

# Analysis of Workload, Work Stress Through Motivation as an Intervening Variable on Employee Performance at PT. Eltran Indonesia

Yofa Nurman Sah Putra<sup>1</sup>, Muhammad Rojali<sup>2</sup>, Meita Novia<sup>3</sup>  
{yofanurman26@gmail.com<sup>1</sup>, rojali@borobudur.ac.id<sup>2</sup>, meitanovia@borobudur.ac.id<sup>3</sup>}

Universitas Borobudur<sup>1, 2, 3</sup>

**Abstract.** This study was directed to examine the effect of responsibility, work pressure and inspiration on representative execution at PT. In Indonesia, Eltrans. This is a quantitative study using a population and sample of 92 respondents. Total sampling is the technique method for choosing the sample. That's what the outcomes demonstrate: 1) Responsibility affects the exhibition of PT workers. Eltran Indonesia; 2) Employee performance at PT is significantly improved by workplace stress. Eltran Indonesia; 3) Work inspiration significantly affects the presentation of PT representatives. Eltran Indonesia; 4) Responsibility significantly affects representative execution through the work inspiration variable as a mediating variable at PT. Eltran Indonesia; 5) Work pressure significantly affects representative execution through the work inspiration variable as an interceding variable at PT. Eltran Indonesia.

**Keywords:** Workload, Work Stress, Motivation and Employee Performance

## 1 Introduction

Changes in the way of work at PT. Due to the Covid-19 pandemic, Eltran Indonesia has caused its employees to experience several problems. Where, employees of PT. Eltran Indonesia currently has to start working again in the office with an increased performance burden compared to before which could be done at home. Employees must adapt to new ways of working (new normal) by being present in the office and utilizing increasingly new technology.

This causes employees' workload to increase because they have to relearn the methods implemented by the company in the new normal period. These changes cause employees to experience work stress because they need to learn new things and new challenges, which also causes employee work motivation to decrease due to the employee's inability to bear the workload. Along with these problems, employee performance and work performance decreases because their thinking becomes more numerous and branched.

PT. Eltran Indonesia's employee experiences high performance loads, so they also feel work stress due to the increased workload after the new normal was implemented. This creates tension which results in decreased employee work motivation. Employee abilities that are lower than performance requirements will increase feelings of boredom, so leaders need to pay attention to several things to improve the company's performance goals.

Empirical studies regarding workload and work stress show very diverse results, thus creating various understandings. This has a bad impact on employees and the company because

it can eliminate their goals and be unable to fulfill all their needs when completing performance and improving work performance in one period of time [1]

In reality, in one month of work, employees work for 22 days without delays. However, quite a few employees arrive almost 21 days late and this is due to their high position. This problem creates discomfort and injustice which causes other employees to experience a decrease in work motivation. Injustice and seemingly different performance burdens make employees feel like they have to work hard. This causes a feeling of fatigue so that employees cannot maximize the performance they produce [2]

Every action from company members can provide a boost of strength to the achievements and performance of each employee. This is because it can create motivation that has an impact on both aspects. Employee motivation comes from the surrounding environment, so that it can create a desire to make efforts and a willingness to expend a high level of effort in achieving performance goals to meet individual needs [3]

The importance of knowing employee abilities can help the company in realizing company goals. The better the employee's achievements and performance will be able to increase the employee's performance targets to the maximum. This research can help companies improve employee achievement and performance and not ignore aspects of workload, work stress and employee motivation. That way, the company can evaluate the policies it implements within the company.

Increasing workload will result in employee work stress, so that employee work motivation will decrease. This will reduce employee concentration at work, resulting in employee performance decreasing. Stress at work is a psychological condition caused by various negative feelings about something. Employees who lose interest in their work will experience work performance, work performance and will avoid their work more.

## **2 Literature Review**

### **2.1 Workload**

Responsibility, to be specific a bunch of exercises that should be finished for each piece of the office or position holder in a specific time span [4]. Responsibility shows how much execution that should be finished in every organization position and is the aftereffect of duplicating the work volume and time standards [5]. The accompanying pointers in responsibility incorporate: [6]

1. The target achievement for each employee is everyone's view regarding the amount of performance achieved to complete all performance within a predetermined period.
2. Situations at work, including everything related to each person's perspective on the situation at work
3. Time utilization, namely, all the time used by each employee in all activities that are related to the performance process.
4. Performance standards are the basis that everyone has regarding work

### **2.2 Job Stress**

Work stress is a condition that causes a feeling of tension and influences the emotions, thought patterns and situations of each individual [7] Work stress or excessive work pressure

will have an impact on the quality and quantity of work produced by each employee [8]. The indicators of work stress are as follows [9]

1. Pressure at work is an aspect related to the performance of each individual which includes layout, physical location and working conditions
2. Role demands, are all things related to emphasizing the consequences of each individual as a benefit for the role carried out in each organization.
3. Pressure on each individual is pressure that arises from other employees.
4. Organizational structure, is a description of agencies used to explain the hierarchy in an organization
5. The leadership style in an agency in the management of the company they oversee can create an organizational climate that gives rise to feelings of tension, anxiety and fear

### **2.3 Work Motivation**

Motivation is a process that changes the energy in each person which can be seen from the emergence of reactions and feelings in achieving a goal [10]. Motivation can be a driving force that comes from within or outside each person who can control them in carrying out their work to meet their needs [11]. The indicators of motivation are as follows [12]:

1. Performance conditions are matters that are within the scope of employees and have an influence on carrying out their work.
2. Supervision, is a stage to provide certainty regarding all activities carried out and based on everything that has been planned.
3. Awards, are something given to each individual or group if they can achieve competitive excellence.

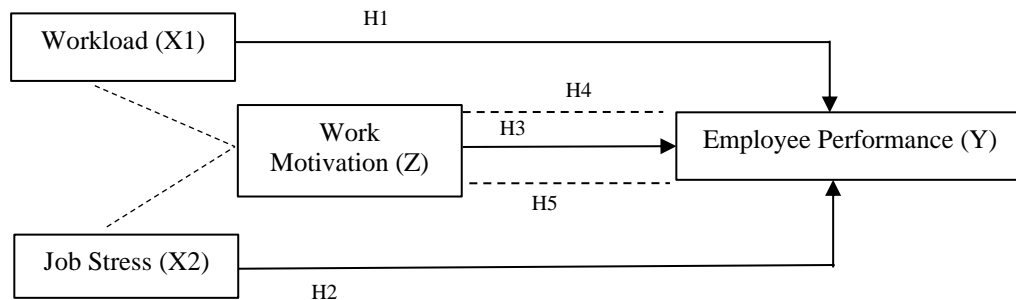
### **2.4 Employee Performance**

Employee performance is a result of the performance obtained by each individual or group in an organization [13]. Performance is one of the performance achievements both in terms of quantity and quality obtained by each individual in carrying out performance completion based on their respective responsibilities [14]. The performance indicators are as follows [15]:

1. Quality, is the result of measuring employees' assumptions regarding work results and whether or not employee performance is perfect.
2. Quantity, is several results which can be in the form of units, the sum of one stage that has been carried out by the employee
3. Suitability of performance time, is the level of activities that have been carried out since the beginning of time which is shown in terms of coordination with the final results and the maximum time available for other activities
4. Effectiveness, is the level of use of resources available in each agency and utilized optimally to provide an increase in the final gain for all purposes in utilizing existing resources.

### **2.5 Framework**

The framework in this research covers the problems contained in this research which consists of the free factors Responsibility (X1), Work Pressure (X2), Work Inspiration (Z), and the reliant variable Representative Exhibition (Y). The following is the framework for thinking in this research.



**Fig. 1.** Framework

The hypotheses in this research are as follows:

1. H1: There is a positive and significant influence between workload on the performance of PT employees. Eltran Indonesia
2. H2: There is a positive and significant influence between work stress on the performance of PT employees. Eltran Indonesia
3. H3: There is a positive and significant influence between work motivation on the performance of PT employees. Eltran Indonesia
4. H4: There is a positive and significant influence between workload on employee performance through PT work motivation. Eltran Indonesia
5. H5: There is a positive and significant influence between work stress on employee performance through PT work motivation. Eltran Indonesia

### 3 Research methods

Several research methods used in this research are as follows:

#### 3.1 Types of research

This research uses survey research, where research data is obtained from questionnaires distributed to respondents and is generally carried out by testing hypotheses. Researchers conducted research on employees of PT. Eltran Indonesia. The research approach used is a quantitative approach, where this research approach is carried out directly in the field, from the data obtained, then the researcher will carry out hypothesis testing using statistical analysis to obtain conclusions in the research [16]. The aim of this research is to determine the influence of the independent variables on the dependent variable.

#### 3.2 Research variable

The variables in this research are divided into two, namely the dependent variable and the independent variable. The following are the variables in this research:

1. Dependent Variable

The reliant variable is a variable that is impacted by the free factor. The reliant variable in this exploration is worker execution (Y)

2. Independent Variable

Variables that have an effect on the dependent variable are called independent variables. The factors in this examination are responsibility factors (X1) and work pressure (X2).

3. Intervening Variable

An intermediate variable between the independent and dependent variables is the intervening variable. The variable in this examination is the work inspiration variable (Z).

### 3.3 Data source

The data source is a subject for determining the data that will be used in research. The data sources in this research are as follows:

1. Primary Data

Primary data in this research was obtained directly and can then be processed by researchers to draw conclusions. Primary data in this research was obtained from questionnaires distributed to PT consumers. Eltran Indonesia.

2. Secondary Data

Secondary data is data obtained indirectly through documentation, reports, journals, etc. that can support this research.

### 3.4 Population, Sample and Sampling Technique

Population is a generalization area that includes objects and subjects in a research environment. In this study, using a population of all employees of PT. Eltran Indonesia with 92 employees is also the research sample, because the researcher used a saturated sample.

### 3.5 Data Collection Method

This research uses two data collection methods, namely questionnaires and documentation. A questionnaire is a method for collecting data in which respondents are asked to answer a series of questions [17]. The statements given in the questionnaire contain the variables contained in the research. The Likert scale is the measurement scale used in this study..

The value weights contained in the Likert scale are as follows:

**Table 1.** Measurement Scale

Value	Note
1	Strongly Disagree (STS)
2	Disagree (TS)
3	Neutral (N)
4	Agree (S)
5	Strongly agree (SS)

Meanwhile, documentation data collection techniques are data collection techniques that contain information from books, journals, documents, which can support research [9].

### 3.6 Data Analysis Techniques

The SmartPLS software used in this study, which is run on computer media, is used for data analysis. A variant-based structural equation analysis (SEM) known as PLS (Partial Least Square) is capable of simultaneously testing measurement models and structural models. The estimation model is utilized to test legitimacy and dependability. In the meantime, causality is tested using the structural model [18].

## 4 Results and Discussion

### 4.1 Description of Research Subjects

The description of the research subjects contains the characteristics of the respondents based on gender, age and highest level of education. The following is a summary of the description of the subject of this research:

**Table 2.** Respondent Characteristics

Respondent Characteristics		Amount	Percentage
Gender	Man	43	34,74%
	Woman	49	53,26%
Age	20 years – 25 years	28	20,43%
	26 years – 30 years	21	22,83%
	31 years – 35 years	10	20,65%
	> 35 years	24	26,09%
Length of working	1 – 3 years	29	31,52%
	4 – 6 years	38	41,30%
	> 6 years	25	27,17%
Last education	High School / Equivalent	19	30,65%
	Diploma	18	19,57%
	Bachelor	46	50%
	Magister	9	9,78%

### 4.2 Data Analysis

After collecting the necessary data, the next step is to carry out descriptive and statistical analysis to assess the validity and reliability of each research variable. This action aims to ensure data accuracy and consistency and to carry out complex research hypothesis testing. The results of this analysis are then used to summarize the findings and develop recommendations based on the research results. With this comprehensive data analysis approach, the quality and accuracy of the research can be maintained throughout.

#### 1. Evaluation of the Measurement Model

##### a. *Outer Model*

##### 1) Convergent Validity Test

Validity tests are used to assess the extent to which a research tool or measurement instrument can measure the variable being measured accurately and consistently.

In this research, the validity test was carried out on a small sample involving 30 data. Data is considered valid if the loading factor value exceeds 0.70. The following are the results of the validity and reliability tests for the small sample presented in the table.

**Table 3.** Convergent Validity

Variable	Workload	Job Stress	Work Motivation	Employee Performance
Workload	0,906			
	0,954			
	0,926			
	0,886			
Job Stress		0,827		
		0,877		
		0,901		
		0,884		
		0,833		
Work Motivation				0,921
				0,949
				0,923
Employee Performance				0,908
				0,923
				0,943
				0,881

Overall, the loading factor results for each variable have exceeded the value of 0.70 so they can be said to be valid.

2) Discriminant Validity Test

In the results of the convergent validity test, the results related to the Average Variance Extracted (AVE) for all variables show a value higher than 0.50, so it can be stated that the variables above are in accordance with the basis of the convergent validity test. The convergent test results are presented in the following table:

**Table 4.** AVE Result

Variable	AVE	Decision
Workload	0,843	Valid
Job Stress	0,748	Valid
Work Motivation	0,867	Valid
Employee Performance	0,836	Valid

3) Reliability Test

Composite reliability is considered to have a better value in providing estimates of internal consistency for each construct. It can be said to meet the requirements if the composite reliability figure exceeds the baseline, namely 0.6 and the figure resulting from Cronbach's alpha also exceeds 0.6. Composite reliability is a measurement related to the actual accuracy or reliability of each variable, while

the Cronbach's alpha measurement is carried out to determine the lowest reliability value for each variable.

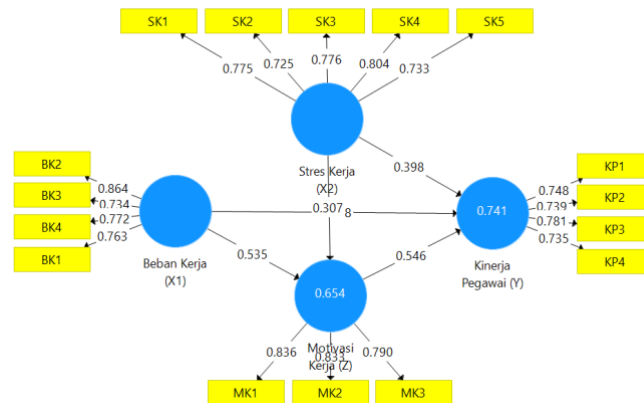
**Table 5.** Reliability Test

Variable	Composite Reliability	Cronbach's Alpha	Decision
Workload	0,956	0,938	Reliabel
Job Stress	0,937	0,915	Reliabel
Work Motivation	0,951	0,923	Reliabel
Employee Performance	0,953	0,934	Reliabel

b. Structural Model Test

1) *Inner Model*

The following is a picture of the SEM=PLS model from the results of the relationship between each independent variable and the dependent variable:



**Fig. 2.** Inner Model

2) *R-Square*

In evaluating the underlying model, first survey the R-Square for each endogenous dormant variable as the prescient force of the primary model. In this study, the R-Square results are as follows:

**Table 6.** R-Square result

Variable	R <sup>2</sup>	R <sup>2</sup> Adjusted
Work Motivation	0,654	0,647
Employee Performance	0,741	0,732

The R-Square (R2) figure for work motivation from measuring the coefficient of determination is 0.654, or 65.4%. This indicates that the workload and work stress variables have a 65.4% influence on work motivation, while other factors outside of the research influence the remaining 34,6%. Meanwhile, the R2 performance value is 0.741, or 74.1 percent. This indicates that the variables workload and work stress have a 74.1 percent impact on employee performance, while other variables account for the remaining 25.9 percent.



3) *Predictive Relevance (Q<sup>2</sup>)*

The predictive relevance test is carried out to carry out analysis on each variable to predict the research model well using the blindfolding method, to find out the results Q<sup>2</sup>. The predictive test results obtained are as follows:

**Table 7.** *Predictive Relevance Result*

Variable	Q <sup>2</sup>
Work Motivation	0,397
Employee Performance	0,374

Based on the predictive relevance test (Q<sup>2</sup>), it is known that the predictive relevance of work motivation is 0.397 and performance has a value of 0.374. Based on the results provided, it shows that work motivation and performance variables can provide predictions. The model in this research can predict the model studied well. This is because the results given produce a higher value than the number 0

2. Hypothesis Test

In the aftereffects of information examination, a clarification will be given in regards to the consequences of the speculation testing that has been done. The bootstrapping method and the numbers from t-statistics and p-values from path analysis between variables are used to test hypotheses.

**Table 8.** *Hypothesis Result*

Hypothesis		<i>Original Sample (O)</i>	<i>T Statistics</i>	<i>P Values</i>	Result
H1	X1→Y	-0,028	0,211	0,833	Rejected
H2	X2→Y	0,398	2,081	0,038	Accepted
H3	Z→Y	0,546	4,041	0,000	Accepted
H4	X1→Z→Y	0,292	2,535	0,012	Accepted
H5	X2→Z→Y	0,167	2,003	0,046	Accepted

**4.3 Discussion**

Based on the test results, the following analysis can be given:

1. The impact of responsibility on the exhibition of PT. Eltran Indonesia workers.  
Based on the test results, it shows that the workload variable has a negative and insignificant effect on the performance of PT employees. Eltran Indonesia. This is shown by the pvalues of  $0.833 > 0.05$ , so the first hypothesis in this study cannot be accepted.  
The performance standards or performance imposed on each job for employees can be formulated as a basis for the value of a performance result by calculating several aspects which include skills, work discipline, suitability of working time, quantity and quality when carrying out work. This can create a workload for employees. The many demands that burden employees at work mean that they must be able to work using multitasking methods, which have a basis that does not continuously provide positive work results. This makes employees not think about work performance because they tend to focus only on the performance results that they have to

complete. These results are not in line with Hamad, Agung dan Firdaus (2020) where workload has an influence on employee performance.

2. The impact of work weight on the exhibition of PT representatives. Eltran Indonesia The test results indicate that PT employees' performance is positively and significantly impacted by the work stress variable. In Indonesia, Eltran. This is shown by the pvalues of  $0.038 < 0.05$ , so the subsequent speculation in this study can be acknowledged.

In order to provide improvements to employee work, it is necessary to implement improvements in areas around the agency and work stress on worker execution. These outcomes are equivalent to the examination led Aprilia (2017) where work pressure emphatically affects nurture execution all the while, to some extent and altogether. Kartika and Haryani (2018) observed a similar effect of workplace stress on employee performance.

3. The effect of work motivation on PT employees' performance. Eltran Indonesia The test results indicate that PT employees' performance is significantly improved by the work motivation variable. In Indonesia, Eltran. This is shown by the pvalues of  $0.000 < 0.05$ , with the goal that the third speculation in this examination can be acknowledged.

Motivation will provide encouragement for employees who work diligently in completing all tasks that are their respective responsibilities. They will become more motivated and satisfied with their performance as well as increased ability to achieve their desires. The results of this research are the same as Aprilia (2017) where Work motivation has a positive impact on nurse performance, both partially and significantly. Kartika dan Haryani (2018) come by comparable outcomes where inspiration affects worker execution.

4. The impact of responsibility on representative execution through work inspiration as a mediating variable PT. Eltran Indonesia In view of the experimental outcomes, it shows that the responsibility variable affects representative execution through the work inspiration variable as an intervening variable at PT. Eltran Indonesia. This is shown by the pvalues of  $0.012 < 0.05$ , so that the fourth hypothesis in this research can be accepted.

In this case, a moderate workload can increase employee work motivation. An appropriate workload can provide challenges that trigger employee intrinsic and extrinsic motivation. This encouragement then leads to increased employee performance. However, it should be noted that workloads that are too high can cause fatigue and decreased motivation, which in turn can reduce performance.

5. The impact of work weight on representative execution through work inspiration as a mediating variable PT. Eltran Indonesia The test results demonstrate that, as an intervening variable at PT, the work motivation variable has a positive and significant effect on employee performance. In Indonesia, Eltran. This is shown by the pvalues of  $0.046 < 0.05$ , so the fourth speculation in this examination can be acknowledged.

Work stress can increase work motivation if individuals perceive stress as a challenge that can be overcome and provide encouragement to improve performance. When individuals feel challenged, they may be more motivated to find solutions, improve skills, or overcome obstacles that arise.

## 5 Conclusion

In view of the outcomes over, the accompanying ends can be drawn:

1. The performance of PT workers is not significantly affected by work load. Eltran Indonesia
2. The performance of PT workers is significantly and positively impacted by work stress. Eltran Indonesia
3. Work inspiration meaningfully affects the presentation of PT representatives. Eltran Indonesia
4. Through the work motivation variable as an intervening variable at PT, workload has a positive and significant effect on employee performance. Eltran Indonesia
5. Work pressure significantly affects representative execution through the work inspiration variable as a mediating variable at PT. Eltran Indonesia

## References

- [1] R. S. and R. Hermawat, "Studi Beban Kerja dan Stres Kerja Berdampak Burnout pada Pekerja Pelaut Berkebangsaan Indonesia," *J. Saintek Marit.*, vol. 22, no. 2, 2021.
- [2] and K. S. W. N. Nugroho J. Setiadi, Gina R. Miftah, "Stres Kerja dan Motivasi Karyawan Lini Depan Serta Pengaruhnya terhadap Kepuasan Kerja : Kajian Empiris pada Beberapa Perusahaan Jasa Sub Sektor Industri Kreatif," *Pros. Semin. Nas.*, vol. 2, no. 4, pp. 231–243, 2016.
- [3] Gilang Pratama and Elistia, "Analisis Motivasi kerja, Kepemimpinan Transformasional dan Budaya Organisasi terhadap Kinerja Karyawan di Mediasi Kepuasan Kerja pada Angkatan Kerja Generasi Z," *J. Ekon. J. Econ.*, vol. 11, no. 2, pp. 144–152, 2020.
- [4] and S. C. Milafatul Qoyyimah, Tegoeh Hari Abrianto, "Pengaruh Beban Kerja, Stres Kerja dan Lingkungan Kerja terhadap Kinerja Karyawan Bagian Produksi PT. INKA Multi Solusi Madiun," *J. Ilm. Bid. Manaj. dan Bisnis*, vol. 2, no. 1, pp. 11–20, 2019.
- [5] and W. R. Jeky K R Rolos, Sofia A P Sambul, "Pengaruh Beban Kerja terhadap Kinerja Karyawan pada PT. Asuransi Jiwasraya Cabang Manado Kota," *J. Adm. Bisnis*, vol. 6, no. 4, 2018.
- [6] P. L. Moore and K. L. Lawrence, "The Essential Role of Human Service Nonprofits in Restorative Justice Policy Implementation," *Nonprofit Policy Forum*, Sep. 2023, doi: 10.1515/npf-2022-0040.
- [7] R. Ronaldo, H. Subiyantoro, M. Sidik, and D. Bahagia, "The Role of Energy Consumption and Fuel Export in Supporting the Country's Economic Growth," 2023. doi: 10.4108/eai.12-11-2022.2327313.
- [8] F. Dimas and Y. Yolanda, "Center Baznas Fundraising Method in Collecting Zakat, Infaq and Shodaqoh Funds," 2023. doi: 10.4108/eai.12-11-2022.2327268.
- [9] N. Ernasari, A. Budianto, and R. Sara, "Realizing An Effective Legal System in Handling Mayantara Crime (Cybercrime) in The Society 5.0 Era," 2023. doi: 10.4108/eai.6-5-2023.2333461.
- [10] T. Asmoro, R. Rodoni, and M. Meirinaldi, "Factors Affecting Export Performance Indonesian Fashion Creative Industry," 2022. doi: 10.4108/eai.30-10-2021.2315830.
- [11] F. Saputro, M. Hubeis, M. Sidik, and H. Subiyantoro, "Determinant of Economic Factors on Economic Growth in West Kalimantan Province 2011-2019," 2022. doi: 10.4108/eai.16-4-2022.2319724.
- [12] G. Hartatiyanto, A. Redi, and E. Israhadi, "Action Violation of Norm Conducted By The Hospital For Medical Action Refusal To Patients," 2023. doi: 10.4108/eai.6-5-2023.2333397.
- [13] A. Redi and N. Ernasari, "Efforts to Overcome Web-Based Phishing Crimes in the World of

- Cyber Crime,” 2023. doi: 10.4108/eai.28-10-2023.2341807.
- [14] S. Suparno and B. A. Hernowo, “Legal Analysis of the Use of Trademarks that have Similarities at Their Core or Entirely (A Study of Decision Number 55/Pdt.Sus-HKI/Merek/2022/PN Niaga Jkt.Pst),” 2023. doi: 10.4108/eai.28-10-2023.2341834.
- [15] N. Noerjanto, F. Santiago, and B. Nurdin, “Medical Legal Aspects of Kidney Failure Patients Treating Continuous Ambulatory Peritoneal Dialysis (CAPD) in Indonesia,” 2023. doi: 10.4108/eai.12-11-2022.2327284.
- [16] B. Nurdin and H. Heriyah, “Implementation of the Death Penalty in Efforts to Eradicate Criminal acts of Corruption,” 2023. doi: 10.4108/eai.28-10-2023.2341781.
- [17] E. Suhartini, Y. Nugraha, and S. Maryam, “Implementation of Legal Responsibility and Settlement of Drug Cases to Create Professional and Transparent Clean Performance,” 2022. doi: 10.4108/eai.16-4-2022.2319715.
- [18] I. Indriyani and Z. Fakrulloh, “The Effectiveness of Budget Absorption in Pandemic Response,” 2022. doi: 10.4108/eai.16-4-2022.2320072.