

WORKLOAD ANALYSIS TO DETERMINE THE OPTIMAL NUMBER OF EMPLOYEES AFTER THE HOLDING-SUBHOLDING TRANSFORMATION IN THE BUSINESS SUPPORT DIVISION OF PT PLN NUSANTARA POWER, BELAWAN GENERATION UNIT

April Yanto Wilsam Pasaribu^{1*}, Prihatin Lumbanraja², Iskandirini³

University of North Sumatra, Indonesia

*Email Correspondence: apriilyantopasaribu@gmail.com

Abstract

The organizational transformation through the Holding-Subholding program within PT PLN (Persero) has brought significant changes to the organizational structure and workload distribution, particularly in the Business Support Division of PT PLN Nusantara Power, Belawan Generation Unit. These changes are evident from the increased number of overtime hours due to the reassignment of several employees from the Business Support Division and the addition of new tasks. This study aims to identify the optimal number of employees by analyzing the current workload in the Business Support Division following the implementation of the Holding-Subholding program. The work time analysis was conducted using the Work Sampling method, and the employee requirements analysis was performed using the Full Time Equivalent (FTE) method, based on the guideline KEP/75/M.PAN/7/2004. The results of the study indicate that the effective working days in a year amount to 278 days, with an effective working time of 1,668 hours for a five-day workweek. Based on work sampling, the percentage of productive activities was 79.01%, non-productive activities 3.51%, and personal activities 17.47%, with a 20% allowance. The FTE workload measurement results show that in the Business Support Division, one staff position falls under the inload category, two positions under underload, and five positions under overload. The calculation also reveals a discrepancy between the actual number of employees and the ideal staffing needs, including shortages of 2 staff members in the HR Officer position, 1 in the Accounting Officer position, and 1 in the Procurement Officer position. However, there is also an excess of 1 staff member in the Finance Officer position.

Keywords: Workload, Work Sampling, Full Time Equivalent (FTE)

INTRODUCTION

Human resources are a key asset in an organization, demonstrating that they must always be maintained, safeguarded, and developed. Quality human resources are those capable of demonstrating work behaviors that lead to the achievement of an organization's goals and objectives. This involves managing human resources to achieve high performance. Human resources are crucial to running a business and are one of the keys to success.

One way to optimally utilize human resources is by measuring workload. Workload is the burden of physical, mental, and social activities received by an individual that must be completed within a certain time, according to the physical abilities and limitations of the worker in accepting the workload. A person's workload is determined in the form of employee work targets according to the type of job. Employee workload can occur in three conditions. First, the workload meets standards. Second, the workload is consistently high (over capacity). Third, the workload is too low (under capacity). A heavy or light workload will result in work inefficiencies. A workload that is too light means there is an excess of labor, which causes the organization to pay more employees for the same productivity, resulting in cost inefficiencies. Conversely, if there is a shortage of labor or a large amount

of work with a small number of employees, it can cause physical and psychological fatigue for employees. Ultimately, employees become unproductive due to overexertion.

Along with the increasingly dynamic development of the energy industry, PT PLN (Persero) has taken various strategic steps to increase efficiency and productivity, one of which is by establishing a holding and subholding organizational structure. In 2023, through the Ministry of State-Owned Enterprises (BUMN), PT Perusahaan Listrik Negara (PLN) agreed to form a holding subholding (HSH) for transformation and efficiency at state-owned power plants. There are 4 PLN subholdings, namely PLN Nusantara Power (PNP), PLN Indonesia Power (PIP), PLN Energi Primer Indonesia and Beyond kWh. This step was taken to create a more focused, agile, and responsive management system to challenges in the electricity sector. This Holding Subholding Program is expected to strengthen operational management and increase company value amidst increasingly competitive market competition.

PT PLN Belawan Power Plant Implementation and Control Unit, which was previously a Power Plant Unit under the auspices of PT PLN (Persero) North Sumatra Main Power Plant Unit, was then handed over to PLN Nusantara Power (PNP), which was previously a subsidiary of PT PLN (Persero) named Pembangkitan Jawa Bali (PJB) which underwent this transformation to strengthen the company's position in facing the challenges of the increasingly competitive electricity industry. As part of the holding, PT PLN Nusantara Power UP Belawan carries out its role in supporting other power plant units within the subholding to achieve common goals. However, this change also has implications for the organizational structure and distribution of workloads in various sections, including in the Business Support field. The Business Support field consists of 3 sections, namely;

1. HR, General Affairs & CSR Division
2. Financial department
3. Procurement Department.

These three divisions have a crucial role in ensuring smooth operations through various support services, such as administration, finance, human resources, and technical services. One of the impacts of the Holding Subholding program on these three divisions is the transfer of several employees from the Business Support sector. This is due to the presence of employees who are unwilling to undertake the Work Tasks to become Holding Subholding employees, then there are employees who move to other sectors, and there are employees who are transferred to the Central Electricity Service Unit (ULPL). These changes not only affect the number of available employees but also have an impact on the distribution of the existing workload. The table shows a comparison of the number of Business Support employees before and after the Holding Subholding Program.

No	Job Title	Number Before HSH (people)	Actual Number of Employees (people)	The gap
1.	Business Support Manager	1	1	-

No	Job Title	Number Before HSH (people)	Actual Number of Employees (people)	The gap
2.	Assistant Finance Manager	1	1	-
3.	Assistant Manager of HR, General Affairs & CSR	1	1	-
4.	Assistant Manager of Procurement	1	1	-
5.	HR Officer	2	1	-1
6.	General Officer & CSR	2	2	-
7.	Finance Officer	3	3	-
8.	Accounting Officer	3	1	-2
9.	Senior Officer of HR Performance, General & CSR	2	1	-1
10.	Senior Financial Performance Officer	2	1	-1
11.	Senior Manager Secretary	1	1	-
12.	Procurement Officer	4	4	-
TOTAL		23	18	-5

In the table above, it can be seen that the number of employees in the Business Support Section before the Holding Subholding was 23 employees led by a Business Support Manager and 3 Assistant Managers (Asman). The Finance Section was led by an Assistant Finance Manager and had 6 staff. The HR, General Affairs & CSR Section was led by an Assistant Manager and had 5 staff. And the Procurement Section was led by an Assistant Manager and had 4 staff. The remaining 4 staff were Senior Officers of HR, General Affairs & CSR Performance and Senior Officer of Financial Performance. However, after the Holding Subholding program, the number of employees in the Business Support Sector became 18 employees. This was due to staff transfers from the Business Support sector.

Following the restructuring resulting from the Holding Subholding program, there have also been significant changes in workload, both in volume and complexity. These changes necessitate a re-evaluation of the optimal workforce to maintain operational effectiveness and efficiency. The following table shows the number of overtime hours worked by Business Support employees before the Holding Subholding program through 2024.

No.	Business Support Section	2022 (Hour)	2023 (Hour)	2024 (Hour)
1	HR, General & CSR	397	504	529
2	Finance	417	527	565
3	Procurement	421	546	568
TOTAL		1235	1577	1662

The table above shows that the number of overtime hours for all Business Support employees increases annually. Overtime hours in 2022 were 1235 hours, increasing to 1577 hours in 2023, or an increase of 342 hours. Meanwhile, in 2023, with overtime hours of 1577 hours, it increased to 1662 hours in 2024, or an increase of 85 hours. Based on the results of interviews that have been conducted, the increase in employee overtime hours from 2022 to 2023 was quite high due to the transition to the Holding Subholding program in that year where employees were still trying to adapt to the system used by PLN Nusantara Power to support their daily work. In addition, each section in the Business Support section received the addition of several new jobs that were previously not the responsibility of the unit, but now must be added and managed by existing employees as a consequence of this organizational transformation. Some of the jobs that increased after the holding subholding:

a. Financial department

1. Making Bill Payments to the Bank
2. Performing invoice bridging for integration between applications
3. Monitoring transactions and gas fuel usage invoices

b. HR, General Affairs & CSR Division

1. Employee Certification and Training Identification Needs Planning
2. Top Talent and Expert Candidate Development Program
3. Implementation of the Nusantara Volunteer Program
4. Implementation of an individual performance system assessment program based on Performance Goal Management Goals through the PMGM application
5. Conducting Monitoring and Evaluation of PPK (Competency Needs Planning)
6. Planning the need for transitional and ideal workforce formation (FTK) for post-subholding holding
7. Outsourcing Manpower Requirements Planning (TAD)

c. Procurement Department

1. Enter bill verification into the Online Verification system
2. Monitoring of Domestic Component Level (TKDN) for each job to be contracted out
3. Processing Outsourcing Contracts (TAD)

Based on the above issues, a workload analysis is required to determine the optimal number of employees to meet operational needs after the subholding. Furthermore,

calculating the optimal number of employees based on this workload can be used as a reference in determining employee numbers at PT PLN Nusantara Power UP Belawan, especially in the Business Support area.

Based on the background above, the problem discussed in this study is determining the optimal number of employees by measuring the workload of employees in the Business Support sector after the Holding Subholding Program.

METHOD

The type of research used is descriptive qualitative, which aims to describe the situation being observed. The research approach used for this study is qualitative, which is an in-depth study using data collection techniques directly from subjects in their natural environment. This study was conducted to examine the activities of each employee and gather information from interviews and observations, but did not conduct hypothesis testing. The data used in this study consists of primary and secondary data. Primary data will be obtained through direct observation and interviews at the research location. Secondary data will be obtained from company data authorized by the company where the research is being conducted to support this research.

RESULTS AND DISCUSSION

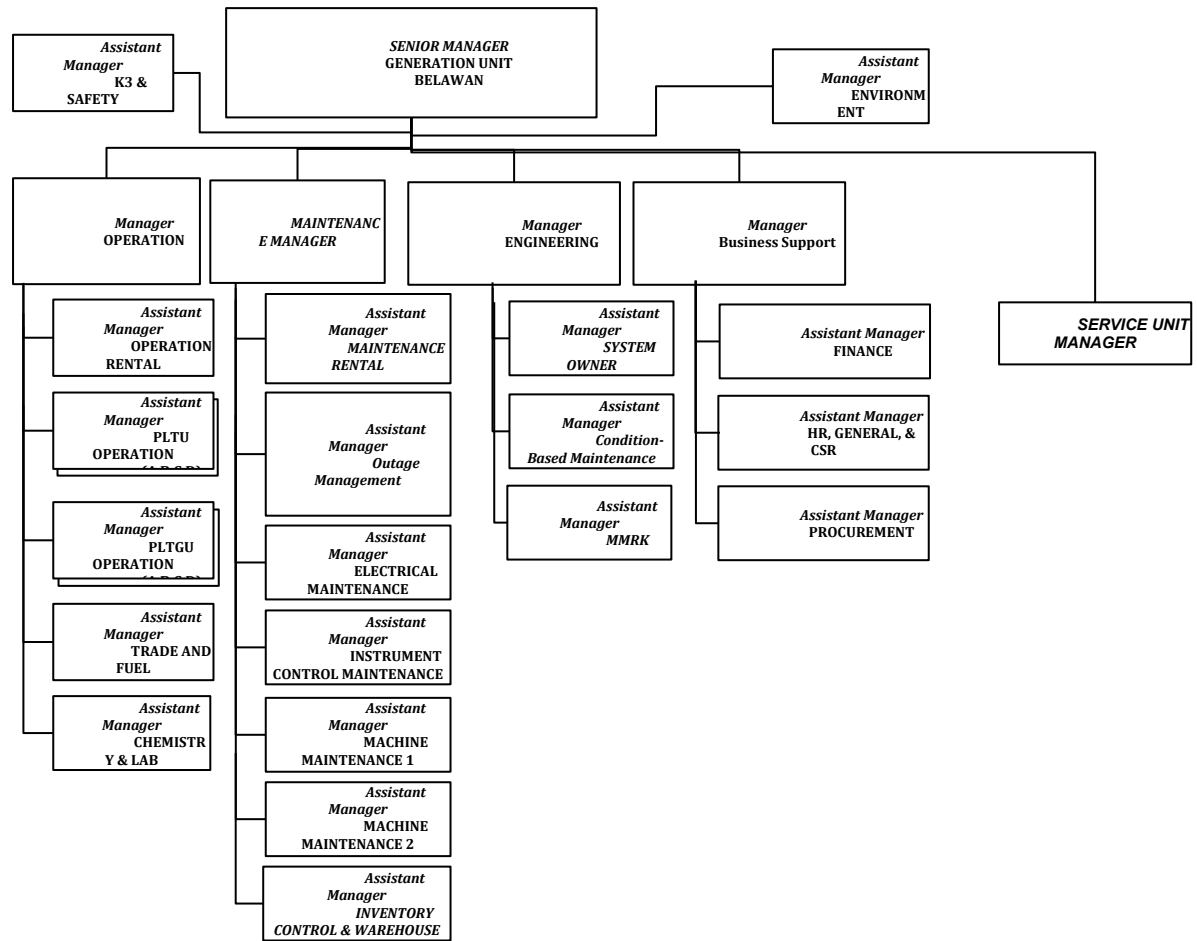
Research Overview

The general description of the object of observation in this thesis research is PT PLN Nusantara Power Unit Pembangkitan Belawan which is located at Jl. PLTU Pulau Sicanang, Medan Belawan, Medan City, North Sumatra Province consisting of the vision, mission and organizational structure used.

Organizational structure

The organizational structure used by PT PLN Nusantara Power Unit Generating Belawan is according to the data provided by PT PLN Nusantara Power Unit Generating Belawan based on the Board of Directors Regulation Number 0003.P/DIR/2024 dated February 20, 2024. The following is the organizational structure at PT PLN Nusantara Power Unit Generating Belawan which is shown in the Figure

The organizational structure used by PT PLN Nusantara Power Unit Generating Belawan is according to the data provided by PT PLN Nusantara Power Unit Generating Belawan based on the Board of Directors Regulation Number 0003.P/DIR/2024 dated February 20, 2024. The following is the organizational structure at PT PLN Nusantara Power Unit Generating Belawan which is shown in the Figure.



Job Description and Work Period for Business Support Field HR Officer

The following table explains the job description of the HR Officer and the period during which the tasks are carried out:

No	Job description	Period
1	Implementing the Hard Competency Assessment Program	Annual
2	Implementing the Soft Competency Assessment Program	Annual
3	Monitoring the Competency Certification Program	Monthly
4	Preparation of Certification Needs Identification	Semester
5	Preparation of Learning Need Analysis and Individual Training Need	Semester
6	Conducting Monitoring and Evaluation of PPK (Competency Needs Planning)	Quarterly

No	Job description	Period
7	Competency Acceleration Planning and Implementation (ACTION)	Monthly
8	Monitoring the Number of Development Person Days (HOP)	Weekly
9	Conduct performance planning input	Monthly
10	Conducting a Strategic Awareness Survey	Monthly
11	Carrying out Industrial Relations Development (Employee Disciplinary Actions)	Quarterly
12	Implementing Bipartite LKS	Monthly
13	Planning and Implementation of Knowledge Asset Management (KS/COP/KC)	Quarterly
14	Carrying out Reconciliation of the HR program implementation process	Monthly
15	Implementation of Succession Cadres and Expert Cadres	Monthly
16	Monitoring Top Talent and Expert Candidate Development Programs	Monthly
17	Implementing Corporate Culture Programs	Monthly
18	Carrying out Personnel Administration / Correspondence	Daily
19	Monitoring the implementation of Retirement Training	Monthly
20	Implementation of Human Capital Data OCR	Monthly
21	Implementing Performance Realization input to all employees in the PMGM application	Monthly
22	Monitoring other PDP input (form of appreciation)	Monthly
23	Monitoring employee development program input on SAP SCDP	Monthly
24	Planning the needs of FTK transitional and ideal employees after subholding holding	Quarterly
25	TAD needs planning	Annual

General Officer & CSR

The following table explains the job description of the General & CSR Officer and the period for which the tasks are carried out:

No	Job description	Period
1	Update employee dependent data on the template provided by the Head Office	Weekly
2	Update BPJS Health for Employees/Employee Dependents on the template provided by the Head Office	Weekly
3	Update on proposed APLN cards for employees/employee dependents	Weekly
4	Send an update on the proposed creation of an APLN card for employees/employees' dependents via email.	Weekly
5	Updating employee/dependents' BPJS health insurance via email	Weekly
6	Employee Health Restitution Monitoring	Monthly
7	Upload Employee/Dependent's Eyeglass Restitution in Online Verification (VO)	Monthly
8	Updating PLN NP's Subscribed Clinics and Hospitals at the Unit Information Center	Monthly
9	Updating information for employees who are about to retire to prepare minimum pension files B-3 before retirement	Monthly
10	Verifying employee retirement preparation proposal files	Monthly
11	Creating an AMS letter for submitting employee pension documents	Monthly
12	Uploading PLN Nusantara Power Center Content to Unit Social Media	Weekly
13	Social Media Content Creation Unit	Weekly
14	Creating a Communication Monitoring Report	Monthly
15	Preparation of CSR/TJSL Program Action Plan	Annual
16	Implementation of CSR/TJSL Programs	Monthly
17	Creating a CSR / TJSL Program Monitoring Report	Monthly
18	Monitoring & Evaluation of Non-Shift Employee Absences	Weekly
19	Monitoring & Evaluation of Shift Employee Attendance	Weekly
20	Preparation of the realization of JKP (Number of Employee Attendance) for employees	Monthly

No	Job description	Period
21	Carrying out Reconciliation of the General and CSR program implementation process	Monthly
22	Verifying the completeness of employee SPPD proposal files	Weekly
23	Upload Employee SPPD	Weekly
24	Monitoring employee SPPD	Weekly
25	PLN 1 Information Update on WAG unit	Daily
26	Webinar information updates on WAG Units	Weekly
27	Update on National COC Material Information in WAG unit	Weekly
28	Update monitoring Check in COC on the Command Application per section in the WAG Unit	Weekly
29	Verifying the application letter for PKL (Field Work Practice) / Industrial Visits for Students and College Students	Monthly
30	Reply to the letter of request for PKL (Field Work Practice) / Industrial Visit from Students/I and Students/I	Monthly
31	Making a letter of completion of PKL / Industrial Visit for Students and College Students	Monthly
32	Making PKL Certification / Industrial Visits for Students and College Students	Monthly
33	Making an activity plan for the Coffee Morning event	Monthly
34	Employee handover ceremony	Semester
35	Delivering information about major activities to all employees via the unit's WhatsApp group	Semester
36	Preparing facilities and infrastructure for activities in the Unit	Semester
37	Making and installing banners to commemorate National Holidays	Monthly
38	Preparing the facilities, infrastructure and consumption needs for External Meetings	Weekly
39	Create premium templates for operator, maintenance, on-call and other duties	Monthly
40	Sending Premium template proposal via email	Monthly
41	Create a work contract RAB for Power Experts and MOU with external parties specifically for the Business Support section.	Annual

No	Job description	Period
42	Monitoring of Maintenance and Repair of Office Building Facilities	Daily
43	Physical and Spiritual Wellbeing Facilitator	Weekly

Finance Officer

The following table describes the job description of the Finance Officer and the period for which the tasks are carried out:

No	Job description	Period
1	Preparing a Petty Cash Limit Request Letter	Monthly
2	Prepare a Power of Attorney to withdraw Petty Cash	Monthly
3	Withdrawing Petty Cash to the Bank	Monthly
4	Preparing billing files	Daily
5	Prepare a Payment Request Letter	Weekly
6	Bill Payment to Bank	Weekly
7	Bridging Bills paid to the system	Daily
8	PBPO, PBLs, PNPO bill verification	Daily
9	Return of Petty Cash to the Center	Daily
10	Bridging Petty Cash unit into the system	Weekly
11	Preparing PBPO, PBLs, PNPO Bill Recapitulation	Daily
12	Preparing GTKW Bill Summary	Daily
13	Preparing a Health Bill Summary	Daily
14	Preparing SPPD & RSPPD Bill Summary	Daily
15	Preparing PNPO Bill Status 2 to Status 4	Daily
16	Preparing PBLs Bills from Status 2 to Status 4	Daily
17	Preparing GTKW Bills from Status 2 to Status 4	Daily
18	Preparing Health Bills Status 2 to Status 4	Daily
19	Preparing RSPPD & SPPD Bills from Status 2 to Status 4	Daily
20	Invoicing bills in Ellipse	Daily

No	Job description	Period
21	Income Tax Recap from Online Tax	Monthly
22	PPN Recap from Psiap	Monthly
23	Reconciliation of Online Tax PPH and Ellipse	Monthly
24	VAT Reconciliation on Psiap and Ellipse	Monthly
25	Filling out the bupot template	Monthly
26	Upload the bupot template to PSiap	Monthly
27	Reconciliation of Bupot results and online tax results	Monthly
28	Download the approved Bupot	Monthly
29	Carrying out Reconciliation of the Unit's Financial Program Implementation Process	Monthly
30	Monitoring Budget Realization	Daily

Accounting Officer

The following table describes the job description of the Accounting Officer and the period for which the tasks are carried out:

No	Job description	Period
1	Entering transaction journals used for financial reporting into the system	Quarterly
2	Conducting an inventory of Fixed Assets and Non-Operating Fixed Assets (ATTB)	Annual
3	Create supporting working papers for financial reports	Monthly
4	Monitor every transaction entered into the system	Daily
5	Implementing ICOFR Reporting	Quarterly
6	Perform Service Entry on Service Bills	Daily
7	Recording fixed assets	Quarterly
8	Making financial reporting	Monthly
9	Conducting a Study on the Write-Off of Non-Operating Fixed Assets (ATTB)	Annual
10	Carrying out inventory and preparation of non-hazardous waste disposal reports	Annual

No	Job description	Period
11	Carry out the creation of Cost of Account (COA) for each section that requires it	Daily
12	Monitor each manual journal which is carried out every month	Monthly
13	Carrying out coordination regarding the input of Temporary Billing Amount (JTS) data	Monthly
14	Revising the Temporary Billing Amount (JTS) and Entering the Final Billing Amount (JTF) Journal	Monthly
15	Attending SCM meetings	Monthly
16	Monitoring transactions and gas fuel usage invoices	Monthly
17	Monitoring Administrative Costs	Monthly
18	Monitoring Maintenance Costs	Monthly
19	Monitoring the Similarity of Chart of Accounts with PRK Code	Monthly
20	Carrying out evaluation and preparation of reports on the basic cost of electricity supply (BPP)	Monthly
21	Submission of HSD Price and Exchange Rate Reports to the relevant sections every month	Monthly
22	Monitoring Lubricant Costs and Chemical Costs	Monthly
23	Carrying out Reconciliation of the Unit Accounting Recording Implementation Process	Monthly
24	Monitoring of Work in Progress (PDP)	Monthly
25	Updating Risk Control and Mitigation Progress in the I-care application	Monthly
26	Monitoring Fixed Asset Balance for each unit	Monthly
27	Preparing Supporting Data for Investment Work to be Asseted	Quarterly
28	Monitoring Material and Fuel Inventory Balances	Monthly

Procurement Officer

The following table explains the job description of the Procurement Officer and the period during which the tasks are carried out:

No	Job description	Period
1	Carry out all activity processes for Direct Procurement	Daily
2	Implementing the activity process for Open Auction	Daily
3	Enter bill verification into the Online Verification system	Daily
4	Monitoring of TKDN for each job to be contracted	Monthly
5	Monitoring and implementing archiving of Contracts and supporting documents	Monthly

Senior Officer of HR Performance, General & CSR

The following table explains the job description of the Senior Officer of HR, General & CSR Performance and the period for which the tasks are carried out:

No	Job description	Period
1	Ensure that HR and General administration tasks are in accordance with company policies to support the creation of an orderly and neat administration system.	Daily
2	Validate the RKAP for personnel costs in accordance with the management policy of the Generation Unit	Monthly
3	Verifying reports and brief analysis of the performance management system so that there is alignment between unit performance and individual employee performance and creates objectivity;	Monthly
4	Review and verify programs related to Stream People & Work Culture	Monthly
5	Ensure that secretarial and protocol administration activities are carried out according to company needs.	Daily
6	Review and ensure that the development of CSR programs is running well to support the creation of a positive company image and evaluate public relations activities.	Monthly
7	Ensure the implementation of risk identification and mitigation within its authority	Monthly

No	Job description	Period
8	Monitoring of Maintenance and Repair of Office Building Facilities	Daily

Senior Financial Performance Officer

The following table describes the job description of the Senior Financial Performance Officer and the period during which the tasks are performed:

No	Job description	Period
1	Verify the preparation of the Unit's annual budget and investment budget	Monthly
2	Verify the financial administration of the Generation Unit so that it runs according to and meets the provisions and principles regarding finance.	Daily
3	Verifying financial realization reports	Monthly
4	Evaluate physical progress reports and disbursements of Unit investments	Monthly
5	Monitoring operational budget control and compiling Unit Management Reports	Monthly
6	Conduct verification of processes related to payments, as well as monitoring the Unit's cash flow.	Monthly
7	Validate bank cash payment and receipt processes.	Monthly
8	Monitoring of notes, invoices and other financial documents	Monthly
9	Verify monthly and annual closings for financial reporting preparation	Monthly
10	Optimizing the management of tax debts, both VAT and Income Tax	Monthly
11	Ensure the implementation of risk identification and mitigation within its authority	Monthly
12	Monitoring fuel usage for Unit vehicles	Daily

Senior Manager Secretary

The following table describes the job description of the Senior Financial Performance Officer and the period during which the tasks are performed:

No	Job description	Period
1	Creating and Uploading Unit Petty Cash Invoices in Online Verification	Monthly
2	Monitoring Unit Incoming and Outgoing Mail	Daily

No	Job description	Period
3	Monitoring of the SK of the proposed team in each field	Monthly
4	Numbering and Monitoring of Work Minutes (BA)	Daily
5	Numbering and Monitoring of Employee Travel Assignment Letters	Daily
6	Numbering and Monitoring of Service Notes	Daily
7	Facilitator of equipment for activities and events Senior Manager in Unit	Daily

Workload Analysis

Load analysis involves measuring and calculating a company's workload. Effective working hours at PT PLN Nusantara Power Unit Generating Belawan in the Business Support division are set at a five-day week. These workdays run from Monday to Friday, with a total of 40 effective working hours. The following are the company's effective working days and hours.

- a. Monday – Thursday
08:00 - 16:30 (Working hours)
12:00 - 13:00 (Break)
- b. Friday
08:00 - 17:00 (Working hours)
12:00 - 13:30 (Break)

Effective working hours were calculated over a one-year period. The observed activities consisted of three categories: productive, unproductive, and personal activities. Observations were conducted during working hours, with observations taken every two minutes. The employee's effective working hours can be seen in the following table:

No	Month	Number Of Days (Days)	Sunday Holiday (Day)	National Holidays (Days)	Annual Leave (Days)
1	JANUARY	31	4	1	12
2	FEBRUARY	29	4	3	
3	MARCH	31	5	3	
4	APRIL	30	4	6	
5	MAY	31	4	5	
6	JUNE	30	5	2	
7	JULY	31	4	0	
8	AUGUST	31	4	0	
9	SEPTEMBER	30	5	1	
10	OCTOBER	31	4	0	
11	NOVEMBER	30	4	1	

No	Month	Number Of Days (Days)	Sunday Holiday (Day)	National Holidays (Days)	Annual Leave (Days)
12	DECEMBER	31	5	2	
TOTAL		366	52	24	12
TOTAL EFFECTIVE WORKING DAYS		278			

From the workday calculation in the table above, we can see that there are 366 days in a year in 2024. Of these 366 days, 52 are Sundays, 24 are national holidays, and 12 are annual leave. Therefore, the employee's effective workday is 278 days.

Data processing

Calculation of Working Hours for Business Support Employees

Observations of working time using the work sampling method are analyzed in the following table:

Business Support Field	Total Observations			Amount	Percentage			Total Percentage
	(2 MINUTES)			(TIME)	(%)			(%)
	PRO	TPR	PRI	TOTAL	PRO	TPR	PRI	
OFK	406	28	78	512	79%	5%	15%	100%
OFA	416	20	76	512	81%	4%	15%	100%
OFU	412	30	72	514	80%	6%	14%	100%
OFS	414	16	82	512	81%	3%	16%	100%
OFP	406	14	92	512	79%	3%	18%	100%
SOF SDM	390	16	106	512	76%	3%	21%	100%
SOF KEU	390	10	112	512	76%	2%	22%	100%
SSM	404	10	98	512	79%	2%	19%	100%
TOTAL	3238	144	716	-	632%	28%	140%	-
AVERAGE	404.75	18	89.5	512	79.01%	3.51%	17.47%	-

Information :

OFK : Finance Officer
OFA : Accounting Officer
OFU : General Officer & CSR
OFS : HR Officer
OFP : Procurement Officer
SOF SDM : Senior Officer of HR Performance, General & CSR
SOF KEU : Senior Officer of Financial Performance
SSM : Senior Manager Secretary

The number of employee observations in Table 4.10 can be seen in the Business Support Sector for productive activities ranging from 390 to 416 times. For unproductive activities ranging from 10 to 30 times and for personal activities ranging from 72 to 112 times. The average number of observations of employees in the Business Support sector for productive activities was 404.75 times or 79.01% and for unproductive activities was 18 times or 3.51%. Meanwhile, for personal activities it was 89.5 times or 17.47%. The use of personal and non-productive activities is still in accordance with the standards of Law No. 13 of 2003 where the use of allowance activities is 30% and for effective work activities is 70%. Based on the results of observations, it can be seen that employees carry out personal activities, usually in the form of praying, eating lunch or going to the toilet. Meanwhile, unproductive activities include talking with friends, some employees are late to the office or receiving phone calls.

Data Adequacy Test

Data sufficiency is used to test how many observations were made on work sampling. The following is a calculation of data sufficiency based on the number of observations of 8 Business Support employees: Confidence level = 95%, then $k = 2$ Accuracy level (s) = 5%

$$N' = \frac{\left(\frac{K}{s}\right)^2 (1-p)}{\dot{p}}$$

$$N' = \frac{\left(\frac{2}{0,05}\right)^2 (1-0,7901)}{0,7901}$$

$$N' = \frac{40^2 (0,2099)}{0,7901}$$

$$N' = 425,06 \text{ rounded up to } 425 \text{ observations}$$

Based on the results of the data sufficiency calculation, it can be concluded that the number of observations that have been carried out is sufficient compared to the theoretical number of observations, namely 512 observations for each employee where $N > N'$ (512 times > 425 times).

Data Uniformity Test

Data uniformity testing is conducted to check whether the data obtained is uniform and does not exceed the specified Upper Control Limit (UCL) and Lower Control Limit (LCL). Data uniformity testing is conducted using the proportion of Business Support employee activities. The Upper Control Limit (UCL) and Lower Control Limit (LCL) are calculated as follows:

$$BKA = \dot{p} + 3 \sqrt{\frac{\dot{p} (1-\dot{p})}{\dot{n}}}$$

$$BKA = 0.7901 + 3 \sqrt{\frac{0,7901 (1-0,7901)}{256}}$$

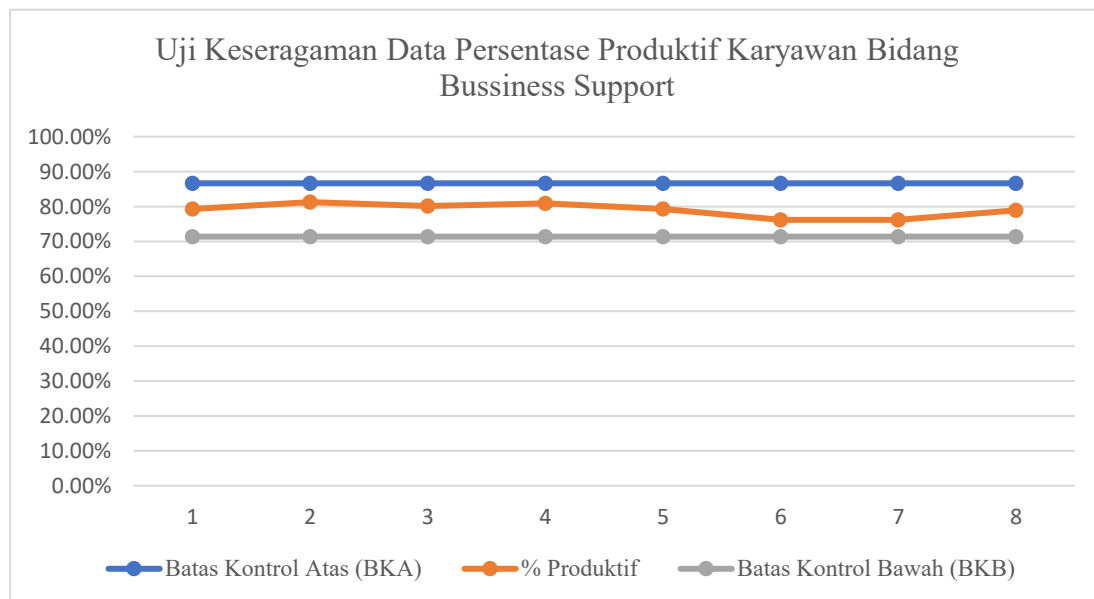
$$BKA = 0.7901 + 3 (0.02545)$$

$$BKA = 0.86645$$

$$BKA = 86.645\%$$

$$\begin{aligned} BKB &= \hat{p} - 3 \sqrt{\frac{\hat{p}(1-\hat{p})}{n}} \\ BKB &= 0.7901 - 3 \sqrt{\frac{0.7901(1-0.7901)}{256}} \\ BKB &= 0.7901 - 3(0.02545) \\ BKB &= 0.71375 \\ BKB &= 71.375\% \end{aligned}$$

In the control test for the uniformity of data, the percentage of productive employees in the Business Support sector can be seen in the following figure:



Based on the calculation of the Upper Control Limit (BKA) and Lower Control Limit (BKB) obtained, it can be seen that the level of data test control required is between the Upper Control Limit (BKA) and Lower Control Limit (BKB) so that the data is uniform.

Analysis of Number of Employee Needs

The analysis of staffing needs is conducted by calculating staffing needs based on workload using a task-by-job approach. Each work unit produces different results. The calculation steps are as follows:

a. Setting Working Hours

Determine effective working hours by calculating the number of days in a year, the number of Saturdays and Sundays in a year, the number of national holidays, and the number of employee days off in a year. Next, add the number of holidays and the number of employee days off to the number of Sundays to get the total number of days off or holidays. Subtract the number of holidays from the number of days in a year. The formula for calculating effective working hours is as follows:

Number of days according to the calendar in a year 366 days

Number of Sundays 52 days

Number of national holidays	24 days
Number of employee leave days	<u>12 days</u> -
Number of effective working days in one year	278 days

According to Law Number 13 of 2003, effective working hours are defined as official working hours minus lost working hours due to non-work (allowance) such as toilet breaks, rest breaks, meal breaks, etc. The average allowance is around 20% of formal working hours.

One working day = 8.5 working hours – 1 hour (break time)
= 7.5 hours

Effective time in one day = 80% x 7.5 hours = 6 hours

Productive time in one year = 278 days x 6 hours
= 1,668 hours

b. Arrange task completion time

To determine the total workload or output (BT) of all work units, a sample of the workload calculated over a year is used and the average task completion capability standard (SKR) for completing work in time units.

Task completion time (WPT) is measured in years. The calculation of task completion time can be seen in the following table:

Employee	No	Job description	BT (times/year)	SKR (Hour)	WPT
	1	Implementing the Hard Competency Assessment Program	1	37.5	37.5
	2	Implementing the Soft Competency Assessment Program	1	15	15
	3	Monitoring the Competency Certification Program	12	1	12
	4	Preparation of Certification Needs Identification	2	37.5	75
	5	Preparation of Learning Need Analysis and Individual Training Need	2	37.5	75
	6	Conducting Monitoring and Evaluation of PPK (Competency Needs Planning)	4	1	4
	7	Competency Acceleration Planning and Implementation (ACTION)	24	2	48
	8	Monitoring the Number of Development Person Days (HOP)	96	1	96
	9	Conduct performance planning input	12	37.5	450

**WORKLOAD ANALYSIS TO DETERMINE THE OPTIMAL
NUMBER OF EMPLOYEES AFTER THE HOLDING-
SUBHOLDING TRANSFORMATION IN THE BUSINESS ...**

April Yanto Wilsam Pasaribu et al

DOI: <https://doi.org/10.54443/sibatik.v4i10.3574>



Employee	No	Job description	BT (times/year)	SKR (Hour)	WPT
	10	Conducting a Strategic Awareness Survey	12	2	24
	11	Carrying out Industrial Relations Development (Employee Disciplinary Actions)	4	1	4
HR Officer	12	Carrying out Reconciliation of the HR program implementation process	10	75	750
	13	Implementing Bipartite LKS	12	1	12
	14	Planning and Implementation of Knowledge Asset Management (KS/COP/KC)	4	1	4
	15	Implementation of Succession Cadres and Expert Cadres	12	37.5	450
	16	Monitoring Top Talent and Expert Candidate Development Programs	12	1	12
	17	Implementing Corporate Culture Programs	12	37.5	450
	18	Carrying out Personnel Administration / Correspondence	278	0.5	139
	19	Monitoring the implementation of Retirement Training	12	1	12
	20	Implementation of Human Capital Data OCR	12	37.5	450
	21	Implementing Performance Realization input to all employees in the PMGM application	12	37.5	450
	22	Monitoring other PDP input (form of appreciation)	12	37.5	450
	23	Monitoring employee development program input on SAP SCDP	12	37.5	450
	24	Planning the needs of FTK transitional and ideal employees after subholding holding	4	2	8
	25	TAD needs planning	1	2	2
TOTAL ASSIGNMENT LOAD					4,480

Employee	No	Job description	BT (times/year)	SKR (Hour)	WPT
	1	Update employee dependent data on the template provided by the Head Office	48	1	48

**WORKLOAD ANALYSIS TO DETERMINE THE OPTIMAL
NUMBER OF EMPLOYEES AFTER THE HOLDING-
SUBHOLDING TRANSFORMATION IN THE BUSINESS ...**

April Yanto Wilsam Pasaribu et al

DOI: <https://doi.org/10.54443/sibatik.v4i10.3574>



Employee	No	Job description	BT (times/year)	SKR (Hour)	WPT
	2	Update BPJS Health for Employees/Employee Dependents on the template provided by the Head Office	48	1	48
	3	Update on proposed APLN cards for employees/employee dependents	48	1	48
	4	Send an update on the proposed creation of an APLN card for employees/employees' dependents via email.	48	0.5	24
	5	Updating employee/dependents' BPJS health insurance via email	48	0.25	12
	6	Employee Health Restitution Monitoring	24	1	24
	7	Upload Employee/Dependent's Eyeglass Restitution in Online Verification (VO)	24	0.5	12
	8	Updating PLN NP's Subscribed Clinics and Hospitals at the Unit Information Center	12	0.25	3
	9	Updating information for employees who are about to retire to prepare minimum pension files B-3 before retirement	12	0.25	3
	10	Verifying employee retirement preparation proposal files	24	2.5	60
	11	Creating an AMS letter for submitting employee pension documents	12	0.5	6
	12	Uploading PLN Nusantara Power Center Content to Unit Social Media	48	0.25	12
	13	Social Media Content Creation Unit	48	3	144
	14	Creating a Communication Monitoring Report	12	2	24
	15	Preparation of CSR/TJSL Program Action Plan	1	3	3
	16	Implementation of CSR/TJSL Programs	12	3	36
	17	Creating a CSR / TJSL Program Monitoring Report	12	2	24
	18	Monitoring & Evaluation of Non-Shift Employee Absences	48	2	96

**WORKLOAD ANALYSIS TO DETERMINE THE OPTIMAL
NUMBER OF EMPLOYEES AFTER THE HOLDING-
SUBHOLDING TRANSFORMATION IN THE BUSINESS ...**

April Yanto Wilsam Pasaribu et al

DOI: <https://doi.org/10.54443/sibatik.v4i10.3574>



Employee	No	Job description	BT (times/year)	SKR (Hour)	WPT
	19	Monitoring & Evaluation of Shift Employee Attendance	48	2	96
	20	Preparation of the realization of JKP (Number of Employee Attendance) for employees	12	2	24
	21	Carrying out Reconciliation of the General and CSR program implementation process	8	75	600
	22	Verifying the completeness of employee SPPD proposal files	96	2	192
	23	Upload Employee SPPD	96	1	96
	24	Monitoring employee SPPD	96	1	96
	25	PLN 1 Information Update on WAG unit	278	0.25	69.5
	26	Webinar information updates on WAG Units	96	0.25	24
General Officer & CSR	27	Update on National COC Material Information in WAG unit	48	0.25	12
	28	Update monitoring Check in COC on the Command Application per section in the WAG Unit	96	0.25	24
	29	Verifying the application letter for PKL (Field Work Practice) / Industrial Visits for Students and College Students	24	0.5	12
	30	Reply to the letter of request for PKL (Field Work Practice) / Industrial Visit from Students/I and Students/I	24	0.5	12
	31	Making a letter of completion of PKL / Industrial Visit for Students and College Students	12	0.5	6
	32	Making PKL Certification / Industrial Visits for Students and College Students	12	0.5	6
	33	Making an activity plan for the Coffee Morning event	12	3	36
	34	Employee handover ceremony	2	2	4
	35	Delivering information about major activities to all employees via the unit's WhatsApp group	6	0.25	1.5
	36	Preparing facilities and infrastructure for activities in the Unit	6	2	12

**WORKLOAD ANALYSIS TO DETERMINE THE OPTIMAL
NUMBER OF EMPLOYEES AFTER THE HOLDING-
SUBHOLDING TRANSFORMATION IN THE BUSINESS ...**

April Yanto Wilsam Pasaribu et al

DOI: <https://doi.org/10.54443/sibatik.v4i10.3574>



Employee	No	Job description	BT (times/year)	SKR (Hour)	WPT
	37	Making and installing banners to commemorate National Holidays	12	2	24
	38	Preparing the facilities, infrastructure and consumption needs for External Meetings	96	1	96
	39	Create premium templates for operator, maintenance, on-call and other duties	12	3	36
	40	Send Premium template proposal via email	12	0.25	3
	41	Create a work contract RAB for Power Experts and MOU with external parties specifically for the Business Support section.	35	3	105
	42	Monitoring of Maintenance and Repair of Office Building Facilities	278	2	556
	43	Physical and Spiritual Wellbeing Facilitator	96	2	192
TOTAL ASSIGNMENT LOAD					2,962

Employee	No	Job description	BT (times/year)	SKR (Hour)	WPT
	1	Preparing a Petty Cash Limit Request Letter	12	1	12
	2	Prepare a Power of Attorney to withdraw Petty Cash	12	0.5	6
	3	Withdrawing Petty Cash to the Bank	12	2	24
	4	Preparing billing files	2108	0.25	527
	5	Prepare a Payment Request Letter	48	1	48
	6	Bill Payment to Bank	48	3	144
	7	Bridging Bills paid to the system	2108	0.25	527
	8	PBPO, PBLs, PNPO bill verification	1516	0.5	758
	9	Return of Petty Cash to the Center	12	0.5	6
	10	Bridging Petty Cash unit into the system	48	1	48
	11	Preparing PBPO, PBLs, PNPO Bill Recapitulation	1516	0.25	379
	12	Preparing GTKW Bill Summary	404	0.25	101

**WORKLOAD ANALYSIS TO DETERMINE THE OPTIMAL
NUMBER OF EMPLOYEES AFTER THE HOLDING-
SUBHOLDING TRANSFORMATION IN THE BUSINESS ...**

April Yanto Wilsam Pasaribu et al

DOI: <https://doi.org/10.54443/sibatik.v4i10.3574>



Employee	No	Job description	BT (times/year)	SKR (Hour)	WPT
	13	Preparing a Health Bill Summary	67	0.25	16.75
	14	Preparing SPPD & RSPPD Bill Summary	121	0.25	30.25
Finance Officer	15	Preparing PNPO Bill Status 2 to Status 4	1313	0.25	328.25
	16	Preparing PBLs Bills from Status 2 to Status 4	203	0.25	50.75
	17	Preparing GTKW Bills from Status 2 to Status 4	404	0.25	101
	18	Preparing Health Bills Status 2 to Status 4	67	0.25	16.75
	19	Preparing RSPPD & SPPD Bills from Status 2 to Status 4	121	0.25	30.25
	20	Invoicing bills in Ellipse	1313	0.25	328.25
	21	Income Tax Recap from Online Tax	12	0.25	3
	22	PPN Recap from Psiap	12	0.25	3
	23	Reconciliation of Online Tax PPH and Ellipse	12	1	12
	24	VAT Reconciliation on Psiap and Ellipse	12	1	12
	25	Filling out the bupot template	12	0.25	3
	26	Upload the bupot template to PSiap	12	0.25	3
	27	Reconciliation of Bupot results and online tax results	12	0.25	3
	28	Download the approved Bupot	12	0.5	6
	29	Carrying out Reconciliation of the Unit's Financial Program Implementation Process	2	18	36
	30	Monitoring Budget Realization	278	1	278
TOTAL ASSIGNMENT LOAD					3,841

Employee	No	Job description	BT (times/year)	SKR (Hour)	WPT
	1	Entering transaction journals used for financial reporting into the system	12	7.5	90
	2	Conducting an inventory of Fixed Assets and Non-Operating Fixed Assets (ATTB)	1	150	150
	3	Create supporting working papers for financial reports	12	7.5	90

**WORKLOAD ANALYSIS TO DETERMINE THE OPTIMAL
NUMBER OF EMPLOYEES AFTER THE HOLDING-
SUBHOLDING TRANSFORMATION IN THE BUSINESS ...**

April Yanto Wilsam Pasaribu et al

DOI: <https://doi.org/10.54443/sibatik.v4i10.3574>



Employee	No	Job description	BT (times/year)	SKR (Hour)	WPT
	4	Monitor every transaction entered into the system	834	1	834
	5	Implementing ICOFR Reporting	4	37.5	150
	6	Perform Service Entry on Service Bills	550	0.25	138
	7	Recording fixed assets	4	1	4
	8	Making financial reporting	12	7.5	90
	9	Conducting a Study on the Write-Off of Non-Operating Fixed Assets (ATTB)	1	8	8
	10	Carrying out inventory and preparation of non-hazardous waste disposal reports	1	22.5	22.5
	11	Carry out the creation of Cost of Account (COA) for each section that requires it	278	0.5	139
	12	Monitor each manual journal which is carried out every month	12	3	36
	13	Carrying out coordination regarding the input of Temporary Billing Amount (JTS) data	12	1	12
Accounting Officer	14	Revising the Temporary Billing Amount (JTS) and Entering the Final Billing Amount (JTF) Journal	12	1	12
	15	Attending SCM meetings	24	2	48
	16	Monitoring transactions and gas fuel usage invoices	12	1	12
	17	Monitoring Administrative Costs	12	1	12
	18	Monitoring Maintenance Costs	12	1	12
	19	Monitoring the Similarity of Chart of Accounts with PRK Code	12	1	12
	20	Carrying out evaluation and preparation of reports on the basic cost of electricity supply (BPP)	12	1	12
	21	Submission of HSD Price and Exchange Rate Reports to the relevant sections every month	12	0.25	3
	22	Monitoring Lubricant Costs and Chemical Costs	12	1	12

**WORKLOAD ANALYSIS TO DETERMINE THE OPTIMAL
NUMBER OF EMPLOYEES AFTER THE HOLDING-
SUBHOLDING TRANSFORMATION IN THE BUSINESS ...**

April Yanto Wilsam Pasaribu et al

DOI: <https://doi.org/10.54443/sibatik.v4i10.3574>



Employee	No	Job description	BT (times/year)	SKR (Hour)	WPT
	23	Carrying out Reconciliation of the Unit Accounting Recording Implementation Process	10	75	750
	24	Monitoring of Work in Progress (PDP)	12	0.5	6
	25	Updating Risk Control and Mitigation Progress in the I-care application	12	1	12
	26	Monitoring Fixed Asset Balance for each unit	12	3	36
	27	Preparing Supporting Data for Investment Work to be Asseted	4	2	8
	28	Monitoring Material and Fuel Inventory Balances	12	1	12
TOTAL ASSIGNMENT LOAD					2,722

Employee	No	Job description	BT (times/year)	SKR (HOUR)	WPT
	1	Ensure that HR and General administration tasks are in accordance with company policies to support the creation of an orderly and neat administration system.	278	1	278
	2	Validate the RKAP for personnel costs according to Unit management policies	12	2	24
	3	Verifying reports and brief analysis of the performance management system so that there is alignment between unit performance and individual employee performance and creates objectivity;	12	2	24
Senior Officer of HR Performance, General & CSR	4	Review and verify programs related to Stream People & Work Culture	12	2	24
	5	Ensure that secretarial and protocol administration activities are carried out according to company needs.	278	1	278

**WORKLOAD ANALYSIS TO DETERMINE THE OPTIMAL
NUMBER OF EMPLOYEES AFTER THE HOLDING-
SUBHOLDING TRANSFORMATION IN THE BUSINESS ...**

April Yanto Wilsam Pasaribu et al

DOI: <https://doi.org/10.54443/sibatik.v4i10.3574>



Employee	No	Job description	BT (times/year)	SKR (HOUR)	WPT
	6	Review and ensure that the development of CSR programs is running well to support the creation of a positive company image and evaluate public relations activities.	12	2	24
	7	Ensure the implementation of risk identification and mitigation within its authority	12	1	12
	8	Monitoring of Maintenance and Repair of Office Building Facilities	278	2	556
TOTAL ASSIGNMENT LOAD					1,220
Employee	No	Job description	BT (times/year)	SKR (Hour)	WPT
	1	Verify the preparation of the Unit's annual budget and investment budget	12	1	12
	2	Verify the financial administration of the Generation Unit so that it runs according to and meets the provisions and principles regarding finance.	278	1	278
	3	Verifying financial realization reports	12	2	24
	4	Evaluate physical progress reports and disbursements of Unit investments	12	2	24
	5	Monitoring operational budget control and compiling Unit Management Reports	12	1	12
Senior Financial Performance Officer	6	Conduct verification of processes related to payments, as well as monitoring the Unit's cash flow.	48	1	48
	7	Validate bank cash payment and receipt processes.	48	1	48
	8	Monitoring of notes, invoices and other financial documents	48	1	48
	9	Verify monthly and annual closings for financial reporting preparation	12	1	12

**WORKLOAD ANALYSIS TO DETERMINE THE OPTIMAL
NUMBER OF EMPLOYEES AFTER THE HOLDING-
SUBHOLDING TRANSFORMATION IN THE BUSINESS ...**

April Yanto Wilsam Pasaribu et al

DOI: <https://doi.org/10.54443/sibatik.v4i10.3574>



Employee	No	Job description	BT (times/year)	SKR (HOUR)	WPT
	10	Optimizing the management of tax debts, both VAT and Income Tax	12	1	12
	11	Ensure the implementation of risk identification and mitigation within its authority	12	1	12
	12	Monitoring fuel usage for Unit vehicles	278	1	278
TOTAL ASSIGNMENT LOAD					808

Employee	No	Job description	BT (times/year)	SKR (Hour)	WPT
	1	Creating and Uploading Unit Petty Cash Invoices in Online Verification	360	3	1080
	2	Monitoring Unit Incoming and Outgoing Mail	278	0.25	69.5
Senior Manager Secretary	3	Monitoring of the SK of the proposed team in each field	12	1	12
	4	Numbering and Monitoring of Work Minutes (BA)	278	0.5	139
	5	Numbering and Monitoring of Employee Travel Assignment Letters	278	0.25	69.5
	6	Numbering and Monitoring of Service Notes	278	0.25	69.5
	7	Facilitator of equipment for activities and events Senior Manager in Unit	278	1	278
Total Workload					1,718

Employee	No	Job description	BT (times/year)	SKR (Hour)	WPT
	1	Carry out all activity processes for Direct Procurement	306	15	4590
	2	Implementing the activity process for Open Tender Procurement	26	75	1950
Procurement Officer	3	Enter bill verification into the Online Verification system	1516	0.5	758
	4	Monitoring of TKDN for each job to be contracted	332	0.5	166
	5	Monitoring and implementing archiving of Contracts and supporting documents	332	1	332
Total Workload					7,796

WPT Amount	25,546
-------------------	---------------

c. Calculation of the number of employees needed

The number of employees required can be calculated based on the data obtained from the previous stage, namely in table 4.11. After the effective working time available (WKE) and task completion time (WPT) data are obtained, the calculation of the number of employees required in the Business Support sector uses the Human Resources requirements formula as follows:

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

The following table is the result of calculating employee needs in the Business Support field:

NO	FIELD	POSITION DESIGNATION	WPT	WKE	EMPLOYEE REQUIREMENTS (WPT / WKE)	ROUNDING
1	<i>Business Support</i>	HR Officer	4,480	1,668	2.68	3
2	<i>Business Support</i>	General Officer & CSR	2,962	1,668	1.77	2
3	<i>Business Support</i>	Finance Officer	3,841	1,668	2.3	2
4	<i>Business Support</i>	Accounting Officer	2,722	1,668	1.63	2
5	<i>Business Support</i>	Senior Officer of HR, General Affairs & CSR	1,220	1,668	0.73	1
6	<i>Business Support</i>	Senior Finance Officer	808	1,668	0.48	1
7	<i>Business Support</i>	Senior Manager Secretary	1,718	1,668	1.02	1
8	<i>Business Support</i>	Procurement Officer	7,796	1,668	4.67	5

Workload Based on Full Time Equivalent

Calculations based on the Full Time Equivalent (FTE) method show that the workload of employees in the Business Support sector can be seen in the following table:

No	Field	Position Designation	Workload	Effective Working Time	Fte	Information
1	<i>Business Support</i>	HR Officer	4480	1668	2.68	<i>Overload</i>
2	<i>Business Support</i>	General Officer & CSR	2962	1668	1.77	<i>Overload</i>
3	<i>Business Support</i>	Finance Officer	3841	1668	2.3	<i>Overload</i>

4	Business Support	Accounting Officer	2722	1668	1.63	<i>Overload</i>
5	Business Support	Senior Officer of HR, General Affairs & CSR	1220	1668	0.73	<i>Underload</i>
6	Business Support	Senior Finance Officer	808	1668	0.48	<i>Underload</i>
7	Business Support	Senior Manager Secretary	1718	1668	1.02	<i>Inload</i>
8	Business Support	Procurement Officer	7796	1668	4.67	<i>Overload</i>

Calculation of employee workload using FTE in the table above, it can be seen that there are 5 sections with overload workload and 2 sections with underload workload and 1 section that falls into the Inload/Normal workload category.

Comparison of Employee Needs to Actual Conditions

Based on the calculations in the previous table, a conclusion can be drawn regarding the number of employees required based on the actual number of employees based on the workload. The following information is provided in the following table:

No	Field	Position Designation	Actual Number Of Employees	Employee Needs	Gap	Information
1	Business Support	HR Officer	1	3	-2	Not enough
2	Business Support	General Officer & CSR	2	2	-	In accordance
3	Business Support	Finance Officer	3	2	1	More
4	Business Support	Accounting Officer	1	2	-1	Not enough
5	Business Support	Senior Officer of HR, General Affairs & CSR	1	1	-	In accordance
6	Business Support	Senior Finance Officer	1	1	-	In accordance
7	Business Support	Senior Manager Secretary	1	1	-	In accordance
8	Business Support	Procurement Officer	4	5	-1	Not enough
TOTAL			14	17	-3	Not enough

The table above shows that the Business Support sector is short of 3 employees, with 2 HR Officers, 1 Accounting Officer, and 1 Procurement Officer. However, there is also a surplus of employees in the Finance Officer position.

Managerial Implications

Calculating employee needs based on workload measurements is the basis for human resource planning so that the Company's life cycle can grow and develop sustainably. In the

Business Support sector, with a total Task Completion Time (WPT) per year of 25,546 hours and Effective Working Time of 1,668 days, the number of employees needed for the Business Support sector is 17 people. More information based on the workload calculation using the FTE method can be seen in the previous table.

Regarding the existence of an overloaded employee workload, it does not mean that the Company takes the alternative of adding employees. The Company needs to review the job analysis for each position. Things that need to be reviewed include the description of the main tasks given to employees. For positions that experience a reduction in the number of employees due to the Holding Subholding program and experience an overloaded workload, the employee's workload can be given to other employees with the same competency whose workload is still underloaded or positions that need excess employees. For example, for the position of HR Officer which is calculated to be short of 2 employees, the workload of that position can be helped by employees with the positions of Senior Officer HR, General Affairs and CSR whose workload is underloaded, or Accounting Officer whose workload is categorized as overloaded and requires the addition of 1 employee. Part of the workload can be helped by the financial officer employee who is calculated to have an excess of 1 employee.

CLOSING

Conclusion

Based on the research results, the following conclusions can be drawn:

1. Calculating employee working hours begins with calculating effective working days and employee working hours. The calculation results in 278 effective working days and 1,668 effective working hours.
2. The use of time calculated using the work sampling method can be seen that the percentage for productive activities of employees in the Business Support field is 79.01%, for unproductive activities 3.51%, and personal activities is 17.47%. The productive activities of employees in the Business Support field of 79.01% are still above the Allowance limit according to the standard Decree of the Minister of Administrative Reform Number: KEP/75/M.PAN/7/2004 concerning Guidelines for Calculating Employee Needs Based on Workload in the Framework of Compiling Civil Servant Formations where the use of allowance activities is 30% and for productive activities is 70%.
3. After calculations, the actual number of employees in several positions does not match the ideal number of employees needed. This is indicated by the difference between the actual number of employees and the ideal number of employees needed of 3 people. This difference occurs because there are several positions that have a shortage of employees, including the HR Officer (2 employees), the Accounting Officer (1 employee), and the Procurement Officer (1 employee). However, there is also a surplus of employees, namely in the Finance Officer. Meanwhile, for several other staff positions, the calculations have been made in accordance with the needs and actual.

Suggestion

1. To optimize employee performance, the company needs to propose additional staff according to the calculation of the number of employees needed or the company can optimize existing employees by giving additional tasks to positions with underloaded workloads or positions with excess workloads, by helping or transferring some work from employees whose work is overloaded to employees whose work is underloaded with the same scope of work.
2. Further researchers are advised to conduct research using the NASA Task Load Index (NASA TLX) method or other calculations for comparison.

REFERENCES

- Ariyanti, S., & Yasmin, Z. (2018). Analisis Beban Kerja Pada Maintenance Bd-Check Dengan Metode Full Time Equivalent. *Jurnal Ilmiah Teknik Industri*.
- Brannick, M. T., Levine, E. L., & Morgeson, F. P. (2019). *Job and Work Analysis: Methods, Research, and Applications for Human Resource Management*. SAGE Publications.
- Dessler, G. (2020). *Human Resource Management*. New Jersey: Pearson.
- Handoko, T. H. (2019). *Manajemen Sumber Daya Manusia*. Yogyakarta: BPFE.
- Hasibuan, Malayu S.P. 2005. *Manajemen Sumber Daya Manusia*. Edisi Cetakan ketujuh. Jakarta: PT. Bumi Aksara.
- Hidayah, N. (2022). Pengaruh Deskripsi Pekerjaan terhadap Kepuasan Kerja Karyawan. *Jurnal Manajemen Sumber Daya Manusia*
- Irawati, Rusda dan Carrollina, Dini Arimbi. 2017. Analisis Pengaruh Beban Kerja terhadap Kinerja Karyawan Operator pada PT Giken Precision Indonesia. *Jurnal Inovasi dan Bisnis*.
- Kawiana, I Gede Putu .(2020) . *Manajemen Sumber Daya Manusia “MSDM” Perusahaan*. Denpasar: Unhi Press
- Ladjin, Litriani, Sahamony, Kusumaningrum, Maulina, Siregar, Hubbansyah, Solikin, Silitonga, Soeyatno, Asyari, Sinaga, A. (2022). *Manajemen Sumber Daya Manusia “Perspektif Pengembangan dan Perencanaan”* . Bandung: CV. Widina Medina Utama .
- Mahawati, Eni, dkk. (2021). *Analisis Beban Kerja dan Produktivitas Kerja*. Semarang: Yayasan Kita Menulis.
- Menteri Pendayagunaan aparatur negara (2004). Keputusan menteri pendayagunaan aparatur negara no. 75 tahun 2004. Keputusan Menteri Pendayagunaan Aparatur Negara No. 75 Tahun 2004.
- Rahman, M. & Setiawan, H. (2020). Pengaruh Beban Kerja terhadap Kepuasan Kerja Karyawan di Sektor Industri. *Jurnal Manajemen*.
- Rino, A. (2020) *Beban Kerja dan Stres Kerja*. Pasuruan: CV.Penerbit Qiara Media.
- Rivai, H. V. dan E. J. Sagala. 2009. *Manajemen Sumber Daya Manusia untuk Perusahaan dari Teori ke Praktik*. Jakarta: Rajawali Pers.

- Sari, R. & Rahardjo, B. (2020). Pengaruh Beban Kerja terhadap Kepuasan Kerja Karyawan. *Jurnal Manajemen Sumber Daya Manusia*.
- Sari, L. (2022). Dampak Restrukturisasi terhadap Beban Kerja dan Kebutuhan Karyawan. *Jurnal Manajemen Perusahaan*.
- Simanjuntak, M. (2020). Pengukuran Kebutuhan Karyawan dalam Organisasi. *Jurnal Manajemen*.
- Soleman, Aminah (2011). Analisis Beban Kerja Ditinjau Dari Faktor Usia Dengan Pendekatan Recommended Wight Limit, Universitas Pattimura, Ambon
- Sugiyono. (2019). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*. Bandung: Alfabeta
- Surya, D. (2021). Pelatihan dan Pengembangan Karyawan: Implikasi terhadap Kinerja. *Jurnal Pendidikan dan Pelatihan*.
- Tjiptono, F. (2020). *Teori Sistem dalam Manajemen*. Yogyakarta: Andi.
- Wibowo, A. (2021). Efisiensi Kerja Karyawan dan Pengaruhnya terhadap Produktivitas. *Jurnal Ekonomi dan Bisnis*.

**WORKLOAD ANALYSIS TO DETERMINE THE OPTIMAL
NUMBER OF EMPLOYEES AFTER THE HOLDING-
SUBHOLDING TRANSFORMATION IN THE BUSINESS ...**

April Yanto Wilsam Pasaribu **et al**

DOI: <https://doi.org/10.54443/sibatik.v4i10.3574>

