TRAINING NEEDS ANALYSIS OF OPERATIONAL

Sri Sundari¹, Mia Kusmiati²

¹ Universitas Pertahanan RI  
² STIE Yasa Anggana

¹sri.sundari@idu.ac.id ²miaaksara@gmail.com

Abstract: A good organization is supported by good management and employees who have adequate knowledge and skills in carrying out functions and games. The organization provides a management system that makes it easy for members of the organization to run the system so that their performance is easily controlled. Employees with adequate quality and competence can bring the organization in a more advanced direction. They continue and have a desire to grow and develop into individuals needed by the organization in achieving its goals. The development of technology and industry today has resulted in many adjustments and system changes in management. In the new normal era where all work activities have been directed to be online-based, many organizations conduct a training needs analysis to obtain information on what training is suitable to be held in improving the performance of the organization and its employees. This study describes the theory of training needs analysis for organizations through operational analysis. And this study aims to obtain information about what is needed in analyzing training needs for organizations through operational analysis. The research method used is a qualitative method using a literature review approach. The results of this study were selected as a training needs analysis tool using the operational analysis approach of the Irwin Goldstein method which sets 4 indicators, namely: knowledge, skills, abilities, and other characteristics or often abbreviated as KSAOs.

Keywords: training; organization; operational analysis; Goldstein

INTRODUCTION

Every organization needs to have people who are trained and experienced to do the activities that have to be done. As jobs become more complex, the importance of employee training in this era continues to increase. When the job is simple and easy to learn, employees don't need to upgrade or change their skills. However, the rapid changes taking place in an already sophisticated and complex society have created increasing pressure for organizations to re-select products and services produced by certain production processes and offered to the market, as well as identify the types of jobs required and the types of skills required to complete them. Profession. In the rapidly changing world of society, employee training is not only a desirable activity but also an activity an organization must undertake if it is to retain a decent and knowledgeable workforce. (Sundari, 2022); (Rigby, C.S & Ryan, 2018); (Sheehan, M., Garavan, T.N., 2014); (Werner, J.M., & DeSimore, 2011). The objectives of employee training are as follows:

1. To Increase Productivity: An instructor can help employees increase their level of performance on their current duties. Improved human performance often leads to an
increase in operational productivity and an increase in company profits.

2. To improve Quality: More knowledgeable workers are less likely to make operational errors. Quality improvement may be related to the company's products or services or refer to an intangible organizational working environment.

3. Meeting Future Needs: Organizations that have a good internal program for development must make changes and adjustments to the workforce that are not too drastic in the event of a sudden change of personnel. When required, organizational vacancies can be easily managed by maintaining adequate instructional programs for non-supervisor and managerial employees.

4. To improve Organizational Climate: An endless chain of positive reactions results from a well-planned training program.

5. To improve Health and Safety: Proper training can help prevent industrial accidents. A safer atmosphere leads to a more stable mental attitude of employees. The managerial mental status will also improve if supervisors know that they can improve themselves through development programs designed by the company.

6. Obsolescence Prevention: Training and development programs foster employee initiative and creativity and help prevent workforce obsolescence due to age, temperament, or a person's motivation or inability to adapt to technological changes.

7. Personal Growth: Employees personally benefit individually from exposure to their educational expressions. Management development programs seem to provide participants with a broader awareness, broadened skills, and enlightening philosophies that are realistic and allow for personal growth.

Today the need for training arises for various reasons.

1. To provide newcomer employees with the basic knowledge and skills they need for intelligent performance of certain tasks.

2. To assist employers to function more effectively in their current position by exposing them to the latest concepts, information, and techniques and developing the skills they need in their particular field.

3. To build a second line of competent officers and prepare them for positions of greater responsibility.

4. To broaden the minds of senior managers by allowing them to exchange experiences inside and outside to correct what may arise from overspecialization.

5. To provide education to customers to meet the company's training needs, especially those related to the public.

6. To reduce supervision time, reduce waste and spoilage of raw materials and produce quality products.

7. To reduce defects and minimize accident rates.

8. To maintain the validity of the organization as a whole and improve the morale of its employees.

9. Maintain labor turnover arising from normal situations such as death or physical disability, accidents, early retirement, voluntary retirement, promotions in organizations, and, job changes.

10. Existing employees need refresher courses so that they can keep up with the changing methods, techniques, equipment, and sophisticated machinery. To absorb new technology in production.

An operational approach to this organization can be done if there is a change in strategic plans or changes in corporate values. Under these conditions, training is an important part of shaping competence and instilling the values desired by the company.
LITERATURE REVIEW
TRAINING NEEDS ANALYSIS

In carrying out training the most important and first thing is a training needs analysis. The training needs analysis will reflect the actual situation faced by prospective trainees in carrying out their duties when compared to something standard. (Ananta, n.d.); (Wilson, 2005)

Training needs analysis is a data collection process used to identify and compare the actual performance level of the organization with the projected (desired) level of performance. A training need arises when there is a gap between what a person needs to do their job competently and what they know. A "training needs assessment" or "training needs analysis" is a method of determining if there is a training need and if so, what training is needed to fill the gap. (Sundari, 2022); (Wilson, 2005) The results of the training needs analysis will highlight the subject matter that needs to be covered during the training course. The knowledge and skills acquired during the training will enhance abilities and enable participants to perform their jobs at an acceptable level. A needs assessment can be very simple and clear. For example, when a new information system is introduced, it is assumed that no one has the knowledge to operate it and training needs are noted. However, if the organization changes the system, the need may not be so clear. (Sundari, 2022) By conducting a training needs analysis, organizations can target groups that need to be trained and hone exactly what training is needed (Herwina, 2021)

The purpose of conducting a needs assessment is to prevent a quick-fix approach to a business problem. A properly done training needs analysis will ensure solutions, address real problems, and effectively focus appropriate resources, time, and effort towards targeted solutions.

1. Reasons for conducting a training needs assessment
   a. To determine whether training is required
   b. To determine the cause of poor performance
   c. Determine the content and scope of the training
   d. To determine the desired training results
   e. To provide a measurement basis
   f. To get management support

2. Needs Assessment Process

   Assessments can be carried out as detailed and involved as needed. Factors to consider when considering the level of detail of training are time, money, number of people involved, the criticality of skills, anticipated return on investment, available resources, etc (Herwina, 2021)

   The comparison of several factors between in-depth and mini-assessment is as follows: (Wilson, 2005)

   **Table 1: The Comparison of Training Needs Assessment**

<table>
<thead>
<tr>
<th>Particular</th>
<th>In-depth</th>
<th>Mini</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of Information</td>
<td>Quantitative Multi-tiered approach Surveys</td>
<td>Qualitative Interviews Focus groups Document reviews</td>
</tr>
<tr>
<td>Methods</td>
<td>Observation Interviews Focus groups Document reviews</td>
<td>Focus groups</td>
</tr>
<tr>
<td>Scope</td>
<td>Widespread organizational Involvement Broad-ranging objectives</td>
<td>Fewer people involved Short term focus</td>
</tr>
<tr>
<td>Length</td>
<td>Several months to a year</td>
<td>Few days to week</td>
</tr>
<tr>
<td>--------------</td>
<td>--------------------------</td>
<td>------------------</td>
</tr>
<tr>
<td>Focus</td>
<td>Linked to defined outputs</td>
<td>Immediate, quick results</td>
</tr>
<tr>
<td>Exposure</td>
<td>High risk</td>
<td>Lower risk</td>
</tr>
<tr>
<td>Cost</td>
<td>Expensive</td>
<td>Inexpensive</td>
</tr>
</tbody>
</table>

**Determine whom to assess**

Again, this depends on the goal and depth of the analysis. The categories of people can include:

<table>
<thead>
<tr>
<th>Table 2: Categories of people to assess</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Target population managers</strong></td>
</tr>
<tr>
<td>Direct reports (those who report to the target population)</td>
</tr>
<tr>
<td>Co-workers and peers</td>
</tr>
<tr>
<td>Senior management</td>
</tr>
<tr>
<td>Target population</td>
</tr>
</tbody>
</table>

**LEVELS OF NEEDS ANALYSIS**

Needs can exist at any of at least three levels, considering the organization, the job/task, and the individual. To ensure an effective HRD effort, needs must be measured on each level. As a result, three types of assessment must be conducted: organizational analysis, task analysis, and person analysis. Each level of assessment measures different aspects of the organization. Organizational Strategic Analysis suggests where in the organization training is needed and under what conditions it will occur. Task analysis explains what must be done to perform a job or complete a process successfully. Person analysis reveals who needs to be trained, and what kind of training they need. (Sundari, 2022); (Rao, 2010); (Wiwin Herwina, 2021).

An organizational needs analysis requires a broad or “whole system” view of the organization and what it is trying to accomplish. The organizational characteristics studied may include goals and objectives, reward systems, planning systems, delegation and control systems, and communication systems. According to Irwin Goldstein, the components of an organizational analysis are as follows:

1. **Organizational Goals**

   Understanding the organization’s goals and strategy provides a starting point in identifying the effectiveness of the organization. Areas where the organization is meeting its goals probably don’t require training effort, but should be monitored to ensure that opportunities for improvement and potential problems are identified early. Effective areas can be used as models, and as a source of ideas for how things can be done more effectively in other areas. Areas, where goals are not being met, should be examined further and targeted for HRD or management efforts.

2. **Organizational Resources**

   An awareness of the organization’s resources is particularly useful in establishing HRD needs. The amount of money available is an important determinant of HRD efforts. In addition, knowledge of resources such as facilities, materials on hand, and the expertise within the organization also influence how HRD is conducted. For example, if there are no classrooms or conference facilities within the
organization, the scheduling and location of a training program can become very
difficult and expensive. In this case, it may be necessary to use an onsite location,
such as a conference center or hotel, or to schedule the program in the company
cafeteria after working hours.

3. **Organizational Climate**
The climate within the organization is an important factor in the success of
training programs. Designing and implementing a program will be difficult if the
climate is not conducive to the programmer. For example, if managers and
employees do not trust one another, employees may not participate fully and
freely in a training programmer. Similarly, if the problem exists between senior
and middle management, as has happened in many organization’s during recent
downsizing and restructuring efforts, middle managers may resist or not fully co-
operate in the training effort, middle managers may not resist or not fully co-
operate in the training effort seriously reducing training effectiveness. Research
shows that an organization’s transfer of training climate will affect whether
employees use the skills they acquire in training programs back on the job.

4. **Environmental Constraints**
Environmental constraints include legal, social, political and economic issues
faced by the organization. The demand for certain type of training programs can
be affected by these constraints. For example, in late 1991, the charges of sexual
harassment made by Anita Hill during the Senate confirmation hearing for
Supreme Court justice nominee Clarence Thomas heightened awareness of this
volatile social issue. Many organization’s responded by offering workshops to
educate managers and employees on what sexual harassment is and how it should
be addressed. Knowledge of the pertinent legal issues can ensure that the HRD
effort is in compliance and will not itself be a source of problems. For example,
equal employment opportunity goals should be considered when determining how
people will be assigned to a training programmed, especially if the programmed is
a prerequisite for entry into a particular job. Similarly, economic issues such as
increased competition can also have an effect on training programmers. If an
organization decides to reduce staff as a part of cost-cutting programmed, training
may be necessary to ensure that the employees who remain will be able to perform
the tasks that were performed by the laid-off workers. (Goldstein, 1974)

**RESEARCH METHODS**
The method used in this paper is a qualitative method that uses a library study approach.
While the operational analysis method used is the Irwin Goldstein method.

**RESULTS AND DISCUSSION**
Operational analysis or job analysis is a systematic collection of data about a particular
job or group of jobs to determine what to teach an employee to achieve optimal
performance. The results of operational analysis usually include performance standards
that are in accordance with: knowledge, skills, abilities, and other characteristics or often
abbreviated as KSAOs.
**Table 3: Approaches to conducting Task Analysis**

<table>
<thead>
<tr>
<th>No</th>
<th>Authors</th>
<th>Steps</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Wexley &amp; Latham (1991)</td>
<td>Job Description Task Identification Course Objectives</td>
</tr>
<tr>
<td>2</td>
<td>Campbell (1988)</td>
<td>Identify components of effective Performance Identify components that could be improved by training Identify what employees should do Identify what employees actually do</td>
</tr>
<tr>
<td>3</td>
<td>McGehee &amp; Thaye (1961)</td>
<td>Identify standards of performance Identify tasks Identify how each task must be performed Identify knowledge, skills and attitude needed to perform each task</td>
</tr>
<tr>
<td>4</td>
<td>Goldstein, Macey &amp; Prei (1981)</td>
<td>Overview of the job Interview job experts and determine task and KSAOs needed to perform tasks Rate tasks and KSAOs Determine which tasks should be trainee and which should be emphasized</td>
</tr>
<tr>
<td>5</td>
<td>Goldstein (1993)</td>
<td>Task Description Develop Task statements Determine relevant task dimensions Develop KSAO statements Link KSAOs to tasks</td>
</tr>
</tbody>
</table>

The task analysis performed to develop a training-training program at Texas Instruments Corporation (TI) provides a good illustration of one of the ideas involved in the task analysis process as proposed by Goldstein (1993). Training staff in IT are faced with finding ways to analyze training needs and provide inexpensive programs to quickly train expert engineers to instruct new engineers. The outside consultant begins the needs analysis process by meeting with branch managers, department heads and employees from the five IT branches to determine the following information:

a) Mission department  
b) Feeling the need for training  
c) Current and previous efforts in staff development  
d) Roles, responsibilities and team arrangements in different branches  

Organizational analysis enlightens the training team about the significant issues involved and team members use this information in persuading top managers to commit to a five-step approach to operational analysis:

1. Create a typical to-do list  
2. Survey staff  
3. Observing class  
4. Conduct structured interviews  
5. Prepare and present the final report  

The task list was developed by examining the literature on training delivery, including company technical reports and the American Society for Training and Development Model for Excellence study. The list is then organized into five areas of responsibility and given to employees for review and addition. This step ensures that all
professionals have the input to define their work from perspective and generates a list of 117 tasks that are normally expected to be performed by trainers (RI & KESEHATAN, 2012). For the staff survey, all department members received a questionnaire listing tasks and asking them to rate each task according to its importance to their job and their interest in receiving more training related to that task. Each item is assigned an average rating score on importance and interest. The results are checked to determine if there is a difference for the five branches.

Upscale observations of experienced and new IT trainers in the department were conducted to provide additional information on instructional delivery. Teams of two observers watched the instructors for an hour and met with each instructor to provide feedback. Individuals from each branch participated in structured interviews to maintain consistency between survey findings and class observations. This allows the training team to gather more information about each branch and to "validate" previously collected data. The results of the interviews are in accordance with data from other sources. The final step is the preparation of the final report. This consisted of examining the results and developing an executive summary outlining strengths and recommendations for training in each of the five task list areas, along with data for each of the data collection methods.

The needs analysis was described as successful because it allowed input and participation at all levels of the department, ensuring collaboration and completeness. As a result, the training team can identify and rank training needs based on sound information rather than relying on intuition.

This example reinforces some points about operational analysis:
- Input from managers, supervisors and employees can ensure support for needs analysis and pave the way for training support
- Multiple methods not only provide unique information but also enable analysts to confirm findings and identify and resolve non-conformities
- Task ranking allows for quantitative analysis of which tasks might benefit from training and which should be addressed
- Looking at needs from a broad perspective, rather than just focusing on performance differences results in a better understanding of training needs and can build support for task training programs

The analysis focuses on the job, not on the individual doing the job. Information from task analysis and organizational analysis provides a clear picture of the organization and the work done within it and knowledge of both provides a solid basis for planning and developing training efforts. But despite this planning, two questions remain: who needs the training and what kind of training do they need? The answers to these questions can be found in people analysis.

CONCLUSIONS AND SUGGESTIONS

Information from operational analysis and organizational analysis provides a clear picture of the organization and the work done within it and knowledge of both provides a solid basis for planning and developing training efforts. The task analysis asks what questions, tasks and KSAOs should be included in the training? This analysis involves steps to describe the job, identify the tasks in the job, identify the KSAO needed to perform the job, identify areas that could benefit from training and prioritize areas that could benefit from training. The weakness of this paper is that the analysis focuses on the job, not on the individual doing the job. And should focus on the needs assessment stage of the training process. Needs assessment should be conducted at three levels:
organizational, task and individual. Suggestion for other writers is to conduct analysis on individuals because regardless of training planning, two questions will still be asked, namely: who needs training and what kind of training do they need? The answers to these questions can be found in individual analyzes.

REFERENCES