

Analysis of Total Employee Needs Based on Measurement of Workloads at PT. Garuda Indonesia Branch Office Medan

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ABSTRACT

Business competition is becoming more stringent in the current era of globalization and free markets. Companies must concentrate on the process of creating products and services related to the main competencies to improve its performance effectively. The problem that often arises in large companies is the form of organization that tends to be wide with an oversized number of employees. This has implications for roles and individual performance is less than the maximum and expenditure for employee needs become large. There is an interesting phenomenon in PT. Garuda Indonesia Branch Office Medan that the current employee distribution still not referring to the existing workload. Also known that the amount of overtime paid by the company is large enough, so it needs to be reviewed again. Considering that many employees feel the workload can be added. The purpose of this study is to analyze the effective working time of non-operational back office employees using the work sampling method and analyze the ideal number of employee needs based on workload measurement using the fulltime equivalent method. The results showed that the effective working days of employees are 235 days during the year and the effective working time owned by employees is 1.400 hours a year with five working days. In general, the total productive time done by employees is 65%, still below the set productive time standard of 70% with an allowance time of 30%. Based on the results of workload measurements, the workload received by employees is still uneven. Where there are 22 employees (66%) under load category, 7 employees (22%) in load category and 4

employees (13%) overload category. While the ideal number of employee needs after measuring workload is 28 employees. Currently the number of employees is 32; there is an advantage of 4 employees.

Keywords: Employee needs, Workload, Work sampling, Full time equivalent.

INTRODUCTION

In order to achieve good corporate governance, bureaucratic reform is carried out by increasing human resources. The expected results are employees with integrity, neutral, competent, capable, professional, high performance and prosperous.

This research was conducted at PT Garuda Indonesia Medan Branch which is an Indonesian national airline company. Employing a total of 89 employees with the status of 37 permanent employees (41.6%) and 52 employees working for a certain time (PKWT) (58.4%). PT Garuda Indonesia collaborates with two subsidiaries of the Garuda Group to meet this need (PKWT), namely PT Aero Globe Indonesia (AGI) for front liner and reservation employees and PT Garuda Daya Pratama Sejahtera (GDPS) to support back office and operational employees. There are differences in the number of employees in each unit who do different types of work. The difference is due to the absence of a stipulated standard of number of employees for a particular unit. The results of the

author's interview with the Senior Manager of HR and General Affairs, Mr. Kamal Rufiadi which was conducted on March 11, 2020, showed that the current distribution of employees still does not refer to the existing workload.

Based on the results of the pre-survey, it was found that 14 employees (43.8%) felt that their current workload could still be added, while 18 employees (56.3%) felt that their workload was sufficient or had excess so there was no need to increase it. As many as 27 employees (84.4%) were satisfied with the distribution of tasks that had been given and as many as 5 employees (15.6%) were dissatisfied with the distribution of tasks. In addition, as many as 20 employees (62.5%) considered the salary they received was in accordance with the workload given, while 12 employees (37.5%) considered the salary received was not appropriate. Environmental conditions and work aids that have been provided by the company to make it easier for employees to complete work on time have the support of 28 employees (87.5%) and only 4 employees (12.5%) answered that they cannot complete their work on time so overtime is required.

This study will use the work sampling method to measure the use of employee working time which is divided into three categories, namely, productive activities, personal activities and non-productive activities. Furthermore, the author will measure the workload using the full time equivalent method, so that it can be seen that the employee workload category to be studied is divided into 3 categories, namely, underload, inload / normal and overload. In addition, the authors will also calculate the needs of employees for each unit using the method contained in the Decree of the Minister of State Apparatus Empowerment No: KEP / 75 / M.PAN / 7/2004 regarding guidelines for employee needs based on the task per position approach. This method is a job description along with the amount of workload for each task, the time for completing the task and

the amount of effective working time per day, so that later the required number of employees will be known.

One of the factors in the change in human resource needs is the labor factor that arises as a result of employees being laid off, retiring, leaving and passing away (Nasution, 2008). Referring to company data, it is known that there are 7 permanent employees from the five work units of PT Garuda Indonesia Medan who will retire within the next four years. Internal control is implemented to make improvements in the implementation of personnel management that is more focused, has a clear and sustainable pattern and ensures the use of existing employees more efficiently and more effectively.

Based on the problems described above, it is known that the workload that is distributed is not evenly distributed, which can cause inconvenience because some employees feel that the workload they are doing is too excessive and some other employees feel that the workload given still needs to be increased. In addition, the reason for implementing workload analysis can also help companies to balance back between the number of employees they have with the existing workload. This is what then motivates the author to analyze the number of employee needs based on the measurement of the workload at PT Garuda Indonesia Medan Branch to support the company's strategy in order to create efficiency and effectiveness of human resources.

Human Resource Planning

Human Resource Planning must be carried out systematically and strategically with regard to forecasting future workforce needs in a company by using appropriate information sources with the aim of providing HR in the quantity and competence required. The goal of this planning is to obtain and maintain the quantity and quality of human resources needed and to be able to anticipate problems that arise from the potential for excess or

lack of human resources (Manullang, 2011). HR planning ensures that the organization can find out and get the people it needs to carry out business activities now and in the future. This planning is the basis for recruiting employees and for human resource development plans (Amstrong, 1994) in (Manullang, 2011).

Workload

Workload is the main aspect that forms the basis for calculating employee formation. According to (Yasmin, et al. 2018), workload is a number of activities that must be completed by employees or a company in a certain period with normal working conditions. If most of the employees work according to company standards, then there is no problem. Conversely, if employees work below standard, the workload they will carry will be excessive. Workload is also a number of work targets or target results that must be achieved in an average employee job.

Workload analysis is carried out to measure and calculate the workload of each position / work unit in the context of efficiency and effectiveness of task implementation and to increase the capacity of a professional, transparent, proportional and rational organization.

Workload analysis is the process of determining the number of manhours needed to complete a workload in a given time. According to (Anisa, et al. 2017) have classified two categories of workload measurement, namely:

1. Subjective measurement, namely measurement based on assessment and reporting by employees on the perceived workload to complete a task. In general, this measurement uses a rating scale.
2. Performance measurement, which is a measurement obtained through observing the aspects of behavior / activity displayed by employees. One of the measurements in this type is a measurement that is measured based on

the work time completed by an employee in completing a particular job

Work sampling

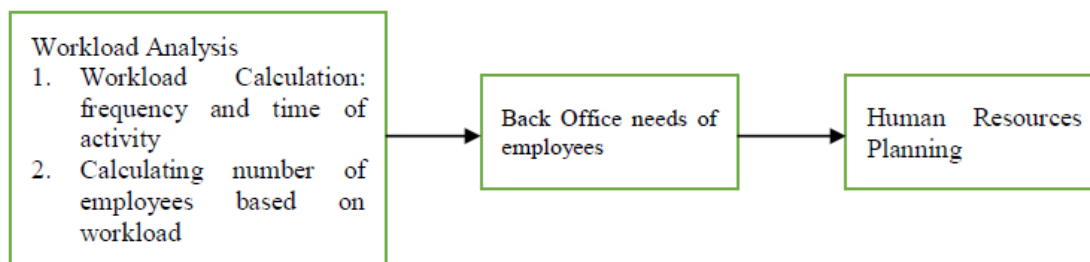
The work sampling method is a technique of calculating the workload to make a large number of observations of the work activities of machines, processes or employees. Initially this method was developed in England by a man named L.H.C Trippet in textile factories in England, but because of its usefulness, this method was later used also in other countries more widely (Hodson, 1992). This method is developed based on the law of probability, therefore observing an object does not need to be carried out thoroughly but rather using a random sample according to Wignjosoebroto, 2003 in (Auliyufliha, et al. 2019).

Calculating needs of Employee

Calculating the needs of employees of a company is absolutely necessary in order to meet the needs of employees that have been planned properly in terms of quantity, time and quality. Employee needs can be calculated by determining the standard ability to achieve the average time to complete main work and the quantity of workload in one year, so that the workload for each job is obtained (Muchrasyah, et al. 2016). Determining the number of employees can be done by adding the number of employees that have been calculated with a certain percentage of allowance. Another method for calculating the needs of employees can use what is stated in the Decree of the Minister of State Apparatus Empowerment Number: KEP / 75 / M.PAN / 7/2004 regarding guidelines for employee needs based on workload.

Conceptual Framework

In accordance with the description on the background of the problem, literature review and previous research, a conceptual research framework is prepared as follows:



Picture 1. Conceptual Framework

The operational definition and measurement of the variables are explained as follows:

1. HR planning is a series of activities carried out systematically and strategically to predict future employee needs in a company by using appropriate information sources. The dimensions used are HR Availability Analysis, HR Demand Analysis and Gap Analysis (quantity and quality).
2. Workload is a number of activities that must be completed by an employee or a company in a certain period with normal working conditions. The dimensions used are subjective measurement and performance measurement.

RESEARCH METHOD

This is descriptive research. According to (Sinulingga, 2016) in (Harahap, 2019), descriptive research is a research method that is intended to describe systematically, factually and accurately about the facts and properties of a particular object or population. This study aims to investigate in detail human activities and jobs to find facts obtained from the results of interviews and observations, but does not conduct hypothesis testing.

The questionnaire was conducted on the population, to all employees of PT Garuda Indonesia Medan branch, Jalan Mongonsidi No 34A, Medan. The total population of 32 employees does not include functional officials at manager level and above. Sample size is the number of samples to be taken from a population. According to (Sugiyono, 2012) if the population is relatively small. So the determination of the sample using the census method or what is commonly called

saturated sample, where all the population is sampled for research.

The data analysis technique was carried out as follows:

1. Performed in data processing, namely checking the data that has been obtained on the work sampling observation sheet. The examination is reviewed in terms of completeness or if there are errors or inconsistencies in the observation data. Activities or working time that have been grouped based on the respective categories of productive, unproductive and personal activities are then counted.
2. The next step is to enter data on the average frequency of main tasks performed and the standard ability of the average time to complete the main tasks of each employee into the calculation formula for employee needs based on workload. The workload obtained then becomes the basis for calculating the number of employee needs.

The workload analysis method is a method of calculating HR requirements based on the workload carried out by each employee in the work unit in accordance with their main duties and functions. To calculate the need for the number of back office employees using a task per position approach, the following steps can be taken:

1. Set available working time (WKT)

Working time in question is working time which is effectively used to carry out its duties and activities within one year. Effective working time consists of effective working days and effective working hours.

1. Effective working days are the number of days in a calendar year minus holidays and leave. The calculation is as follows:

Effective working day = (A-(B + C))

Information:

A = The number of days according to the calendar

B = Number of Saturdays, Sundays and public holidays in a year

C = amount of annual leave

2. Effective working hours are working hours that must be used to carry out tasks in one day, namely office working hours minus work time lost due to non-work (allowances) such as resting, praying, and eating and so on.

1. Arrange the completion time of the task (WPT)

Time to complete tasks is the result of multiplying the total burden of a main task with the standard ability of the average time to complete the task.

2. Calculate the number of employees needed

Employee needs can thus be calculated after the completion time of the task is determined. The formula for calculating the number of employee requirements is:

$$KP = \frac{\sum WPT}{\sum WKE} \times 1 \text{ orang}$$

KP = Employee needs

WPT = Time to complete the task

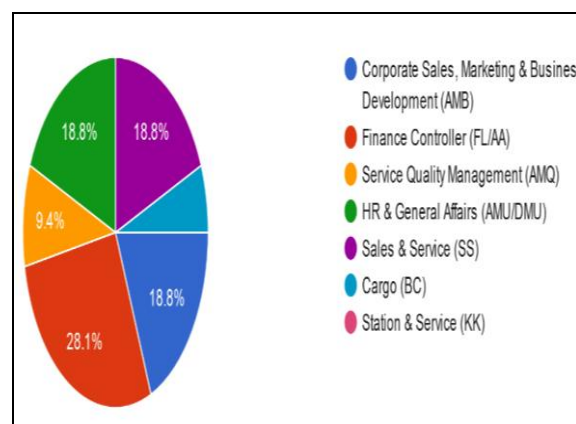
WKE = Effective working time

RESULT AND DISCUSSION

Descriptive Respondents

Respondents in this study were 32 back office employees representing six work units where the characteristics of the respondents included gender, age, years of service and education level. The results of the analysis in this study show that female employees are 62.5 percent, while male employees are 37.5 percent. Women are more diligent and resilient than men. In the present era of emancipation, the door to wide job vacancies for women is opened (Manullang, 2011). The dominance of the number of female employees is due to the nature of the work being done that requires accuracy because it is related to sales and

financial data processing. The demographic aspect of employees is an important aspect used to identify employee performance.



Picture 2: Number of Employees Based on Work Units

In this study, the age levels were divided into four age ranges, namely 18-25 years, 26-30 years, 31-40 years and ages over 40 years. Based on Figure 4.4, it is known that the most respondents who are over 40 years old are 11 employees (34.4%). The next sequence of respondents aged 26-30 years were 10 employees (31.3%), then aged 31-40 years were 7 employees (21.9%) and finally aged 18-25 years were 4 people (12.5%).

It is known that more than half of the respondents or as many as 18 employees (56.3%) have a work period of 1-10 years, while 8 employees have a working period of 21-30 years, followed by a work period of 11-20 years and over 30 years respectively. 3 employees. Employees will be able to work well in a unit if the work is in accordance with their expertise. The period of work of many employees reflects the more experience they get; the more trained and skilled they are in carrying out their work (Sari, 2014). However, employees who do not have experience, but have good intelligence will also be able to complete their duties.

Workload Analysis

Workload analysis is descriptive of the workload required in a company unit to measure and calculate the workload of each position/work unit in the context of

efficiency and effectiveness of task implementation and increasing the capacity of a professional, transparent, proportional and rational organization.

The amount of time used for each employee activity for the corporate sales, marketing and business development unit is known that the total time for productive activities is around 280 minutes or 51.85 percent to 400 minutes or 74.07 percent, while personal activities range from 60 minutes or so. 11.11 percent to 110 minutes or 20.37 percent, then for unproductive activities it ranges from 70 minutes or 12.96 percent to 200 minutes or 37.04 percent. Overall in this unit, the average use of productive time for each employee of this unit is 357 minutes per day or 66 percent, while for non-productive and personal time it is 184 minutes or 34 percent.

It is known that the amount of time spent on each employee's service quality management unit activities, for productive activities ranges from 270 minutes or 50 percent to 340 minutes or 62.96 percent, while for personal activities ranges from 90 minutes or 16.67 percent to 130 minutes or 24, 07 percent, then the unproductive time ranges from 100 minutes or 18.52 percent to 180 minutes or 33.37 percent. Overall in this unit, the average use of productive time per employee is 307 minutes per day or 57 percent, while for non-productive and personal time it is 233 minutes or 43 percent.

It is known that the amount of time spent on each employee's finance controller unit activities, for productive activities ranges from 290 minutes or 53.70 percent to 450 minutes or 83.33 percent, while for personal activities ranges from 60 minutes or 11.11 percent to 110 minutes or 20.37 percent, while for unproductive activities it was 30 minutes or 5.56 percent to 190 minutes or 35.19 percent. Overall in this unit, the average use of productive time for each employee is 356 minutes per day or 66 percent, while for unproductive and personal activities it is 184 minutes or 34 percent.

It is known that the amount of time spent on each employee's sales and services unit activities, for productive activities ranges from 330 minutes or 61.11 percent to 410 minutes or 75.93 percent, while for personal activities it ranges from 60 minutes or 11.11 percent to 90 minutes or 16.67 percent and for unproductive activities ranged from 40 minutes or 7.41 percent to 120 minutes or 22.22 percent. Overall in this unit, the average use of productive time for each employee is 367 minutes per day or 68 percent, while for personal and non-productive activities is 174 minutes or 32 percent.

It is known that the amount of time used for each HR and general employee activity, for productive activities ranges from 320 minutes or 59.26 percent to 400 minutes or 74.07 percent, while for personal activities it ranges from 80 minutes or 14.81 percent to 120 minutes or 22.22 percent, while non-productive activities are 60 minutes or 11.11 percent to 100 minutes or 18.52 percent. Overall in this unit, the average use of productive time for each employee is 370 minutes per day or 69 percent, while for personal and unproductive activities 170 minutes or 31 percent.

It is known that the amount of time used for each cargo unit employee activities, for productive activities ranges from 330 minutes or 61.11 percent to 360 minutes or 66.67%, while for personal activities it ranges from 80 minutes or 14.81 percent to 130 minutes or 24.07 percent, while for unproductive activities of 80 minutes or 14.81 percent to 100 minutes or 18.52 percent. Overall in this unit, the average use of productive time for each employee is 345 minutes per day or 64 percent, while for personal and unproductive activities 195 minutes or 36 percent.

Analysis of the Number of Employee Needs

Determine the effective working time by calculating the number of days in a year, the number of Saturdays and Sundays

in a year, the number of national holidays and collective leave in a year and the number of employee leave in a year. Then the number of Saturdays and Sundays is added to the number of national holidays and the number of employee leave, resulting in the total days not working or holidays.

The number of effective working days in one year is 235 days. After getting an effective work day, then the effective working hours will be sought. According to ministerial decree (Kepmennaker) No.128 of 2016 effective working hours are formal working hours reduced by lost work time due to non-work (allowances) such as defecating, releasing tiredness, eating breaks and so on. Allowance on average is about 30% of total formal working hours.

One working day = 9 hours of work - 1 hour (rest time) = 8 hours

Effective time in one year = 70% x 8 hours = 5.6 hours rounded to 6 hours.

Productive time in one year = 235 days x 6 hours = 1,410 hours rounded to 1,400 hours or 84,000 minutes.

The average proficiency standard (SKR) shows how long it takes an employee to complete one visit, which is one hour per visit. The time to complete assignments (WPT) for visiting activities by multiplying the workload for a year with the average standard of ability, namely 235 times x 1

hour per visit is equal to 235 hours per year. The same is done for subsequent assignments.

The workload (BT) and the average standard of ability (SKR) for the completion time of each element of the main task or output are obtained from the task load form filled out by each employee in the unit to be researched and the author also asks the head of the unit of each employee to verify it. The result of the multiplication between the duty load and the average standard of ability for each main task is then added up, so that the total time for completing the task of the cargo unit (\sum WPT) is 2,388 hours per year.

Calculating the Number of Employee Needs

Total needs of individual work units. There are two units that are ideal, namely the finance controller unit and the cargo unit, and then there are three units with excess staff, namely the corporate sales, marketing and business development unit with 2 more employees, the service quality management unit and the HR and general affairs unit respectively. 1 employee has excess, while the sales and service unit lacks 1 employee. Overall, the total number of employees needed is 29 employees, while the current condition is 32 employees, which means there are excess of 3 employees.

Table1: The Number of Employee Needs

No	Unit	Employee Demand	Fix
1	Corporate Sales, Marketing & Business Development	3.83	4
2	Finance Controller	9.16	9
3	Service Quality Management	1.99	2
4	HR & General Affairs	5.02	5
5	Sales & Services	6.59	7
6	Cargo	1.71	2
Total Demand			29

There are two work units that are still under load (AMB and BC), but the FTE figure is close to the ideal workload, namely 1 so that the number of employees is quite ideal. The number of personnel needed by the FL unit is appropriate so that it does not require an adjustment, while the SS unit currently has the number of employees in

accordance with the existing workload. Meanwhile, the AMQ and AMU units are adjusted according to the previous calculations so that the workload is ideal. The number of required employees based on this method is 28 employees, which means that there are 4 employees excess.

As a work unit, each employee has determined the workload and is an employee's responsibility. Based on observations, looking at the workload of each unit there is still an under load, so it is necessary to move, reduce and add employees as well.

CONCLUSION

1. The effective working time of employees is 1,410 hours, rounded up to 1,400 hours a year with working days starting from Monday to Friday from 07.30 to 16.30. Based on the calculation, it was found that 235 working days were effective for a year
2. In general, the total productive time that each employee has is 65%, still below the standard productive time set at 70% with an allowance time of 30%. This indicates that there is a workload that needs to be added and a lot of time is used by employees for personal or non-productive activities.
3. The workload received by each employee is still uneven. This can be seen in the results of measuring the workload using the FTE method, where there are 22 employees or 66% in the underload category, 7 employees or 22% in the inload category and 4 employees or 13% with the overload category. If it is related to pre-survey data, it means that 84.4% of employees are satisfied with low workloads and 15.6% of employees are dissatisfied due to excessive workloads.
4. The number of existing personnel needs is still not in accordance with the ideal number of employee needs. This is indicated by the existence of three work units that have excess employees, namely the corporate sales, marketing and business development unit with an excess of 2 employees, a service quality management unit and a HR and general affairs unit each with an excess of 1 employee. However, there are also work units that already have the appropriate calculations, namely the finance

controller unit, sales and service unit and the cargo unit

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