



Effectiveness Of The Role Of *Manpower Planning* On The Productivity Level Of PT ABM Investama Tbk (Case study: PT Cipta Kridatama and PT Cipta Krida Bahari Warehouse)

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Abstract

Currently PT ABM Investama is focusing on increasing company productivity, marked by the creation of a productivity dashboard to facilitate management in monitoring employee productivity levels. Productivity can be increased by making output effective and input efficient. This research discusses how to increase productivity, by making the existing manpower planning system more effective. This research is qualitative research with a focus on the case study type of research. The researcher chose to use a research method with the case study type because the researcher himself went directly into the company. In CKB there is a gap in manpower between planning and actual due to considerations to make labor costs more efficient than planned by increasing employee overtime, whereas in CK there is The manpower gap in planning and actual is due to consideration of the opportunity costs incurred if the human resources provided are less than required. The manpower system in ABM uses case studies for each business unit from 2 subsidiaries to find out how input can be made efficient from in terms of costs and number of workers with an effective manpower system so that it can influence the company's productivity level.

Keywords: Manpower planning, effective, efficient, productivity

1. INTRODUCTION

In the world of business and management, company efficiency is the most important factor in ensuring success and sustainable development. According to Linawati (2023),





workforce planning is systematic data collection and situation analysis and is very important for understanding workforce and resource needs. According to Purwaji et al (2016), the physical and mental effort of a worker (employee) to create a product or service is called labor. Nevertheless further studies are still needed to determine whether workforce planning really makes a difference in improving company efficiency .

Currently PT ABM Investama is focusing on the company's production level, which is marked by the formation of a production council to make it easier for management to control employee levels. According to Sari (2019), productivity can be interpreted as a comparison of consumption in a certain period to the income generated in that period. Two important aspects of productivity are efficiency. Efficiency refers to how various inputs are combined or tasks are completed. Whether the desired level of output or results can be achieved is the essence of efficiency (Putti, 1998).

In terms of labor, this is done by maintaining labor costs and the number of employees (as long as the number is the same) to be as efficient as possible. and effective workforce planning. FTE is the total number of workers needed to complete all tasks within a certain time period. (Zimmerman, 2002). According to Supriyono (2012), the salary paid by the company to its workers is the entire labor cost.

Productivity can be increased by making output effective and input efficient. Because one way to increase productivity is by making the existing manpower planning system more efficient to streamline input in terms of costs and manpower, this report focuses on discussing how to make the company's existing manpower planning system more effective.

2. LITERATURE REVIEW

2.1 Manpower planning

With the aim of projecting how many workers will be needed in the organization in the future to provide the required quantity and quality of work, HR planning must be carried out methodically and using relevant sources of information (Sri, 2016). It is defined as the process of trying to determine business needs at a particular time in a particular way, both in terms of quality and scope. This plan aims to ensure that the organization avoids understaffing when needed or overstaffing when it is not needed (Noer, 2017). According to Linawati (2023), workforce planning is systematic and analytical data collection and is very important in understanding workforce needs and resources. This involves identifying factors that may cause an imbalance between jobs. Additionally, workforce planning





includes decision making, decision making, and planning appropriate actions. This step is an integral part of the planning process aimed at achieving certain goals.

2.2 Productivity

According to Harahap (2018), efficiency is determined by comparing the total resources used (input) with the results obtained (output). Efficiency is: Efficiency = Impact on productivity Effective use of inputs. (Suparno, 2015) defines output as the ratio of the results obtained to the total resources consumed, and input as the total amount of resources used. Additionally, various variables, including salary, environment, and job happiness, can influence employee productivity. One of the concepts of labor efficiency is fair wages, fair work and less work. Production Productivity is the comparison between output and input. Both the amount and the description are objective (partial) measurements. Money production is also a measure of income generation, but the calculation is done in currency units (rupees). There are examples of partial production (Blocher, Chen, Lin, 2007):

1. Direct raw material output (raw material output or components)
2. Labor productivity, which includes production per worker or output per hour worked.
3. A measure of productivity related to a process (or activity), such as output per kilowatt or machine hour. A common method for determining single input productivity is to calculate the *output/input ratio*.

The formula : Productivity ratio = $Output / Inputs$

2.3 Effectiveness

Opinion Schemerhon Johnr.Jr. (2010), Effectiveness is defined as the achievement of output goals, or output, and is determined by comparing budgeted output, or OA (should), with realized output, or OS (actual). If OA exceeds OS, then the output will be considered effective. Productivity is a measure of the completion of certain tasks in an organization (Kumorotomo, 2005). Production is often related to two factors that can be combined to determine production levels. Both points are important and valid. Integration of processes in selecting activities to manage the resources that best support them. Meanwhile, efficiency is a process that minimizes waste to achieve maximum results with minimal income. Therefore, productivity is achieved through better performance and efficiency (Tamtomo, 2008).





2.4 Employees / Manpower

According to Iwan Salahuddin (2018), employees are synonymous with workers or employees. Therefore, job descriptions can be shown in macro and micro terms. From a macro perspective, the workforce is the working age group. Intermediate workers are workers or laborers who can provide services in the production process. According to Amiruddin Idris (2016), workers are residents of working age (15 to 64 years) or within the country who can use energy as they wish to obtain the desired things in the form of goods or services for themselves and others. The opinion of Purwaji et al (2016), in the case of creating a product or service, workers or employees must use physical and mental energy, this is called labor. Labor costs are compensation for services provided on behalf of employees.

2.5 Efficient

According to Syam (2020), the definition of efficiency is a state or situation where the completion of work is carried out efficiently and to the maximum of human ability. According to Syam (2020), the definition of efficiency is an effort to use as little input as possible to achieve maximum output. Productivity is the internal processes or equipment needed by an entity to obtain one unit of output. In this way, performance can be calculated by looking at the ratio of output to income (Syam, 2020).

2.6 Full time equivalent (FTE)

FTE (*Full Time Equivalent*), opinion of Dewi and Satrya (2012) One time-based workload analysis technique is *Full Time Equivalent* , which measures the amount of time needed to complete a task and then converts that time into an index called the FTE value . By comparing the amount of time required to perform different tasks with the amount of effective working time available, a workload calculation technique using full time equivalent (FTE) is implemented. Converting workload hours to the number of workers needed to perform a specific task is a way for FTE to simplify work measurement (Adawiyah, 2013). Then the opinion of Oesman (2012) is that the total number of members of a population or organization can be determined using FTE. *Full Time Equivalent* (FTE) is a metric used to determine how many hours a person actually works as a full-time employee, based on established criteria. Basically, FTE refers to the number of personnel required to complete each step of a procedure within a certain time period (Zimmerman, 2002). The frequency of employee work for 40 hours is expressed as a ratio called FTE. In other words, an employee





is considered to work 40 hours a week (Dewi and Satrya, 2012) so that the FTE figure is divided into three types, namely *overload* , normal and *underload* .

2.7 Labor costs / Cost of employee (COE)

Referring to the opinion of Mulyadi (2015), labor costs refer to the costs associated with employing human workers. Labor refers to the exertion of physical or mental effort by workers in the production of goods. Then in Supriyono's (2012) opinion, the company reimburses all labor costs incurred by its workers. According to Siregar et al (2013), the total value of labor resulting from the use of labor to convert raw materials into finished goods is known as labor costs. According to Purwaji; et al (2016) labor cost components include regular wages and salaries, incentives and allowances. As a reward for the hard work done by workers physically and mentally, the company pays its employees with predetermined wages and salaries. The term 'salary' is used for the periodic wages, usually monthly, paid to permanent employees. By the way, the term "salary" is used for wages provided by companies to productive workers and is only calculated in working days.

3. RESEARCH METHOD

The study is exploratory with a qualitative approach. According to Moleong (2016), qualitative research involves examining the behavior, attitudes, intentions, actions, etc. of research subjects. This study is qualitative research with a focus on the type of study and a focus on the type of study. Internships make it easier for researchers to access and search for further information. Qualitative research prioritizes quality over quantity, and instead of using surveys, data is collected through direct observation, interviews, and other formal records. This study focuses on internal control activities in payroll systems and procedures at PT ABM Investama Tbk. The focus of the research is to draw conclusions regarding the implementation of employee training programs at PT ABM Investama Tbk.

The research data sources come from primary data and secondary data. The primary data in this study comes from the results of researchers' interviews with several heads of Human Capital divisions in each subsidiary and *subject matter experts* at PT ABM Investama Tbk, as well as secondary data The study came from supervisors, mentors and sources who were interviewed, namely several HC division heads and *subject matter experts* at PT ABM Investama Tbk.





4. RESULT

4.1 Manpower gap

4.1.1 Cipta Krida Bahari

It is certain that planning will sometimes produce results that deviate from the original plan and create gaps. At CKB there is a manpower gap or a discrepancy in the number of workers between planned and actual due to considerations to make labor costs more efficient than planned by increasing employee overtime, because the costs incurred to pay for employee overtime are considered better than paying new employees in full. intact. *"Efficient manpower needs to be seen first in terms of how efficient it is, in terms of the amount of manpower or the costs spent on manpower. "For Ckb, because it is a services company, it will look at the manpower costs spent, because we are not a factory that makes products that are immediately visible, we look more at how much we spend and we look again at how much profit margin we get on top of that "* (DSAP, Deputy Div. Head HC Business Partner Logistics & Distribution at PT CKB, 06/20/23).

Then another source gave a similar statement:

"Human Capital at CKB is tasked with maintaining and protecting it, so that it is in line with increasing revenue because in the end it all comes back to making a profit in the company. One variable that will reduce profits is cost. The costs obtained at CKB are 50-50 between assets and people costs, which is balanced so that an increase in the number of people costs will have an impact on the company's margin or profit. "So HC CKB really monitors so that increases or decreases in fixed costs remain consistent, so at CKB there is a review process every month ." (MIW, Group Head Corporate Support at PT Cipta Krida Bahari, 03/30/23).

Overtime refers to work completed by employees outside of their regular workday at the behest of a superior, or work completed on their statutory holidays or weekly rest days. (Riyadi, 2020).

"The increase in overtime usually occurs because there is an increase in volume, but the MPP is not increased. So it's safer to add overtime costs, rather than adding 1 employee ." (MIW, Group Head Corporate Support at PT Cipta Krida Bahari, 03/30/23).

4.1.2 Cipta Kridatama

In CK, there is a manpower gap in planning and actual due to consideration of the opportunity costs incurred if the human resources provided are less than required. Supomo's (2016) opinion, opportunity cost is the value lost when choosing one option over





another option to make money or reap benefits from money (Setiawan, 2017), that is one technique for analyzing all the factors involved in choosing an action that can provide Margin or future profit is *an opportunity cost* .

" *In the specified ratio, a gap can occur where if one day only 20 people are needed for 10 equipment while 27 people are prepared then there are 7 people who have not been on duty in one day, the price paid for 7 people is more economical than if there was equipment in a project which does not have an operator due to one thing or another that happens in the field ,*" (RA, Group Head Human Capital, Mining Value Chain at PT Cipta Kridatama, 14/03/23)

In this case, the costs incurred by CK to pay employees that are more than the required ratio are better than having to have a shortage of people to operate the machine and losing several dollars of profit that should be obtained just because the machine cannot operate due to a lack of human resources.

4.2 Manpower Planning System

4.2.1 Cipta Krida Bahari

At PT CKB in the *warehouse section* , to determine the workforce or manpower, the company needs to measure or assess several indicators. There are 3 indicators in determining the MPP at CKB (Warehouse):

1. How big is the warehouse (sqm)
2. Any type of goods (large/small)
3. How much inventory (items)

"*So actually there are 3 indicators that serve as a reference for determining the MPP in this warehouse, the first is how many SQM or warehouse area, the second is how many goods or line items you could call inventory, the third is what types of goods are there*" (DSAP, Deputy Div. Head HC Business Partner Logistics & Distribution at PT CKB, 06/20/23)

The first is the size of the warehouse. The size of the existing warehouse can influence the number of workers needed. The wider the warehouse, the more workers needed because the wider the warehouse, the more capacity of goods that can be loaded in the warehouse. The more goods will be checked. and maintained every day, this is related to the second point, namely whether the type of item is large or small because the smaller the item, the



more manpower is needed to control and check inventory items, and vice versa, the larger the inventory item, the amount of manpower or labor What is needed is not as much as small items. Lastly, the amount of inventory, how many goods or items need to be handled, also determines the amount of manpower needed.

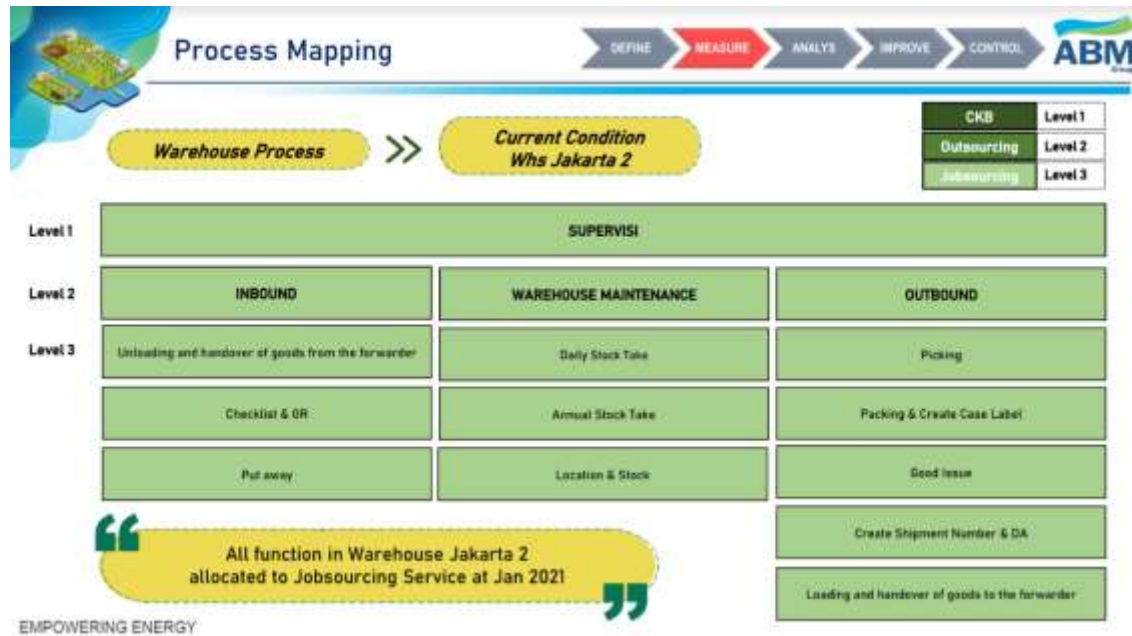


Figure 1. Warehouse Mapping Process

Source: (Company data, 2023)

Figure 1 shows the process of mapping PT CKB's warehouse activities, which consists of 3 levels. The first level is filled with workers from CKB, while levels 2 and 3 are filled with outsourced and jobsourcing workers. The figure also shows the position or type of activities carried out by each level in the warehouse process starting from when the goods enter the warehouse (Inbound), maintaining the goods while they are in the warehouse (Warehouse maintenance), and when the goods leave the warehouse (Outbound).

4.2.2 Cipta Kridatama

Manpower Planning starts from budgeting which is carried out every year in the 3rd Quarter or in July - September by carrying out MPP planning along with operational planning

costs. The first determining indicator is sales volume, with this sales volume we can determine how many people are needed or the amount of manpower that will be met to achieve the production target that has been determined for the next 5 years using the manpower index ratio that has been determined based on position in a project .

" So at HC, yes, we have planning for the outcome of the next 5 years, budgeting, so if I look at this picture, we at HC have annual activities in every Q3, this Q3 is held around July-September, later we will have a related process called budgeting. with manpower planning, now the following manpower planning also includes the costs, the operating costs that we will use in one project, so after that we will calculate all the manpower requirements, later there will be data there which we will later give it to the finance department ." (RA, Group Head Human Capital for Mining Value Chain at PT Cipta Kridatama, 03/14/23)

Rasio Manpower Index :

- **Operator / Equipment (2.65), plan to 3.25 (to shadow crew 3 windows)**
- **Technician / Equipment (0.87)**
- **Pengawas / Operator (15)**
- **Pengawas / Technician (12)**
- **Support function Index (as matrix)**
- **SIA max 1%**
- **Utilisasi (Operator & MDAR Technician) >75%**
- **Productivity Operator >100%**
- **No Abuse Operator**

Figure 2. *Manpower Index Ratio*

Source: (Company data, 2023)

The following is PT CK's Manpower Index Ratio data which is used as a reference in determining the workforce planning needed in the future. This data includes the needs of operators per machine, machine technicians, supervisors for each operator, etc.

After determining the production volume target data, it will then be given to Equipment Management to determine the type of equipment that will be used both in terms of size and quantity, after determining the equipment composition that is adjusted to the sales volume target, the operator who will operate the equipment will be determined using the manpower



on the Manpower Planning system is in the red dotted box carried out by Human Capital PT CK.

5. CONCLUSION

The manpower system at ABM uses *case studies* for each business unit from 2 *subsidiaries* to find out how *input* can be made efficient in terms of costs and number of workers with an effective manpower system so that it can influence the company's productivity level.

In this research, ABM uses 2 different approaches to streamline input in productivity, namely in terms of costs and number of workers with a *manpower system* from 2 *subsidiaries*, namely PT CKB warehouse and PT CK. CK's efficiency lies in its workforce, where the costs incurred by CK to pay employees that are more than the requirement ratio are better than having a shortage of people to operate the machines and losing several dollars of *profits* that should be obtained just because the machines cannot operate due to a lack of human resources. Meanwhile, at CKB, efficiency lies in the costs, because the costs incurred to pay for employee *overtime* are considered better than paying new employees in full.

What companies need to do to make their manpower planning system more effective is to create indicators that support the use of WLA (*workload analysis*) in each HR plan to optimize worker performance and find out the optimal number of employees needed by the company. According to Anggareni (2015), using the workload analysis method will provide information regarding the allocation of employee human resources to complete the existing workload. So that in this condition it can be used as a basis for analyzing the optimal number of labor requirements using the *workload analysis method*.

In this case, for CKB, the *warehouse section* is to find out whether the employee workload is still within normal limits or is *overloaded* , while for CK it is to find out whether the amount of *manpower* that has been increased is based on the ratio, the workload is appropriate or *underload* , which means the same as there are several CK *manpower that its utility* is low. According to Anggara in Culture and Muhsin, (2018), a good workload should be close to 100% or under normal conditions.

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