International Journal of
DATA SCIENCE AND IOT MANAGEMENT SYSTEM
Peer Reviewed, Referred & Indexed Journal
ISSN: 3068-272X www.ijdim.com Original Research Paper

ECOMMERCE SALES, CUSTOMER BEHAVIOUR & PROFITABILITY INTELLIGENCE DASHBOARD

[1]Siddamma C.M, [2] N Ramya, [3] G Sruthi, [4] D Akhila, [5] Ch Rohith, [6] Sai Vignesh
[1]AssistantProfessor, [23456]Students
Department of Computer Engineering(Internet Of Things)
Siddhartha Institute of Technology & Sciences, Narapally
siddmmacm@siddhartha.org.in, 24tq1a6928@siddhartha.co.in, 24tq5a6916@siddhartha.co.in, 24tq1a6911@siddhartha.co.in, 24tq1a6948@siddhartha.co.in, 25tq5a6906@siddhartha.co.in

Abstract

The E-Commerce Sales, Customer Behavior & Profitability Intelligence Dashboard empowers businesses to monitor and optimize their online performance through data-driven insights. It provides a structured overview of daily operations, including sales trends, customer interactions, and profit margins, helping businesses make informed decisions. In the sales monitoring module, users can track revenue, order volume, top-selling products, and seasonal trends. The dashboard visualizes key performance indicators (KPIs) such as total sales, conversion rates, and average order value, enabling businesses to identify growth opportunities and optimize pricing strategies.

The customer behavior analysis module focuses on understanding user interactions. It analyzes browsing patterns, purchase history, customer segmentation, and retention rates. Businesses can identify loyal customers, detect churn risks, and personalize marketing strategies to enhance engagement and customer satisfaction. The profitability intelligence module evaluates costs, margins, and overall profitability. It tracks expenses, discounts, and returns to provide a clear picture of net profit. Advanced analytics help identify high-margin products and areas where costs can be reduced.

The dashboard features intuitive navigation, real-time updates, and customizable reports. It also includes predictive insights and recommendations to improve sales performance and customer retention. By leveraging this system, businesses can streamline operations, enhance customer experience, and maximize profitability in a competitive e-commerce environment.

I. Introduction

The E-Commerce Sales, Customer Behavior & Profitability Intelligence Dashboard is a powerful analytical platform designed to help businesses monitor, understand, and optimize their online performance. The dashboard begins with a comprehensive data analysis, providing a detailed overview of key business elements such as total sales, order volume, customer engagement, product performance, profit margins, and overall business health score. These metrics are presented through interactive charts, graphs, and statistical indicators, giving users a clear and visual understanding of their business performance. Based on this analysis, the dashboard delivers actionable insights tailored to improve decision-making and business growth. The sales module highlights daily and monthly revenue trends, identifies top-performing products, and tracks conversion rates and average order value. This enables businesses to adjust

International Journal of
DATA SCIENCE AND IOT MANAGEMENT SYSTEM
Peer Reviewed, Referred & Indexed Journal
ISSN: 3068-272X www.ijdim.com Original Research Paper

pricing strategies, manage inventory effectively, and capitalize on high-demand products

.

The customer behavior module focuses on analyzing user interactions and purchasing patterns. It evaluates customer segmentation, repeat purchase behavior, retention rates, and churn risks. By understanding customer preferences and habits, businesses can create personalized marketing strategies, improve customer engagement, and enhance overall user experience.

The profitability intelligence module provides a detailed breakdown of costs, expenses, discounts, and returns to calculate net profit and margin performance. It helps businesses identify high-profit products, reduce unnecessary expenditures, and optimize operational efficiency for better financial outcomes.

With intuitive navigation, real-time updates, and customizable reports, the dashboard ensures seamless usability. It also includes predictive analytics and smart recommendations to forecast sales trends and customer demands. By continuously tracking performance and offering optimization strategies, the system helps businesses improve efficiency, increase revenue, and maximize profitability in a competitive e-commerce environment.

II. Literature Survey

E-Commerce Sales,Customer Behavior & Profitabality Intelligence Dashboard

This paper explains that managing e-commerce operations has become increasingly complex due to the rapid growth of online businesses and the vast amount of data generated from transactions, customer interactions, and product performance.

Despite having access to large datasets, many businesses struggle to extract meaningful insights, leading to inefficient decision-making and reduced profitability.

Improper analysis of sales trends, customer preferences, and operational costs can negatively impact business growth and customer satisfaction. In view of this, this work proposes the use of data analytics and business intelligence techniques to develop an integrated E-Commerce Sales, Customer Behavior & Profitability Intelligence Dashboard.

The system provides businesses with detailed insights through sales trend analysis, customer segmentation, and profitability evaluation, enabling informed decision-making and strategic planning.

The dashboard leverages visualization tools and analytical models to present key performance indicators, helping businesses identify high-performing products, understand customer behavior, and optimize operational efficiency. Experimental results show that the proposed system improves decision accuracy, enhances customer engagement, and increases overall business profitability.

International Journal of
DATA SCIENCE AND IOT MANAGEMENT SYSTEM
Peer Reviewed, Referred & Indexed Journal
ISSN: 3068-272X www.ijdim.com Original Research Paper

A Study on E-Commerce Sales, Customer Behavior & Profitability Intelligence Dashboard

This paper refers that, with the rapid advancement of digital technologies, the e-commerce industry has experienced significant growth and transformation. Modern online platforms generate vast amounts of data related to sales transactions, customer interactions, and product performance. As a result, businesses often face challenges in effectively analyzing this data to make informed decisions, leading to uncertainty in identifying profitable products, understanding customer preferences, and optimizing overall business strategies.

The suggested system assists in developing an intelligent dashboard application that helps businesses overcome these challenges. The developed application works in such a way that it collects and processes data related to sales, customers, and financial operations. Businesses are required to input or integrate their transactional data, customer details, and product information into the system for analysis.

An E-Commerce Sales, Customer Behavior & Profitability Intelligence Dashboard is utilized to accurately analyze and visualize key performance indicators such as revenue trends, customer segmentation, purchase behavior, and profit margins. The system effectively predicts business trends, identifies high-performing products, and evaluates the profitability of operations. By providing clear insights and recommendations, the proposed system supports businesses in making data-driven decisions and improving overall efficiency and growth.

E-Commerce Analytics System using Deep Learning

performance. These models can process vast amounts of structured and unstructured data, enabling accurate predictions and insights.

As the number of customers and products in e-commerce platforms continues to grow, the need for efficient data analysis becomes more critical. Businesses must identify customer preferences, purchasing patterns, and high-performing products to remain competitive. Deep learning This paper, it explains that e-commerce platforms generate a large amount of data that significantly influences business performance and decision-making. However, selecting the best strategies for sales improvement, customer engagement, and profitability optimization can be challenging due to the complexity and volume of data. Traditional analytical methods are often insufficient to handle such large-scale and unstructured data effectively.

The proposed system utilizes deep learning techniques to provide a predictive and intelligent approach for analyzing e-commerce data. Deep learning algorithms help in understanding complex relationships between sales patterns, customer behavior, and product models assist in customer segmentation, demand forecasting, and personalized recommendations, improving overall business efficiency.

Since every customer has unique behavior and preferences, it becomes difficult to analyze them using conventional methods. Deep learning algorithms are well-suited for this task as they can learn patterns from large datasets and generate meaningful insights. Thus, the system enhances decision-making, improves customer satisfaction, and increases profitability by providing accurate and data-driven solutions.

Artificial Intelligence-Based Smart E-Commerce Analytics System

International Journal of
DATA SCIENCE AND IOT MANAGEMENT SYSTEM
Peer Reviewed, Referred & Indexed Journal
ISSN: 3068-272X www.ijdim.com Original Research Paper

In this paper, it explains that modern e-commerce platforms are rapidly evolving with the integration of Artificial Intelligence (AI) to improve business efficiency and customer experience. Businesses today handle a large volume of transactional and customer data, making it difficult to extract meaningful insights using traditional methods. AI-based systems provide predictive capabilities that help businesses understand sales trends, forecast demand, and identify customer preferences.

The system utilizes machine learning algorithms to analyze customer purchase history, browsing behavior, and product interactions. These intelligent models help in segmenting customers, predicting future buying patterns, and recommending suitable products or strategies. As the number of customers and products increases, the complexity of decision-making also rises. AI algorithms are well-suited to address this challenge, as they can process large-scale data and generate accurate and actionable insights.

Thus, AI-based e-commerce analytics systems play a crucial role in enhancing sales performance, improving customer satisfaction, and optimizing overall business operations.

Smart Dashboard Application for E-Commerce Business Intelligence

With the rapid growth of digital technologies, the number of online businesses and users has increased significantly. Accessing and analyzing business data such as sales, customer behavior, and profitability has become essential but challenging. Many business owners face difficulties in understanding complex datasets and making informed decisions.

To address these issues, this research proposes a smart dashboard application that provides an integrated view of e-commerce performance. The system enables users to easily access, analyze, and interpret key metrics such as revenue, product performance, customer segmentation, and profit margins. It also helps businesses compare different products, track customer trends, and identify areas for improvement.

The dashboard offers a user-friendly interface that simplifies complex data into visual representations such as charts and graphs. This allows users to quickly understand business performance and make strategic decisions. By providing real-time insights and analytical tools, the system supports efficient business management and enhances overall productivity.

III. System Analysis

The E-Commerce Sales, Customer Behaviour & Profitability Intelligence Dashboard system is designed to analyze online business performance, customer purchasing behavior, and profitability patterns using data analytics and visualization techniques. Modern e-commerce platforms generate large amounts of data from customer transactions, product interactions, browsing activities, and marketing campaigns. Analyzing this data helps businesses understand customer preferences, improve sales strategies, and increase overall profitability. The system focuses on converting raw e-commerce data into meaningful insights through advanced analytics and interactive dashboards. It evaluates important business metrics such as total revenue, sales growth, profit margins, customer retention, product performance, and purchasing trends. Data preprocessing techniques including data cleaning, handling missing values, normalization, and feature engineering are applied to improve data quality and

International Journal of
DATA SCIENCE AND IOT MANAGEMENT SYSTEM
Peer Reviewed, Referred & Indexed Journal
ISSN: 3068-272X www.ijdim.com Original Research Paper

accuracy. Customer behavior analysis identifies buying patterns, product preferences, and engagement levels. Profitability analysis helps determine high-performing products, profitable customer segments, and revenue opportunities. Visualization techniques provide interactive charts, graphs, and reports for better decision-making. The system enables organizations to optimize marketing strategies, improve customer experience, and achieve sustainable business growth through data-driven insights.

Existing System

In the existing system, e-commerce sales and customer analysis mainly depend on traditional reporting methods, spreadsheets, and basic business intelligence tools. Businesses usually evaluate performance using simple metrics such as total sales, number of orders, and product revenue reports. These traditional systems provide limited insights and are less effective for analyzing large-scale customer behavior and profitability data. Existing approaches mainly focus on historical sales summaries rather than predicting customer trends and future business opportunities. Manual analysis consumes more time and increases the possibility of errors in decision-making. Traditional systems have difficulty identifying hidden relationships between customer preferences, purchasing behavior, and profit generation. Existing tools provide limited support for customer segmentation and personalized marketing strategies. They also lack advanced drill-through capabilities to analyze detailed customer and product-level information. Handling large volumes of real-time e-commerce data becomes challenging with traditional approaches. Many systems fail to integrate sales, customer behavior, and profitability analysis into a single platform. These limitations create the need for an intelligent analytics dashboard that provides complete business intelligence insights.

Disadvantages of Existing System

- Requires more manual effort for analysis.
- Time-consuming reporting process.
- Limited customer behavior understanding.
- Difficulty handling large e-commerce datasets.
- Lack of accurate profitability analysis.
- Limited predictive analytics capabilities.
- Poor customer segmentation support.
- Less effective visualization features.
- Higher chances of human errors.
- Lack of real-time business insights.

Proposed System

The proposed E-Commerce Sales, Customer Behaviour & Profitability Intelligence Dashboard provides an intelligent data analytics solution for analyzing sales trends, customer behavior, and profit performance. The system collects and processes e-commerce datasets containing transaction details, customer profiles, product information, order history, revenue records, and engagement activities. Advanced preprocessing techniques such as data cleaning, missing value handling,

International Journal of
DATA SCIENCE AND IOT MANAGEMENT SYSTEM
Peer Reviewed, Referred & Indexed Journal
ISSN: 3068-272X www.ijdim.com Original Research Paper

normalization, and feature transformation are applied to improve dataset reliability. Sales analytics identifies revenue growth, product demand, order patterns, and market trends. Customer behavior analysis examines purchase frequency, browsing patterns, customer preferences, and retention levels. Profitability intelligence evaluates product margins, customer value, sales contribution, and business performance indicators. Machine learning techniques can be integrated for customer segmentation, sales prediction, and recommendation generation. Interactive dashboards provide detailed visual insights through charts, graphs, filters, and drill-through reports. The system helps businesses improve marketing campaigns, inventory planning, and customer relationship management. Overall, the proposed system provides a scalable and automated approach for improving e-commerce decision-making and profitability.

Advantages of Proposed System

- Automated e-commerce performance analysis.
- Provides accurate sales insights.
- Better understanding of customer behavior.
- Improved profitability evaluation.
- Supports customer segmentation.
- Helps identify high-performing products.
- Provides interactive dashboards and reports.
- Improves marketing and sales strategies.
- Supports data-driven decision-making.
- Scalable for future business analytics needs.

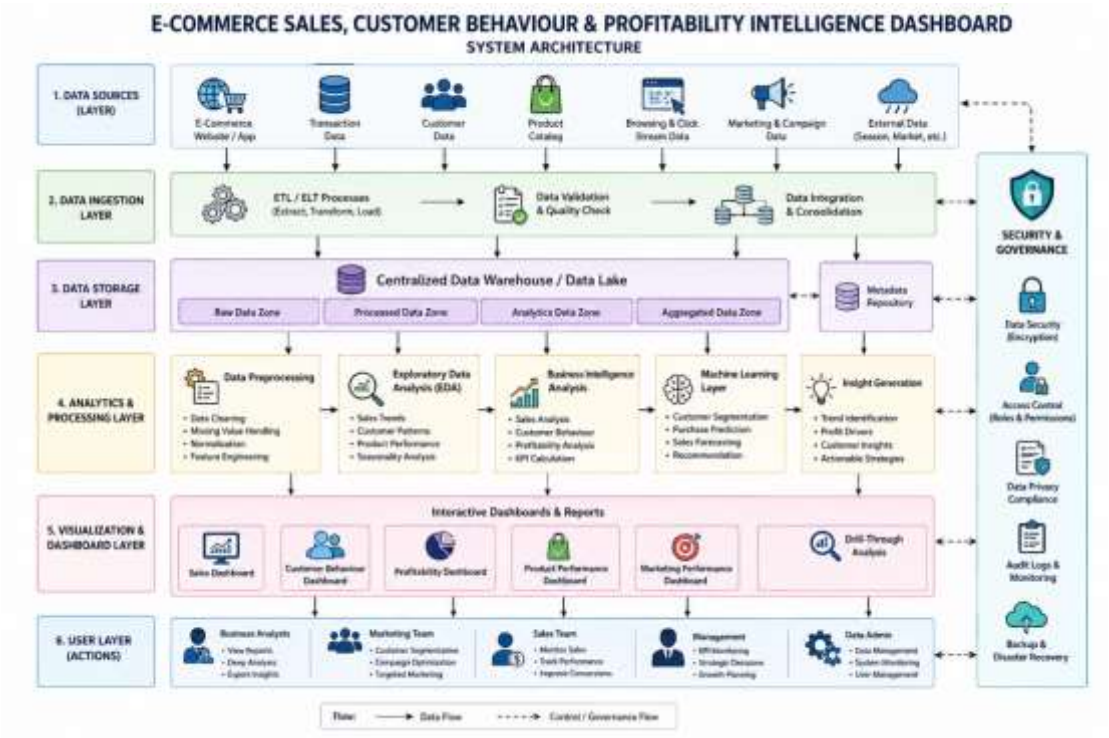
IV. Methodology

The methodology of the E-Commerce Sales, Customer Behaviour & Profitability Intelligence Dashboard consists of data collection, preprocessing, analysis, visualization, and insight generation stages. Initially, e-commerce datasets containing sales transactions, customer details, product records, revenue values, and user activity information are collected from various sources. Data preprocessing techniques such as missing value handling, duplicate removal, normalization, and feature engineering are performed to prepare accurate datasets. Exploratory Data Analysis techniques are applied to identify sales trends, purchasing behavior, and profitability patterns. Sales analysis evaluates key indicators such as total revenue, order volume, product performance, and sales growth. Customer behavior analysis identifies user preferences, buying frequency, and engagement levels. Profitability analysis determines revenue contribution, profit margins, and valuable customer segments. Machine learning models can be used for sales forecasting, customer classification, and personalized recommendations. Visualization dashboards display analytical results using charts, graphs, and interactive reports. The generated insights help businesses optimize pricing strategies, marketing campaigns, and inventory management. This methodology provides an efficient, scalable, and reliable approach for e-commerce intelligence analysis.

System Architecture

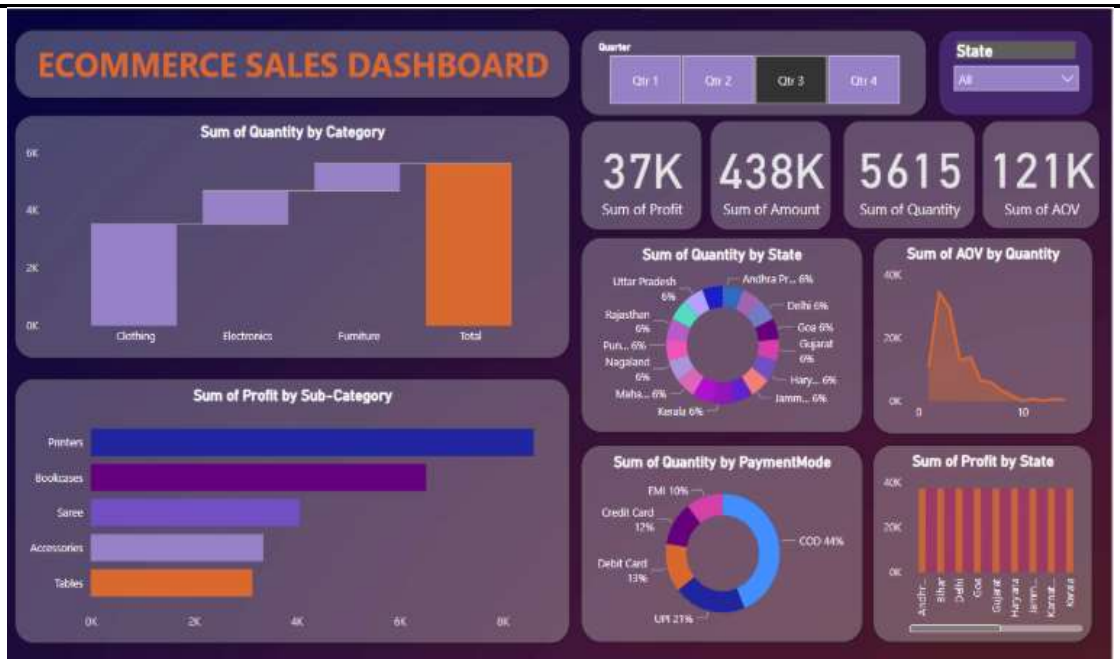
International Journal of
DATA SCIENCE AND IOT MANAGEMENT SYSTEM
Peer Reviewed, Referred & Indexed Journal
ISSN: 3068-272X www.ijdim.com Original Research Paper

The system architecture of the E-Commerce Sales, Customer Behaviour & Profitability Intelligence Dashboard follows a multi-layer architecture consisting of data collection, preprocessing, analytics, visualization, and storage layers. The data collection layer gathers information such as customer records, sales transactions, product details, browsing history, and marketing data from e-commerce platforms. The preprocessing layer performs data cleaning, missing value handling, normalization, encoding, and transformation to create high-quality datasets. The analytics layer applies statistical and exploratory techniques to identify sales trends, customer behavior patterns, and profitability insights. The customer intelligence module analyzes purchase history, engagement activities, and customer segmentation. The profitability analysis module evaluates revenue contribution, profit margins, and product performance. The machine learning layer supports prediction models for customer behavior, sales forecasting, and recommendation systems. The visualization layer generates interactive dashboards, graphs, charts, and business reports for better interpretation. The backend layer manages analytical processes, data workflows, and system operations. The database layer securely stores raw data, processed information, analytical results, and generated reports. Overall, the architecture provides a scalable, intelligent, and efficient framework for improving e-commerce sales performance, customer satisfaction, and profitability management.



V. Result and Output

International Journal of
DATA SCIENCE AND IOT MANAGEMENT SYSTEM
Peer Reviewed, Referred & Indexed Journal
ISSN: 3068-272X www.ijdim.com Original Research Paper



VI. Conclusion

The E-Commerce Sales, Customer Behavior & Profitability Intelligence Dashboard represents a significant advancement in data-driven business analytics for online retail. By leveraging advanced data analytics, Artificial Intelligence, and machine learning techniques, the dashboard provides accurate insights into sales performance, customer purchasing patterns, and overall business profitability. It analyzes large volumes of transactional and customer data to identify trends such as top-selling products, seasonal demand variations, customer retention rates, and revenue growth, enabling businesses to make informed and strategic decisions.

The dashboard excels in delivering personalized and actionable insights by considering key business factors such as customer demographics, buying behavior, product preferences, and market trends. It features an intuitive and user-friendly interface with visual elements like charts, graphs, KPIs, and performance indicators, allowing users to easily interpret complex data. The system is designed for cross-platform accessibility, ensuring that business owners and analysts can monitor operations and track performance anytime, anywhere.

Data security and integrity are prioritized through robust mechanisms such as secure authentication, encrypted data storage, and compliance with industry standards. The integration of predictive analytics further enhances the system by forecasting future sales trends, customer demand, and profit margins, helping businesses plan effectively and reduce risks.

References

1. Kumar, R. D., Prudhviraj, G., Vijay, K., Kumar, P. S., & Plugmann, P. (2024). Exploring COVID-19 through intensive investigation with supervised machine learning algorithm. In Handbook of Artificial Intelligence and Wearables (pp. 145-158). CRC Press.

International Journal of
DATA SCIENCE AND IOT MANAGEMENT SYSTEM
Peer Reviewed, Referred & Indexed Journal
ISSN: 3068-272X www.ijdim.com Original Research Paper

2. Swathi, B., Vijay, K., Sushanth Babu, M., & Dinesh Kumar, R. (2024, November). Machine Learning Techniques in Cloud Based Intrusion Detection. In The International Conference on Artificial Intelligence and Smart Environment (pp. 557-564). Cham: Springer Nature Switzerland.
3. Sv satyakrishna, shirisha rangu ,bhargavi nalacheruve.(2024) Prospective investigation on colorectal cancer with SMOTE on machine learning Algorithm
4. Dr.G.Vishnu Murthy, BhargaviNalacheruve 1Professor, Department of computer Science & engineering, Anurag University, TS, India. 2Student, Department of computer Science & engineering, Anurag University, TS, India.
5. V. N. S. Manaswini, K. K, C. Nigam, S. S. Ali, R. Niranjana, and Suman, "Real-Time Object Detection in Drone Surveillance Using YOLOv5," in Proc. 2025 3rd Int. Conf. IoT, Communication and Automation Technology (ICICAT), Gorakhpur, India, 2025, pp. 1–6, doi: 10.1109/ICICAT68430.2025.11414670.
6. B. Soundarya, V. N. S. Manaswini, M. Ayyakrishnan, R. D. Kumar, "Contextual Analysis of Big Data Analytics in Intelligent Transportation Frameworks," in Intersection of Artificial Intelligence, Data Science, and Cutting-Edge Technologies: From Concepts to Applications in Smart Environment, Lecture Notes in Networks and Systems, vol. 1353, Cham: Springer, 2025, doi: 10.1007/978-3-031-88304-0_79.
7. R. D. Kumar, V. N. S.Manaswini, "Applications of blockchain in smart cities: detecting fake documents from land records using blockchain technology," in Blockchain for Smart Cities, Elsevier, 2021, pp. 105–117, doi: 10.1016/B978-0-12-824446-3.00017-X.
8. Tejavath Veeramma, Badarla Anil, Guguloth Ravinder, "An advanced movie recommender using collaborative filtering and sentiment analysis," International Research Journal of Modernization in Engineering Technology and Science, vol. 7, no. 7, July 2025, doi: 10.56726/IRJMETS81618.
9. Ravi Kumar Banoth, Ramana Murthy B V, "Automatic crop recommendation system using LightGBM and decision tree machine learning models," Journal of Machine and Computing, vol. 5, no. 1, pp. 343, Jan. 2025, doi: 10.53759/7669/jmc202505026.
10. Ravi Kumar Banoth, Dr. B.V. Ramana Murthy, "Smart agriculture through IoT and machine learning for analyzing carbon footprints," in Proc. Int. Conf. Computer Science and Communication Engineering (ICCSCE), Apr. 2025.
11. Ravi Kumar Banoth, B. V. Ramana Murthy, "Soil image classification using transfer learning approach: MobileNetV2 with CNN," SN Computer Science, vol. 5, art. no. 199, 2024, doi: 10.1007/s42979-023-02500-x.
12. Purmani, S. S. R. (2025). Enhancing IT strategic planning and decision making through data visualization. International Journal of Enhanced Research in Management & Computer Applications, 14(4), 75–81
13. Mudusu, S. K. (2025). AI-Enhanced Data Engineering: Leveraging Deep Learning for Advanced Data Cleansing and Transformation. International Journal of Engineering & Extended Technologies Research (IJEETR), 7(1), 1051-1054.

14. Mudusu, S. K. (2024, August). Designing self-healing data pipelines for autonomous and continuous AI operations. Journal of Computational Analysis and Applications, 33(2), 1238–1247.
15. Gajula, S. (2025, December). Ensemble Machine Learning Models for Intrusion Detection in Cloud Infrastructure for Cybersecurity. In 2025 International Conference on Artificial Intelligence, Blockchain, Cloud Computing, and Data Analytics (ICoABCD) (pp. 1-6). IEEE.
16. Maturi, S. Y. (2022). Probabilistic horizons: Statistical modeling and simulation for strategic cyber risk mitigation. Journal of Information Systems Engineering and Management, 7(2).
17. P. Venkata Ramana. (2024). AI-driven predictive analytics in ERP systems for proactive supply chain optimization. Eudoxus Press Journal.
18. Pavan Kumar Adabala. (2026). Best Practices for Enterprise System Integration in Modern Organizations. Journal of Information Systems Engineering and Management, 11(2s), 1137–1146. https://doi.org/10.52783/jisem.v11i2s.14558
19. Gajula, S. (2025). Cloud transformation in financial services: A strategic framework for hybrid adoption and business continuity. International Journal of Scientific Research in Computer Science, Engineering and Information technology.
20. Majumder, R. Q. (2025). A Review of Anomaly Identification in Finance Frauds Using Machine Learning Systems. SSRN Electronic Journal. https://doi.org/10.2139/ssrn.5267287
21. Gaddam, S. Integrating Analytics into the Development Process: Bridging the Gap between Data Insights and Design Execution.
22. Reddy, S. K. R. Developing a Modular AI Framework to Enhance Scalability and Personalization in Next-Generation Reward Platforms.
23. Poojari, R. Frameworks for Data Management and Lineage in Large-Scale Healthcare Data Systems.
24. Purmani, S. S. R. (2025). Streamlining IT operations and service management with agile frameworks. European Journal of Advances in Engineering and Technology, 12(4), 76–81.
25. Viswanathan, V. (2024). Embedding Ethical Principles into Generative AI Workflows for Project Teams.
26. Mudusu, S. K. (2026, April 15). The secure intelligence framework: Architecting AI systems for a data-driven world. CIO (Foundry Expert Contributor Network).
27. Viswanathan, V. (2024). Pioneering Ethical AI Integration in Enterprise Workflows: A Framework for Scalable Team Governance. Available at SSRN 5375619.
28. Mudusu, S. K. (2025, June 3). Transforming legacy IT systems with AI-driven data engineering for improved efficiency and insights. Hampton Global Business Review (HGBR).
29. Gajula, S. (2026, March). Two Pillars of Banking Intelligence: A Comparative Analysis of AI Techniques for Fraud Prevention and Churn Mitigation. In 2026 14th International Symposium on Digital Forensics and Security (ISDFS) (pp. 1-6). IEEE.

International Journal of
DATA SCIENCE AND IOT MANAGEMENT SYSTEM
Peer Reviewed, Referred & Indexed Journal
ISSN: 3068-272X www.ijdim.com Original Research Paper

30. Maturi, S. Y. (2023). Crowdsourced frontier: Unveiling autonomous adversarial cybercapabilities via open AI competition. International Journal of Intelligent Systems and Applications in Engineering, 11(1s), 275–284.
31. Chowdhury, A. K., Muhit, M. M. I., & Islam, M. M. (2023). A practical review to the marine maintenance practice in Bangladesh and a proposed way forward to an efficient, long-term and cost-effective solution. In Proceedings of the 13th International Conference on Marine Technology (MARTEC 2022). https://doi.org/10.2139/ssrn.4445071
32. Manoharan, D. (2025). Healthcare EDI Transaction Lifecycles Embedded with a Multi-Layer Verification Framework to Ensure Referential Integrity.
33. Ravishankara, M. (2026, February). CircuChain: Disentangling Competence and Compliance in LLM Circuit Analysis. In SoutheastCon 2026 (pp. 1-7). IEEE.
34. Doragacharla, V. R. (2023). Comprehensive Benchmarking Analysis of Auto Scaling Approaches in Cloud Native Streaming Pipelines During Flash Sales and Holiday Traffic Peaks. Available at SSRN 6566479.
35. P. Venkata Ramana. (2024). AI-driven predictive analytics in ERP systems for proactive supply chain optimization. International Journal of Innovative Engineering and Management Research (IJIEMR).
36. Kumar Adabala, P. (2021). Optimizing ERP Modernization: A Smart Data Migration Framework Approach. International Journal of Enhanced Research in Science, Technology &Amp; Engineering, 10(07), 61–72. https://doi.org/10.55948/ijerste.2021.0708
37. Kavuri, S. (2025). Critical Review of Software Testing Problems in the Current Decade. International Journal on Science and Technology, 16(2). https://doi.org/10.71097/ijsat.v16.i2.9469
38. Srikanth Kavuri. (2024). Probabilistic Generative Modeling for Synthesizing High-Coverage Test Data in Safety-Critical Software Applications. Computer Fraud and Security, 633–642. https://doi.org/10.52710/cfs.838
39. Venkata Pavan Kumar Gummadi. (2024). API Design and Implementation: RAML and OpenAPI Specification. Journal of Electrical Systems, 16(4), 76–85. https://doi.org/10.52783/jes.9329
40. Venkata Pavan Kumar Gummadi. (2025). MuleSoft's Role in Advancing Sustainable Digital Infrastructure: An Enterprise Integration Perspective. Journal of Information Systems Engineering and Management, 10(62s), 1313–1321. https://doi.org/10.52783/jisem.v10i62s.13783