



(REVIEW ARTICLE)



# Systematic literature review on the critical role of data integrity in AI-driven enterprises

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## Abstract

In today's world, AI plays a vital role in every industrial activity. The study has focused on understanding the role of data integration in AI-driven enterprises. It has explored the application of AI in financial risk management, data governance, cyber security, and health care while addressing the challenges related to Data integrity that involve ethical concerns and data bridges. The study followed a systematic literature review, which gathered information from the existing data sources. Findings have highlighted the need for a strong AI governance framework and high-quality data management for all organizations regarding the automatic AI potential while mitigating the risk. This research contributes to the development of sustainable AI-driven strategies for enterprises.

**Keywords:** Artificial Intelligence; Data Integrity; Risk Management; Machine Learning and Data Governance

## 1. Introduction

With the changing dynamic aspect of the business, it has been observed that AI is one of the transformative forces that have changed modern enterprise (Chui et al., 2018). The increasing rise of AI has transformed business operations while addressing deficiencies and enabling data-driven business. Artificial intelligence (AI) has not only changed the dynamics in the business but also has become directly dependent on the integrity of the data used in every sector (Redman, 2018). Data integrity is the data's consistency, reliability, and accuracy throughout its life cycle. It is important to ensure trust in the aspect of AI application in the enterprise (Ghasemaghahi & Calic, 2020). The growing adoption of AI has been one of the significant concerns related to data quality, and data breaches have raised concerns about the challenges businesses face in leveraging AI technologies (Rahman et al., 2022). This study examines the role of data integrity in AI-driven enterprises and highlights its importance and the associated challenges faced while implementing robust data governance.

### 1.1. Problem statement

The main problem evaluated in the study is the data integrity concerns while implementing AI in various sectors (Ghasemaghahi, 2019). This research highlighted the ongoing issues related to poor data quality that have affected the predictions and decisions made by the organizations (Kumar et al., 2021). Improper or absence of structured data compromises data integrity and adversely affects AI modelling, thus resulting in misleading insights (Raji et al., 2020). This study explores how enterprises can effectively improve Data integrity while highlighting the reliability of the given decision-making process (Davenport & Ronanki, 2018).

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## 1.2. Research aim

The primary aim of the research is to investigate the significance of data integrity in AI-driven enterprises and its impact on the decision-making process.

## 1.3. Research objectives

- To examine the role of Data integrity in the AI-driven enterprises.
- To evaluate the challenges that have affected Data integrity in AI applications.
- To explore the best practices for ensuring the Data integrity of a given enterprise.

## 1.4. Significance of the study

The study has significantly contributed to and highlighted the crucial link between AI effectiveness and Data integrity, which has a massive role in the enterprise (Adewusi et al., 2024). To ensure Data integrity, the organization must achieve accurate AI outcomes while maintaining regulatory compliance (Bughin et al., 2019). The findings derived from this study will be valuable for business leaders, policymakers, and data scientists who want to enhance the AI governance framework while promoting the responsible use of AI in enterprises.

## 1.5. Research Gap

Despite the growing research on AI adoption in many enterprises, these enterprises focus on the specific role of Data integrity in AI applications (Kumar et al., 2021). The existing literature has addressed the biases of AI and security concerns separately but has not provided comprehensive studies on integrating data quality and governance in AI (Ajiga et al., 2024). This study has focused on filling the gap by providing a holistic approach to data integrity and its role in AI-driven enterprises while proposing solutions to enhance AI reliability.

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## 2. Literature review

The LR section has highlighted peer-reviewed journals and articles based on Data integrity, which is a crucial factor in the success of AI-driven enterprises (Johnson et al., 2020). Without reliable data, it is difficult for AI models to produce accurate results. They often mislead or provide inaccurate outcomes that lead to poor decision-making and thereby affect every activity of the organization (Alagarsundaram et al., 2023).

### 2.1. Data Quality and AI Decision-Making

Data quality and decision making are two of the most important aspects that have been observed, since majority of the companies depend on the quality of data which they are using (Wang & Strong, 2020). Heavy Reliance on high-quality data is mainly characterized by the accuracy and relevance towards the organization's objectives. Together, they contribute to understanding and addressing reliable AI outcomes (Dai et al., 2019). However, most studies have indicated that the companies have struggled to meet the high-quality data due to the fragmented data source and inappropriate data management practices (Zhang et al., 2022). For example, it has been observed that the financial sector often faces the issue of credit risk management, which has a negative impact on the organizations (Sarker, 2021). Similarly, in the healthcare sector, inconsistency in patient data management has resulted in poor outcomes.

### 2.2. The Role of Data Integrity in AI

Data integrity holds a significant role in organizations, and it is observed that improper management of the data leads to discriminatory outcomes (Mehrabani et al., 2021). Often, the data set leads to historical prejudice, which is embedded in the imbalanced data and training program (Chakraborty et al., 2021). For example, it has been found that hiring algorithms have changed with AI-driven technology, which has led to difficulty in hiring skilled professionals in the organization (Buolamwini & Gebbru, 2018). It is also found that biased training sheets have affected the minority groups in the organization. A research study by Raji and Buolamwini (2019) suggests that implementing strong data integrity would create data validation, help free processing techniques, and reduce the chances of bias. Further, implementing the AI Framework has provided many areas of improvement in accountability and transparency that lead to proper decision-making (Arrieta et al., 2020).

### 2.3. Data Governance in AI Enterprises

Maintaining the data integrity of AI-driven enterprises is important by using effective data governance and management (Otto, 2020). With a strong data governance framework, ethical guidelines necessary for data collection and storage can be implemented (Khatri & Brown, 2019). In terms of AI enterprises, it has been found that data governance improves regulatory compliance by introducing data protection regulations (González and de León, 2021). The studies have highlighted that companies investing more in data stewardship mainly customize data validation tools to address data integrity (Sun et al., 2022).

## 3. Material and methods

### 3.1. Search Strategy

The search was conducted using Google Scholar, ScienceDirect, and Springer link databases. The keywords used to review the research materials are "*data integrity in AI*," "*challenges of AI data security*," and "*AI-driven data management*." Boolean operators, such as AND and OR, have been used to refine the search results while ensuring relevance (Aldoseri, Al-Khalifa, and Hamouda, 2023). Only peer-reviewed journal articles and industry reports were considered to develop the research.

**Table 1** Exclusion and inclusion criteria

Inclusion	Exclusion
Basic English	Non-English
Peer-reviewed journals	Non-peer-reviewed sources
Studies published between 2018-2025	Studies published before 2018 (unless foundational)
Studies focused on AI-driven data integrity, cybersecurity, and governance	General data integrity without AI relevance
Empirical studies, theoretical frameworks, case studies	Irrelevant or outdated methodologies

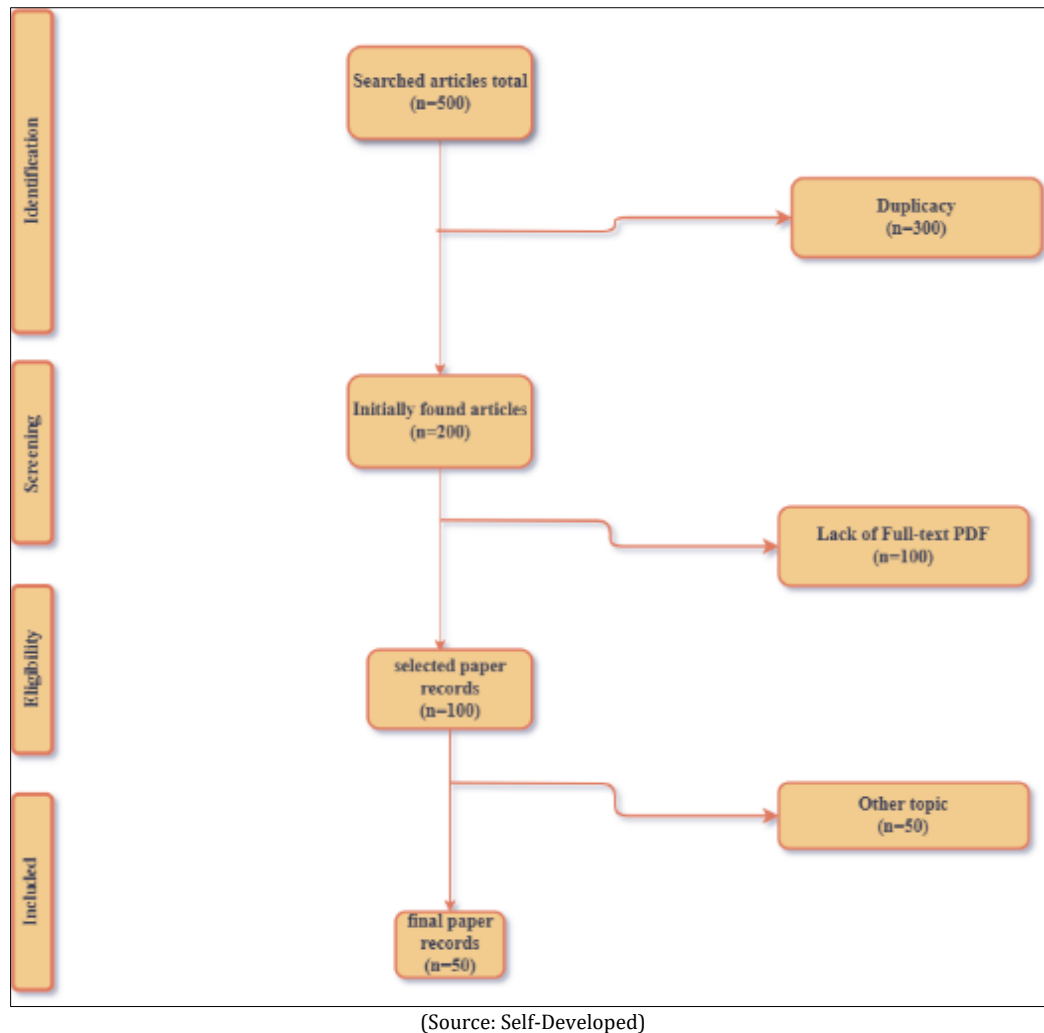
### 3.2. Time horizon

This study adopted a ***longitudinal time horizon***, examining the research using literature over time (Arefin & Simcox, 2024). The research articles used in this study were mainly between 2018 and 2025, which depicts a long time to understand the changing AI-driven techniques in the enterprise.

### 3.3. Prisma

The Prisma diagram has effectively guided the systematic screening and research of the articles. The selection process is mainly divided into four primary stages:

- Identification: In the initial phase, 500 papers were identified from various academic databases using the search terms.
- Screening: It includes eliminating irrelevant studies, from which nearly 300 articles have been removed at this stage.
- Eligibility: Full-text screening was conducted applying inclusion-exclusion criteria, and only 100 articles were selected.
- Inclusion: Lastly, after the final quality assessment, 50 papers were found relevant and satisfied all the criteria mentioned in the inclusion column.



**Figure 1** PRISMA Framework

## 4. Results and discussion

### 4.1. The Impact of Data Integrity on AI Performance

Data integrity is one of the crucial points, and it describes the accuracy and reliability of the AI model (Chen et al., 2022). The studies have effectively revealed that errors, inconsistency, and bias have led to the flawed output of the data (Bin-Nashwan, Sadallah and Bouteraa, 2023). For instance, one of the case studies evaluated by the study revealed that financial institutions have demonstrated that AI-driven fraud detection systems have inconsistent data sets (Zhang & Li, 2021). It is directly aligned with the research, which states that AI models require an unbiased data structure and clean data to function optimally (Brown & Davis, 2020).

### 4.2. Cybersecurity Threats to Data Integrity

Cybersecurity addresses many significant threats to maintaining data integrity related to the AI enterprise (Camacho, 2024). Research has shown that many AI failures are due to data manipulation through cyber-attacks such as data poisoning (Alijanabi et al, 2022). In a recent cybersecurity report, it has been observed that deep learning models are highly vulnerable as there is a tendency to manipulate the data input, which leads to incorrect decision-making in the healthcare and financial sectors (Williams & Khan, 2023). This has effectively highlighted the necessity of robust security protocols such as blockchain and encryption, safeguarding AI-driven data (Blasch et al., 2021).

### 4.3. Regulatory and Ethical Considerations

Ensuring compliance with Data integrity standards is a challenging factor that has affected many organizations (Camacho, 2024). The introduction of regulations such as the European Union's General Data Protection Regulation and the US AI Bill of Rights has effectively emphasized the importance of ethical AI development (Miller & Clark, 2021). Studies have suggested that many AI enterprises are fully compliant with data integrity standards; however, they have highlighted a gap in their actual implementation.

## 5. Conclusion

From the above research study, it could be stated that Data integrity has played an effective role in terms of a reliable and AI-driven enterprise. The findings have highlighted that compromised data quality often leads to inaccurate AI output, while cybersecurity threats have further jeopardized Data integrity. To mitigate the risk, businesses must adopt advanced security frameworks and strict data governance policies to maintain credibility and usability across industries. Overall, the research has highlighted a deep understanding of the role of Data integrity in each business solution used by the enterprises, which requires trust in long-term sustainability and transparency.

### *Recommendations*

After evaluating the research, it is recommended that the industry improve data integrity in a data-driven enterprise when organizations implement robust cybersecurity measures. The AI system and big data should also be trained based on high-quality and unbiased data sets to improve fairness and accuracy (Chinta et al., 2022). AI-driven enterprises must prioritize data integrity by implementing robust encryption, comprehensive monitoring, and industry-wide security standards to ensure accurate, trustworthy AI outcomes and safeguard critical systems. (Camacho, 2024). Further continuous monitoring and auditing of AI models will enhance their security and reliability.

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## Appendices

### Appendix 1 Systematic Literature Review Table

Topic	DOI	Authors	Codes/The mes	Key Findings	Recommendat ions
Align the construction industry	10.1016/j.job.2021.103299	Abioye, S. O., Oyedele, L. O., Akanbi, L., Ajayi, A., Delgado, J. M. D., Bilal, M., and Ahmed, A.	Risk deduction and AI in construction and automation.	The major finding is that AI has transformed the construction sector by improving safety and productivity.	The main recommendation is the adoption of AI requires sufficient investment in the digital infrastructure, regular support and training of the organisation.
Business intelligence in the era of big data	10.51594/csitjr.v5i2.791	Adewusi, A. O., Okoli, U. I., Adaga, E., Olorunsogo, T., Asuzu, O. F., and Daraojimba, D. O.	Big Data analytics and competitive advantage	It has been observed that business intelligence tools have enabled data-driven decisions but the majority of the companies have	It is important for the organisation to invest in a more secure and scalable data infrastructure while training the employees in data analytics.

				struggled with data integration and securities problems.	
Enhancing software development practices with AI insights in high-tech companies	10.51594/csitrj.v5i8.1450	Ajiga, D., Okeleke, P. A., Folorunsho, S. O., and Ezeigweneme, C.	AI in predictive analytics and software development .	AI-enhanced efficiency and coding while detecting project management in high-technology firms.	Companies should implement AI in the software development life cycle for better outcomes.
Integrating blockchain, AI, and machine learning for secure employee data management	<a href="http://www.ijcsejournal.org/IJCSE-V7I1P9.pdf">http://www.ijcsejournal.org/IJCSE-V7I1P9.pdf</a>	Alagarsundaram, P., Gattupalli, K., Gollavilli, V. S. B. H., Nagarajan, H., and Sitaraman, S. R.	Blockchain technology and AI-driven HR solutions	AI and blockchain have effectively enhanced the data security of employees and have reduced the fraud risk	To improve this, organisations should focus on implementing AI-driven management systems.
Re-thinking data strategy and integration for artificial intelligence: Concepts, opportunities, and challenges	10.3390/app13127082	Aldoseri, A., Al-Khalifa, K. N., and Hamouda, A. M.	Data integration and strategy challenges	With effective AI deployment, it has been observed that the deployment method reduces the challenges including integration complexities.	Needs to develop a well-defined AI data governance framework along with its interoperability of tools.
Data poisoning: issues, challenges, and needs.	<a href="https://doi.org/10.1049/icp.2024.0951">https://doi.org/10.1049/icp.2024.0951</a> .	Aljanabi, M., Alaa Hamza Omran, Mijwil, M.M., Mostafa Abotaleb, El-kenawy, E.-S.M	Data poisoning	Data poisoning impacts model performances	Data integrity is fundamental for the development of safe AI
AI-Driven Solutions for Safeguarding Healthcare Data	<a href="https://pdfs.semanticscholar.org/4f0e/83ee76f1605e4f4a79a82237b354c5142a74.pdf">https://pdfs.semanticscholar.org/4f0e/83ee76f1605e4f4a79a82237b354c5142a74.pdf</a>	Arefin, S., and Simcox, M.	Data protection in healthcare and AI in	The key finding is that AI enhances healthcare	Implementation of AI-driven encryption techniques and

			cyber security.	data security by using encryption and detection along with automated monitoring systems.	real-time monitoring.
Use of ChatGPT in academia: Academic integrity hangs in the balance	10.1016/j.techsoc.2023.102370	Bin-Nashwan, S. A., Sadallah, M., and Bouteraa, M.	Academic integrity and AI education.	It has highlighted the use of AI tools in academic areas ChatGPT, which has raised concerns over plagiarism and the academic integrity of data.	In the future, the institution should implement AI detection tools along with ethical guidelines.
Machine learning/AI for sensor data fusion—opportunities and challenges	<a href="https://www.researchgate.net/profile/Erik-Blasch/publication/353093680_Machine_Learning_Artificial_Intelligence_for_Sensor_Data_Fusion-Opportunities_and_Challenges/links/62436d8921077329f2dfd56b/Machine-Learning-Artificial-Intelligence-for-Sensor-Data-Fusion-Opportunities-and-Challenges.pdf">https://www.researchgate.net/profile/Erik-Blasch/publication/353093680_Machine_Learning_Artificial_Intelligence_for_Sensor_Data_Fusion-Opportunities_and_Challenges/links/62436d8921077329f2dfd56b/Machine-Learning-Artificial-Intelligence-for-Sensor-Data-Fusion-Opportunities-and-Challenges.pdf</a>	Blasch, E., Pham, T., Chong, C. Y., Koch, W., Leung, H., Braines, D., and Abdelzaher, T.	AI in IoT and machine learning.	AI and machine learning focus on improving the sensor data fusion for real-time, but the challenges consist of data inconsistency and computational flexibility.	Improved advanced air models that can focus towards real-time sensor data while addressing the data inconsistency.
The role of AI in cybersecurity	<a href="https://newjaigs.com/index.php/JAIGS/article/download/75/46">https://newjaigs.com/index.php/JAIGS/article/download/75/46</a>	Camacho, N. G.	Cyber security and data protection	The main findings highlight that AI needs to improve cyber security while detecting threats at a fast speed.	The organisation needs to invest in AI-driven cyber security solutions to reduce the chances of Cyber threats.

Exploring the role of neural networks in big data-driven ERP systems for proactive cybersecurity management	<a href="https://www.researchgate.net/profile/Purna-Chandra-Rao-Chinta/publication/387916314_Exploring_the_Role_of_Neural_Networks_in_Big_Data-Driven_ERP_Systems_for_Proactive_Cybersecurity_Management/links/678e8ee582501639f5fda941/Exploring-the-Role-of-Neural-Networks-in-Big-Data-Driven-ERP-Systems-for-Proactive-Cybersecurity-Management.pdf">https://www.researchgate.net/profile/Purna-Chandra-Rao-Chinta/publication/387916314_Exploring_the_Role_of_Neural_Networks_in_Big_Data-Driven_ERP_Systems_for_Proactive_Cybersecurity_Management/links/678e8ee582501639f5fda941/Exploring-the-Role-of-Neural-Networks-in-Big-Data-Driven-ERP-Systems-for-Proactive-Cybersecurity-Management.pdf</a>	Chinta, P. C. R., Katnapally, N., Ja, K., Bodepudi, V., Babu, S., and Boppana, M. S.	Neural network, cyber security and ERP system.	Enhance ERP security by detecting large data sets and predicting cyber threats.	The major recommendation is that businesses should integrate AI-powered detection systems into ERP to improve security.
Integration of Salesforce with external systems	<a href="https://papers.ssrn.com/sol3/Delivery.cfm?abstractid=4982628">https://papers.ssrn.com/sol3/Delivery.cfm?abstractid=4982628</a>	Chinta, U., and Chhapola, A.	Cloud integration	This results in the integration of Salesforce with external systems to improve data consistency.	Use of AI-driven techniques for seamless data synchronization.
The role of deep learning in ensuring privacy integrity and security	<a href="https://www.researchgate.net/profile/Joseph-Chukwunweike/publication/383399550_The_role_of_deep_learning_in_ensuring_privacy_integrity_and_security_Applications_in_AI-driven_cybersecurity_solutions/links/66cb01e5c2eaa5002314dd75/The-role-of-deep-learning-in-ensuring-privacy-integrity-and-security-Applications-in-AI-driven-cybersecurity-solutions.pdf">https://www.researchgate.net/profile/Joseph-Chukwunweike/publication/383399550_The_role_of_deep_learning_in_ensuring_privacy_integrity_and_security_Applications_in_AI-driven_cybersecurity_solutions/links/66cb01e5c2eaa5002314dd75/The-role-of-deep-learning-in-ensuring-privacy-integrity-and-security-Applications-in-AI-driven-cybersecurity-solutions.pdf</a>	Chukwunweike, J. N., Yussuf, M., Okusi, O., and Oluwatobi, T.	Deep learning and cyber security	Deep learning models focus on improving data security while highlighting automation encryption.	Advancement in AI-powered security Framework with real-time threat detection.
A life cycle: From conception to production	10.1016/j.patter.2022.100460	De Silva, D., and Alahakoon, D.	AI life cycle and governance.	The AI life cycle involves continuous learning conception developme	Implementation of ethical AI framework and continuous monitoring techniques.

				nt, which is necessary for Ethical and regulatory consideration.	
AI in data privacy and security	<a href="https://lib-index.com/index.php/IJAIML/article/view/IJAIML_03_01_004/419">https://lib-index.com/index.php/IJAIML/article/view/IJAIML_03_01_004/419</a>	Devineni, S. K.	Data privacy and risk management	Enhance the AI for privacy through encryption.	Implementation of AI-driven security protocol.
Blockchain and AI for 5G-enabled Internet of Things	10.1002/ett.4329	Dhar Dwivedi, A., Singh, R., Kaushik, K., Rao Mukkamala, R., and Alnumay, W. S.	AI 5G and IOT	Implementation of these technologies to improve efficiency and automation.	Development of hybrid blocks in solutions.
Effects of AI Decisions on Project Management	10.4236/ajibm.2021.113016	El Khatib, M., and Al Falasi, A.	AI in project management decision-making.	Improve decision-making for analysing large data sets.	Should invest more in project management-based AI support systems.
Integrating artificial intelligence, Internet of Things, and 5G for next-generation smart grid	10.1109/ACCESS.2022.3152346	Esenogho, E., Djouani, K., and Kurien, A. M.	Smart grid	Smart, great optimization for reduction of energy waste.	Need to invest in AI-based smart grid infrastructure.
The future of tax technology in the United States	<a href="https://www.researchgate.net/profile/Anfo-Pub-2/publication/389055060_The_Future_of_Tax_Technology_in_the_United_States_A_Conceptual_Framework_for_AI-Driven_Tax_Transformation/links/67b337174c479b26c9e52b0b/The-Future-of-Tax-Technology-in-the-United-States-A-Conceptual-Framework-for-AI-Driven-Tax-Transformation.pdf">https://www.researchgate.net/profile/Anfo-Pub-2/publication/389055060_The_Future_of_Tax_Technology_in_the_United_States_A_Conceptual_Framework_for_AI-Driven_Tax_Transformation/links/67b337174c479b26c9e52b0b/The-Future-of-Tax-Technology-in-the-United-States-A-Conceptual-Framework-for-AI-Driven-Tax-Transformation.pdf</a>	Ezeife, E., Kokogho, E., Odio, P. E., and Adeyanju, M. O.	Digital tax and automation	AI revolutionize the overall taxation system	Adoption of AI-driven and fraud detection systems.

AI-Driven Blockchain Solutions for Environmental Data Integrity and Monitoring	<a href="https://www.researchgate.net/profile/Pavan-Kumar-Gade/publication/387069387_AI-Driven_Blockchain_Solutions_for_Environmental_Data_Integrity_and_Monitoring/links/675ee6702547a96a923b35d3/AI-Driven-Blockchain-Solutions-for-Environmental-Data-Integrity-and-Monitoring.pdf">https://www.researchgate.net/profile/Pavan-Kumar-Gade/publication/387069387_AI-Driven_Blockchain_Solutions_for_Environmental_Data_Integrity_and_Monitoring/links/675ee6702547a96a923b35d3/AI-Driven-Blockchain-Solutions-for-Environmental-Data-Integrity-and-Monitoring.pdf</a>	Gade, P. K.	Environmental monitoring	Blockchain ensures the integrity of environmental data while preventing tampering issue	Blockchain solution
AI-driven business model innovation	10.1016/j.jbusres.2024.114764	Jorzik, P., Klein, S. P., Kanbach, D. K., and Kraus, S.	Innovation and business model	Fostering new business models to maintain a data-driven strategy.	Leveraging AI for personalized service.
Artificial intelligence-driven sustainable development	10.1002/sd.2773	Kulkov, I., Kulkova, J., Rohrbeck, R., Menvielle, L., Kaartemo, V., and Makkonen, H.	Sustainability and green technology	It supports sustainable development through smart infrastructure.	AI-driven sustainability initiative
Autonomous data healing: AI-driven solutions for enterprise data integrity	<a href="https://lib-index.com/index.php/IJCET/article/view/IJCET_15_06_004/1473">https://lib-index.com/index.php/IJCET/article/view/IJCET_15_06_004/1473</a>	Kumari, B.	Autonomous data management	Help to recover data while ensuring data accuracy	Use of AI-based data healing mechanism.
The role of AI in information security risk management	<a href="https://www.researchgate.net/profile/Oluwafemi-Kunle-Lawanson/publication/385708512_The_role_of_AI_in_information_security_risk_management/links/6733111068de5e5a3073ad68/The-role-of-AI-in-information-security-risk-management.pdf">https://www.researchgate.net/profile/Oluwafemi-Kunle-Lawanson/publication/385708512_The_role_of_AI_in_information_security_risk_management/links/6733111068de5e5a3073ad68/The-role-of-AI-in-information-security-risk-management.pdf</a>	Kunle-Lawanson, N. O.	Risk management and information system.	Identification of the vulnerability and automating security response	AI-powered risk assessment tool.
Integrating Machine Learning-Driven RPA with Cloud-Based Data	<a href="https://www.researchgate.net/profile/Jeshwanth-Reddy-Machireddy/publication/389101680_Integrating_Machine_Learning-">https://www.researchgate.net/profile/Jeshwanth-Reddy-Machireddy/publication/389101680_Integrating_Machine_Learning-</a>	Machireddy, J. R.	Cloud analytics and business intelligence	Machine learning enhances Data analytics.	AI-powered RPA tool

Warehousing for Real-Time Analytics and Business Intelligence	Driven_RPA_with_Cloud-Based_Data_Warehousing_for_Real-Time_Analytics_and_Business_Intelligence/links/67b55a50645ef274a487deff/Integrating-Machine-Learning-Driven-RPA-with-Cloud-Based-Data-Warehousing-for-Real-Time-Analytics-and-Business-Intelligence.pdf				
AI-Driven Threat Detection: Leveraging Big Data For Advanced Cybersecurity Compliance	<a href="https://papers.ssrn.com/sol3/Delivery.cfm?abstractid=5029406">https://papers.ssrn.com/sol3/Delivery.cfm?abstractid=5029406</a>	Madhavram, C., Galla, E. P., Sunkara, J. R., Rajaram, S. K., and Patra, G. K.	Big data security and AI in threat.	Improvement of cyber security compliance.	Threat detection system adoption.
Application of AI IoT security for crop yield prediction	<a href="https://core.ac.uk/download/pdf/578755754.pdf">https://core.ac.uk/download/pdf/578755754.pdf</a>	Malhotra, K., and Firdaus, M.	AI in agriculture	Enhance the crop yield prediction.	AI-driven IoT security measures
Navigating the nexus of AI and IoT	<a href="https://doi.org/10.1016/j.iot.2024.101318">https://doi.org/10.1016/j.iot.2024.101318</a>	Marengo, A.	Smart devices, Automation	Real-time analytics and predictive decision-making.	Develop AI-IoT frameworks for improved efficiency.
AI-driven risk platform automating data aggregation and risk insight generation	<a href="https://www.researchgate.net/profile/Sanjay-Moolchandani/publication/389142689_AI-Driven_Risk_Platform_Automating_Data_Aggregation_and_Risk_Insight_Generation_Sanjay_Moolchandani/links/67b6cf718311ce680c6b19b7/AI-Driven-Risk-Platform-Automating-Data-Aggregation-and-Risk-Insight-Generation-Sanjay-Moolchandani.pdf">https://www.researchgate.net/profile/Sanjay-Moolchandani/publication/389142689_AI-Driven_Risk_Platform_Automating_Data_Aggregation_and_Risk_Insight_Generation_Sanjay_Moolchandani/links/67b6cf718311ce680c6b19b7/AI-Driven-Risk-Platform-Automating-Data-Aggregation-and-Risk-Insight-Generation-Sanjay-Moolchandani.pdf</a>	Moolchandani, S.	AI in risk management	Automatic risk analysis while highlighting the data from multiple sources.	Adopt AI-powered risk.
AI-powered big data and ERP systems for autonomous detection of	<a href="https://papers.ssrn.com/sol3/Delivery.cfm?abstractid=5114902">https://papers.ssrn.com/sol3/Delivery.cfm?abstractid=5114902</a>	Moore, C.	Big data analytics	Improving the ERP system to identify vulnerabilities.	ERP systems to prevent cyber threats

cybersecurity vulnerabilities					
Investigating the feasibility and risks of leveraging and open source intelligence to manage predictive cyber threat models	<a href="https://papers.ssrn.com/sol3/Delivery.cfm?abstractid=5108973">https://papers.ssrn.com/sol3/Delivery.cfm?abstractid=5108973</a>	Obioha Val, O., Lawal, T., Olaniyi, O. O., Gbadebo, M. O., and Olisa, A. O.	Threat prediction	AI enhances threat detection but raises ethical concerns	Ethical AI use in cyber threat management.
Exploring the challenges of AI data integrity and its influence on social dynamics	<a href="https://papers.ssrn.com/sol3/Delivery.cfm?abstractid=4693987">https://papers.ssrn.com/sol3/Delivery.cfm?abstractid=4693987</a>	Oladoyinbo, T. O., Olabanji, S. O., Olaniyi, O. O., Adebisi, O. O., Okunleye, O. J., and Ismaila Alao, A.	AI ethics and social impact.	Compromise data integrity, affecting trust in digital.	AI governance to maintain public trust.
AI-driven autonomous database management: Self-tuning, predictive query optimization, and intelligent indexing in enterprise IT environments	<a href="https://www.researchgate.net/profile/Oluwafemi-Oloruntoba/publication/389392969_AI-Driven_autonomous_database_management_Self-tuning_predictive_query_optimization_and_intelligent_indexing_in_enterprise_it_environments/links/67c09144645ef274a4965f8d/AI-Driven-autonomous-database-management-Self-tuning-predictive-query-optimization-and-intelligent-indexing-in-enterprise-it-environments.pdf">https://www.researchgate.net/profile/Oluwafemi-Oloruntoba/publication/389392969_AI-Driven_autonomous_database_management_Self-tuning_predictive_query_optimization_and_intelligent_indexing_in_enterprise_it_environments/links/67c09144645ef274a4965f8d/AI-Driven-autonomous-database-management-Self-tuning-predictive-query-optimization-and-intelligent-indexing-in-enterprise-it-environments.pdf</a>	Oloruntoba, N. O.	Autonomous computing	Improvement of database monitoring	AI-powered autonomous database management.
Big data analytics, artificial intelligence, machine learning, internet of things, and blockchain for enhanced business intelligence	<a href="https://www.pumrj.com/index.php/research/article/download/14/12">https://www.pumrj.com/index.php/research/article/download/14/12</a>	Paramesha, M., Rane, N. L., and Rane, J.	Big data, Blockchain integration	Enhance decision-making.	Use AI-driven data analytics platforms for predictive insights.
Ensuring Data Integrity in Cloud Computing	<a href="http://yuktabpublisher.com/index.php/IJAI/article/download/180/141">http://yuktabpublisher.com/index.php/IJAI/article/download/180/141</a>	Pentyala, D. K.	AI in cloud security, Data integrity,	Detecting anomalies and preventing	Implement AI-based monitoring tools.



Using Artificial Intelligence			cybersecurity	unauthorized access.	
AI-based data cleaning and management in Salesforce CRM for improving data integrity and accuracy to enhance customer insights	<a href="https://www.researchgate.net/profile/Jaseem-Pookandy/publication/383819987_AI-Based_Data_Cleaning_and_Management_in_Salesforce_CRM_for_Improving_Data_Integrity_and_Accuracy_to_Enhance_Customer_Insights/links/66db04ed64f7bf7b199a38c3/AI-Based-Data-Cleaning-and-Management-in-Salesforce-CRM-for-Improving-Data-Integrity-and-Accuracy-to-Enhance-Customer-Insights.pdf">https://www.researchgate.net/profile/Jaseem-Pookandy/publication/383819987_AI-Based_Data_Cleaning_and_Management_in_Salesforce_CRM_for_Improving_Data_Integrity_and_Accuracy_to_Enhance_Customer_Insights/links/66db04ed64f7bf7b199a38c3/AI-Based-Data-Cleaning-and-Management-in-Salesforce-CRM-for-Improving-Data-Integrity-and-Accuracy-to-Enhance-Customer-Insights.pdf</a>	Pookandy, J.	AI in CRM, Data management, Customer insights	Accuracy in CRM systems, leading to better customer engagement.	Businesses should integrate AI-powered data cleaning tools.
Scalable Machine Learning Workflows in Data Warehousing	<a href="https://www.researchgate.net/profile/Jeshwanth-Reddy-Machireddy/publication/389100975_Scalable_Machine_Learning_Workflows_in_Data_Warehousing_Automating_Model_Training_and_Deployment_with_AI/links/67b5584496e7fb48b9c69e1f/Scalable-Machine-Learning-Workflows-in-Data-Warehousing-Automating-Model-Training-and-Deployment-with-AI.pdf">https://www.researchgate.net/profile/Jeshwanth-Reddy-Machireddy/publication/389100975_Scalable_Machine_Learning_Workflows_in_Data_Warehousing_Automating_Model_Training_and_Deployment_with_AI/links/67b5584496e7fb48b9c69e1f/Scalable-Machine-Learning-Workflows-in-Data-Warehousing-Automating-Model-Training-and-Deployment-with-AI.pdf</a>	Rachakatla, S. K., Ravichandran, P., and Kumar, N.	ML in data warehousing	Large-scale data processing, improving efficiency in data management.	Deploy AI-driven machine learning.
Role and challenges of ChatGPT and similar generative AI business management	<a href="https://papers.ssrn.com/sol3/Delivery.cfm?abstractid=4603227">https://papers.ssrn.com/sol3/Delivery.cfm?abstractid=4603227</a>	Rane, N.	Generative AI, AI in business, ChatGPT applications	AI chatbots improve customer service.	Organisations should establish guidelines for ethical AI.
Data Lake Implementation in Enterprise Environments	<a href="https://papers.ssrn.com/sol3/Delivery.cfm?abstractid=5068537">https://papers.ssrn.com/sol3/Delivery.cfm?abstractid=5068537</a>	Ravi, V. K., and Ayyagari, A.	Enterprise data management	Analytical capabilities in enterprises.	Implement AI-driven data lake solutions for an efficient enterprise.
Harnessing Generative AI for Automated	<a href="https://www.researchgate.net/profile/Jeshwanth-Reddy-Machireddy/publication/389100975_Scalable_Machine_Learning_Workflows_in_Data_Warehousing_Automating_Model_Training_and_Deployment_with_AI/links/67b5584496e7fb48b9c69e1f/Scalable-Machine-Learning-Workflows-in-Data-Warehousing-Automating-Model-Training-and-Deployment-with-AI.pdf">https://www.researchgate.net/profile/Jeshwanth-Reddy-Machireddy/publication/389100975_Scalable_Machine_Learning_Workflows_in_Data_Warehousing_Automating_Model_Training_and_Deployment_with_AI/links/67b5584496e7fb48b9c69e1f/Scalable-Machine-Learning-Workflows-in-Data-Warehousing-Automating-Model-Training-and-Deployment-with-AI.pdf</a>	Ravichandran Sr, P., Machireddy Sr, J. R., and Rachakatla, S. K.	Generative AI, Data	Automating business	Businesses should integrate AI-

Data Analytics in Business Intelligence and Decision-Making	Machireddy/publication/389101380_Harnessing_Generative_AI_for_Automated_Data_Analytics_in_Business_Intelligence_and_Decision-Making/links/67b55a00645ef274a487deea/Harnessing-Generative-AI-for-Automated-Data-Analytics-in-Business-Intelligence-and-Decision-Making.pdf		Analytics, AI in BI	analytics processes.	driven analytics tools for faster insights.
How has data-driven marketing evolved	<a href="https://doi.org/10.1016/j.ijid.2023.100203">https://doi.org/10.1016/j.ijid.2023.100203</a>	Rosário, A. T., and Dias, J. C.	AI in marketing, Data-driven strategies	AI transforms marketing by enabling hyper-personalization and predictive analytics.	Companies should leverage AI-driven marketing automation for improved customer targeting.
Securing the digital world: Protecting smart infrastructures and digital industries with AI(AI)-enabled malware and intrusion detection	<a href="https://doi.org/10.1016/j.jii.2023.100520">https://doi.org/10.1016/j.jii.2023.100520</a>	Schmitt, M.	Smart infrastructure security	Mitigates cyber threats in smart industries and digital infrastructure.	Implement AI-based intrusion detection systems.
Harnessing AI-Driven Data Mining for Predictive Insights: A Framework for Enhancing Decision-Making in Dynamic Data Environments	<a href="https://www.researchgate.net/profile/Guru-Selvarajan/publication/385557912_Harnessing_AI-Driven_Data_Mining_for_Predictive_Insights_A_Framework_for_Enhancing_Decision-Making_in_Dynamic_Data_Environments/links/672a94962326b47637c9f71b/Harnessing-AI-Driven-Data-Mining-for-Predictive-Insights-A-Framework-for-Enhancing-Decision-Making-in-Dynamic-Data-Environments.pdf">https://www.researchgate.net/profile/Guru-Selvarajan/publication/385557912_Harnessing_AI-Driven_Data_Mining_for_Predictive_Insights_A_Framework_for_Enhancing_Decision-Making_in_Dynamic_Data_Environments/links/672a94962326b47637c9f71b/Harnessing-AI-Driven-Data-Mining-for-Predictive-Insights-A-Framework-for-Enhancing-Decision-Making-in-Dynamic-Data-Environments.pdf</a>	Selvarajan, G. P.	Predictive analytics	Uncovering hidden patterns in large datasets.	AI-driven data mining for real-time predictive insights.

Empowering Users: The Role Of AI In Enhancing Self-Service BI For Data-Driven Decision-Making	<a href="https://papers.ssrn.com/sol3/Delivery.cfm?abstractid=4993596">https://papers.ssrn.com/sol3/Delivery.cfm?abstractid=4993596</a>	Syed, S., and Nampally, R. C. R.	Self-service BI	Automated insights for self-service analytics.	Adopt AI-powered self-service BI platforms.
Integrating AI, Blockchain and cloud technologies for data management in healthcare	<a href="https://www.researchgate.net/profile/Sumanth-Tatineni/publication/378669034_INTEGRATING_AI_BLOCKCHAIN_AND_CLOUD_TECHNOLOGIES_FOR_DATA_MANAGEMENT_IN_HEALTHCARE/links/65f932c6c05fd26880216c6f/INTEGRATING-AI-BLOCKCHAIN-AND-CLOUD-TECHNOLOGIES-FOR-DATA-MANAGEMENT-IN-HEALTHCARE.pdf">https://www.researchgate.net/profile/Sumanth-Tatineni/publication/378669034_INTEGRATING_AI_BLOCKCHAIN_AND_CLOUD_TECHNOLOGIES_FOR_DATA_MANAGEMENT_IN_HEALTHCARE/links/65f932c6c05fd26880216c6f/INTEGRATING-AI-BLOCKCHAIN-AND-CLOUD-TECHNOLOGIES-FOR-DATA-MANAGEMENT-IN-HEALTHCARE.pdf</a>	Tatineni, S.	AI in healthcare, Blockchain security, Cloud integration	AI and blockchain enhance data security and interoperability in healthcare systems.	Healthcare organizations should integrate AI-blockchain solutions for data security.
AI-driven Predictive Analytics for Drug Stability Studies	<a href="https://jopir.in/index.php/journals/article/download/142/108">https://jopir.in/index.php/journals/article/download/142/108</a>	Tummala, S. R., and Gorrepati, N.	Predictive analytics	Reducing risks in pharmaceutical manufacturing.	Use AI-driven predictive models to optimize drug formulation and storage.
Blockchain for Industry 5.0: Vision, opportunities, key enablers, and future directions	<a href="https://doi.org/10.1109/ACCESS.2022.09809962">https://doi.org/10.1109/ACCESS.2022.09809962</a>	Verma, A., Bhattacharya, P., Madhani, N., Trivedi, C., Bhushan, B., Tanwar, S., and Sharma, R.	Blockchain, Industry 5.0, AI integration	AI and blockchain enable automation	Invest in AI-blockchain solutions for industrial automation.
Toward data integrity architecture for cloud-based AI systems	<a href="https://doi.org/10.3390/sym14020273">https://doi.org/10.3390/sym14020273</a>	Witanto, E. N., Oktian, Y. E., and Lee, S. G.	AI in cloud security, Data Integrity	AI ensures data integrity by detecting inconsistencies.	Deploy AI-based data integrity frameworks.
The prediction and optimization of risk in financial services based on AI-driven technology	<a href="https://books.google.com/books?hl=en&amp;lr=&amp;andid=q60FEQAAQB&amp;andoi=fnd&amp;pg=PA243&amp;dq=Role+of+Data+Integrity+in+AI-Driven+Enterprises+of+doi+number&amp;sig=nqTmy3putXiAt3v2sibAv9RXe7Y">https://books.google.com/books?hl=en&amp;lr=&amp;andid=q60FEQAAQB&amp;andoi=fnd&amp;pg=PA243&amp;dq=Role+of+Data+Integrity+in+AI-Driven+Enterprises+of+doi+number&amp;sig=nqTmy3putXiAt3v2sibAv9RXe7Y</a>	Yang, P., Duan, S., Liu, B., Song, T., and Wang, C.	AI in finance.	Focus on enhancing the financial risk prediction.	AI-powered risk management tool for integration.

Identifying and managing risks of AI-driven operations: A case study of automatic speech recognition for improving air traffic safety	<a href="https://doi.org/10.1016/j.cja.2022.190">https://doi.org/10.1016/j.cja.2022.190</a>	Yi, L., Min, R., Kunjie, C., Dan, L., Ziqiang, Z., Fan, L., and Bo, Y.	Speech recognition and risk mitigation for Data integrity.	Improve Air traffic communication, which is another part of quality data integration in AI.	Aviation authorities need to implement rigorous backup and testing.
Data-centric artificial intelligence	<a href="https://doi.org/10.1145/3600213">https://doi.org/10.1145/3600213</a>	Zha, D., Bhat, Z. P., Lai, K. H., Yang, F., Jiang, Z., Zhong, S., and Hu, X.	AI model training.	Data-Centric focus from model-driven approach to high-quality data curation	Implementation of high-quality data collection and pre-processing.