



ANALYSIS OF LOAD AND WORK ENVIRONMENT FOR OPTIMIZATION OF HUMAN RESOURCES (HR)

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Abstract:

Structured planning is an essential element in achieving goals, both at the individual and organizational levels. With good planning, strategic steps can be formulated to ensure the achievement of goals effectively and efficiently. In the context of the organization, human resource planning (HR) plays a strategic role in ensuring the availability of manpower in accordance with operational needs. This process includes workload and workforce analysis to determine ideal workforce needs and improve organizational operational efficiency. This study uses a research methodology (library research), which is a way to obtain data by knowing and studying theories from various literature related to research. However, many organizations face challenges in effectively integrating such analytics into HR management. These constraints often impact employee productivity, task distribution, and well-being. Therefore, it is important to understand the factors that affect the effectiveness of HR planning, especially related to workload and work environment conditions. This study aims to evaluate the influence of workload variables and work environment on work security and its impact on employee stress levels. Using the literature review method, this study identified the mismatch between workload and individual capacity and a less conducive work environment as the main cause of increased work stress. Factors such as excessive work duration and uncomfortable environmental conditions contribute to high work pressure. The findings of this study provide important insights for organizations in designing appropriate interventions, such as optimizing workload distribution and improving work environment conditions. With these measures, organizations can improve employee well-being, reduce stress levels, and encourage overall workforce productivity.

Keywords: *Human Resource Planning, Workload Analysis, Work Environment Analysis*

INTRODUCTION

In achieving a goal, it is usually not done haphazardly, but through careful planning. With good planning, it will be easier for individuals to determine the steps that need to be taken so that the desired goal can be achieved. Planning is the process of making a plan to achieve a specific goal. This process includes the identification of goals to be achieved, analysis of the current situation, as well as the development of strategies to achieve these goals. In addition, planning also

involves the allocation of resources such as time, funds, and energy to achieve the desired results. The purpose of planning is to help individuals or organizations achieve desired results efficiently and effectively. Human resource planning (HR) is a crucial aspect in ensuring the availability of manpower that suits the organization's needs. One of the important elements in HR planning is workload analysis and workforce analysis. Both of these analyzes are used to determine the ideal workforce needs and ensure the operational efficiency of the organization. However, many organizations face difficulties in integrating this analysis effectively into their HR management processes.

Human resource management (HRM) is a process that focuses on solving various issues related to employees, officers, laborers, managers, and other workforce, with the aim of supporting the activities of organizations or companies in achieving set targets. Human resources are considered a very valuable asset, so the company has a responsibility to maintain the quality of the work environment and develop the workforce in order to contribute maximally to the achievement of the company's goals. Jonathan Rice (2011) states that Human Resource Planning is a long-term process that is carried out in the right way to employ the organization's human resources. To create and maintain the best fit between jobs and employees, planning is given special attention. "The three key elements of the HR planning process are forecasting labor demand, analyzing current labor supply, and balancing projected labor demand and supply".

Managing human resources seems to be applied by groups that consider their employees as the most important part of the group. There are many groups of people who do not succeed in achieving the goals that have been determined because, in a situation of strict competition, the work spirit of their employees is not as strong as their competitors. This usually happens because employees do not have the potential or motivation to face the demands of the industry at that level. On the other hand, organizations that excel in the market tend to work together with their employees to increase job satisfaction using various methods, motivate them to brave obstacles, and encourage them to give their best in order to achieve targets. Strategic human resource planning not only provides short-term benefits, but also supports the success of a group in the future. Therefore, a group that makes human resource planning a basic part of their management will be better able to face obstacles and excel in the market.

Human resources are one of the crucial elements in a company to achieve the desired goals and targets, because the success or failure of a company in achieving its goals is greatly influenced by this factor. One of the aspects that need to be observed in human resource management is employee work placement. The work environment is an important element in planning and implementing staffing plans, because it can increase the motivation and satisfaction of an employee. The performance and responsibility of employees will be better if they are in a work environment that appreciates. In addition, a good work environment can also reduce the level of absenteeism and work stress (Lowe et al., 2002).

Workload is one of the important aspects of human resource management that aims to ensure operational efficiency and employee well-being. Workload that is not well managed can cause various problems in the organization, such as task imbalance, decreased productivity, and disruption to the mental health of employees. This imbalance often appears as a result of a lack of understanding of the amount of work that must be completed in a certain time or an uneven distribution of tasks among employees.

In many organizations, the main challenge faced is the lack of accurate data to measure employee workload in real-time, as well as the absence of a system that can help identify whether an employee is facing an excess of tasks (overload) or even a lack of tasks (underload). In addition, changes in the work environment, such as digitization and increased job complexity, often add pressure on employees without capacity building or adequate training.

Work load imbalance can also have a negative impact, both for individuals and organizations. A heavy workload can cause stress, fatigue, and burnout, which ultimately increases the level of absenteeism or employee turnover. On the other hand, a workload that is too low can reduce employee motivation and performance, thus affecting the achievement of organizational targets. This shows that an effective workload analysis is needed to create a balance between job duties and available workforce capacity. With proper management, organizations can not only increase efficiency, but also create a healthy and productive work environment.

لَهُ مُعَقَّبَاتٌ مِّنْ بَيْنِ يَدَيْهِ وَمِنْ خَلْفِهِ يَحْفَظُونَهُ مِنْ أَمْرِ اللَّهِ ۗ إِنَّ اللَّهَ لَا يُغَيِّرُ مَا بِقَوْمٍ حَتَّىٰ يُعَيِّرُوا مَا بِأَنْفُسِهِمْ ۗ وَإِذَا أَرَادَ اللَّهُ بِقَوْمٍ سُوءًا فَلَا مَرَدَ لَهُ ۗ وَمَا لَهُمْ مِّنْ دُونِهِ مِنْ وَالٍ

Meaning: *The angels always take turns protecting humans from the front and from the back. From the front and the back for them (humans). They protect him as directed by Allah. It is true that God will not improve the condition of a race, it is TRUE that the race itself improves its condition. That God will not improve the condition of a race, unless the race itself improves its condition. Especially if God wills evil.*

RESEARCH METHODS

The method used in this article is a literature study, which is an approach to data collection that is done by understanding and learning theories from various literatures that are relevant to research. According to Zed (2004), there are four stages in library study, namely preparing the necessary tools, compiling a work bibliography, managing time, and reading and recording research materials. Data collection is done by finding sources and reconstructing information from various references such as books, journals, and existing research. The analysis methods applied include content analysis and descriptive analysis. Library materials obtained from various references are analyzed critically and in depth to support the propositions and ideas put forward.

RESULTS AND DISCUSSION

Meaning of Human Resource Planning

Planning, also known as planning, is a process of putting together a plan or program of activities. Every plan is closely related to the goal to be achieved. This process facilitates the determination of the right steps to take. Although planning requires enough time, this cannot be done in a hurry. (Yusuf, n.d.)

Every organization must start the initial step in management, namely by planning. Without a good planning process, the achievement of organizational goals will not be realized. Therefore, the first step that must be taken by an organization is to plan the management of human resources. (Hartini, 2023). Human resource planning (HR) is a strategic step taken by management to ensure that the organization has a workforce that matches the needs. The main function that must be implemented by the organization is HR planning, which

aims to place individuals in the right position, position, and job at the right time. All this is done to achieve the goals and targets that have been set. The word "right" is key in various contexts that include: (a) the implementation of the organization's social responsibility, (b) the achievement of the organization's goals, and (c) the achievement of the personal goals of the organization's members. Human resource management is an essential cause that links the function of human resource management with group results and goals. Several elements in human resource management play a role in providing results to support organizational plans and strategies (Richard G., 1984).

Human Resource Planning (HR) is a crucial element in an effective management strategy. In the midst of globalization and increasingly intense competition, HR planning is not just an administrative task, but is also an important factor that affects organizational success. The HR planning process is systematic and includes the management, development, and utilization of human resources in the organization. According to Syarief et al. (2022), HR planning is designed to ensure that the organization has the right amount, type, and quality of human resources at the right time. This process covers the identification of HR needs, recruitment, training, development, and evaluation of employee performance. Thus, HR planning functions as a tool to ensure that the organization has a competent workforce and is ready to achieve its strategic goals. (Syarief et al., 2022)

Among the definitions and meanings of human resource management planning are as follows:

1. Straub and Attner

Human resources planning is the process of forecasting the demand for and supply of personnel for the organization. Which means: human resource planning is the process of forecasting demand and providing personnel for the organization.

2. Handkerchief

Human resource planning is a series of activities carried out to predict the business needs and environmental conditions of the organization in the future, as well as to meet the workforce needs that arise as a result of these situations.

Purpose of Human Resource Planning

Butler (1991) stated that human resource management has a very important task in creating a competitive advantage for a group in the midst of industrial competition. Manzini (1988) emphasizes that the success of every effort of a group of people depends on the collaboration applied by HR with the existing strategy. When various strategic efforts such as growth, improvement of customer service, innovation in the way of preparation, improvement of full sales service, and collaboration can be adapted to HR decisions and processes that include organizing, communication, development, evaluation, and appreciation to employees, then the chances of organizational success will increase more. By observing the group's future capabilities and opportunities to succeed, better implementation of the master plan will create influential improvements.

Walker (1990) emphasized that the ability of human resource planning, like other group methods, relies heavily on the point of view applied. HR planners must have clear targets in order to manage HR planning with quality. Ulrich (1987) also stated that HR planning is accepted as an important tool in improving organizational functions based on its mission and purpose. With the right strategy, the environment that needs to be improved in the organization's functions can be identified, thus supporting improvement and success. Various

ways in HR planning have been attempted, both by the organization itself and those in the literature, which include steps such as setting clear goals, choosing appropriate strategies, and applying innovative approaches in HR management.

Benefits of Human Resource Planning

Human resource planning in the organization is carried out by the higher-ups of the organization such as the management where the target is to determine what the needs of the group are in the future and how to accurately prevent problems in the group. Furthermore, there are several uses of human resource planning. Human resources (HR) have a very essential role in moving an organization, both business-based and non-business-based, because its success relies heavily on the quality of the HR it has. However, the company is large, if the available human resources are not able to manage resources efficiently, then the company will not be able to survive much longer. Therefore, HR planning is very necessary. Usually, HR planning is applied by the organization's management with the intention of planning future needs and finding the right way to overcome various problems that may arise. Here are some of the benefits of HR planning.

a) Increase the effectiveness and efficiency of HR utilization

In the current year, there may have been discussions behind the scenes regarding the performance of one of the company's employees who is considered unsatisfactory and should be replaced by someone else. As a company manager, it is important not to ignore this issue, because you need to evaluate the existing human resources. This is related to the effectiveness and efficiency in the utilization of human resources, so that each individual can be placed in a position that suits his abilities, so as not to cause conflict or a decrease in performance in the company. With good human resource planning, companies can achieve their goals more optimally and maximally. (Ifadhila & Iswahyudi, 2023)

b) Increase cost savings

Cost is one of the crucial elements in a company that needs to be carefully observed. Errors in the management of costs or burdens can cause companies to face significant financial problems. This aspect is also closely related to human resource planning (HR). Therefore, before recruiting new employees, the company should consider promoting positions and eliminating certain positions to avoid an excess of human resources. This step will also contribute to the saving of salary costs in the company.

c) Ensuring the need for quality human resources

Through human resource planning, the employee placement process can be done more precisely according to their respective abilities, so that the company can operate optimally to achieve common goals. This is also important for management to get to know the officers better.

d) Encouraging the development of an accurate human resource information system, this human resource planning will produce an accurate and relevant information system for the company, so that every employee who faces problems or deficiencies can be dealt with properly. In addition, employees with higher competence can also be given more suitable positions.

e) Improve coordination between HR

One of the very significant benefits of this is the achievement of more optimal company goals, without any communication errors between divisions. Although it seems trivial, the problem of missing communication between divisions often appears in companies. With this HR planning, each superior,

at least at the supervisor level, can get to know officers from other divisions, thus facilitating better coordination between divisions.

f) Creating an atmosphere of togetherness

The implementation of human resource planning requires emotional maturity, attitudes, and values among each individual. Therefore, it is important to prioritize tolerance in the team. This will contribute to the creation of a more harmonious and conducive working atmosphere.

Workload Analysis

Basically, workload is an aspect that inherently exists and will be faced by individuals who hold responsibility in a job. The level of load received by each employee can vary, depending on the type of work and position held by the individual. (Darker, 1987) Some experts in the literature define workload as follows:

1. Nurmianto (2003) explained that the workload consists of a group of activities that must be completed by the employee within a specified time.
2. Irwandy (2007) stated that workload is the average frequency of activities carried out in a certain period, which includes physical and mental workload.
3. Haryanto (2010) states that workload includes a number of activities that must be completed by individuals or groups of individuals within a certain period of time in the context of normal activities. From the various definitions, it can be concluded that the workload is a series of tasks that must be completed by the employee who holds the responsibility within the specified time.

Workload analysis is a systematic process to measure and evaluate the amount of work that must be completed by an individual or group in a certain period of time. The main purpose of the workload analysis is to determine whether the existing workload is optimal or needs to be adjusted, either in terms of adding or reducing human resources.

a) Factors Affecting Workload

There are a number of factors that can affect the workload that employees feel, known as stressors. According to Maharani and Budianto (2019), workload is influenced by internal and external factors. Internal factors come from within the individual and are divided into two categories, namely somatic factors and psychological factors. These factors are the body's response to external workload. The body's response is known as strain, which can be measured both objectively and subjectively. Internal factors include somatic aspects such as gender, age, body size, nutritional status, and health conditions, as well as psychological aspects that include motivation, perception, belief, desire, and satisfaction.

External factors consist of three main aspects, namely physical tasks, mental tasks which include complexity, level of difficulty, and job responsibility. This factor is a burden that comes from outside the individual worker and is often referred to as a stressor. The first aspect includes physical tasks related to spatial planning, work facilities, tools, working conditions, and work attitudes. The second aspect is related to work organization, including the duration of working hours, rest time, shift work system, night work, remuneration structure, and division of duties and authority. The third aspect covers the work environment which includes physical, chemical, biological, and psychological factors.

b) Impact of Workload

A study published in the Journal of Occupational and Environmental Medicine showed a relationship between the number of working hours in a week

and the risk of heart attack. Individuals who work 55 hours a week have a 16% higher chance of having a heart attack compared to those who work 45 hours a week, as reported by Kesehatan.kontan.co.id. The research also found that those who worked 65 hours a week had a heart attack risk that increased by up to 33%. In addition, an empirical study published in 2014 in the journal Psychosomatic Medicine revealed that high workload is closely related to diabetes, with a risk that can reach 45%. Excess workload can also have a negative impact on mental health. (Surijadi & Musa, 2020) The mismatch between the expected role, the time available, and the resources available to meet the demands can cause problems.

Workload relates to the amount of tasks to be completed, time availability, and available resources. When these three elements are not balanced, it is most likely that tasks cannot be completed well, which can cause stress. In addition, excessive workload can increase the intention to change jobs, that is the desire to leave the company. Excessive workload can cause health disorders or work-related illnesses. This can also result in physical and mental fatigue, as well as emotional reactions such as headaches, indigestion, and irritability. On the other hand, a workload that is too light due to the repetition of roles and activities can cause boredom. Each employee has a different experience in feeling the workload, depending on their ability, experience, and understanding. From the available data, it can be concluded that excessive workload cannot be considered trivial because of its very serious impact.

Workload Indicator

In this research adopted the Workload indicator presented by Koesomowidjojo (2017), which includes among others:

a) Employment Conditions

A clear understanding of the job is very important for every employee. For example, employees in the production division will interact with the production machine to achieve the target that has been set. Therefore, the company must have and communicate SOP (Standard Operating Procedure) to all parties in the organization, so that employees can: 1) Easily carry out the tasks given; 2) Minimize errors in the work process; 3) Reduce the possibility of work accidents; 4) Reduce workload while increasing competitiveness, credibility, and accountability; 5) Facilitating effective communication between employees and superiors or co-workers.

b) Use of Working Hours

Working hours that are in accordance with the SOP will certainly minimize the workload of employees. However, there is a disadvantage that an organization does not have SOP or is inconsistent in implementing SOP, the use of working hours imposed on employees tends to be excessive or very narrow.

c) Target to be achieved

The work target set by the company will have a direct impact on the workload faced by employees. The less time given to complete certain tasks or the greater the imbalance between the time needed to achieve the target and the volume of work given, the greater the workload felt by employees. For that, there needs to be a standard time determination in completing certain tasks in each organization, the amount of which will vary from one organization to another.

Workforce

Workforce analysis is one of the crucial elements in economics, especially related to productivity, employee well-being, and economic growth. In Indonesia, workforce dynamics are influenced by a number of factors, such as education level, workforce migration, and technological development. (Widyaningsih et al., 2024).

Workforce is one of the most valuable assets in an organization. They are individuals who contribute directly in achieving the organization's goals. Human Resources (HR) is a field that focuses on the management of this workforce, from recruitment, development, to termination.

a). Workforce Structure

The workforce structure in Indonesia is still dominated by the informal sector, although there has been a shift to the formal sector in recent years. According to the Central Statistics Agency (2021), around 55% of the workforce is still in the informal sector, especially in the agriculture, trade, and informal service sectors.

b). Productivity and Quality of Workforce

Labor productivity in Indonesia is still relatively low when compared to other countries in Southeast Asia. The main cause of this condition is the low level of education and skills possessed by the workforce. According to data from The World Bank (2020), around 55% of the workforce in Indonesia only have education up to Junior High School (SMP) level or even lower.

c). Formal vs Informal Jobs

Jobs in the formal sector generally offer more benefits, including social security and more consistent wages. On the other hand, many workers in the informal sector do not obtain basic rights such as minimum wage, social security, and legal protection. Therefore, the government's role in expanding access to formal employment, through education and training policies, is very important to improve the quality of the workforce.

d). The Influence of Technology on the Workforce

Digitization and automation have the potential to change the labor market in Indonesia. On the one hand, technology can increase efficiency and productivity, but on the other hand, it can reduce the need for manpower in certain sectors. The biggest challenge is how to prepare the workforce to compete in the digital age.

e). Labor Migration

Labor migration, both internal and international, plays an important role in the Indonesian economy. Labor migration from rural to urban areas is often driven by differences in job opportunities and income. In addition, migration abroad is also important in contributing to the country's foreign exchange through remittances.

f). Government Policy

The Indonesian government has implemented a number of policies to improve the quality of the workforce, including through education and training initiatives. One of the prominent programs is the Pre-employment Card Program, which is designed to improve the skills of the workforce.

Burack (1985) emphasized the importance of manpower planning, which he called manpower stock. Manpower planning is the main function in the human resources department because this is one of the most vital and crucial tasks in HR planning as a whole. The HR planning process ensures that the right number of employees are available in the right place at the right time. Gould (1984) in his

research stated that by evaluating HR issues, organizations can gain a deeper understanding of the skills needed to implement strategies and achieve successful goals. Biles et al. (1980) revealed that to achieve success, it is very important to formulate strategies, determine mechanisms, have the right equipment, and develop appropriate instruments. Manpower planning is a very important aspect to ensure the smooth functioning of the organization. Some strategies in workforce planning include the preparation of operational plans, the establishment and implementation of the organization's mission, as well as the collection, processing, and analysis of quantitative data periodically to assess the level of organizational success. In facing critical conditions or urgent situations, planning should also take into account the availability and use of mechanical capacity, so that the planning process becomes more authentic and beneficial. Plans and human resources information systems are the two main elements that become the source for effective workforce planning.

In general, the challenges in managing the workforce in Indonesia include efforts to improve the quality of education, skills, and the development of the formal sector. In addition, policies that take advantage of the opportunities of digitization and automation are also very important to encourage workforce productivity in the global era.

CONCLUSION

Human Resource Planning (HR) is a very important strategic step in organizational management. Through good HR planning, organizations can ensure that the workforce they have is in line with the needs and goals of the organization. This planning process involves the correct placement of employees, development of skills, as well as efficient management of resources to optimally achieve organizational targets.

The main benefits of HR planning include increased efficiency in the use of HR, cost savings, the development of a better HR information system, as well as improving coordination between divisions in the organization. In addition, HR planning is also important to guarantee the availability of quality workforce, which in turn supports the achievement of organizational goals.

Workload is an equally important factor in HR planning, because excessive or inappropriate workload can have a negative impact on the physical and mental health of employees. Therefore, mature planning in managing the workload is very necessary to maintain the well-being of employees and prevent a decrease in productivity.

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