

DO BIG DATA AND AUDITOR EXPERIENCE MATTER? ASSESSING FRAUD DETECTION WITH FORENSIC AUDITS AS A KEY MEDIATOR

Sugeng Riadi ¹, Vitra Desaina Ginting ²

Management and Business Department, Batam State Polytechnic¹²

ARTICLE INFO

Article history:

Received: 6th March 2025

Revised: 26th March 2025

Accepted: 10th April 2025

Keywords:

Big Data, Auditor Experience, Fraud Detection, Forensic Audit

Correspondence:

Sugeng Riadi

sugeng@polibatam.ac.id

ABSTRACT

With advancements in data technology and the growing complexity of financial fraud, questions arise about the impact of Big Data and auditor experience on effective fraud detection. This study delves into the role of Big Data and auditor expertise in enhancing fraud detection and the effectiveness of forensic auditing, focusing on forensic auditing's potential as a mediating factor. Surveying 157 government auditors from Indonesia's Audit Board, the Financial and Development Supervisory Agency, the Financial Services Authority, and the Inspectorate General of the Riau Islands Regency. Data was collected through questionnaires and analyzed via PLS-SEM using Smart-PLS 3. The findings indicate that Big Data and auditor experience significantly bolster fraud detection and forensic auditing. However, contrary to expectations, forensic auditing does not directly influence fraud detection nor serves as a mediator in the relationship between Big Data and auditor experience in fraud detection. These insights underscore the independent yet complementary roles of Big Data and auditor expertise in fraud detection practices.

How to cite (APA Style):

Riadi,Sugeng & Ginting , Vitra Desaina. (2025). Do Big Data and Auditor Experience Matter? Assessing Fraud Detection with Forensic Audits as a Key Mediator. *Jurnal Akuntansi*, 15(1), 41-50 <https://doi.org/10.33369/jakuntansi.15.1.41-50>

INTRODUCTION

According to data from the International Data Corporation (IDC) on Indonesia's Big Data analytics software market in 2022, the growth rate of Big Data analytics software reached 14.7%, up from 12.5% in the second half of 2021. In Indonesia, Big Data is utilized in the government sector, particularly in procurement, to prevent corruption by promoting transparency¹. The Association of Certified Fraud Examiners (ACFE) ranks Indonesia fourth in the number of fraud cases globally. Fraud cases in the financial services sector between 2018 and 2022 led to losses amounting to 123.5 trillion rupiahs². One significant fraud case occurred at Asabri Company, where the Audit Board of the Republic of Indonesia identified financial mismanagement and irregularities in investment fund management from 2012 to 2019, causing state losses of 22.78 trillion rupiahs³.

The bribery case involving four government auditors, in which the Corruption Eradication Commission seized 1.024 billion rupiah, has led to criticism regarding the effectiveness of internal oversight within the Auditor⁴. Consequently, auditor experience is crucial in detecting fraud, as more excellent experience enhances auditors' ability and proficiency in handling their tasks and audit activities. Auditor experience contributes significantly to improving audit quality.

¹ Accessible: [The Big Data Analytics Market in Indonesia Grew by 14.7 Percent in the First Half of 2022](#)

² Accessible [Various "Fraud" Cases Threaten Indonesia's Economy](#)

³ Accessible: [https://www.bpk.go.id/news/State Losses in the PT ASABRI Case Amount to Rp22.78 Trillion](https://www.bpk.go.id/news/State%20Losses%20in%20the%20PT%20ASABRI%20Case%20Amount%20to%20Rp22.78%20Trillion)

⁴ Accessible: [ICW Highlights BPK's Internal Oversight](#)

The government must take action against civil servants suspected of holding improper assets, as highlighted in the case involving a former official from the Directorate General of Taxes. In this case, forensic auditing was employed to investigate and prosecute individuals involved in fraud, embezzlement, or other financial crimes, making it an essential tool in supporting fraud detection efforts⁵.

A study by (Syahputra & Afnan, 2020), states that Big Data has a positively influences forensic auditing and fraud detection. This finding is supported by research conducted by (Handoko et al., 2022) which demonstrates that Big Data affects both fraud detection and forensic auditing. This study also finds that forensic auditing positively impacts fraud detection and is proven to act as a partial mediating variable. Additionally, (Priyadi et al., 2022) assert that forensic auditing positively influences fraud detection. Research by (Laloan et al., 2021), highlights that auditor experience significantly affects fraud detection.

This study explores whether the integration of Big Data analysis, combined with the depth of an auditor's expertise, significantly influences fraud detection accuracy. Additionally, it examines the role of forensic audits as a critical mediator in this process, providing insights into how forensic practices can enhance the ability to identify and analyze fraud. By assessing these factors, this research aims to provide a comprehensive understanding of the tools and skills that may strengthen fraud detection in a data-rich environment.

This study employs agency theory to support the research findings. Agency theory explains the conditions that lead to fraud within organizations. It posits that fraudulent behavior can be understood through economics, decision-making, and sociology (Meckling & Jensen, 1976). Therefore, competent and experienced auditors are essential for effective fraud detection (Sembiring & Widuri, 2023). Attribution theory explains the internal attribution of individual behavior and focuses on external attributions, such as the social environment. This theory is related to the variable of auditor experience as an internal factor and the external influences of situational pressure, time constraints, difficulties, and opportunities in the workplace (Rafnes & Primasari, 2020). Attribution theory is relevant to the variable of auditor experience as an individual behavior in fraud detection.

The fraud pentagon theory identifies five factors that contribute to fraud: pressure, opportunity, rationalization, competence, and arrogance. A sense of superiority over one's authority suggests that individuals with power within an organization can control internal controls and the organization itself (Priyadi et al., 2022). A high level of self-interest can drive individuals to commit fraud, believing their actions will go undetected. Therefore, this theory is related to auditor experience and big data in the context of fraud detection.

Previous studies have found that Big Data has a positive and significant impact on forensic auditing (Sembiring & Widuri, 2023); (Syahputra & Afnan, 2020); (Handoko & Rosita, 2022); (Surono, 2023), and that auditor experience also has a positive and significant influence on forensic auditing (Sembiring & Widuri, 2023). Experience refers to the auditor's ability to perform their duties and responsibilities; the more years of experience an auditor has, the more skilled they become in collecting evidence, presenting the obtained data, and being accountable for their tasks. The consistent application of Big Data by auditors enhances the effectiveness of forensic auditing in fraud detection.s

The results of previous studies indicate that forensic auditing has a positive and significant impact on fraud detection (Sembiring & Widuri, 2023); (Syahputra & Afnan, 2020); (Handoko & Rosita, 2022); (Priyadi et al., 2022); (Ma'rifah & Setiawan, 2022); (Rahmawati et al., 2021); (Surono, 2023), and Big Data also has a positive and significant impact on enhancing fraud detection (Pratiwi, Surya, & Djefris, 2023); (Syahputra & Afnan, 2020); (Handoko & Rosita,

⁵ Accessible: [ICW Highlights BPK's Internal Supervision](#)

2022); (Bandiyono, 2023); (Surono, 2023). Forensic auditing requires data collection, verification, analysis, and reporting. Forensic auditors should leverage strategies rooted in their knowledge, skills, and experience. They also need to excel across multiple disciplines, including accounting, information technology, and criminology. This broad expertise positions forensic auditing as one of the most powerful tools for aiding fraud detection and showcases its effectiveness in uncovering fraudulent activities (Sembiring & Widuri, 2023). Big Data expands the auditor's sources of information for fraud detection, aligning with agency theory, which supports that Big Data addresses agency problems and fraud within organizations. Big Data enhances data creation, visualization, and communication within internal teams in fraud detection. This demonstrates that Big Data effectively and efficiently detects fraud (Sembiring & Widuri, 2023).

Other studies have found that auditor experience has a positive and significant impact on fraud detection (Sembiring & Widuri, 2023); (Mannan et al., 2020); (Rahmawati et al., 2021); (Rafnes & Primasari, 2020); (Dewi Kusuma et al., 2021); (Wahyudi & Qintharah, 2023); (Welly et al., 2022); (Situmorang & Asmara, 2022); (Laloan et al., 2021). Auditor experience enhances and broadens their skill set, significantly influencing their ability to detect fraud. Furthermore, there is evidence that forensic auditing mediates the impact of auditor experience on fraud detection, as well as the influence of Big Data on fraud detection (Sembiring & Widuri, 2023). More excellent experience improves the auditor's expertise and enhances their skills in assessing fraud risk.

Based on the findings from previous studies, the following hypotheses are formulated:

- H₁: Big Data has a positive and significant effect on forensic auditing
- H₂: Auditor experience has a positive and significant effect on forensic auditing
- H₃: Forensic auditing has a positive and significant effect on fraud detection
- H₄: Big Data has a positive and significant effect on fraud detection
- H₅: Auditor experience has a positive and significant effect on fraud detection
- H₆: Forensic auditing mediates the effect of Big Data on fraud detection
- H₇: Forensic auditing mediates the effect of auditor experience on fraud detection

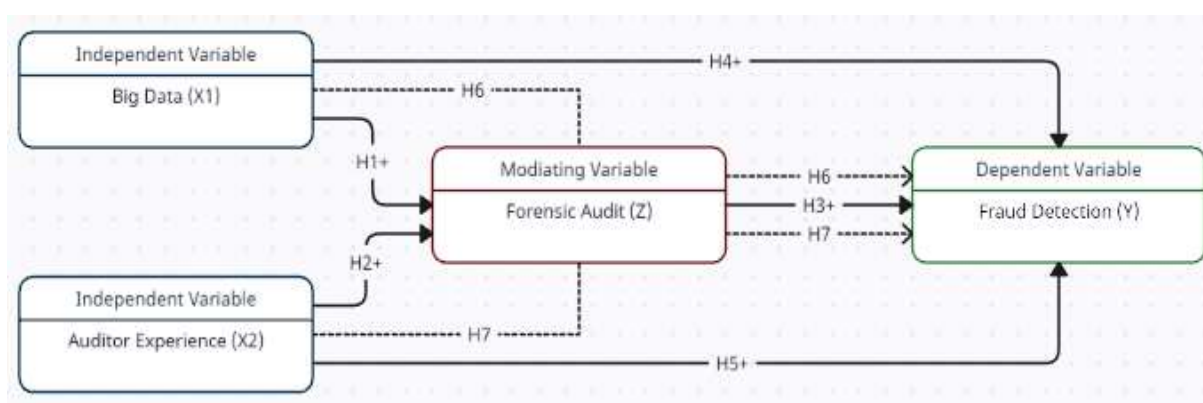


Fig 1 Research Framework
Source: Data Processed by the Researcher, 2024

RESEARCH METHODS

This study employs a quantitative research approach. The population consists of government auditors in Indonesia's Audit Board, the Financial and Development Supervisory Agency, the Financial Services Authority, and the Inspectorate General of the Riau Islands

Regency. Data was collected through a direct survey by distributing questionnaires to the respondents. The data collected includes responses from 157 government auditors.

The research variables consist of two independent variables: Big Data and auditor experience; one dependent variable, fraud detection; and one mediating variable, forensic audit. Big Data is measured by capability, knowledge, and role in Big Data (Rahman, 2023), Auditor experience is assessed by tenure as an auditor and the volume of audit assignments (Siregar, 2021). Fraud detection is measured by the level of implementation and regulatory violations (Sembiring & Widuri, 2023). Meanwhile, forensic audit is measured by auditor competence, forensic audit skills, and auditor neutrality (Syahputra & Afnan, 2020).

The questions in this questionnaire were adapted and developed based on relevant previous research. Questions regarding Big Data were sourced from (Rahman, 2023). Additionally, questions on auditor experience were drawn from (Siregar, 2021). Fraud detection items were taken from (Mislya, 2019) as were the questions regarding forensic audit.

This study employs the Partial Least Squares Structural Equation Modeling (PLS-SEM) method using Smart-PLS 3 software. Respondents provided answers on a 5-point Likert scale, ranging from strongly disagree (1) to agree (5) strongly. Data were collected through online questionnaires and direct surveys. The study aims to test hypotheses regarding the impact of Big Data and auditor experience on fraud detection, with forensic audit as a mediating variable.

The measurement model (outer model) was tested for convergent validity, discriminant validity, and reliability. Convergent validity was evaluated through outer loading values and average variance extracted (AVE). An outer loading is considered valid if it exceeds 0.7, although values above 0.6 are also acceptable. The AVE must exceed 0.5 to meet the criteria for convergent validity. Discriminant validity was assessed using the Fornell-Larcker criterion, where the square root of the AVE for each construct should be greater than the correlations among constructs. Reliability was examined by measuring composite reliability, with a threshold of >0.70, and Cronbach's alpha, also set at >0.70 (Sarstedt et al., 2021).

In the structural model (Inner Model), relationships among latent variables, significance, and the R-square value of the research model were established. The structural model was evaluated by examining the R² value of the dependent variable, path coefficients (direct effects), path coefficients (indirect effects), and hypothesis testing, which involved observing P-values and t-tests to identify relationships between dependent and independent variables. The guideline used is a t-statistic >1.67 for one-tailed hypotheses with a significance level or P-value of 0.05 (5%) (Sarstedt et al., 2021).

RESULTS AND DISCUSSION

Before distributing the questionnaire, a pilot test was conducted with 30 student respondents, confirming the questionnaire's validity. A total of 157 completed and analyzable questionnaires were collected for this study. Most respondents were female auditors, totaling 87, while male auditors numbered 70. Most respondents were junior auditors with less than five years of experience (86 respondents), while the remaining 71 were senior auditors with more than five years of experience. Additionally, most respondents held a bachelor's degree or equivalent (149 respondents). Most respondents (92) had not received specific training in fraud detection.

Table 1. Outer Loading Values and Convergent Validity

Variable	Indicator	Outer Loadings	Result	AVE	Result
Big Data (BG)	BG2	0,793	Valid	0,609	Valid
	BG3	0,752	Valid		

	BG4	0,843	Valid		
	BG5	0,850	Valid		
	BG6	0,695	Valid		
	BG7	0,737	Valid		
Auditor Experience (PA)	PA1	0,843	Valid	0,631	Valid
	PA2	0,863	Valid		
	PA3	0,783	Valid		
	PA4	0,766	Valid		
	PA5	0,707	Valid		
Fraud Detection (FD)	FD3	0,792	Valid	0,660	Valid
	FD4	0,886	Valid		
	FD5	0,752	Valid		
Forensic Audit (AF)	AF2	0,738	Valid	0,668	Valid
	AF5	0,902	Valid		
	AF6	0,866	Valid		
	AF7	0,749	Valid		

Source: Data Processed by the Researcher, 2024

Results of Outer Loading and Convergent Validity Testing: some outer loading values were discarded as they were <0.6 , to ensure that the outer loading factors met the standard threshold of >0.6 . The level of convergence, indicated by an AVE value >0.5 , meets the criteria for good convergent validity.

Table 2. Discriminant Validity Test Values

	AF	BG	FD	PA
Forensic Audit (AF)	0,817			
Big Data (BG)	0,469	0,780		
Fraud Detection (FD)	0,341	0,480	0,812	
Auditor Experience (PA)	0,493	0,539	0,506	0,794

Source: Data Processed by the Researcher, 2024

The discriminant validity test using the Fornell-Larcker criterion found that the square root of the AVE for each variable is greater than the correlation with other latent variables. These results indicate that the variables' discriminant validity is met.

Table 3. Reliability Test Values

	Cronbach's Alpha	Composite Reliability	Result
Forensic Audit (AF)	0,834	0,889	Reliable
Big Data (BG)	0,871	0,903	Reliable
Fraud Detection (FD)	0,746	0,853	Reliable
Auditor Experience (PA)	0,853	0,895	Reliable

Source: Data Processed by the Researcher, 2024

The reliability test results show that the variables' reliability level is acceptable, as indicated by Cronbach's Alpha and Composite Reliability values above 0.7, which suggests the

variables are reliable. Based on the reliability test results, it can be concluded that the variables' internal consistency is met in measuring the respective constructs.

Table 4. R-square Test Values

	R-Squares
Forensic Audit	0,301
Fraud Detection	0,318

Source: Data Processed by the Researcher, 2024

Based on Table 4, the R-square value for forensic Audit is 30.1%, and for fraud detection, it is 31.8%. These results indicate that the independent variables, namely Big Data and auditor experience, explain 30.1% of the variance in the forensic audit variable. This means other variables outside the model explain the remaining 69.9% influence. Similarly, Big Data and auditor experience account for 31.8% of the variance in the fraud detection variable, with the remaining 68.2% of the influence explained by variables not included in the model.

Table 5. Hypothesis Result (Direct Effect)

Hypothesis	Original Sample	T-Statistics	P-Value	Result
Big Data -> Forensic Audit (H ₁)	0,286	1,805	0,036	Accepted
Auditor Experience -> Forensic Audit (H ₂)	0,340	2,214	0,013	Accepted
Forensic Audit -> Fraud Detection (H ₃)	0,045	0,329	0,371	Rejected
Big Data -> Fraud Detection (H ₄)	0,280	1,689	0,046	Accepted
Auditor Experience -> Fraud Detection (H ₅)	0,333	2,019	0,022	Accepted

Source: Data Processed by the Researcher, 2024

The guidelines used are a t-statistic > 1.67 for one-tailed hypotheses with a significance level or P-value < 0.05 (5%) and a positive direction. The analysis in Table 6 shows that Big Data has a positive and significant effect on forensic Audit, with a t-statistic of $1.805 > 1.67$ and a significant value of $0.036 < 0.05$. This analysis also indicates that Big Data has a positive and significant effect on fraud detection, with a t-statistic of $1.689 > 1.67$ and a significant value of $0.046 < 0.05$. Auditor experience also has a positive and significant effect on forensic Audit, with a t-statistic of $2.214 > 1.67$ and a significant value of $0.013 < 0.05$. Auditor experience positively and significantly affects fraud detection, with a t-statistic of $2.019 > 1.67$ and a significant value of $0.022 < 0.05$. Meanwhile, forensic Audit has a positive but insignificant effect on fraud detection, as shown by the parameter coefficient of 0.045, a t-statistic of $0.329 < 1.67$, and a significant value of $0.371 > 0.05$. Therefore, H₁, H₂, H₄, and H₅ are accepted, while H₃ is rejected.

Table 6. Path Coefficients (Indirect Effect)

Hypothesis	Original Sample	T-Statistics	P-Value	Result
Big Data -> Forensic Audit -> <i>Fraud Detection</i>	0,013	0,247	0,403	Rejected
Auditor Experience -> Forensic Audit -> <i>Fraud Detection</i>	0,015	0,301	0,382	Rejected

Source: Data Processed by the Researcher, 2024

The analysis results from Table 6 indicate that the sixth hypothesis, which states that forensic audit mediates the effect of Big Data on fraud detection, is rejected, as the t-statistic is $0.247 < 1.67$. The significance value is $0.403 > 0.05$. Similarly, the seventh hypothesis, which

posits that forensic audit mediates the effect of auditor experience on fraud detection, is also rejected due to the t-statistic of $0.301 < 1.67$ and the P-value of $0.382 > 0.05$.

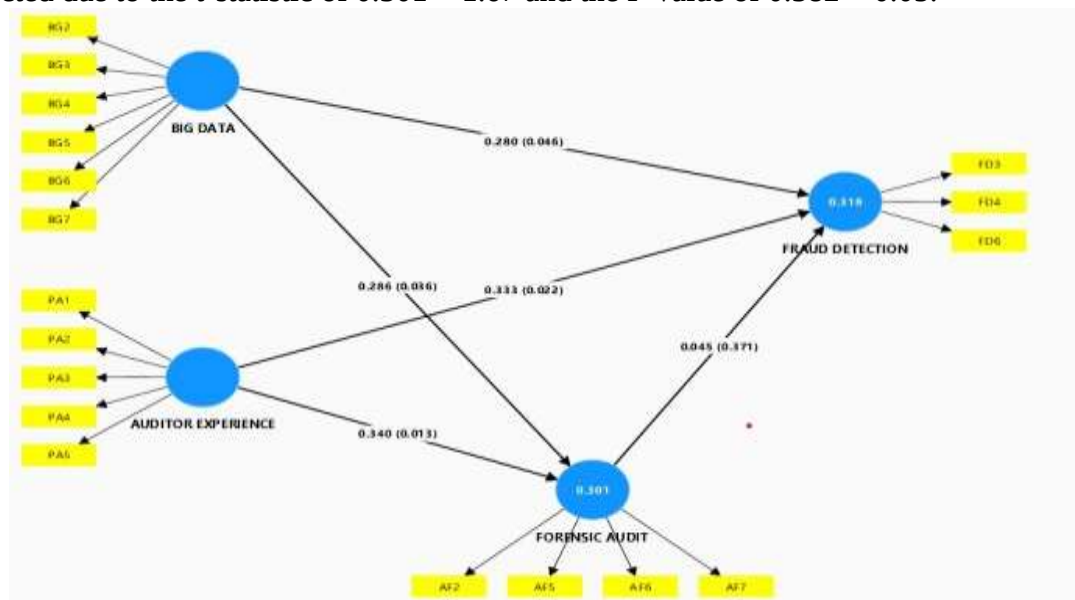


Fig 2. Bootstrapping Result
Source: Data Processed by the Researcher, 2024

Discussion

The analysis results indicate that Big Data has a positive and significant effect on forensic audit (H_1), meaning that, according to auditors' opinions, Big Data can enhance the effectiveness of forensic audits by facilitating the analysis of large and diverse datasets and increasing the speed of the audit process. This finding supports previous studies, which have shown that Big Data has a positive and significant impact on forensic audits (Sembiring & Widuri, 2023); (Syahputra & Afnan, 2020); (Handoko & Rosita, 2022); (Surono, 2023). Similarly, auditor experience has a positive and significant effect on forensic audit (H_2), this means that forensic auditing necessitates investigative experience to deliver insights that can support administrative, civil, or criminal proceedings. This finding is consistent with prior research, which found that auditor experience positively influences forensic audits (Sembiring & Widuri, 2023).

The statistical data indicate that forensic Audits do not significantly affect fraud detection (H_3), suggesting they are ineffective in fraud detection. Based on the respondents' demographic data, 92 auditors needed forensic audit training and certification, while only 40 held such certification. The lack of forensic audit expertise and experience, along with limited resources and a focus on compliance audits and performance, hinder the effectiveness of the forensic audit process. Furthermore, forensic audits typically require specific requests or occur once fraud has been detected rather than being part of the routine audit process. Therefore, forensic audits are crucial for investigating cases of fraud that have already occurred, but they cannot always support the fraud detection process. This finding is aligned with the research by (Pratiwi, Surya, & Djefris, 2023), which states that forensic audits do not significantly affect fraud detection.

The hypothesis testing on Big Data shows a positive and significant effect on fraud detection (H_4). Big Data enables faster fraud identification in today's technological era. By maximizing the use of Big Data, the effectiveness of fraud detection can be enhanced. Previous studies have also confirmed that Big Data positively influences fraud detection (Pratiwi, Surya,

& Djefris, 2023); (Syahputra & Afnan, 2020); (Handoko & Rosita, 2022); (Bandiyono, 2023); (Surono, 2023).

This study demonstrates that auditor experience positively and significantly influences fraud detection (H₅). In other words, more experienced auditors are likely to be more skilled at managing themselves and audit activities, making fraud detection easier. The level of experience also affects the auditor's responsibility in fraud detection. The results of this study are consistent with research conducted by (Sembiring & Widuri, 2023); (Mannan et al., 2020); (Rahmawati et al., 2021); (Rafnes & Primasari, 2020); (Dewi Kusuma et al., 2021); (Wahyudi & Qintharah, 2023); (Welly et al., 2022); (Laloan et al., 2021).

The statistical results regarding forensic audit mediating the effect of Big Data on fraud detection (H₆) were rejected. Forensic Audits cannot mediate the effect of big data on fraud detection. The analysis results highlight the need for future auditors to possess broader skills, including a deep understanding of Big Data and proficiency in forensic auditing. Therefore, future audits will require professionals with solid accounting knowledge and the ability to leverage technologies like Big Data and master forensic audit techniques to address increasingly complex fraud challenges. This finding supports the research by (Sembiring & Widuri, 2023) which concluded that forensic audits cannot mediate the effect of Big Data on fraud detection.

The results also show that forensic Audits do not mediate the effect of auditor experience on fraud detection (H₇). Many auditors in this study had less than five years of experience. Thus, the lack of experience in recognizing fraud patterns and practices, combined with insufficient forensic audit expertise to ensure proper investigative methodologies, may hinder the effectiveness of fraud detection. A combination of extensive auditor experience and in-depth forensic audit expertise enables better identification of fraud indicators that formal approaches might miss. While forensic auditing provides a robust framework, the auditor's experience remains a crucial factor in the effectiveness of fraud detection. This finding contradicts previous research, which states that forensic audits can mediate the effect of auditor experience on fraud detection (Sembiring & Widuri, 2023).

This study supports agency theory, explaining that behaviors leading to fraud can stem from decision-making processes (Sembiring & Widuri, 2023). Auditor experience and Big Data are considered personal characteristics influencing audit decision-making in fraud detection. Forensic audit is seen as a factor that reduces the potential for fraud, thus strengthening auditors' ability to identify and prevent fraudulent actions.

CONCLUSIONS AND SUGGESTION

Based on the discussion, seven hypotheses were put forward, four accepted and three rejected. The research findings reveal that auditor experience and Big Data play a positive and significant role in enhancing fraud detection. Notably, both auditor experience and Big Data show a meaningful and impactful influence on forensic auditing. However, the findings also highlight that forensic auditing does not directly impact fraud detection.

The findings of this study indicate that forensic Audits do not serve as a mediator between big data and fraud detection, nor do they mediate the effect of auditor experience on fraud detection. Practically, this study highlights the importance of these factors in addressing the challenges posed by large data volumes in the current digital era during the fraud detection process. Theoretically, the findings support the development of agency theory by providing a deeper understanding of auditor experience, the application of Big Data, and the role of forensic Audit in fraud detection. A fundamental limitation of this study lies in its focus on a sample drawn exclusively from government auditors in the Riau Island Regency, including those from

Indonesia's Audit Board, the Financial and Development Supervisory Agency, the Financial Services Authority, and the Inspectorate General. Therefore, the results of this research cannot be directly applied to a broader population.

Future research should expand the sample by involving auditors from various professional backgrounds, such as independent and internal auditors. Subsequent studies could broaden the scope of variables to understand better the correlation between forensic audit and fraud detection, including adding variables such as investigative auditing. Overall, this study found that auditor experience, which includes an understanding of Big Data and expertise in forensic auditing, plays a crucial role in enhancing the effectiveness of fraud detection.

REFERENCES

- Bandiyono, Agus. (2023). Fraud Detection: Religion In The Workplace Big Data Analytics. *Jurnal Akuntansi*, 27(2), 380–400. <https://doi.org/10.24912/ja.v27i2.1515>
- Dewi Kusuma, P. D., Suryandari Ayu, N. N., & Susandya Arie, A. P. G. B. (2021). Pengaruh Pengalaman Auditor, Skeptisisme Profesional Dan Tekanan Waktu Terhadap Pendeteksian Kecurangan Di Perwakilan Bpkp Provinsi Bengkulu. *Jurnal Akuntansi Dan Keuangan*, 9(1), 45. <https://doi.org/10.29103/jak.v9i1.3649>
- Handoko, B. L., & Rosita, A. (2022). The Effect of Skepticism, Big Data Analytics to Financial Fraud Detection Moderated by Forensic Accounting. *ACM International Conference Proceeding Series*, 59–66. <https://doi.org/10.1145/3537693.3537703>
- Handoko, B. L., Rosita, A., Ayuanda, N., & Budiarto, A. Y. (2022). The Impact of Big Data Analytics and Forensic Audit in Fraud Detection. 2022 12th International Workshop on Computer Science and Engineering, WCSE 2022, Wcse, 67–71. <https://doi.org/10.18178/wcse.2022.06.011>
- Laloan, charly S. T., Kalangi, L., & Gamaliel, H. . 2021. (2021). Pengaruh Pengetahuan Audit, Pengalaman Audit Dan Independensi Auditor Dalam Kemampuan Pendeteksian Kecurangan (Fraud) Pada Inspektorat Daerah Provinsi Sulawesi Utara. *Jurnal Riset Akuntansi Dan Auditing "GOODWILL,"* 12(2), 129–141. <https://doi.org/10.35800/jjs.v12i2.36079>
- Ma'rifah, N., & Setiawan, A. (2022). Pengaruh Audit Forensik , Profesionalisme Auditor , dan Komitmen Organisasi Terhadap Pendeteksian Fraud. *Veteran Economics, Management & Accounting Review*, 1(1), 1–18. <https://doi.org/10.59664/vemar.v1i1.4825>
- Mannan, A., Hasanuddin, U., Rahmawati, R. H., Hasanuddin, U., Indrijawati, A., & Hasanuddin, U. (2020). Auditor Experience, Work Load, Personality Type, and Professional Auditor Skeptisism against Auditors Ability in Detecting Fraud. January. <http://www.ijmsbr.com>
- Mislya, R. (2019). Peran Whistle-Blowing Terhadap Efektivitas Audit Forensik dan Audit Investigasi Dalam Mendeteksi Fraud Dengan Moderasi Gender dan Pengalaman (Doctoral dissertation, universitas islam indonesia).
- Pratiwi, S. R., Surya, F., & Djefris, D. (2023). Peran Big Data dan Audit Forensik Terhadap Pendeteksian Fraud. *JAAB: Jurnal of Applied Accounting And Business*, 2(1). <https://doi.org/10.37338/jaab.v2i1.120>
- Priyadi, A., Abu Hanifah, I., & Muchlish, M. (2022). The Effect of Whistleblowing System Toward Fraud Detection with Forensic Audit and Investigative Audit as Mediating

- Variable. *Devotion : Journal of Community Service*, 3(4), 336–346. <https://doi.org/10.36418/dev.v3i4.121>
- Rafnes, M., & Primasari, nora hilmia. (2020). Pengaruh Skeptisisme Profesional, Pengalaman Auditor, Kompetensi Auditor dan Beban Kerja terhadap Pendeteksian Kecurangan. *Jurnal Akuntansi Dan Keuangan*, 9(1), 16–31. <https://dx.doi.org/10.36080/jak.v9i1.1410>
- Rahman, S. F. (2023). Peran Big Data dalam kualitas audit dan pengungkapan fraud. Fakultas Ekonomi dan Bisnis. Universitas Mulawarman.
- Rahmawati, A., Simorangkir, P., & Ginting, R. (2021). Pengaruh Akuntansi Forensik, Skeptisme Profesional dan Pengalaman Audit Terhadap Deteksi Fraud. 3(2), 6. <https://doi.org/10.30997/jakd.v7i2.4542>
- Sarstedt, M., Ringle, C. M., & Hair, J. F. (2021). Partial Least Squares Structural Equation Modeling. *Handbook of Market Research*, November, 587–632. https://doi.org/10.1007/978-3-319-57413-4_15
- Sembiring, F. N. B. R., & Widuri, R. (2023). the Effect of Auditor Experience, Big Data and Forensic Audit As Mediating Variables on Fraud Detection. *Journal of Theoretical and Applied Information Technology*, 101(6), 2324–2337. <https://www.jatit.org/volumes/Vol101No6/23Vol101No6.pdf>
- Siregar, D. S. (2021). Pengaruh Independensi dan Pengalaman Auditor Terhadap Kemampuan Auditor Dalam Mendeteksi Kecurangan Pada Kantor Akuntan Publik di Kota Medan. <http://repository.umsu.ac.id/handle/123456789/15538>
- Situmorang, R., & Asmara, R. Y. (2022). The Effect of Professional Skepticism, Independency, Audit Experience, and the Knowledge of the Internal Control System on the Auditor's ability to detect fraud in the Internal Auditor Ministries/Agencies of the Republic of Indonesia. *International Journal of Innovative Science and Research Technology*, 7(8), 1707–1715. <https://doi.org/10.5281/zenodo.7092935>
- Surono. (2023). Dampak Pemanfaatan Big Data dan Audit Forensik dalam Pendeteksian Fraud. Madani: *Jurnal Ilmiah Multidisiplin*, 1(9), 103–111. <https://doi.org/10.5281/zenodo.8437456>
- Syahputra, B. E., & Afnan, A. (2020). Pendeteksian Fraud: Peran Big Data dan Audit Forensik. *Jurnal ASET (Akuntansi Riset)*, 12(2), 301–316. <https://doi.org/10.17509/jaset.v12i2.28939>
- Wahyudi, G., & Qintharah, Y. N. (2023). Pengaruh Profesionalisme Pengalaman, Risiko Audit, dan Keahlian Audit Terhadap Pendeteksian Kecurangan. *Peta*, 8(1), 96–114. <https://doi.org/10.51289/peta.v8i1.641>
- Welly, W., Ghazali, R., & Zuraidah, I. (2022). Pengaruh Skeptisisme Profesional Auditor, Kompetensi Auditor, dan Pengalaman Auditor Terhadap Pendeteksian Kecurangan (Survei Pada Kantor Akuntan Kota Palembang). *Jurnal Media Wahana Ekonomika*, 19(2), 345. <https://doi.org/10.31851/jmwe.v19i2.8942>