

# The Influence of Artificial Intelligence (AI) on Financial Reporting in Companies Listed on the Jakarta Islamic Index (JII)

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## ABSTRACT

Artificial Intelligence is a system that can imitate or even surpass human intelligence in completing certain tasks. AI has driven transformation in various sectors, including financial reporting. This research aims to determine the effect of implementing AI in financial reporting in companies listed on the Jakarta Islamic Index (JII). The data used in this research are in the form of company financial reports at JII, namely balance sheets and profit and loss reports. The method used is Artificial Intelligence with variable levels of efficiency, accuracy and data analysis.

This type of research is associative with an associative quantitative approach. The data collection technique is a documentation technique. The data analysis technique used is statistical analysis. This research processing uses a formula for efficiency level, accuracy level, data analysis level, and applicationEviews version 12 (X64). With 5 companies that have published financial report data for 3 consecutive years.

The research results obtained show 1) The level of efficiency does not have a significant influence on *Financial Reporting*, this is proven from the t-test carried out, where it is obtained equal to  $0.8439 > 0.05$ , then it can be concluded that H1 is rejected. 2) The level of accuracy has a significant influence on Financial Reporting. This is proven by the t-test carried out, where a value of  $0.0089 < 0.05$  is obtained, so it can be concluded that H2 is accepted. 3) The level of data analysis has a significant influence on Financial Reporting. This is proven by the t-test carried out, where a value of  $0.0011 < 0.05$  is obtained, so it can be concluded that H3 is accepted.

**Keywords:** Artificial Intelligence, Financial Reporting

## INTRODUCTION

*Financial Reporting* (Financial Reports) are the results of recording all financial transactions in the company. The company's finance department will process transaction data, either through manual methods or using the ERP (Enterprise Resource Planning) system that they have implemented.<sup>1</sup> However, the increasingly rapid development of technology and information requires that all professions must continue to develop efficient work methods to remain relevant and achieve their goals effectively. Likewise, the field of accounting, a branch of economics, studies various types of financial analysis. This is proven by the existence of Artificial Intelligence (AI) which is widely discussed in the accounting field.

<sup>1</sup> Toto Prihadi, Analisis Laporan Keuangan, ed. by Fajarianto (Jakarta: PT Gramedia Pustaka Utama, 2019).

*Artificial Intelligence* is intelligence that is integrated into a system that can be managed in a scientific context or can be referred to as AI, which is defined as the intelligence of a scientific entity. Artificial intelligence as the ability of a system to correctly interpret external data, learn from that data, and use that learning to achieve specific goals and tasks through flexible adaptation.<sup>2</sup> Such systems are usually referred to as computer intelligence because they are incorporated into machines or computers to perform functions comparable to those of humans.<sup>3</sup>

AI has been around in accounting for a long time, especially in financial reporting and auditing. According to research conducted by the University of Oxford in 2015, accountants accounted for 95% of job losses as machines took over the role of analyzing data and numbers. However, this same report found that as technology advances, some jobs are eliminated while others are created.<sup>4</sup>

AI is provided as the most innovative and powerful tool due to its benefits. This is the only tool or technology that is equal to human intelligence and whose results can be trusted. The development and application of AI is increasing every day and we are witnessing new roles for AI in various fields, which is causing dependence on AI to increase. The way AI works is similar to human abilities in processing information starting from receiving, storing, processing, deciding and modifying information in various forms. This phase is called the intelligence cycle in AI. The world's Big Four KAP, KPMG, has successfully implemented it by collaborating with IBM to use a cognitive system in the form of the Watson supercomputer. Watson applies machine-learning and AI technology. This technology can read thousands of pages of contracts and documents and summarize them quickly. It can also verify incoming and outgoing debit and credit data and then analyze the data to generate the required financial information.

AI is certainly very useful for workers in various fields. AI is a field of study regarding intelligent thoughts that can be used as a form of carrying out calculations.<sup>5</sup> AI can help a business to create effectiveness and efficiency. AI technology is also widely used in financial distress, financial fraud, stock market forecasting, and auditing.<sup>6</sup>

The use of AI in financial reporting has changed the way companies manage and report financial information, it has increased efficiency, accuracy, and the ability to analyze more complete data helps companies make better decisions. AI has become one of the leading technological innovations in recent years and has had a significant impact on various sectors, including the financial industry.

According to research conducted by I Putu Jordy Pratama Widiasa and I Putu Julianto (2021) entitled "The Effect of Implementing an Internal Control System and Accounting Information System Based on Artificial Intelligence on the Tendency of Fraudulent Financial Reporting (Empirical Study in Bali Star Hotels)" shows that there are positive and negative effects of implementing AI-based accounting information and internal control systems on the tendency of inaccurate financial reports in hotels.

This shows that the more people use AI-based accounting information systems, the fewer people make financial reporting errors, and vice versa. Using this system can help hotels avoid fraudulent financial reports.<sup>7</sup>

## METHOD

In this research, the author used associative quantitative research methods. Associative research is a type of research that utilizes existing data to search for and analyze causal relationships

<sup>2</sup> Andreas Kaplan and Michael Haenlein, 'Siri, Siri, in My Hand: Who's the Fairest in the Land? On the Interpretations, Illustrations, and Implications of Artificial Intelligence', *Business Horizons*, 62.1 (2019), 15–25.

<sup>3</sup> Mangapul Siahaan and others, 'Penerapan Artificial Intelligence (AI) Terhadap Seorang Penyandang Disabilitas Tunanetra', *Journal of Information System and Technology (JOINT)*, 1.2 (2020), 186–93.

<sup>4</sup> Oliver Griffin, 'How Artificial Intelligence Will Impact Accounting', ICAEW: *Economia*, 2019.

<sup>5</sup> Sarbjit and Sukhvinder Singh Singh, 'Artificial Intelligence', *International Journal of Computer Applications*, 6 (2010), 21–211 <<http://www.ijcaonline.org/volume6/number6/pxc3871413.pdf>>.

<sup>6</sup> Adrian Gepp and others, 'Big Data Techniques in Auditing Research and Practice: Current Trends and Future Opportunities', *Journal of Accounting Literature*, 40.1 (2018), 102–15.

<sup>7</sup> Jordy Pratama and I Putu Julianto, 'Pengaruh Penerapan Sistem Pengendalian Internal Dan Sistem Informasi Akuntansi Berbasis Artificial Intelligence Terhadap Kecenderungan Fraudulent Financial Reporting (Studi Empiris Pada Hotel Berbintang Di Bali)', *JIMAT (Jurnal Ilmiah Mahasiswa Akuntansi) Undiksha*, 12.1 (2021), 889–901.

between two or more variables between the independent variable and the dependent variable. Quantitative research, which originates from the philosophy of positivism, is used to investigate specific samples. This method involves the use of research instruments to collect data, which is then processed quantitatively or statistically to analyze, in an effort to prove the hypothesis that has been made.<sup>8</sup>

This research was conducted on companies listed in the Jakarta Islamic Index (JII). Which is accessed via the official website of the Indonesian Stock Exchange ([www.idx.co.id](http://www.idx.co.id)). The population in this research is companies registered in the Jakarta Islamic Index (JII) during 2021-2023, where after data processing there are 5 companies that are in the JII constituents during 2021-2023. The sampling technique in this research uses the Purposive Sampling technique, where the data to be used has gone through several certain considerations

## RESULTS

### 1. Description of Research Data

Data which used study this is data secondary form data report annual And price share Which published through website Exchange Effect Indonesia And *Yahoo Finance*. Data Which obtained will processed For get answer from formulation problem study, is efficiency level, accuracy level, data analysis level. Where object study This that is company Which including constituents *Jakarta Islamic Index* (JII) during 2022-2023. As much 5 company has become part from *Jakarta Islamic Index* (JII) during three year consecutive And Also fulfil criteria purposive sampling Which used researcher, among them as following.

Research Sample		
No.	Code	Issuer Name
1	CASH	Cashlez Worldwide Indonesia Tbk.
2	DMMX	Digital Mediatama Maxime Tbk.
3	GLVA	Galva Technologies Tbk.
4	HDIR	Hansei Davest Indonesia Tbk
5	EDGE	Indointernet Tbk.

Data Source: Website PT.Exchange Effect Indonesia

Study this use data report finance on company which registered in Jakarta Islamic Index (JII) as variable dependent which in measuring use efficiency formulas, accuracy, financial data analysis, and financial reports.

### 2. Variable X Data

#### a. Efficiency

With the same calculation, the efficiency values obtained for the 5 companies in the Jakarta Islamic Index (JII) 2021 to 2023 are as follows:

#### Efficiency Calculation Results

No	Company Code	Year	Total Shopping	Total income	Efficiency
1	CASH	2021	IDR 47,566,461,712	IDR 195,762,848,877	0.243
		2022	IDR 41,198,722,129	IDR 129,179,787,649	0.319
		2023	IDR 53,771,905,257	IDR 195,049,955,048	0.276
2	DMMX	2021	IDR 36,919,049,031	IDR 1,150,441,212,932	0.032
		2022	IDR 56,175,281,128	IDR 1,938,153,436,211	0.029
		2023	IDR 57,024,552,705	IDR 1,945,055,730,713	0.029

<sup>8</sup> Dr Sugiyono, 'Metode Penelitian Pendidikan Pendekatan Kuantitatif, Kualitatif Dan R&D', 2013.

3	GLVA	2021	IDR 132,814,000,000	IDR 1,749,414,000,000	0.076
		2022	IDR 104,491,000,000	IDR 2,326,621,000,000	0.045
		2023	IDR 144,833,000,000	IDR 2,061,598,000,000	0.070
4	HDIT	2021	IDR 3,495,736,401,649	IDR 3,489,291,713,032	1,002
		2022	IDR 4,139,398,691,506	IDR 4,116,139,186,770	1,006
		2023	IDR 2,196,841,900,486	IDR 2,154,529,760,201	1,020
5	EDGE	2021	IDR 504,135,000,000	IDR 629,831,000,000	0.800
		2022	IDR 644,379,000,000	IDR 587,766,000,000	1,096
		2023	IDR 764,015,000,000	IDR 950,409,000,000	0.804

Source : Results of efficiency calculations for 2021 to 2023

The data in table 4.2 above shows that PT CASH Tbk from 2021 to 2023 shows that total expenditure is relatively higher compared to total income in each year, resulting in fluctuations in efficiency, with relatively low efficiency values below 0.5. PT DMMX Tbk shows very low efficiency of around 0.03 annually, which means the company has much lower expenditure compared to its income, but still maintains a consistent ratio. PT GLVA Tbk has relatively low efficiency, showing a decrease in 2022 of 0.031 before increasing again in 2023 of 0.025, but remaining below 0.1. PT HDIT Tbk has an efficiency of slightly more than 1, which indicates that spending is slightly higher compared to the income generated, but this difference is very small. PT EDGE Tbk shows an efficiency close to 1, with the highest efficiency in 2022 worth 1.096, indicating that their spending is relatively comparable to the income generated in 2021 worth 0.800 and 2023 worth 0.804.

#### b. Accuracy

The accuracy formula uses the Altman calculation method Z-score here, there is five indicator from ratios finance Which can combined For see level of accuracy, that is capital Work shared total assets (working capital to total assets), profit detained shared total assets (retained earnings to total assets), profit before tax shared total assets (earnings before taxes to total assets), mark market securities shared with mark book debt (market value of equity to book value of liability), sale shared total assets (sales to total assets).

With the same calculation using Z-Score, the accuracy values obtained for 5 companies in the Jakarta Islamic Index (JII) 2021 to 2023 are as follows:

Accuracy Calculation Results (Z-score)

No	Company Code	Year	The calculation results					Z (Accuracy)
			X1	X2	X3	X4	X5	
1	CASH	2021	0.2985	0.0004	-0.1836	1.2657	1.2520	2.6331
		2022	0.0573	0.0006	-0.1353	2.7047	0.5720	3,1993
		2023	-0.0615	0.0002	-0.5454	1.2401	0.8479	1.4813
2	DMIMX	2021	0.8388	0.3819	0.7444	4.2463	1.0596	7.2709
		2022	0.7128	0.3721	0.0274	2.9808	1.7081	5.8012
		2023	0.4023	0.0602	-0.9925	2.0817	2.2409	3.7926
3	GLVA	2021	0.3538	0.1974	0.2740	0.3538	2.8244	4.0034
		2022	0.3770	0.2353	0.4207	0.3484	2.5280	3.9093
		2023	0.4284	0.3062	0.3618	0.4366	2.2127	3.7457
4	HDIT	2021	0.9740	0.0006	-0.0458	1.9122	7.5101	10.3512
		2022	0.9183	0.0015	-0.2141	8.3339	11.6105	20.6501
		2023	0.8719	0.0015	-0.4002	2.9211	6,1906	9.5850
5	EDGE	2021	0.2612	0.0016	0.4149	2.5899	0.4877	3.7555
		2022	0.1630	0.0001	0.4875	1.8424	0.5120	3.0050
		2023	-0.0431	0.0001	0.3925	0.7051	0.3490	1.4035

Source: Z-score calculation results for 2021 to 2023

The data in table 4.3 above can be seen at PT CASH Tbk with a fluctuating Z value (accuracy), with an increase in 2022 but a decrease in 2023 of 1,718. This indicates that despite improvements in 2022, 2023 shows signs of a decline in financial health. At PT DMMX Tbk, it shows a decrease in the Z value every year, an estimate of around 1.7391, although it is still quite high, which indicates stable but slightly deteriorating financial health. Meanwhile, PT GLVA Tbk has a relatively stable Z value with a slight decrease from 2021 to 2023, indicating fairly good financial health. Research at PT HDIT Tbk shows a very high Z value, especially in 2022, valued at 20.6501, which indicates very good financial health in that year. However, there will be a decrease in 2023. This is different from PT EDGE Tbk which shows a decrease in the Z value from year to year, with the lowest value in 2023 being 1.4035. This indicates a problem in financial health that needs to be addressed.

The description above provides an overview of the financial health of each company based on certain financial ratios and Z-score values. PT HDIT Tbk stands out with a very high Z (accuracy) score, indicating excellent financial health, while PT EDGE Tbk shows a significant decline, which may be worth noting.

### c. Data Analysis

With the same calculation, the analysis value of financial data for 5 companies in the Jakarta Islamic Index (JII) 2021 to 2023 is obtained as follows :

Data Analysis Calculation Results

No	Code Company	Year	Total Current Assets	Short Term Debt	Financial Data Analysis
1.	CASH	2021	IDR 86,702,245,453	IDR 48,150,583,189	1.8006
		2022	IDR 48,902,536,546	IDR 38,128,300,583	1.2826
		2023	IDR 60,879,949,460	IDR 72,653,325,590	0.8380
2.	DMMX	2021	IDR 851,351,704,159	IDR 92,444,835,607	9.2093
		2022	IDR 837,394,864,046	IDR 163,404,160,376	5.1247
		2023	IDR 473,901,489,726	IDR 182,935,487,210	2.5905
3.	GLVA	2021	IDR 566,833,000,000	IDR 384,203,000,000	1.4753
		2022	IDR 834,009,000,000	IDR 544,900,000,000	1.5306
		2023	IDR 844,310,000,000	IDR 511,720,000,000	1.6499
4.	HDIT	2021	IDR 387,817,408,606	IDR 10,707,632,905	36.2188
		2022	IDR 286,310,134,767	IDR 15,024,420,555	19.0563
		2023	IDR 287,216,031,994	IDR 34,341,152,046	8.3636
5.	EDGE	2021	IDR 494,923,000,000	IDR 218,194,000,000	2.2683
		2022	IDR 542,307,000,000	IDR 324,141,000,000	1.6731
		2023	IDR 583,322,000,000	IDR 681,223,000,000	0.8563

Source: Calculation results of financial data analysis for 2021 to 2023

Data from table above can be seen PT CASH Tbk showing a decrease in the current ratio from 1.8006 in 2021 to 0.8380 in 2023. This indicates that the company's ability to meet its short-term obligations with current assets has decreased significantly, especially in 2023, where the current ratio is below 1, indicating potential liquidity difficulties. PT DMMX Tbk showed a significant decrease in the current ratio from 9.2093 in 2021 to 2.5905 in 2023. Although the current ratio is still above 1, this decrease indicates a fairly large decline in the company's liquidity. Meanwhile, PT GLVA Tbk showed a relatively stable current ratio and increased slightly from 1.4753 in 2021 to 1.6499 in 2023. This shows an increase in the company's ability to meet its short-term obligations. In contrast, PT HDIT Tbk indicates a very high current ratio, although it has decreased from 36.2188 in 2021 to 8.3636 in 2023. However, this very high current ratio shows that the company has current assets that are much greater than long-term debt. in short, it indicates excellent liquidity. Research on PT EDGE Tbk shows

a decrease in the current ratio from 2.2683 in 2021 to 0.8563 in 2023. This decrease results in the company's ability to meet its short-term obligations decreasing significantly, with a current ratio below 1 in 2023, which indicates potential liquidity problems.

### 3. Variable Y Data

With the same calculation, the value of ROI (Return on Investment) for 5 companies in the Jakarta IslamicIndek (JII) 2021 to 2023 is obtained as follows :

ROI (Return On Investment) Calculation Results

No	Company	Year	Total Sales	Investment	ROI
1.	CASH	2021	IDR 194,050,514,379	IDR 9,948,865,623.00	18.50
		2022	IDR 128,979,803,706	IDR 9,326,204,114.00	12.83
		2023	IDR 194,879,027,696	IDR 2,177,543,087.00	88.49
2.	DMMX	2021	IDR 1,150,441,212,932	IDR 183,500,553,450.00	5.27
		2022	IDR 1,938,153,436,211	IDR 36,344,781,338.00	52.33
		2023	IDR 1,945,055,730,713	IDR 128,824,866,483.00	14.10
3.	GLVA	2021	IDR 1,749,414,000,000	IDR 32,864,000,000.00	52.23
		2022	IDR 2,326,621,000,000	IDR 43,613,000,000.00	52.35
		2023	IDR 2,061,598,000,000	IDR 28,542,000,000.00	71.23
4.	HDIT	2021	IDR 3,489,267,765,180	IDR 36,753,467,000.00	93.94
		2022	IDR 4,116,137,837,804	Rp -	0.00
		2023	IDR 2,154,529,401,286	IDR 8,500,000.00	253473.05
5.	EDGE	2021	IDR 619,942,000,000	IDR 433,193,000,000.00	0.43
		2022	IDR 822,222,000,000	IDR 280,421,000,000.00	1.93
		2023	IDR 950,409,000,000	IDR 698,059,000,000.00	0.36

Source: Return on Investment (ROI) calculation results for 2021 to 2023

Data from table above can be seen at PT CASH Tbk showing significant fluctuations in ROI from year to year. ROI decreases in 2022 compared to 2021, but increases in 2023. The increase in 2023 could be due to a significant reduction in investment while total sales remain high. PT DMMX Tbk experienced a significant increase in ROI from 5.27% in 2021 to 52.33% in 2022, although with a decrease in 2023. The high ROI in 2022 is most likely due to a large reduction in investment. However, increasing investment in 2023 leads to a decrease in ROI. Likewise, PT GLVA Tbk shows stability and increase in ROI from year to year, with ROI increasing from 52.23% in 2021 to 71.23% in 2023. This indicates good efficiency in the use of investment to generate sales. Research on PT HDIT Tbk shows an extraordinarily high ROI in 2023, however this data is likely unrealistic and could be caused by inaccurate recording or anomalies in investments. ROI in 2021 is quite high at 93.94%, but no investment was recorded in 2022. Meanwhile, PT EDGE Tbk shows low ROI from year to year, with ROI increasing slightly in 2022 but decreasing again in 2023. Large investment but ROI A low value indicates that the company may be inefficient in using investment to generate high enough sales.

### 4. Hypothesis Testing

#### a. Coeficient of Determinant ( $R^2$ )

Coefficient of Determination

MSE Root	20287.88	R-squared	0.897014
Mean dependent var	16929.14	Adjusted R-squared	0.794028
SD dependent var	65437.91	SE of regression	29698.42
Akaike info criterion	23.74010	Sum squared resid	6.17E+09
Schwarz criterion	24.11773	Log likelihood	-170.0508
Hannan-Quinn Criter.	23.73608	F-statistic	8.710066
Durbin-Watson stat	1.664851	Prob(F-statistic)	0.005303

Source: Results exercise data eviews version 12

Based on results test R2 on table show that mark Adjusted R-squared 0.794028 or as big as 79%. It means ability variable independent in study this influence variable dependent by 79%, whereas the rest as big as 21% explained by variable other outside research this.

**b. Partial test (t)**

Partial Test (t Test)				
Variables	Coefficient	Std. Error	t-Statistics	Prob.
C	118724.2	57502.41	2.064682	0.0778
X1	24003.22	117429.1	0.204406	0.8439
X2	-11417.95	3187.287	-3.582342	0.0089
X3	-7724.260	1453.292	-5.315010	0.0011

Source: Results exercise data eviews version 12

1) X1

Mark variable X1 to y equal to 0.8439 where  $> 0.05$ , so can withdrawn conclusion that H1 is rejected because X1 no effect to mark *financial reporting*.

2) X2

Mark variable X2 to y equal to 0.0089 where  $< 0.05$ , so can withdrawn conclusion that H2 accepted because X2 influential on the value of financial reporting.

3) X3

Mark variable X3 to y equal to 0.0011 where  $< 0.05$ , so can withdrawn conclusion that H3 is accepted because X3 influential to mark *financial reporting*.

**c. Simultaneous test (F)**

Simultaneous Test (F Test)

MSE Root	20287.88	R-squared	0.897014
Mean dependent var	16929.14	Adjusted R-squared	0.794028
SD dependent var	65437.91	SE of regression	29698.42
Akaike info criterion	23.74010	Sum squared resid	6.17E+09
Schwarz criterion	24.11773	Log likelihood	-170.0508
Hannan-Quinn Criter.	23.73608	F-statistic	8.710066
Durbin-Watson stat	1.664851	Prob(F-statistic)	0.005303

Source: Results exercise data eviews version 12

Based on results test simultaneous or in a way together show mark *Prob(F-statistic)* equal to 0.005303  $< 0.05$  so can concluded that hypothesis third accepted, Where variable efficiency (X1), accuracy (X2), and data analysis (X3) in a way together influential to variable (Y) namely financial reporting.

## DISCUSSION

### The Influence of Efficiency Levels on Financial Reporting in Companies Listed on the Jakarta Islamic Index (JII)

Efficiency means doing something quickly and correctly.<sup>9</sup> Efficiency is dynamic and requires continuous efforts to maintain and improve it. What is meant by efficiency level X1.

The results of research conducted by researchers at companies listed on the Jakarta Islamic Index (JII) regarding whether the level of efficiency affects financial reporting listed on the Jakarta Islamic Index (JII) for the 2021-2023 period. Results test Partial (test t) shows that there is a negative and insignificant influence between the level of efficiency on financial reporting registered in the Jakarta Islamic Index (JII) for the 2021-2023 period.

The results of this research are not in line with research conducted by Franycia Maria Pangkey, M

<sup>9</sup> Amirullah, Pengantar Manajemen, Cetakan Kedua, Graha Ilmu, Yogyakarta, 2011.

Furkan, and Edy Herman in 2019, Roida Pakpahan in 2021. This research states that AI has a positive influence on human life and consumer buying interest as measured through a digital expert system. Meanwhile, in this research, X1 (level of efficiency) has no effect on financial reporting company which registered in Jakarta Islamic Index (JII).

### **The Influence of Accuracy Levels on Financial Reporting in Companies Listed on the Jakarta Islamic Index (JII)**

Accuracy is the extent to which the consequences of estimates, calculations, or details correspond to precise values or standards.<sup>10</sup> What is meant by the level of accuracy is X2.

The results of research conducted by researchers at companies registered with the Jakarta Islamic Index (JII) regarding whether the level of accuracy affects financial reporting registered with the Jakarta Islamic Index (JII) for the 2021-2023 period. Results test Partial (test t) shows that the X2 value has a significant effect on financial reporting. The value of the beta coefficient X2 shows that there is a positive influence on the value of financial reporting.

The results of this research are in line with research conducted by Putri Ayunda Dipta Arviollisa, Arianis Chan, and Healthy Nirmalasari in 2021. This research states that AI has a positive effect on customer experience and accuracy in business operations. Meanwhile, in this research, X2 (level of accuracy) has an effect on financial reporting company which registered in Jakarta Islamic Index (JII).

### **The Influence of the Level of Data Analysis on Financial Reporting in Companies Listed on the Jakarta Islamic Index (JII)**

Financial statement data analysis is an effort to analyze the entity's financial condition, the entity's past work results and future estimates to determine the entity's performance to date and estimate it in the future.<sup>11</sup> What is meant by the level of data analysis is X3.

The results of research conducted by researchers at companies registered with the Jakarta Islamic Index (JII) regarding whether the level of data analysis influences financial reporting registered with the Jakarta Islamic Index (JII) for the 2021-2023 period. Results test Partial (test t) shows that the X3 value has a significant effect on financial reporting. The value of the beta coefficient X3 shows that there is a positive influence on the value of financial reporting.

The results of this research are in line with research conducted by Muhammad Abyan Ramadhana & Ananda Sabil Hussein in 2022 which stated that AI has a good influence and can make an impression on companies. However, this research is in contrast to research conducted by I Putu Jordy Pratama Widiasa & I Putu Julianto in 2021. This research states in the second hypothesis that the implementation of an AI-based accounting system has a negative effect due to things that tend to be fraudulent financial reporting. Meanwhile, this research states that X3 (level of data analysis) influences financial reporting in companies listed on the Jakarta Islamic Index (JII).

People Muslim very recommended For prevent irregularities and practice truth doing business, Which in explain to Surah An-Nisa verse 135. By applying sharia accounting principles, it can be seen from the meaning and interpretation of Surah An-Nisa verse 135. That accounting in sharia rules must fulfill 3 principles, namely accountability, the principle of justice and the principle of truth.

## **CONCLUSION**

This research aims to find out whether the level of efficiency, accuracy and data analysis influences financial reporting on company which registered in Jakarta Islamic Index (JII). With a research sample of 5 companies from 2021-2023. This research focuses on predicting AI using efficiency, accuracy and data analysis formulas. Based on the results of data analysis and hypothesis testing carried out using the R2 test, t-test, F test, the following conclusions can be drawn:

<sup>10</sup>Tedi, 'Perbedaan Akurasi Dan Presisi', 14 March, 2023 <<https://perbedaan.budisma.net/perbedaan-akurasi-dan-presisi.html>>.

<sup>11</sup> V Wiratna Sujarweni, 'Analisis Laporan Keuangan (Teori, Aplikasi Dan Hasil Penelitian). Yogyakarta' (PUSTAKA BARU PRESS. Susilo Wulandari, 2019).

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- A. The level of efficiency has no effect and is not significant in financial reporting for companies listed on the Jakarta Islamic Index (JII) from 2021 to 2023.
- B. The level of accuracy has no effect and is not significant in financial reporting for companies listed on the Jakarta Islamic Index (JII) from 2021 to 2023.
- C. The level of data analysis has no effect and is not significant in financial reporting for companies listed on the Jakarta Islamic Index (JII) from 2021 to 2023.

## REFERENCES

Amirullah, Introduction to Management, Second Edition, Graha Ilmu, Yogyakarta, 2011.

Bambang, R. (2001). *Basics Expenditure Company* Edition Fourth. Yogyakarta: BPFE.Darwin, Muhammad, Marianne Reynelda Mamondol, Salman Alparis Sormin, Yuliana Nurhayati, Hardi Tambunan, Diana Sylvia, and others, Quantitative Approach Research Methods (Media Sains Indonesia, 2021)

Dr. Darmawan, M.AB, Basics of Understanding Ratios and Financial Reports, ed. by SE Dini Maulana Lestari, Print 1 (Yogyakarta: UNY Press, 2020)

Drs. Danang Sunyoto, SH., SE., MM., Financial Report Analysis for Business, Print 1 (Yogyakarta: CAPS (Center of Academic Publishing Service), 2013)

Frihatni, Andi Ayu, Irmayanti Sudirman, and Frengky Mandacan, 'Analysis of Hospitality Financial Performance Due to the Covid-19 Pandemic', Mandala Education Scientific Journal, 7.3 (2021)

Gepp, Adrian, Martina K Linnenluecke, Terrence J O'Neill, and Tom Smith, 'Big Data Techniques in Auditing Research and Practice: Current Trends and Future Opportunities', Journal of Accounting Literature, 40.1 (2018), 102–15

Griffin, Oliver, 'How Artificial Intelligence Will Impact Accounting', ICAEW: Economia, 2019

Hamta, Firdaus, Book of Teaching Materials for Accounting Research Methods (Deepublish, 2015)

Iryanie, Emy, and Monika Handayani, Cost Accounting, ed. by Adi Pratomo, Cet. 1 (Banjarmasin: Poliban Press, 2019)

Kaplan, Andreas, and Michael Haenlein, 'Siri, Siri, in My Hand: Who's the Fairest in the Land? On the Interpretations, Illustrations, and Implications of Artificial Intelligence', Business Horizons, 62.1 (2019), 15–25

Kusumawati, Ririen, 'Human Artificial Intelligence (Artificial Intelligence); Future Dream Technology', ULUL ALBAB Journal of Islamic Studies, 9.2 (2008), 257–74

Luger, George F, Artificial Intelligence: Structures and Strategies for Complex Problem Solving (Pearson education, 2005)

Mahendra, Gede Surya, Daniel Adolf Ohyver, Najirah Umar, and Loso Judijanto, AI Technology Trends: Introduction, Theory, and Examples of Application of Artificial Intelligence in Various Fields, ed. by Efitra, Pe Printing (Jambi: Editorial, 2024)

Mahsun, Mohamad, 'Public Sector Performance Measurement', Yogyakarta: Bpfe, 2006

Manaseer, Sufian, and Suleiman Daood Al-Oshaibat, 'Validity of Altman Z-Score Model to Predict Financial Failure: Evidence from Jordan', International Journal of Economics and Finance, 10.8 (2018)

Marr, Bernard, and Matt Ward, Artificial Intelligence In Practice, ed. by Paulina Dewanti, Digi Edition (Jakarta: PT Elex Media Komputindo, 2021)

Parepare, IAIN, Guidelines for Writing Scientific Writing (Parepare, 2020)

Pasyarani, Lis, 'Revitalization of Accounting with the Application of Artificial Intelligence', Journal of Data Science, 3 (2) (2023)

Pratama, Jordy, and I Putu Julianto, 'The Effect of Implementing Internal Control Systems and Artificial Intelligence-Based Accounting Information Systems on the Tendency of Fraudulent Financial Reporting (Empirical Study of Star Hotels in Bali)', JIMAT (Scientific Journal of Accounting Students) Undiksha, 12.1 (2021 ), 889–901

Prihadi, Toto, Financial Report Analysis, ed. by Fajarianto (Jakarta: PT Gramedia Pustaka Utama, 2019)

Rahman, Ferry Fadzul, and Hendra Saputra, Artificial Intelligence in Health Services, ed. by Dwi Fadhila, Pe Printing (West Sumatra: Media Scholar Partner Team, 2023)

Ramadhana, Muhammad Abyan, and Ananda Sabil Hussein, 'The Effect of Using Artificial Intelligence on Customer Loyalty with Brand Image as a Mediating Variable', 2022

Raphael, Jon, 'How Artificial Intelligence Can Boost Audit Quality', CFO Magazine (CFO. Com), June, 15 (2015)

Sarip Muslim, S.Ag., MA, Sharia Financial Accounting, Edition 1 (Bandung: CV Pustaka Setia, 2015)

Siahaan, Mangapul, Christopher Harsana Jasa, Kevin Anderson, Melissa Valentino Rosiana, Satria Lim,

---

and Wahyu Yudianto, 'Application of Artificial Intelligence (AI) to Blind People with Disabilities', Journal of Information Systems and Technology (JOINT), 1.2 (2020) , 186–93

Singh, Sarjeet and Sukhvinder Singh, 'Artificial Intelligence', International Journal of Computer Applications, 6 (2010), 21–211 <<http://www.ijcaonline.org/volume6/number6/pxc3871413.pdf>>

Siyoto, Sandu, and Muhammad Ali Sodik, Basic Research Methodology (media publishing literacy, 2015)

Sugiyono, 'Quantitative Research Methods' (Bandung: Alfabeta, 2019)

Sugiyono, Dr, 'Quantitative, Qualitative and R&D Approach Educational Research Methods', 2013

Sujarweni, V Wiratna, 'Financial Report Analysis (Theory, Application and Research Results). Yogyakarta' (PUSTAKA BARU PRESS. Susilo Wulandari, 2019)

Tedi, 'The Difference between Accuracy and Precision', 14 March, 2023  
<<https://besar.budisma.net/beda-akurasi-dan-presisi.html>>

Tinabunan, Paulina, 'Vertical and Horizontal Analysis of the Financial Reports of PT Perkebunan Nusantara III (Persero) Medan', Management and Business, 2017, 134