . If it is converted to the Value of Money obtained by Rp. 422,294,400, - with the following calculation

$$\text{Rp}.533,200,333 \times \frac{79.2}{100} = 422,294,400$$

d. The increase in services provided by the training organizers obtained a value of
3.11 or 77.7% is assumed that the services provided or services satisfactorily achieved. If it is converted to the Value of Money obtained by Rp. 414,296,400, - with the following calculation of Rp.

\[ 533,200,333 \times \frac{77.7}{100} = 414,296,400 \]

e. Increased Ability and Performance of Widyaiswara obtained a value of 89% with satisfactory qualifications or Good and Recommended. If it is converted to the Value of Money obtained by Rp. 474,548,293, - with the following calculation:

\[ \text{Rp.} \, 533,200,333 \times \frac{89}{100} = 474,548,293 \]

f. Increasing the performance of the institution as the Education and Training Manager obtained a value of 85.7% with satisfactory qualifications. If it is converted to the Value of Money obtained by Rp. 456,952,685, - with the following calculations:

\[ \text{Rp.} \, 533,200,333 \times \frac{85.7}{100} = 456,952,685 \]

Based on the above calculation, the total benefits or profits obtained by the Institution, sourced from the DIPA Ceiling of the Ministry of Energy and Mineral Resources in 2017 for the implementation of Level IV Leadership Training are as follows:

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<tr>
<th>Total Benefits of Costs</th>
<th>Organizing Training and Education Level IV Leadership</th>
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From these calculations, the Return On Investment Value for the 2017 Level IV Leadership Training is:

\[ \text{ROI} = \frac{2,807,831.751 - 533,200.333}{533,200.333} = 4.2 \]

From the above calculation it is known that The value of Return on Investments Level IV Leadership Training has an ROI Value of 4.2.

This is due to the increase in the components of the implementation of the Education and Training program and the benefits of holding the Level IV Leadership Training. Then the Level IV Leadership Training was declared Feasible or feasible to be carried out, for the continuation of the subsequent Leadership Training.

After knowing the Return on Investment Value from the Implementation of Level IV Leadership Training, it is necessary to know the relationship between the benefits of managing with a predetermined budget known as the following calculation:

\[ \text{Relationship of benefit of education and costs} = \frac{533,200,333}{2,812,565,600} \times 100\% \]

\[ \text{Relationship of benefit of education and cost} = 0.18 \text{ atau } 18\% \]

From these calculations it can be concluded that the relationship between the benefits of level IV leadership training and the costs incurred for the implementation of level IV leadership training is a value of 0.18 or 18% meaning that the costs incurred as an investment human resource development Level IV Leadership Training contributes 18% to economic development productivity.

**IV. CONCLUSION/RECOMENDATION**

Based on the results of the research and discussion described in Chapter IV, after a theoretical analysis with the findings in the field and the formulation of the problem focus the researcher he explained the conclusions from the analysis of the implementation of Level IV Leadership Training in PPSDM Apparatus. PPSDM Apparatus for the first time held a Level IV Leadership Training in 2017, since re-organization to become PPSDM Apparatus in 2016, it was more focused on organizing Diklat in management, leadership and administration according to the duties and functions carried out.
The implementation of Level IV Leadership Training in PPSDM Apparatus has run well including the Planning, Implementation and Evaluation Stage. Implementation of Level IV Leadership Education and Training is in accordance with the reference guidelines, namely Perkalan Number 20 of 2015 concerning Guidelines for the Implementation of Level IV Leadership Training. All stages of the implementation of the Level IV Leadership Education and Training are adjusted to the existing references.

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