



Workload Analysis of Employee Needs at PT. Jamkrindo Medan Branch Office

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Abstract. This study aims to find out how many employees need in each section of PT. Jamkrindo Medan Branch Office. The method used in this study is the Full-Time Equivalent (FTE) method which aims to determine the level of workload on employees and the number of employees needed. Based on the results of measuring the workload with the Full-Time equivalent method, it can be seen that there are 8 employees with an underload workload, 5 employees with a normal workload, and 7 employees with an overloaded workload. From the calculation of the number of ideal employee needs after the calculation with the FTE method, it is known that the Medan Branch Office Jamkrindo has a shortage of 7 employees.

Keywords: Employee Needs · Full Time Equivalent · Workload

1 Introduction

Pt. Jamkrindo Medan branch office is a State-Owned Enterprise (BUMN) company that is included in the Indonesia Financial Group which is engaged in credit guarantees. Through its core business, PT Jamkrindo seeks to support the development of micro, small, and medium enterprises and cooperatives to increase national economic growth.

Pt. Jamkrindo Medan Branch Office has 20 employees with quite complex roles and job descriptions and sees that currently, the scope is quite wide since Qanun Number 11 of 2018 which was enacted in January 2019 concerning Islamic Financial Institutions which requires financial service providers to carry out transactions based on the sharia system as of January 2020 so that the operational activities of PT. Jamkrindo Banda Aceh Branch Office has ended since April 30, 2021, and moved to the Medan branch office.

With these many tasks, of course, an appropriate amount of energy is needed in order to provide the best service. According to Koesomowidjojo [1], workload analysis is a process of determining the number of working hours and human resources needed in completing a job for a certain period of time. The workload is given to employees in order to be precise or according to the workability of the employee, so as to achieve optimal productivity, productivity levels optimal employees will produce a job that all parties want.

This study aims to determine the workload of employees in the guarantee business section, claims and subrogation parts, and operational parts through the calculation of

the Full-Time Equivalent (FTE) method, to be able to find out the ideal and appropriate number of employees in each section in the Jamkrindo Medan Branch Office and can provide suggestions and suggestions for improvements for companies regarding the value of employee workload.

1.1 Literature Review

Workloads

According to Vanchapo [2] workload is an activity that should be completed by a worker within a certain time. Based on the Minister of Home Affairs Regulation (Permendagri) No. 12/2008 [3], workload refers to the amount of work carried out by an organizational unit and is the multiplication results between the volume of work and time. Therefore, the workload is defined as the process by which a worker completes job tasks or groups of positions under normal circumstances within specified time frames.

Workload Measurement

The workload measurement aims to determine the number of employees required in completing a job and obtain information regarding the effectiveness and efficiency level of the organization based working level in a year. Although workload measurement could be done in different procedures, O'Donnell & Eggemeier [4] classified them into three categories, namely:

1. Subjective measurement is a type of measurement on the working assessment by reporting the workload in completing tasks. A rating scale is commonly used in this type of measurement.
2. Performance measurement involves behavioral observation to the workers. Time-based performance determines the completion time used by workers who have specific qualifications in predetermined working atmosphere.
3. Physiological measurement determines the level of workload by observing some aspects of workers' physiological response while performing specific tasks/jobs. Typically, pupillary reflexes, eye movements, muscle activity, and other body responses are measured.

Full Time Equivalent (FTE)

Full Time Equivalent (FTE) is a calculation method used in completing the works compared to the available effective working time. As a result, the goal of using this Full Time Equivalent method is to simplify working hours with the number of people required to complete a specific task [5]. The following formula is used to calculate the FTE value of a work process:

$$FTE = \sum \frac{\text{task completion time} + \text{allowance}}{\text{effective working time}} \quad (1)$$

There are some steps to perform workload analysis by using FTE method as explained by Dewi and Satriya [6], they are:

1. Determine the duties of a work unit including the category of its employees.
2. Set available working time for one year
3. Draw up a standard of leeway.
4. Set workload standards.
5. Calculate the labor requirement used per unit of work.

2 Method

2.1 Data Collection

The primary data of this study involved employees of PT Jamkrindo Medan Branch Office through direct observation and interviews talking about some relevant topics such as the main duties of the employees in the company. To be more detailed, observations were done to each employees who had 8 working hours. The observation to an administrator-level employee was done in a day. The data from the observation were supported by in-depth interviews to ensure that the collected data were appropriate.

Meanwhile, secondary data were done through literature reviews such as books reading, journal analysis, internet-mediated data, and other company documents.

2.2 Data Processing

a. Forming Work Units and Their Workforce

The work units studied the employee levels in the business and assurance department, the kaim, and subrogation sections and the operational parts with the 20 employees' total workforce.

b. Allowance

This section determines the time of respite consisting of leeway on personal needs, leeway to eliminate fatigue and leeway for unsavory obstacles.

c. Effective Working Time Determination

Effective Working Time Determination is an effective working time in working hours used as a measuring tool in workload analysis in the Jamkrindo Medan Branch Office.

One working day

= 9 h worked

= 9 h of work – 1 h of rest

= 8 h

Effective Time in one year

• $70\% \times 8 \text{ h} = 5.6 \text{ h}$

Productive Time in one year

• $234 \times 5.6 \text{ h} = 1.310 \text{ h} = 78,624 \text{ min.}$

Effective working hours gained from working times minus the time of allowances.

The average number of allowance is about 30% of the number of formal workinghours.

d. Workload Calculation

At this stage, a measurement of the workload of each employee was done using Full Time Equivalent method. Method Full Time Equivalent is a method used to complete the work and then converted into an FTE value index, which is based on the guidelines of the Agency's workload analysis State Staffing 2010 each section has Table 1 range of values:

Table 1. Workload Calculation

Workload Calculation Result	Groups
0–9.999	Underload
1–1.28	Normal
> 1.28	Overload

The results of the calculation of the employee's workload are then verified by management, after verification can be continued with labor needs.

e. Calculation of Labor Needs

At this stage is calculated the need for an optimal workforce for particular position with the approach of duties per the post obtained from the calculation of the amount of time for the completion of tasks for one year. This approach is the result of FTE calculations to measure workloads. If the number of employees is too small, the workload that each employee bears is very heavy. It is likely that the employee cannot perform his duties properly. On the contrary, if the number of employees is too large or excessive, it results in a waste of labor costs, so the company is inefficient.

3 Result and Discussion

3.1 Workload Calculation with Full Time Equivalent Method (FTE)

The workload calculation method uses the Full Time Equivalent (FTE) method where the time used to complete the job task is compared to the available effective time. The purpose of FTE is to simplify the measurement of work by converting working hours into the number of people needed to complete a particular job [5]. The steps to obtain the FTE value of a work process are as follows:

Allowance

Based on. KEPMEN.Naker No.128 of 2016 [7] states that effective working hours are normal working hours that are reduced due to work time lost due to personal needs such as defecation, meal breaks and so on called Allowance. The average allowance is about 30% of the number of formal working hours.

Effective Uptime

Effective uptime based on KEP/75/M.PAN/7/2004 [6] addressed in Table 2.

Table 2. Effective Working Hours in 2021

Account	Sum	Unit
Working Days 2021	234	day
Total working days in working hours	1. 872	h
Allowance	30	%
Average Effectiveness Factor	70	%
Total Effective Hours Worked	1.310	h/year
	5.6	h/day
	360	Min/days

Table 3. Workloads and Business Guarantees

Lakie	Job Position	FTI Index	Information
P1	Account Officer	1,82	Overload
P2	Account Officer	1,70	Overload
P3	Account Officer	1,34	Overload
P4	Suretyship Staff	3.18	Overload
P5	Business Staff	1. 21	Normal
P6	Business Staff	0,96	Underload
P7	Business Staff	1.01	Normal
P8	Support Staff	1.01	Normal

3.2 Employee Workload

a. Business and Guarantee Workloads

Employee workloads in the Business and Guarantee section are shown in Table 3.

b. Claims and Subrogation Workloads

Workloads on Claims and Subrogations are shown in Table 4.

c. Operational Workloads

Employee workloads in Operations are shown in Table 5.

3.3 Labor Needs

The determination of the number of workers in each section is carried out taking into account the total FTE index and the workload that employees must bear for each working position. The need for the amount of work is shown in Table 6.

Table 4. Claims and Subrogation Workloads

Lakie	Job Position	FTE Index	Information
P1	Staff Claims	1,85	Overload
P2	Staff Claims	2,62	Overload
P3	Staff Claims	1.10	Normal
P4	Staff Claims	0,98	Underload
P5	Subrogation Staff	1.20	Normal
P6	KKWT	1,23	Normal
P7	KKWT	1,22	Normal
P8	Support	0,85	Underload

Table 5. Operational Workloads

Lakie	Job Position	FTE Index	Information
P1	Accountancy	1,71	Overload
P2	Accountancy	1,42	Overload
P3	Cashier	1,16	Normal
P4	Support	0,18	Underload

Table 6. The Need for The Number of Manpower

Job Position	Number of Employees must	Number of existing Employees	Number of Employee Needs	FTE rate-rate
Business and Guarantees	12	8	4	1,53
Claims and Subrogation s	11	8	3	1,38
Operational	4	4	0	0,56

With regard to the presence of an overloaded workload of employees, it does not mean that the department takes an alternative to adding employees. For employees who experience workload overload or uneven workload in one job position, you descriptions of employees who have overloaded workloads are given to other employees who have an underload workload.

Although the optimal amount of labor has been determined, in practice adjustments must still be made. In the workload analysis of the business and guarantee department, it is known that it is necessary to add 4 employees. This is because there are employees who get promotions and there is no replacement for these employees so that the effectiveness

of marketing visits decreases. It can be known that the average employee feels the workload they carry excessively as is known as is known the comparison of the percentage of FTE index values of 13% underload, 38% normal and 50% overload.

Referring to the workload analysis in the claims and subrogation section, it is known that there are 3 additional employees with a percentage of the FTE index value of 25% underload, 50% normal and 25% overload. With the transfer of the portfolio of aceh branch offices to the medan branch offices, this has caused the workload on the claims and subrogation sections to increase which results in a shortage of claims analysis personnel to settle claims in the process. This shows that employees in the claims and subrogation departments have an overcapacity workload with limited number of employees.

Workload analysis in the operational section found that the number of employees was optimal based on workload with an FTE index of 25% underload, 25% normal and 50% overload. Then there is no need for additional or subtraction of employees in the operational department, only I am in employees supporting operational workload can still be increased, for example by helping to archive files on accounting employees whose workload is already overloaded.

4 Conclusion

From the analysis results, some conclusions can be drawn as in the followings:

1. Full Time Equivalent method revealed that the business and guarantee department has one underload employee, 3 normal employees and 4 underload employees. Meanwhile, the claims and subrogation section has 2 employees with underload workload, 4 employees with normal workload and 2 employees with overload workload. In the operational section, there is 1 person with an underload workload, 1 person with a normal workload and 2 people with an overload workload. The value of this workload index is obtained by taking into account the number of hours worked by employees in a year and compared with the effective working time of the year.
2. After the Full Time Equivalent method was employed, among 27 employees of PT. Jamkrindo KC Medan, there were 7 employees who needed details in the business and guarantee section. From these 7 employees, there were 4 employees in the claims and 3 employees in the subrogation section.
3. Through a workload analysis, companies could asses quality and identify employee needs in the company. It aims to run effectively, efficiently and productively. Conducting workload analysis could also maximize individual performance (employees) and it can be known whether employees work excessively or underload. Companies can also carry out or propose employee mutation programs from excess work units to work units that lack employees.

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