

## **The Influence of Business Management on the Optimization of Fixed Asset Management (Case Study at PT KAI (Persero) Regional Division I North Sumatera)**

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### **ABSTRACT**

*Asset management is one of the keys to successful management of the country's economy. Optimal asset management by prioritizing maximum asset performance on the one hand is expected to be able to increase the trust in state financial management from companies. However, there is still administrative disorder in the management of fixed assets in several BUMN companies. The aim of this study was to determine the effect of Asset Inventory, Legal Audit, Asset Appraisal, Asset Control and Monitoring on the Optimization of Fixed Asset Management (land and buildings) at PT KAI (Persero) Regional Division I North Sumatra. The population of this study are active (permanent) employees at PT KAI (Persero) Regional Division I North Sumatra. Selection of the sample using the Non-probability sampling method. The sample used in this study was 94 respondents. The analysis tool used is multiple linear regression test using a statistical tool in the form of SPSS for windows. The results of hypothesis testing indicate that Asset Inventory, Legal Audit have a positive and significant effect on the Optimization of Fixed Asset Management at PT KAI (Persero) Regional Division I North Sumatra. Meanwhile, Asset Valuation, Control and Supervision of Assets have a positive and not yet significant effect on the Optimization of Fixed Asset Management at PT KAI (Persero) Regional Division I North Sumatra. Simultaneous tests show the results that the variables Asset Inventory, Legal Audit, Asset Appraisal, Asset Control and Supervision together influence the Optimization of Fixed Asset Management.*

**Keywords :** *Asset Inventory, Legal Audit, Asset Valuation, Asset Control and Supervision and Optimization of Fixed Asset Management*

### **INTRODUCTION**

Globalization, digital technology, and liberalization have transformed the way companies manage their business activities. Companies faced with global competition need to develop effective management strategies to remain competitive, innovate, and follow market trends to enhance the value and function of company assets. The value and function of assets must align with the goals and governance strategies of the company to identify assets that have the potential to add value, use resources efficiently, manage operational risks, and most importantly, ensure a healthy asset market. Through policies outlined in the Regulation of the Minister of State-Owned Enterprises (BUMN PER-13/MBU/09/2014) on Guidelines for the Utilization of State-Owned Enterprise Fixed Assets, authority has been delegated to each company's board of directors to optimize the company's value by utilizing the fixed assets it owns or controls. PT Kereta Api Indonesia (Persero), as a state-owned enterprise providing land transportation services, leverages this authority to implement asset management and utilize its assets as a long-term source of revenue for the company. The authority it possesses pertains to how assets are managed effectively.

The Supreme Audit Agency of the Republic of Indonesia (BPK RI) believes that the supervision and control of State-Owned Property (BMN) are currently not effective, as highlighted in the BPK RI Audit Report on the Central Government's Financial Statements (LKPP) for the year 2015. This includes findings related to Fixed Assets controlled or used by other parties that do not conform to BMN management regulations due to issues with recording, administration, and reporting of inventory and fixed assets. Based on the above issues, there are several stages of asset management that can be undertaken to enhance the values of the assets owned, namely: (1) asset inventory, (2) legal audit, (3) asset appraisal, (4) asset supervision and control, and (5) asset optimization. If these five stages are executed effectively, they can provide significant benefits to the company in terms of improving efficiency, effectiveness, and adding value by maintaining assets in an orderly, accountable, and transparent manner.

Regarding asset optimization, it involves safeguarding assets to maximize their physical potential, location, value, quantity/volume, legality, and economic aspects. In this research, the focus will be on factors influencing the optimization of fixed assets (land and buildings), including asset inventory, legal asset audit, asset appraisal, and asset supervision and control at PT KAI (Persero) Regional Division I North Sumatera.

## **LITERATURE REVIEW**

### **Asset Management**

According to Suterdi (2009: 29), "The general definition of an asset is something that has economic value, commercial value, or exchange value, owned by a business entity, institution, or individual." According to Hastings (2010: 4), asset management is defined as follows: "Asset Management is the set of activities associated with identifying what assets are needed, identifying funding requirements, acquiring assets, providing logistic and maintenance support systems for assets, disposing or renewing assets so as to effectively and efficiently meet the desired objective."

### **Asset Inventory**

According to Siregar (2018: 518), "Inventory is a work process consisting of data collection, codification/labelling, grouping, and bookkeeping/administration in accordance with asset management goals." According to Siregar (2018: 518), asset inventory consists of two aspects: physical inventory and legal/juridical inventory. The physical aspect includes shape, size, location, volume/quantity, type, address, and others. The juridical aspect includes ownership status, legal issues, possession boundaries, and others. Inventory is also conducted to gather information related to assets.

### **Legal Audit**

Siregar (2018: 519) states that legal audit is a scope of asset management work that involves inventorying asset ownership status, ownership or transfer system and procedures, identifying and finding solutions to legal issues, and strategies to resolve various legal issues related to asset ownership or transfer. Common legal issues include weak ownership rights, assets controlled by others, unmonitored asset transfers, and others.

### **Asset Appraisal**

According to Siregar (2018: 518), appraisal is a work process for evaluating owned assets, determining the value of regional wealth, and setting prices for assets that are to be sold or leased. Many company assets are currently not valuable, making it difficult to use and utilize them effectively. As a result, asset appraisal should be carried out by a professional with expertise in valuation.

### **Asset Supervision and Control**

According to the Ministry of Home Affairs Regulation No. 17 of 2017 on the Technical Guidelines for the Management of Regional/State-Owned Goods, it defines supervision and control. Control is an effort or activity to ensure that work is carried out in accordance with the established plan. Supervision is an effort or activity to find out and assess the actual facts about the implementation of duties and/or activities, whether they are in accordance with legal regulations.

### **Optimization of Fixed Asset Management**

According to Siregar (2018: 774), the optimization of asset management is a work process aimed at optimizing the physical potential, location, quantity or volume, value, legal, and economic aspects of the assets owned. At this stage, the company's assets can be grouped into assets with potential and assets without potential.

## **METHODS**

The type of research used in this study is a quantitative research approach. According to Sugiyono (2019:16), quantitative research can be defined as a research method based on positivist philosophy, used to study a specific population or sample, data collection is done using research instruments, data analysis is quantitative and statistical in nature, with the aim of testing predetermined hypotheses. The objectives of quantitative research are to demonstrate the relationships between variables, test theories, and seek generalizations that have a perspective value from samples taken from a specific population. Data collection techniques involve observation (interviews, questionnaires, observations, or documentary studies).

## **RESULTS AND DISCUSSION**

### **Result**

#### **Multiple Linear Regression**

Analysis In this study, the hypotheses were tested using a multiple linear regression model to obtain a comprehensive overview of the influence of the variables: asset inventory, legal audit, asset appraisal, and asset supervision and control on the optimization of fixed asset management. Based on the data processing results using the SPSS program, the multiple linear regression results are as follows:

**Table 3. Multiple Linear Regression Analysis Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients		Sign.
	B	Std. Error	Beta	t	
1. (Constant)	20,181	6,725		3,001	,003
Asset Inventory (X <sub>1</sub> )	,577	,191	,328	3,018	,003
Legal Audit (X <sub>2</sub> )	,391	,177	,233	2,204	,030
Asset Appraisal (X <sub>3</sub> )	,129	,170	,069	,759	,450
Asset Supervision and Control (X <sub>4</sub> )	,093	,154	,073	,608	,545

a. Dependent Variable: Y

Based on the table above, the multiple linear regression equation is as follows:

$$Y = a + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$$

$$Y = 20.181 + 0.577X_1 + 0.391X_2 + 0.129X_3 + 0.093X_4 + \varepsilon$$

From the regression equation, the following can be observed:

- The regression constant value (a) of 20.181 indicates that when asset inventory, legal audit, asset appraisal, and asset supervision and control are all at zero ( $X = 0$ ), the dependent variable, optimization of fixed asset management at PT KAI (Persero) Regional Division I North Sumatra, is equal to 20.181.
- The coefficient of asset inventory ( $\beta_1$ ) is 0.577, which is positive. This means that when the instrument product variable ( $X_1$ ) increases by 1 unit while assuming the other variables are constant, the optimization of fixed asset management (Y) increases by 0.577. It can be concluded that asset inventory has a positive influence on the optimization of fixed asset management.
- The coefficient of legal audit ( $\beta_2$ ) is 0.391, which is positive. This indicates that when the instrument product variable ( $X_2$ ) increases by 1 unit while assuming the other variables are constant, the optimization of fixed asset management (Y) increases by 0.391. It can be concluded that legal audit has a positive influence on the optimization of fixed asset management.
- The coefficient of asset appraisal ( $\beta_3$ ) is 0.129, which is positive. This means that when the instrument product variable ( $X_3$ ) increases by 1 unit while assuming the other variables are constant, the optimization of fixed asset management (Y) increases by 0.129. It can be concluded that asset appraisal has a positive influence on the optimization of fixed asset management.
- The coefficient of asset supervision and control ( $\beta_4$ ) is 0.093, which is positive. This indicates that when the instrument product variable ( $X_4$ ) increases by 1 unit while assuming the other variables are constant, the optimization of fixed asset management (Y) increases by 0.093. It can be concluded that asset supervision and control have a positive influence on the optimization of fixed asset management.

### Partial Test Result

In hypothesis testing for the regression model, the degrees of freedom are determined

by the formula  $n-k$ , where  $n$  = the number of samples, and  $k$  = the number of variables (independent and dependent). Hypothesis testing with  $\alpha = 5\%$ , two-tailed testing, and the degrees of freedom ( $df$ ) =  $n-k = 94-5 = 89$  (at a significance level of 0.05) results in a  $t$ -table value of 1.987. Partial tests are conducted between each independent variable and the dependent variable, and the results are shown in the following table:

**Table 4. Results of t-Tests**

		Coefficients <sup>a</sup>			t	Sig.
		Unstandardized Coefficients	Standardized Coefficients	Beta		
Model		B	Std. Error			
1	(Constant)	20,181	6,725		3,001	,003
	Asset Inventory (X <sub>1</sub> )	,577	,191	,328	3,018	,003
	Legal Audit (X <sub>2</sub> )	,391	,177	,233	2,204	,030
	Asset Appraisal (X <sub>3</sub> )	,129	,170	,069	,759	,450
	Asset Supervision and Control (X <sub>4</sub> )	,093	,154	,073	,608	,545

Dependent Variable: Y

Based on the table above, the results of partial testing ( $t$ -test) clearly show the following:

1. Asset Inventory Variable (X<sub>1</sub>)

The  $t$ -value for the Asset Inventory variable (X<sub>1</sub>) is 3.018 with a significance level of 0.003, while the  $t$ -table value at  $\alpha = 0.05$  is 1.987. This indicates that the  $t$ -value (3.018) >  $t$ -table (1.987) and the significance value of 0.003 < 0.05, so  $H_0$  is rejected, and  $H_a$  is accepted.

2. Legal Audit Variable (X<sub>2</sub>)

The  $t$ -value for the Legal Audit variable (X<sub>2</sub>) is 2.204 with a significance level of 0.030, while the  $t$ -table value at  $\alpha = 0.05$  is 1.987. This indicates that the  $t$ -value (2.204) >  $t$ -table (1.987) and the significance value of 0.030 < 0.05, so  $H_0$  is rejected, and  $H_a$  is accepted.

3. Asset Appraisal Variable (X<sub>3</sub>)

The  $t$ -value for the Asset Appraisal variable (X<sub>3</sub>) is 0.759 with a significance level of 0.45, while the  $t$ -table value at  $\alpha = 0.05$  is 1.987. This indicates that the  $t$ -value (0.759) <  $t$ -table (1.987) and the significance value of 0.45 > 0.05, so  $H_0$  is accepted, and  $H_a$  is rejected.

4. Asset Supervision and Control Variable (X<sub>4</sub>)

The  $t$ -value for the Asset Supervision and Control variable (X<sub>4</sub>) is 0.608 with a significance level of 0.003, while the  $t$ -table value at  $\alpha = 0.05$  is 1.987. This indicates that the  $t$ -value (0.608) >  $t$ -table (1.987) and the significance value of 0.545 > 0.05, so  $H_0$  is accepted, and  $H_a$  is rejected.

### Simultan Test

The  $F$ -table value at  $df_2 = 89$  with a significance level of 5% (0.05) is 2.70. The  $F$ -value will be obtained using SPSS and then compared with the  $F$ -table at a 5% level of



significance ( $\alpha = 0.05$ ). The analysis was conducted between the independent variables and the dependent variable, and the results can be seen in the following table:

**Table 5. Results of the F-Test**

Model		Sum of Squares	ANOVA <sup>a</sup> df	Mean Square	F	Sig.
1	Regression	196,137	4	49,034	8,124	,000 <sup>b</sup>
	Residual	537,193	89	6,036		
	Total	733,330	93			

a. Dependent Variable: Optimization of Fixed Asset Management (Y)

b. Predictors: (Constant), Asset Supervision and Control (X<sub>4</sub>), Asset Appraisal (X<sub>3</sub>), Legal Audit (X<sub>2</sub>), Asset Inventory (X<sub>1</sub>)

Based on the data in the table, it is shown that the calculated F-value is 8.124 with a significance level of 0.000. Meanwhile, the critical F-value at a significance level ( $\alpha = 0.05$ ) is 2.70, where (calculated F > critical F). This indicates that the calculated F-value of 8.124 is greater than 2.70, and the p-value is less than 0.05 ( $0.000 < 0.05$ ). Therefore, it can be stated that the independent variables, Inventarisasi Aset (X<sub>1</sub>), Legal Audit (X<sub>2</sub>), Penilaian Aset (X<sub>3</sub>), and Pengendalian dan Pengawasan Aset (X<sub>4</sub>), together have a significant simultaneous influence on the dependent variable, Optimalisasi Pengelolaan Aset Tetap (Y), at PT KAI (Persero) Divisi Regional I Sumatera Utara.

## CONCLUSION

Based on the research results on the Influence of Asset Management on the Optimization of Fixed Asset Management at PT KAI (Persero) Divisi Regional I Sumatera Utara and the various explanations and analyses presented in the previous chapters, the author can conclude that:

1. The test results show that Inventarisasi Aset (X<sub>1</sub>) has a positive and significant partial effect on the Optimization of Fixed Asset Management at PT KAI (Persero) Divisi Regional I Sumatera Utara.
2. The test results show that Legal Audit (X<sub>2</sub>) has a positive and significant partial effect on the Optimization of Fixed Asset Management at PT KAI (Persero) Divisi Regional I Sumatera Utara.
3. The test results show that Penilaian Aset (X<sub>3</sub>) has a positive but not significant partial effect on the Optimization of Fixed Asset Management at PT KAI (Persero) Divisi Regional I Sumatera Utara.
4. The test results show that Pengawasan dan Pengendalian Aset (X<sub>4</sub>) has a positive but not significant partial effect on the Optimization of Fixed Asset Management at PT KAI (Persero) Divisi Regional I Sumatera Utara.
5. The test results show that the variables Inventarisasi Aset (X<sub>1</sub>), Legal Audit (X<sub>2</sub>), Penilaian Aset (X<sub>3</sub>), and Pengawasan dan Pengendalian Aset (X<sub>4</sub>) have a simultaneous effect on the Optimization of Fixed Asset Management at PT KAI (Persero) Divisi Regional I Sumatera Utara. Based on the analysis of the strength of the relationship between the dependent variable and the independent variable or the

analysis to determine how much the independent variables explain the dependent variable, it can be known that the adjusted R<sup>2</sup> coefficient is 0.267. This value means that 26.7% of the variation in Optimalisasi Pengelolaan Aset Tetap is not influenced by Penilaian Aset, while the remaining portion is influenced by other variables in this study.

## REFERENCES

- Averkamp, H. (2020). *Accounting Coach*. Retrieved. Diambil kembali dari <https://www.accountingcoach.com/accounting-topics>
- Ardiani, Susi. 2020. *Pengaruh Manajemen Aset terhadap Optimalisasi Pemanfaatan Aset Tetap Pemerintah Kota Palembang*. E-journalSemanticscholar.com diakses 29 Mei 2020.
- Hastings, N. A. J. 2010. *Physical Asset Management*. London: Springer.
- Kortelainen, H., Hanski, J., & Valkokari, P. 2020. *Advanced technologies for effective asset management - two cases in capital intensive branches*. IFACPapersOnLine, 53(3), 7-12.
- Ningsih, Suci. 2018. *Pengaruh Manajemen Aset terhadap Optimalisasi Pengelolaan Aset Tetap Pemerintahan Kota Palembang*. E-journal eprints.polsri.ac.id diakses 13 Juni 2019.
- Overly, M. R. (2016). *A Guide to IT Contracting: Checklists, Tools, and Techniques*. Auerbach Publications.
- Peraturan Pemerintah Nomor 27 Tahun 2014 Tentang Pengelolaan Barang Milik Negara/Daerah. Jakarta: Sekretariat Negara. Diambil kembali dari <https://peraturan.bpk.go.id/Home/Details/5464/pp-no-27-tahun-2014>
- Peraturan Menteri Dalam Negeri Nomor 19 Tahun 2019 Tentang Pedoman Teknis pengelolaan Barang Milik Daerah. Diambil kembali dari <https://peraturan.bpk.go.id/Home/Details/137669/permendagri-no-19-tahun-2016>.
- Peraturan Menteri BUMN PER-13/MBU/09/2014, tentang Pedoman Pendayagunaan Aset Tetap Badan Usaha Milik Negara. Diambil kembali dari <https://peraturan.bpk.go.id/Home/Details/146714/permen-bumn-noper13mbu092014-tahun-2014>.
- Peraturan Menteri Keuangan Nomor 96/PMK.06/2007 Tentang Tata Cara Pelaksanaan, Penggunaan, Pemanfaatan, Penghapusan dan Pemindahtanganan Barang Milik Negara. Diambil kembali dari <http://bmkn.bmkg.go.id>.
- Peraturan Menteri dalam Negeri No. 17 tahun 2007 tentang Pedoman Teknis Pengelolaan Barang Milik Daerah. Diambil kembali dari <https://peraturan.bpk.go.id/Home/Details/126378/permendagri-no-17-tahun-2007>.
- Peraturan Menteri Keuangan Nomor 244/PMK.06/2012 jo PMK Nomor 52/PMK.06/2016. tentang Tata Cara Pelaksanaan Pengawasan dan Pengendalian Barang Milik Negara. Diambil kembali dari BN.2012/NO.1352, jdih.kemenkeu.go.id : 10 hlm.
- Pohan, Vini. 2021. *Implementasi Manajemen Aset pada PT Pelabuhan Indonesia I (Persero)*. E-journal repository.umsu diakses 29 Juli 2021.
- Purba, Marisi P. 2013. *Akuntansi Keuangan. Aset Tetap dan Aset Tak Berwujud*.

- Yogyakarta: Graha Ilmu.
- Romney, Marshall B, Paul John Steinbart. 2015. *Sistem Informasi Akuntansi. Edisi 13*. Salemba Empat : Jakarta.
- Sangadah, Nur. 2019. *Pengaruh Manajemen Aset terhadap Optimalisasi Pengelolaan Aset Daerah pada Badan Keuangan Daerah Provinsi Kalimantan Selatan*. E-journal [ejournal.stiepancasetia.com](http://ejournal.stiepancasetia.com) diakses 10 September 2022.
- Sekaran, Uma. 2006. *Research Methods For Business: Metodologi Penelitian Untuk Bisnis, Buku 2*. Jakarta: Salemba Empat.
- Sholeh, Chabib, Heru Rochmansjah. 2010. *Pengelolaan Keuangan dan Aset Daerah Sebuah Pendekatan Struktural Menuju Tata Kelola Pemerintahan Yang Baik*. Bandung: Fokusmedia.
- Siregar, Doli D. 2018. *Manajemen Aset: Strategi Penataan Konsep Pembangunan Berkelanjutan secara Nasional dalam Konteks Kepala Daerah sebagai CEO's pada Era Globalisasi dan Otonomi Daerah*. Jakarta: Gramedia Pustaka Utama.
- Sugiana, A Gima. 2013. *Manajemen Aset Pariwisata*. Bandung: Guardaya Intimarta.
- Sugiyono. 2019. *Metode Penelitian & Pengembangan Research and Development*. Cetakan ke-28. Bandung: Alfabeta.
- Sutedi, Adrian. 1966;2009. *Implikasi hukum atas sumber pembiayaan daerah : dalam kerangka otonomi daerah / Jakarta : Sinar Grafika*.
- Vincentiar, Pradana. 2022. *Manajemen Aset: Pengertian, Tujuan, dan Fungsinya untuk Perusahaan*. Diambil kembali dari <https://klikpajak.id/blog/manajemen-aset/> diakses 10 Mei 2022.
- Wicaksana, Arif Harmono, Sari Yuniarti (2021), *Pengaruh Inventarisasi Aset, Penggunaan Aset, Pengamanan dan Pemeliharaan Aset Terhadap Optimalisasi Aset Tetap Tanah Melalui Pemanfaatan Aset Pada Pemerintah Kabupaten Malang*. E-journal [jurnal.unmer.ac.id](http://jurnal.unmer.ac.id). diakses 30 April 2020.
- Young, D. W. (2008). *Management Control in Non-profit Organizations Edition-0* .books. [google.co.id/books/about/Management\\_Control\\_in\\_Nonprofit\\_Organization](https://google.co.id/books/about/Management_Control_in_Nonprofit_Organization).