Jurnal Manajemen Bisnis Vol. 12, No.2 (2025) September, Page. 295-305
e-ISSN: 2621-1971 | p-ISSN: 2088-7086

Epistemology Accounting in The Digital Era: Truth and Transparency Through Artificial Intelligence and Big Data

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ARTICLE INFO

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Keywords:
Accounting Epistemology; Artificial Intelligence; Big Data; Financial Transparency; Accounting Ethics.

DOI:
https:doi.org/10.33096/jmb.v12i2.1247

ABSTRACT

The development of digital technologies, particularly Artificial Intelligence and Big Data, has brought great impact to accounting epistemology. This research aims to explore the influence of these technologies on accounting practices, especially in terms of efficiency, accuracy, and data-driven decision-making. Through the literature review method, this study analyzed 26 relevant articles to identify the impact of AI and Big Data in accounting, focusing on validity, transparency, and emerging ethical challenges. The results show that AI in accounting can automate processes, reduce human error, and speed up the processing of financial information. Big Data Data helps companies to gain deeper insights through larger and real-time data, making financial statements not only a reflection of the past, but also a predictive tool. However, challenges such as algorithmic bias, data privacy and adherence to ethical standards are important concerns that must be managed. Companies are expected to allocate adequate resources in accounting technology and provide training related to AI and Big Data. The application of these technologies must comply with strict ethical standards and regulations to avoid misuse. Further research could explore the application of digital technologies in different industry sectors or company types and involve interviews with accounting professionals and information technology experts.

ABSTRAK

Perkembangan teknologi digital, khususnya Kecerdasan Buatan dan Big Data, telah membawa dampak besar pada epistemologi akuntansi. Penelitian ini bertujuan untuk mengeksplorasi pengaruh teknologi ini terhadap praktik akuntansi, terutama dalam hal efisiensi, akurasi, dan pengambilan keputusan berbasis data. Melalui metode tinjauan pustaka, penelitian ini menganalisis 26 artikel relevan untuk mengidentifikasi dampak AI dan Big Data dalam akuntansi, dengan fokus pada validitas, transparansi, dan tantangan etika yang muncul. Hasil penelitian menunjukkan bahwa AI dalam akuntansi dapat mengotomatiskan proses, mengurangi kesalahan manusia, dan mempercepat pemrosesan informasi keuangan. Big Data membantu perusahaan memperoleh wawasan yang lebih mendalam melalui data yang lebih besar dan real-time, menjadikan laporan keuangan tidak hanya sebagai cerminan masa lalu, tetapi juga sebagai alat prediktif. Namun, tantangan seperti bias algoritmik, privasi data, dan kepatuhan terhadap standar etika merupakan isu penting yang harus dikelola. Perusahaan diharapkan mengalokasikan sumber daya yang memadai dalam teknologi akuntansi dan memberikan pelatihan terkait AI dan Big Data. Penerapan teknologi ini harus mematuhi standar dan peraturan etika yang ketat untuk menghindari penyalahgunaan. Penelitian lebih lanjut dapat mengeksplorasi penerapan teknologi digital di berbagai sektor industri atau jenis perusahaan, dan melibatkan wawancara dengan profesional akuntansi dan pakar teknologi informasi.

INTRODUCTION

The development of information and communication technology in the digital age has transformed various aspects of life, including in accounting. Accounting not only relies on traditional financial statements but also includes big data analysis that can be used to predict

trends and support strategic decision-making. This requires accountants to have new skills in information technology, analytics, and understanding of digital systems. Therefore, the epistemology of accounting in the digital era is no longer just about measuring economic value, but also includes managing data transparently, ethically, and appropriately, so as to provide broader benefits to stakeholders and encourage accounting to remain relevant amid rapid technological change (Dwikristanto & Muslim, 2022).

Technological developments have brought fundamental changes in various disciplines including accounting. This transformation is increasingly visible with the existence of AI (Artificial Intelligence) and Big Data which serve as important tools in the process of recording and reporting finances (Bose et al., 2023a). The use of AI in this sector allows companies to save time and money, reduce human error, and speed up the process of creating financial reports (Benbya & Leidner, 2018). The integration of AI-driven computing into software platforms enhances efficiency and simplify human tasks through the automation of repetitive activities (Asiva Noor Rachmayani, 2015).

Big Data Analytics is the the process of collecting, managing, and analyzing large amounts of data to identify patterns, present insights, and uncover hidden information and knowledge within it (Sun et al., 2018). Big Data allows analysis of very large volumes of data that is not possible with traditional methods where data generated from various business transactions both financial and non-financial in nature that can be used to generate more comprehensive insights related to the financial condition of a company where with the ability to process data and analyze large amounts of data. Companies can make smarter data-based decisions and be more responsive to market changes (Rahmawati, 2022). While AI and Big Data technologies offer increased efficiency and accuracy in accounting, new challenges are emerging regarding the validity and transparency in the analysis generated by such automated systems.

One of the key challenges is ascertaining the extent to which AI and Big Data systems can be trusted to produce objective and accurate financial decisions. This question is relevant in the context of accounting epistemology, which examines how knowledge is generated and validated. Is accounting that relies entirely on these technologies still capable of maintaining accountability and transparency? Ethical issues such as potential algorithmic bias and data privacy are also of great concern, as the use of these technologies may lead to unfair or inappropriate decision-making.

Several previous studies have discussed the impact of digital technology on accounting Alghafiqi & Munajat (2022) found that AI and Big Data can improve accuracy and efficiency in financial reporting, but also pointed to challenges in terms of data security and privacy. (Bose et al., 2023) concluded that AI is able to reduce human error in recording transactions and speed up the creation of financial reports. However, research by (Fülöp et al., 2023) explains the risk of algorithmic bias in big data analysis, which can affect the final results and financial decision-making. The findings suggest that although AI and Big Data technologies have brought improvements in accounting accuracy and efficiency, challenges related to transparency and ethics are still significant issues and directly affect the validity of accounting epistemology in the digital age, where public trust is key. Complex algorithmic analysis processes are often not easily understood by human users, which can reduce transparency in decision-making. In addition, the risk of bias in algorithms may threaten the credibility of the resulting financial statements.

This research aims to explore how AI and Big Data affect accounting epistemology, specifically regarding validity, transparency and ethics in the process of collecting and presenting financial data. In addition, this research also seeks to identify strategies and solutions that can be implemented to overcome the challenges arising from the use of these technologies. Thus, this research aims to ensure that accounting continues to meet the demands of the times and can be trusted by stakeholders. Understanding the impact of digital technology on accounting is crucial to the future of accounting in the digital age so that it is expected to provide deeper insights into how accounting can adapt and remain relevant amidst rapid changes and how to maintain accountability and transparency in accounting practices that are increasingly dependent on technology.

RESEARCH METHOD

This research method uses the literature study method to explore findings related to accounting epistemology in the digital era. Literature study is an approach to identify, review, interpret, and evaluate various studies related to the topic to be studied, by formulating relevant research questions and reviewing and identifying journals in a structured manner in accordance with predetermined procedures. This approach was selected because it offers a comprehensive perspective on the advancement of digital technologies, such as AI and Big Data, in accounting practice. The literature search process was conducted through several academic databases such as Google Scholar and Scopus. The keywords used were Artificial Intelligence AND accounting, Big Data AND accounting, epistemology AND accounting. Based on these keywords, more than 500 articles were found, but the researcher used 26 articles related to this research.

Article selection was conducted in two stages. The first stage involved identifying relevant articles based on titles and abstracts, while the second stage involved assessing the overall quality of the articles to ensure relevance to the research questions. All selected articles were evaluated based on two main aspects: (1) the influence of technology on the validity and transparency of financial statements, and (2) ethical and regulatory challenges in the application of technology. Findings from the selected literature were then synthesized to identify key themes related to AI, Big Data, and accounting epistemology in the digital age.

RESULTS AND DISCUSSION

Accounting epistemology in the digital era is a concept that includes new ways of understanding and practicing accounting amid technological advances such as Artificial Intelligence, and Big data. Along with the rapid advancement in technology, including Artificial Intelligence and Big Data, the way of looking at accounting knowledge has undergone a significant shift. Knowledge in accounting no longer focuses only on traditional principles and rules, but also on the ability to understand and manage big data generated by various sources. Big Data provides a new context for accountants to evaluate financial information more holistically and dynamically. Meanwhile, AI makes it possible to process vast amounts of data quickly and accurately, which in turn changes the way decisions are made in accounting, making it more data-driven and predictive. In this context, accounting epistemology includes the ability to integrate big data analysis and artificial intelligence as part of a more strategic and evidence-based decision-making process. In the research conducted by Christianti et al., (2021), explained that in the digital era, accounting is not only limited to recording financial transactions, but also includes analyzing and managing data on

a large scale, which has a significant impact on the way accounting is applied. This transformation illustrates the changing epistemology in accounting, which now emphasizes the ability to handle and understand data quickly and in a broader context.

Research by Nurhayani et al., (2024) highlights how MSMEs (Micro, Small, and Medium Enterprises) are adopting Fintech technology to adapt to the changing business environment. Fintech enables MSMEs to access more efficient and affordable financial services, such as digital payment systems and online loans. It also impacts accounting practices, as these enterprises can now utilize technology to record and report their financial transactions more easily and accurately. The adoption of Fintech by MSMEs reflects how accounting in the digital era must adapt to technological innovation. Accountants must not only understand traditional accounting principles, but must also be able to manage and integrate new financial technologies in their practice. Therefore, the epistemology of accounting in the digital era includes an understanding of how technologies such as Fintech can affect the way companies, especially MSMEs, manage their finances.

Technology has changed many aspects of life including the way companies manage their finances where accounting practices are now becoming increasingly automated thanks to technological advances that allow data collection and analysis quickly and accurately. In the digital era, accountants are not only tasked with recording key transactions but must also be able to analyze the big data generated by companies using it to make strategic business decisions. One of them is the use of AI technology in accounting. Bose et al. (2023) revealed that AI can make accounting processes more automated, with competence in analyzing and interpreting accounting data. Consequently, AI-driven accounting functions are able to deliver results quickly and accurately. The availability of such instant outcomes can improve the promptness of accounting data and aid users in decision-making. Leitner-Hanetseder et al., (2021) added that although AI increases efficiency, this technology also brings major changes in the role of accountants, who now need new skills in managing and applying technology in their daily work.

The implementation of AI in auditing and Consulting also provides significant benefits. Munoko et al., (2020) reports that the use of AI in the audit function helps save time, improve analysis accuracy, and deepen insights into business processes. Hamza et al., (2024) finding that the ability of AI to manage massive datasets enables faster and more accurate financial analysis, risk assessment, and forecasting, supporting smarter and more strategic business decision-making. This allows organizations to make more thoughtful and strategic business decisions. AI also simplifies accounting processes and reduces the need for human labor, thus saving companies costs.

Xero, as a cloud-based accounting platform that leverages AI to automate the bank reconciliation process. Lestari et al., (2024) describes the use of AI allows Xero to match bank transactions automatically, significantly reducing the likelihood of human error that often occurs in manual processes. In addition, at an accounting firm at PwC that uses AI to analyze large amounts of financial data during audits. AI can quickly detect anomalies or discrepancies in financial statements that human auditors may have missed. Guşe & Mangiuc, (2022) revealed AI can also reduce human errors in financial reporting and audit processes. This shows how AI can improve efficiency and reduce human error in accounting processes, which ultimately affects the quality of financial statements and decision making.

The use of Big Data in accounting provides a deeper insight into a company's financial performance, as well as enabling the identification of patterns that are useful in decision-

making. Theodorakopoulos et al., (2024) found that big Data analysis of different departments can uncover areas that need improvement, both in terms of efficiency and cost reduction. By analyzing data from various departments of a company, accountants will be able to find certain patterns that indicate areas where the company can improve efficiency or reduce costs. Ibrahim et al., (2021) states that accountants must now be able to manage and analyze data on a large scale to make more accurate and relevant decisions. It also affects decision making accurate and timely data is essential to produce a decision, which becomes the core of accounting epistemology in the digital age.

Research by Zhang, (2023) revealed that Big Data technology is essential in facilitating the digital transformation of various industries. Its application in accounting digitalization can provide convenience and efficiency in job accounting. Zhong et al., (2022) explains that simulation tests prove that big data technology is able to detect and prevent threats with accurate real-time analysis, as well as increase system resilience to cyber attacks. Big data can improve human resource management processes, such as recruitment, retention, and productivity. By analyzing big data from multiple sources, companies can make more informed decisions and identify employees who have a significant contribution to corporate innovation (Hamilton & Sodeman, 2020).

Research by Gepp et al. (2017) stated that Big Data has great potential to revolutionize auditing practices, both in terms of speed, efficiency, and accuracy. In line with research by Appelbaum et al. (2017) stated Big data and analytics have great potential to revolutionize modern auditing, there is a significant need to develop appropriate skills, technological infrastructure and audit methodologies. Supported by research Jiwandono & Sofyani (2024) states that the use of Big Data Analytics (BDA) can increase the efficiency and effectiveness of auditor performance by accelerating the data analysis process and providing more accurate results in identifying risks or anomalies. The perception of usefulness and ease of use of BDA drives auditors' intention to adopt it, especially if supported by adequate technological infrastructure, training, and a data-oriented organizational culture. In addition, Alghafiqi & Munajat (2022) revealed Big Data technology helps companies in gaining deeper insights into financial conditions and identifying patterns that can lead to better decision making. For example, Amazon and Walmart use Big Data-based analytics to monitor and analyze spending across departments. Hamza et al. (2024) explained that by identifying inefficient spending trends, they can cut costs and improve profitability. This shows that Big Data not only improves operational efficiency but also supports more timely and relevant decision-making. In addition, Ibrahim et al. (2021) affirms that Big Data helps in making more informed and data-driven decisions. In addition, Sun et al. (2018) states big data can improve decision-making processes, and improve business performance through more efficient and accurate data processing. However, challenges such as the need for new skills, data privacy and regulation must be addressed in order for the benefits of this technology to be fully optimized in the field of accounting.

In the digital age, accounting is not only about compiling traditional financial statements, but also involves the use of Big Data to provide deeper insights into a company's performance. Varma et al. (2021) explains Big Data has played an important role in changing the accounting landscape, both in terms of professional practice and academic research. Modern accountants professionals must be equipped with big data analysis skills and advanced analytics capabilities to assist in strategic business decisions. By analyzing the data generated from various business processes, companies can identify patterns that traditional

accounting methods may have missed. Younis (2020) affirming the application of Big Data in accounting allows firms to improve forecasting accuracy while strengthening the quality of accounting information. For example, by analyzing historical data about sales, accountants can predict future sales trends and help companies make better decisions about inventory or expenses. This reflects the importance of an accounting epistemology that includes an understanding of how technology can be used to improve the quality of business decision making.

AI and Big Data significantly improve the efficiency and accuracy of accounting processes by automating time-consuming tasks and reducing human error (Benbya et al., 2020). One of the most important impacts of AI in accounting is its ability to process large amounts of financial data in much less time than humans need. For example, AI algorithms can automatically classify transactions, reconcile accounts, and create financial statements much faster than traditional methods. This not only reduces the time spent on routine tasks but also frees accounting professionals to focus on more complex and strategic activities, thereby increasing overall productivity (Bose et al., 2023). For example, AI-powered analytics can quickly detect anomalies in financial transactions or identify trends that could affect future business strategies (Theodorakopoulos et al., 2024).

Big Data has an important role in providing deeper insights. Appelbaum et al., (2017) describes its ability to combine and analyze large amounts of financial and operational data enabling companies to make data-driven decisions with greater precision. For example, through Big Data, a company can analyze its spending patterns across different departments and identify areas where costs can be cut without affecting operational efficiency. This results in better allocation of resources, which contributes to cost reduction and profitability. Therefore, the use of AI and Big Data in Accounting not only increases the speed and accuracy of data processing, but also empowers businesses to make more responsive and informed decisions. This combination of technologies allows companies to remain competitive in a fast-moving digital environment by ensuring that their financial operations are accurate and strategically aligned with market demands.

As the use of digital technology in accounting increases, issues related to data security and ethics are becoming increasingly important. Yoon, (2020) revealed that these new technologies not only help companies in improving efficiency and effectiveness, but also present challenges, especially in terms of integration of old systems with new technologies. While AI can improve efficiency and profitability, its application also carries associated risks of injustice, privacy, and transparency (Gerlick & Liozu, 2020). Accountants in the digital age must ensure that the data they manage is safe from cyber threats, such as hacking or data theft. Therefore, they must understand the risks associated with managing digital data and ensure that their accounting practices conform to high ethical standards. Research by Fülöp et al. (2023) results in that most accountants have basic knowledge of artificial intelligence (AI) but do not yet fully understand its ethical implications. The regulation is still not able to keep up with the rapid development of technology, which causes gaps in the application of rules governing the use of data and technology in accounting. However, there is a shared belief that AI ethics are crucial, and that the participation of regulatory authorities in establishing ethical laws for artificial intelligence is essential to sustaining public trust in its use within accounting.

Research by Moll & Yigitbasioglu (2019) this also shows that this technology can significantly improve financial visibility and enable more timely interventions, given the continuous nature of accounting. However, considering the numerous tasks that technology

has taken over from accountants, such advancements could also raise concerns about the legitimacy of the profession. In this case, the epistemology of accounting in the digital age also includes an understanding of security and Ethics in the use of technology. Accountants must ensure that the data they use and report is accurate and not misused. They must also play a role in protecting the privacy of individuals and companies whose data they manage, especially in the context of increasingly stringent regulations related to the protection of personal data. In line with the opinion of Bhimani & Willcocks (2014) states that organizations must remain mindful of various forms of knowledge, the difficulties in producing and applying it, and be cautious about what can truly be achieved thru advancements in information technology and software.

The idea that ethical principles can be programmed into AI aligns with the concept of "AI Ethics" a growing field that focuses on how AI systems should be designed and operated to ensure they are aligned with moral values and legal norms. Fülöp et al., (2023) mentions that although AI can be trained to recognize ethical principles and make appropriate decisions, the primary responsibility for defining these ethical standards rests with humans. Ethics in AI development has raised concerns over issues such as algorithmic bias, data privacy, and accountability. Ensuring that AI systems comply with legal standards and ethical principles requires ongoing oversight by industry leaders and regulators. Human oversight remains essential to monitor the use of AI, intervene when necessary, and adapt ethical standards as technology evolves. Thus, although AI can follow programmed ethical guidelines, humans are still responsible for setting principles and limits that guide the development of AI and its integration into various sectors.

One ethical problem is algorithmic bias, whereby AI used in accounting systems can inadvertently perpetuate or reinforce bias. This can lead to unfair decision-making such as biased credit scoring or accounting practices that favor certain groups more than others. A prime case in point is the case of AI algorithms used in recruitment or loan approval processes that sometimes show bias towards minority groups due to biased training data (Fülöp et al., 2023). In accounting, similar biases can affect financial reporting, resource allocation, or auditing if AI systems are not properly trained to recognize and mitigate biases.

Regulatory oversight is needed to ensure that AI and Big Data are used ethically in accounting. Such oversight can certainly help establish clear guidelines on data handling, algorithmic fairness, and accountability. For example, a regulatory body may issue regular audits of AI algorithms to check for bias or irregularities. In this, Guşe & Mangiuc (2022) emphasized that involvement can establish ethical standards for the use of AI in accounting can help reduce the risk of fraud or data manipulation as well as ensure transparency of financial reporting.

Accountants in the future not only need to understand traditional accounting, but also need to have new skills such as programming, data analysis, and the use of advanced analytical tools. This is important so that they can adapt quickly to technological changes and remain relevant in an increasingly competitive job market. The epistemology of accounting in the digital age includes a broader understanding of how technology affects accounting practices, as well as the need to develop new skills and knowledge in order for accountants to function effectively in this ever-changing environment. Accounting in the digital age is not only about financial statements, but also about how data and technology can be used to support better business decisions. Accountants must be able to navigate this changing landscape with a deep understanding of technology, data, and ethics, so they can continue to

play an important role in maintaining corporate financial transparency and integrity in this digital age.

CONCLUSIONS

The transformation of technology in the digital age has brought a huge impact on the epistemology of accounting, fundamentally changing the way financial information is generated, managed and used. The adoption of technologies such as AI and Big Data not only improves efficiency in data processing, but also opens up new opportunities for accountants to provide deeper strategic insights for business decision making. Not only that, this technology can enable automation of accounting processes and improve the speed and accuracy of financial data analysis. The use of AI in Accounting not only helps reduce human legality, but also speeds up the processing time of information that is so needed in good decision making. The use of Big data-Driven Analytics enables more accurate and real-time performance measurements, making financial statements no longer just a reflection of the past, but a predictive tool for the future. However, this transformation also poses new challenges related to ethics and data security. Therefore, accountants must continue to develop skills and understanding related to AI and Big Data and understand the importance of maintaining data integrity and ensuring compliance with existing regulations. Collaboration between humans and AI is key to ensuring that this technology provides maximum benefits without overriding the basic values of the accounting profession. Overall, accounting epistemology in the digital age emphasizes the importance of technology in financial management and reporting and accountants must continue to adapt to technological developments to maintain the relevance and sustainability of accounting practices.

Based on the above conclusion, the suggestion that can be proposed is that companies are advised to allocate adequate resources in the field of accounting technology, especially AI and Big Data to improve efficiency, accuracy, and responsiveness in decision making. Companies can also provide specialized training on AI and Big Data in order to have data analysis skills and technology skills to keep up with the development of digital accounting systems and improve the quality of financial statements. In addition, companies and regulators must ensure that the application of AI and Big Data Technologies in accounting follows strict security and ethical standards.

The limitation of this study is the difference in the results between the selected studies. Some studies may suggest that AI can improve transparency in financial statements, while other studies have found that the use of AI actually magnifies the potential for algorithmic bias in financial analysis. These inconsistencies add to the challenge of synthesizing existing findings and can make it difficult to draw definitive conclusions about the effect of AI on financial statement transparency. Therefore, the conclusions resulting from this study should be treated with caution, and differences in results between studies need to be considered in the context of differences in methodologies, samples, and approaches used. Suggestions to further research may examine different industry sectors or different types of companies to gain a deeper understanding of the implementation of digital technology in accounting as well as may include interview methods with accounting professionals and information technology experts as part of the research methods

REFERENCE

Al-Ababneh, M. M. (2020). Linking Ontology, Epistemology and Research Methodology. *Science & Philosophy*, *8*(1), 75–91. https://doi.org/10.23756/sp.v8i1.500

Alghafiqi, B. (2022). Dampak Teknologi Artificial Intelligence Pada Profesi Akuntansi. *Fair Value: Jurnal Ilmiah Akuntansi Dan Keuangan*, *4*(6), 2158–2174. https://doi.org/10.32670/fairvalue.v5i01.865

Alghafiqi, B., & Munajat, E. (2022). Impact of Artificial Intelligence Technology on Accounting Profession. *Berkala Akuntansi Dan Keuangan Indonesia*, *7*(2), 140–159. https://doi.org/10.20473/baki.v7i2.27934

Appelbaum, D., Kogan, A., & Vasarhelyi, M. A. (2017). Big data and analytics in the modern audit engagement: Research needs. *Auditing*, *36*(4), 1–27. https://doi.org/10.2308/ajpt-51684

Benbya, H., Davenport, T. H., & Pachidi, S. (2020). Artificial Intelligence in Organizations: Current State and Future Opportunities Hind Benbya, Deakin University and Oxford Internet Institute (Australia and U.K.) Thomas H. Davenport, Babson College and Oxford Saïd Business School (U.S.) Stella Pachidi, C. *MIS Quarterly Executive*, *19*(4), 9–21.

Benbya, H., & Leidner, D. (2018). How Allianz UK used an idea management platform to harness employee innovation. *MIS Quarterly Executive*, *17*(2), 141–157.

Bhimani, A., & Willcocks, L. (2014). Digitisation, Big Data and the transformation of accounting information. *Accounting and Business Research*, *44*(4), 469–490. https://doi.org/10.1080/00014788.2014.910051

Bose, S., Dey, S. K., & Bhattacharjee, S. (2023). Big data, data analytics and artificial intelligence in accounting: An overview. In *Handbook of Big Data Research Methods* (Issue March). https://doi.org/10.4337/9781800888555.00007

Christianti, Y. D., Amir, V., & Suhasto, RB. I. N. (2021). Paradoks Konsumerisme "Manusia Akuntansi" Studi Fenomenologi Transendental Perilaku Konsumsi Di Era Industri 4.0 Dalam Pandangan Islam. *Jurnal Ilmiah Edunomika*, *5*(02), 1055–1065. https://doi.org/10.29040/jie.v5i2.2626

Dwikristanto, Y. P., & Muslim, S. (2022). Strategi Penerapan Berpikir Kritis, Logis Dan Reflektif Dalam Pembelajaran Pengantar Akuntansi Di Era Daring: Suatu Tinjauan Epistemologis [Strategy in the Implementation of Critical, Logical, and Reflective Thinking During Online Learning in Introduction. *Polyglot: Jurnal Ilmiah*, *18*(1), 65. https://doi.org/10.19166/pji.v18i1.4892

El-Tawy, N., & Tollington, T. (2008). The recognition and measurement of brand assets: An exploration of the accounting/marketing interface. *Journal of Marketing Management*, *24*(7–8), 711–731. https://doi.org/10.1362/026725708X345489

Fitria, T. N. (2023). Augmented Reality (AR) and Virtual Reality (VR) Technology in Education: Media of Teaching and Learning: A Review. *International Journal of Computer and Information System (IJCIS) Peer Reviewed-International Journal*, *04*(01), 2745–9659.

Fülöp, M. T., Topor, D. I., Ionescu, C. A., Cifuentes-Faura, J., & Măgdaș, N. (2023). Ethical Concerns Associated With Artificial Intelligence in the Accounting Profession: a Curse or a Blessing? *Journal of Business Economics and Management*, *24*(2), 387–404. https://doi.org/10.3846/jbem.2023.19251

García-Duque, C. E. (2018). A meta-analysis of the papers on Accounting Epistemology most read in Colombia in the period 1996-2016. *Discusiones Filosoficas*, *19*(32), 65–84. https://doi.org/10.17151/difil.2018.19.32.5

Gepp, A., Linnenluecke, M. K., O'Neill, T., & Smith, T. (2017). Big Data Techniques in Auditing Research and Practice: Current Trends and Future Opportunities. *SSRN Electronic Journal*, *June*. https://doi.org/10.2139/ssrn.2930767

Gerlick, J. A., & Liozu, S. M. (2020). Ethical and legal considerations of artificial intelligence and algorithmic decision-making in personalized pricing. *Journal of Revenue and Pricing Management*, *19*(2), 85–98. https://doi.org/10.1057/s41272-019-00225-2

Guşe, G. R., & Mangiuc, M. D. (2022). Digital Transformation in Romanian Accounting Practice and Education: Impact and Perspectives. *Amfiteatru Economic*, *24*(59), 252–267. https://doi.org/10.24818/EA/2022/59/252

Hamilton, R. H., & Sodeman, W. A. (2020). The questions we ask: Opportunities and challenges for using big data analytics to strategically manage human capital resources. *Business Horizons*, *63*(1), 85–95. https://doi.org/10.1016/j.bushor.2019.10.001

Hamza, R. A. E. M., Alnor, N. H. A., Al-Matari, E. M., Benzerrouk, Z. S., Mohamed, A. M. E., Bennaceur, M. Y., Elhefni, A. H. M., & Elshaabany, M. M. (2024). The Impact of Artificial Intelligence (AI) on the Accounting System of Saudi Companies. *WSEAS Transactions on Business and Economics*, *21*, 499–511. https://doi.org/10.37394/23207.2024.21.42

Healy, P. M., & Palepu, K. G. (2001). Information asymmetry, corporate disclosure, and the capital markets: A review of the empirical disclosure literature. *Journal of Accounting and Economics*, *31*(1–3), 405–440. https://doi.org/10.1016/S0165-4101(01)00018-0

Ibrahim, A. E. A., Elamer, A. A., & Ezat, A. N. (2021). The convergence of big data and accounting: innovative research opportunities. *Technological Forecasting and Social Change*, *173*(November 2020), 121171. https://doi.org/10.1016/j.techfore.2021.121171

Jiwandono, A. I., & Sofyani, H. (2024). KEY DETERMINANTS OF GOVERNMENT AUDITOR'S BEHAVIOUR TO ADOPT BIG DATA ANALYTICS IN AUDIT PRACTICE. *Jurnal Akuntansi Bisnis*, *17*(2), 182. https://doi.org/10.30813/jab.v17i2.6000

Leitner-Hanetseder, S., Lehner, O. M., Eisl, C., & Forstenlechner, C. (2021). A profession in transition: actors, tasks and roles in AI-based accounting. *Journal of Applied Accounting Research*, *22*(3), 539–556. https://doi.org/10.1108/JAAR-10-2020-0201

Lestari, N., Jafar, R. F., Febriyanti, N., & ... (2024). Penerapan Kecerdasan Buatan Dalam Akutansi Keuangan: Tantangan Dan Peluang. *… of Management and …*, *5*(2), 279–284.

Mauliddiyah, N. L. (2021). Epistemological Trends In Accounting Sciences In Undergraudate Degress In Ecuadorian Universities. *Revista Universidad y Sociedad, 13*(3), 354-360

Moll, J., & Yigitbasioglu, O. (2019). The role of internet-related technologies in shaping the work of accountants: New directions for accounting research. *British Accounting Review*, *51*(6), 100833. https://doi.org/10.1016/j.bar.2019.04.002

Munoko, I., Brown-Liburd, H. L., & Vasarhelyi, M. (2020). The Ethical Implications of Using Artificial Intelligence in Auditing. *Journal of Business Ethics*, *167*(2), 209–234. https://doi.org/10.1007/s10551-019-04407-1

Nagatsu, M., Davis, T., DesRoches, C. T., Koskinen, I., MacLeod, M., Stojanovic, M., & Thorén, H. (2020). Philosophy of science for sustainability science. *Sustainability Science*, *15*(6), 1807–1817. https://doi.org/10.1007/s11625-020-00832-8

Nurhayani, U., Dongoran, F. R., Syah, D. H., & Sagala, G. H. (2024). Fintech Acceptance Among MSMEs: A Post-Covid 19 Response. *Jurnal Akuntansi Dan Keuangan*, *26*(1), 56–66. https://doi.org/10.9744/jak.26.1.56-66

Nur, T., & ∗1, F. (2023). ELT FORUM 12(1) (2023) Journal of English Language Teaching Artificial intelligence (AI) technology in OpenAI ChatGPT application: A review of ChatGPT in writing English essay. *Journal of English Language Teaching*, *12*(1), 44–58.

Pajriani, T. R., Nirwani, S., Rizki, M., Mulyani, N., Ariska, T. O., & Harahap, S. S. A. (2023). Epistemologi Filsafat. *PRIMER : Jurnal Ilmiah Multidisiplin*, *1*(3), 282–289. https://doi.org/10.55681/primer.v1i3.144

Rabiahaladawiyah, & Wirman. (2023). Pengembangan Teori dan Praktek Akuntansi Syariah di Indonesia Rabiahaladawiyah 1 , Wirman 2 1,2 Universitas Singaperbangsa Karawang. *Jurnal Ilmiah Wahana Pendidikan*, *9*(4), 435–446.

Rahmawati, Y. (2022). Akuntansi Syariah di Indonesia dalam Era Digital. *Indonesian Journal of Islamic Economics and Finance*, *2*(1), 1–12. https://doi.org/10.37680/ijief.v2i1.1366

Satyawan, M.D., & Iswati, S. (2023). Articial Intelligence and Philosophy of Humanism in Auditor Perceptions." *Journal of Economic, Business, and Accountancy Ventura* 26.2 (2023): 249-259. https://doi.org/ 0.14414/jebav.v26i2.3491

Sun, Z., Sun, L., & Strang, K. (2018). Big Data Analytics Services for Enhancing Business Intelligence. *Journal of Computer Information Systems*, *58*(2), 162–169. https://doi.org/10.1080/08874417.2016.1220239

Theodorakopoulos, L., Thanasas, G., & Halkiopoulos, C. (2024). Implications of Big Data in Accounting: Challenges and Opportunities. *Emerging Science Journal*, *8*(3), 1201–1214. https://doi.org/10.28991/ESJ-2024-08-03-024

Varma, A., Piedepalumbo, P., & Mancini, D. (2021). Big data and accounting: A bibliometric study. *International Journal of Digital Accounting Research*, *21*(October), 203–238. https://doi.org/10.4192/1577-8517-v21_8

Yoon, S. (2020). A study on the transformation of accounting based on new technologies: Evidence from korea. *Sustainability (Switzerland)*, *12*(20), 1–23. https://doi.org/10.3390/su12208669

Younis, N. M. M. (2020). Big Data and the Future of the Accounting Profession. *Indian Journal of Science and Technology*, *13*(08), 883–892. https://doi.org/10.17485/ijst/2020/v13i08/149808

Zhang, M. (2023). Problems and countermeasures of accounting informatization construction in colleges and universities under the background of big data and artificial intelligence. *Journal of Computational Methods in Sciences and Engineering*, *23*(2), 747–757. https://doi.org/10.3233/JCM-226623

Zhong, R., Zhang, Q., & Zhao, Y. (2022). Research on Enterprise Financial Accounting Information Security Model Based on Big Data. *Wireless Communications and Mobile Computing*, *2022*. https://doi.org/10.1155/2022/7929846