International Research Journal of Innovative Engineering (IRJIE)

| ISSN: 2395-0560 | www.irjie.org |editor@irjie.org| A Bimonthly, Peer-Reviewed, Scholarly Journal|

|Volume 10, Issue 3, May- June 2026|

DOI:10.15680/IRJIE.2026.1003003

Next Generation Enterprise Intelligence using Agentic Systems Machine Learning and Context Aware Automation

Haroon Qureshi

Solutions Architect, Emirates NBD, UAE

Publication History: Received: 15. 05.2025; Revised: 07.06.2026; Accepted: 12.06. 2026; Published: 15.06.2026

ABSTRACT: Next-generation enterprise intelligence is rapidly evolving through the integration of agentic systems, machine learning, and context-aware automation, enabling organizations to move beyond traditional data-driven decision support toward autonomous, adaptive, and self-optimizing operational ecosystems. Agentic systems introduce goal-oriented intelligent agents capable of reasoning, planning, and executing tasks independently across enterprise workflows. When combined with machine learning models, these systems enhance predictive accuracy, pattern recognition, and continuous learning from dynamic business environments. Context-aware automation further strengthens enterprise intelligence by enabling systems to interpret situational variables such as user behavior, environmental signals, and operational states to deliver adaptive responses in real time. Together, these technologies create a unified framework for intelligent enterprise operations, improving efficiency, decision speed, and organizational resilience. However, challenges such as explainability, governance complexity, ethical risks, data privacy concerns, and system interoperability remain critical barriers to adoption. This study explores the conceptual foundations and architectural evolution of next-generation enterprise intelligence systems powered by agentic AI, machine learning, and contextual automation. A qualitative research methodology based on systematic literature review and conceptual synthesis is employed. Findings indicate that integrating autonomous agents with machine learning and contextual intelligence significantly enhances enterprise adaptability, operational intelligence, and strategic decision-making capabilities in complex digital ecosystems.

KEYWORDS: Agentic systems, enterprise intelligence, machine learning, context-aware automation, autonomous agents, artificial intelligence, decision intelligence, adaptive systems, predictive analytics, enterprise automation, digital transformation, intelligent workflows, cognitive computing, AI governance, real-time systems

I. INTRODUCTION

The evolution of enterprise systems has entered a new phase characterized by the convergence of artificial intelligence, autonomous decision-making, and adaptive automation technologies. Traditional enterprise intelligence systems primarily relied on descriptive and predictive analytics to support managerial decision-making. However, the increasing complexity of digital ecosystems, rapid data generation, and demand for real-time responsiveness have exposed the limitations of conventional approaches. As a result, organizations are increasingly adopting next-generation enterprise intelligence frameworks powered by agentic systems, machine learning, and context-aware automation.

Agentic systems represent a significant advancement in artificial intelligence, enabling autonomous software agents to perceive their environment, reason about goals, and execute actions independently. Unlike traditional rule-based systems, agentic systems are capable of dynamic decision-making, continuous learning, and adaptive behavior. When integrated into enterprise environments, these systems can automate complex workflows, coordinate across multiple business functions, and optimize operational performance without constant human intervention.

Machine learning plays a central role in enhancing enterprise intelligence by enabling systems to learn from historical and real-time data. Predictive models, anomaly detection algorithms, and reinforcement learning techniques allow enterprises to forecast demand, identify risks, and optimize resource allocation. The integration of machine learning with agentic systems creates a powerful synergy where autonomous agents continuously improve their decision-making capabilities based on evolving data patterns.

| ISSN: 2395-0560 | www.irjie.org |editor@irjie.org| A Bimonthly, Peer-Reviewed, Scholarly Journal|

|Volume 10, Issue 3, May- June 2026|

DOI:10.15680/IRJIE.2026.1003003

Context-aware automation further extends enterprise intelligence by enabling systems to interpret situational context such as user intent, operational conditions, environmental factors, and system states. This contextual understanding allows enterprises to deliver personalized responses, adaptive workflows, and intelligent process automation in real time. Together, these technologies form a cohesive framework that enhances organizational agility, efficiency, and responsiveness.

Despite these advancements, challenges remain in ensuring transparency, governance, interoperability, and ethical deployment of autonomous systems. Issues such as algorithmic bias, data privacy concerns, and lack of explainability must be addressed to ensure responsible implementation. This study explores how agentic systems, machine learning, and context-aware automation collectively shape next-generation enterprise intelligence and transform modern organizational operations.

II. LITERATURE REVIEW

Existing literature on enterprise intelligence highlights the transition from traditional business intelligence systems to advanced AI-driven decision-support frameworks. Early systems focused on static reporting and historical data analysis, while modern approaches emphasize real-time analytics, predictive modeling, and automated decision-making.

Agentic systems have emerged as a key area of research within artificial intelligence, focusing on autonomous agents capable of goal-oriented behavior, reasoning, and interaction with dynamic environments. Studies indicate that agent-based architectures enable distributed decision-making and scalable automation across complex enterprise workflows. Multi-agent systems are particularly effective in coordinating tasks across heterogeneous environments.

Machine learning has been widely studied in enterprise contexts for its ability to improve forecasting accuracy, detect anomalies, and optimize business processes. Supervised, unsupervised, and reinforcement learning techniques are commonly applied in domains such as supply chain management, financial analytics, cybersecurity, and customer behavior analysis.

Context-aware computing is another important research area that focuses on systems capable of adapting behavior based on environmental and situational context. Literature shows that context-aware systems improve personalization, operational efficiency, and decision relevance by incorporating real-time contextual data into decision-making processes.

Researchers also emphasize the convergence of these technologies into unified enterprise intelligence frameworks. Agentic systems provide autonomy, machine learning provides predictive capability, and context-aware automation provides adaptability. Together, they enable intelligent enterprise ecosystems capable of continuous learning and self-optimization.

However, literature also identifies several challenges including system complexity, integration difficulties, scalability issues, and ethical concerns. Explainability of AI decisions remains a major concern, particularly in regulated industries. Additionally, ensuring interoperability between agentic systems, machine learning models, and enterprise infrastructure is a significant technical challenge.
Overall, existing research supports the view that next-generation enterprise intelligence systems offer transformative potential but require robust governance, secure architecture, and responsible AI practices for effective implementation.

III. RESEARCH METHODOLOGY

This study adopts a qualitative research methodology to explore next-generation enterprise intelligence systems powered by agentic systems, machine learning, and context-aware automation. A qualitative approach is appropriate because the research focuses on conceptual understanding, system architecture analysis, and synthesis of interdisciplinary knowledge rather than quantitative measurement or empirical testing. The domain of intelligent enterprise systems is rapidly evolving, making interpretive and exploratory methods essential for developing meaningful insights.

International Research Journal of Innovative Engineering (IRJIE)

| ISSN: 2395-0560 | www.irjie.org |editor@irjie.org| A Bimonthly, Peer-Reviewed, Scholarly Journal|

|Volume 10, Issue 3, May- June 2026|

DOI:10.15680/IRJIE.2026.1003003

The research is grounded in an interpretivist philosophical paradigm, which assumes that enterprise intelligence systems and AI technologies are shaped by organizational context, technological infrastructure, and human interaction. This perspective enables the study to examine how enterprises adopt and integrate agentic systems, machine learning models, and context-aware automation based on their operational needs and strategic goals. Rather than seeking universal principles, the study aims to develop a comprehensive understanding of how intelligent systems function within real-world enterprise environments.

A descriptive and exploratory research design is employed to systematically analyze existing literature, frameworks, and industry practices related to enterprise intelligence, artificial intelligence, and automation systems. The descriptive component focuses on documenting current technologies, architectural models, and implementation strategies, while the exploratory component investigates emerging trends such as autonomous agents, adaptive learning systems, and contextual decision automation.

The study relies entirely on secondary data sources, including peer-reviewed journal articles, conference proceedings, technical white papers, industry reports, and documentation from leading technology organizations. Academic databases such as IEEE Xplore, ACM Digital Library, ScienceDirect, SpringerLink, Scopus, Web of Science, and Google Scholar are used for literature collection. Keywords include “agentic systems,” “enterprise intelligence architecture,” “machine learning automation,” “context-aware computing,” “intelligent agents,” “decision intelligence systems,” “adaptive enterprise systems,” and “AI-driven automation.”

A systematic literature review (SLR) approach is adopted to ensure structured identification, evaluation, and synthesis of relevant research. The review process begins with defining research questions focused on how agentic systems, machine learning, and context-aware automation contribute to enterprise intelligence. Inclusion criteria prioritize recent, high-impact, and peer-reviewed studies relevant to AI-driven enterprise systems. Exclusion criteria eliminate outdated, non-peer-reviewed, or irrelevant sources lacking methodological rigor.



Fig.1. AI Non cloud Agentic AI Systems

| ISSN: 2395-0560 | www.irjie.org |editor@irjie.org| A Bimonthly, Peer-Reviewed, Scholarly Journal|

|Volume 10, Issue 3, May- June 2026|

DOI:10.15680/IRJIE.2026.1003003

The selected literature is analyzed using thematic analysis, which involves coding and categorizing data into conceptual themes. These themes include agentic system architecture, machine learning integration, context-aware automation, enterprise decision intelligence, workflow automation, predictive analytics, adaptive systems, AI governance, and system interoperability. Each theme is analyzed to identify relationships, patterns, and differences across studies.
Agentic systems are analyzed in terms of their ability to perform autonomous reasoning, planning, and execution within enterprise workflows. The methodology examines how intelligent agents interact with enterprise systems, coordinate tasks, and optimize processes across distributed environments. Multi-agent system architectures are also studied to understand scalability and coordination mechanisms.

Machine learning integration is evaluated across supervised, unsupervised, and reinforcement learning paradigms. The study examines how machine learning models enhance predictive capabilities, anomaly detection, and decision optimization within enterprise intelligence systems. The role of data pipelines, feature engineering, and continuous model training is also analyzed.

Context-aware automation is examined in terms of its ability to interpret environmental signals, user behavior, and system states to enable adaptive decision-making. The methodology explores how contextual data is collected, processed, and integrated into automation workflows to improve relevance and responsiveness. Real-time processing frameworks and sensor-based data systems are also considered.

To enhance validity and reliability, triangulation is employed by comparing findings across multiple sources, including academic literature, industry case studies, and technical documentation. This ensures that conclusions are supported by converging evidence rather than isolated perspectives. Cross-validation improves credibility in interpreting the role of agentic systems, machine learning, and context-aware automation in enterprise intelligence.

Comparative analysis is also conducted between traditional enterprise intelligence systems and next-generation AI-driven frameworks. Traditional systems rely on static reporting and human-driven analysis, whereas modern systems incorporate autonomous agents, continuous learning, and contextual adaptability. This comparison highlights significant improvements in speed, scalability, and decision accuracy.

Ethical considerations are addressed by ensuring accurate representation of all sources, maintaining academic integrity, and avoiding misinterpretation of published research. Since the study is based on secondary data, no human participants or sensitive organizational data are involved, minimizing ethical risks. However, careful attention is given to responsible interpretation of AI-related concepts.

The study acknowledges several limitations. The rapidly evolving nature of AI technologies means that new frameworks and methodologies may emerge beyond the scope of this research. Additionally, reliance on secondary data limits the ability to empirically validate findings through real-world implementation or experimental evaluation. Despite these limitations, the methodology provides a strong conceptual foundation for understanding next-generation enterprise intelligence systems.

Overall, this research methodology provides a structured and rigorous approach to analyzing how agentic systems, machine learning, and context-aware automation collectively transform enterprise intelligence. Through systematic literature review, thematic analysis, triangulation, and comparative evaluation, the study generates comprehensive insights into the architectural, technological, and governance dimensions of intelligent enterprise ecosystems.

The evolution of enterprise intelligence is entering a transformative phase driven by the convergence of agentic systems, machine learning, and context-aware automation. This next-generation paradigm shifts enterprises from static, rule-based decision systems toward dynamic, self-adaptive ecosystems capable of autonomous reasoning, continuous learning, and real-time decision execution. The integration of these technologies enables organizations to move beyond traditional analytics pipelines into intelligent systems that perceive context, anticipate outcomes, and act proactively across business domains.

A key finding is that enterprise intelligence is no longer confined to descriptive or predictive analytics but has expanded into autonomous decision intelligence. Agentic systems—software entities capable of perceiving environments, setting goals, planning actions, and executing tasks—form the backbone of this transformation. Platforms such as Microsoft, Amazon Web Services, and Google provide the infrastructure for deploying these systems

| ISSN: 2395-0560 | www.irjie.org |editor@irjie.org| A Bimonthly, Peer-Reviewed, Scholarly Journal|

|Volume 10, Issue 3, May- June 2026|

DOI:10.15680/IRJIE.2026.1003003

through AI model hosting, orchestration frameworks, and event-driven architectures. These ecosystems enable agents to interact with enterprise data sources, APIs, and workflows in real time, creating a continuous intelligence loop.
Machine learning plays a foundational role in enabling adaptive intelligence. Unlike traditional static models, modern machine learning systems continuously retrain on streaming data, allowing enterprises to respond to evolving patterns in customer behavior, financial transactions, and operational performance. Data platforms such as Snowflake and Databricks are central to this capability, providing scalable data infrastructures that support real-time ingestion, transformation, and model training. This ensures that enterprise intelligence systems remain up to date and contextually relevant.

IV. RESULTS AND DISCUSSION (≈1000 WORDS)

Context-aware automation represents a critical advancement beyond conventional automation. Instead of executing predefined workflows, systems now interpret contextual signals such as user behavior, environmental conditions, system state, and business priorities. This enables adaptive decision-making that aligns with real-world dynamics. For example, customer service systems can adjust responses based on sentiment analysis, while supply chain systems can reroute logistics based on weather disruptions or geopolitical events.

Enterprise workflow platforms such as ServiceNow and Salesforce act as orchestration layers that convert intelligent insights into operational actions. ServiceNow enables automated IT operations, incident management, and enterprise service workflows, while Salesforce integrates AI-driven intelligence into customer relationship management, enabling personalized engagement and predictive sales strategies. These platforms bridge the gap between intelligence generation and execution.

A significant development in next-generation enterprise intelligence is the emergence of multi-agent collaboration systems. In these systems, multiple AI agents interact, negotiate, and coordinate to achieve complex organizational goals. For example, one agent may focus on risk detection, while another optimizes resource allocation, and a third manages compliance. Together, they form a distributed intelligence network that enhances scalability and resilience. This architecture reduces dependency on centralized decision-making and improves system robustness.

Security and governance are critical considerations in agentic and context-aware systems. As autonomous agents gain access to sensitive enterprise systems, ensuring proper authentication, authorization, and monitoring becomes essential. Zero-trust architectures are increasingly adopted to ensure that every agent action is continuously verified. Additionally, explainability mechanisms are required to ensure that decisions made by machine learning models and agents can be interpreted and audited.

Cloud-native infrastructure providers such as IBM, Oracle, and Alibaba Cloud enable deployment of scalable enterprise intelligence systems across hybrid and multi-cloud environments. Container orchestration technologies such as Red Hat OpenShift and VMware Tanzu provide runtime consistency for deploying intelligent agents across distributed infrastructures.

Another important finding is the shift toward real-time decision intelligence. Traditional enterprise systems rely on batch processing and delayed reporting, whereas next-generation systems operate on streaming data pipelines that allow instantaneous insights and actions. This enables enterprises to respond to market fluctuations, operational anomalies, and customer interactions in real time, significantly improving agility and competitiveness.

However, several challenges remain. One major issue is model drift, where machine learning models degrade over time due to changing data distributions. Continuous retraining and monitoring mechanisms are required to ensure model reliability. Another challenge is interoperability between different agent frameworks and enterprise systems, which currently lack standardized communication protocols.

Overall, the integration of agentic systems, machine learning, and context-aware automation is fundamentally redefining enterprise intelligence. Organizations are transitioning from reactive decision-making systems to proactive, autonomous, and adaptive intelligence ecosystems that operate continuously across business functions.

| ISSN: 2395-0560 | www.irjie.org |editor@irjie.org| A Bimonthly, Peer-Reviewed, Scholarly Journal|

|Volume 10, Issue 3, May- June 2026|

DOI:10.15680/IRJIE.2026.1003003

V. CONCLUSION

The study of next-generation enterprise intelligence highlights a major shift in how organizations design and operate decision-making systems. The convergence of agentic systems, machine learning, and context-aware automation enables enterprises to move beyond traditional analytics toward autonomous, real-time intelligence systems capable of continuous learning and adaptation.

Machine learning provides the predictive foundation for enterprise intelligence by enabling systems to identify patterns, forecast outcomes, and optimize decisions based on historical and real-time data. Platforms such as Snowflake and Databricks play a central role in supporting these capabilities by providing scalable, high-performance data infrastructures.

Agentic systems ex tend this capability by introducing autonomous decision-making entities that can independently plan and execute tasks. These systems reduce the need for human intervention in operational processes, allowing enterprises to improve efficiency and responsiveness. Cloud providers such as Microsoft, AWS, and Google support the deployment of these systems through integrated AI services and orchestration frameworks.
Context-aware automation enhances enterprise intelligence by enabling systems to adapt actions based on real-time contextual information. This leads to more accurate and efficient decision-making across domains such as customer service, supply chain management, and IT operations. Workflow platforms like ServiceNow and Salesforce ensure that intelligent insights are translated into actionable business processes.

Despite these advancements, challenges remain in ensuring transparency, security, and interoperability. Enterprises must implement robust governance frameworks to manage autonomous systems responsibly and ensure that AI-driven decisions remain explainable and auditable.

Overall, next-generation enterprise intelligence represents a fundamental transformation in organizational capability, enabling businesses to operate with greater agility, intelligence, and autonomy in an increasingly complex digital environment.

VI. FUTURE WORK

Future research in enterprise intelligence should focus on improving the autonomy, interoperability, and trustworthiness of agentic and machine learning systems. One important direction is the development of standardized protocols for multi-agent communication, enabling seamless collaboration between heterogeneous AI systems across enterprise environments.

Another key area is the advancement of fully autonomous enterprise systems capable of self-healing, self-optimizing, and self-configuring operations. These systems would reduce human intervention and significantly enhance operational efficiency. However, ensuring safety and reliability in such systems will require advanced monitoring and governance mechanisms.
Context-aware automation can also be further enhanced through deeper integration with real-world data sources such as IoT devices, edge computing systems, and environmental sensors. This will enable enterprises to respond more effectively to physical-world events in real time.

Security and governance will remain critical research areas. As AI systems gain greater autonomy, ensuring ethical decision-making, data privacy, and regulatory compliance becomes essential. Future systems must incorporate explainable AI techniques, audit trails, and continuous compliance monitoring.

Finally, research should focus on reducing model drift and improving the lifecycle management of machine learning systems in production environments. Continuous learning frameworks and adaptive retraining pipelines will be essential for maintaining model accuracy and reliability over time.

| ISSN: 2395-0560 | www.irjie.org |editor@irjie.org| A Bimonthly, Peer-Reviewed, Scholarly Journal|

|Volume 10, Issue 3, May- June 2026|

DOI:10.15680/IRJIE.2026.1003003

REFERENCES

1. Juvvadi, R. R. (2023). Re-architecting intercompany accounting: An event-driven pattern for real-time matching and continuous elimination. International Journal of Applied Engineering & Technology, 5(S4), 414–424.
2. Databricks. (2024). *Lakehouse AI platform*. https://www.databricks.com
3. Khan, M. I. (2025). Big Data Driven Cyber Threat Intelligence Framework for US Critical Infrastructure Protection. Asian Journal of Research in Computer Science, 18(12), 42-54.
4. Microsoft. (2024). *Azure AI and agent frameworks*. https://learn.microsoft.com
5. Rajan, P. K. (2026, February). Privacy-Preserving On-Device AI for Personalized Mobile Video Advertising. In SoutheastCon 2026 (pp. 1-6). IEEE.
6. Gandhi, S. T. (2024). Fusion of LiDAR and HDR Imaging in Autonomous Vehicles: A Multi-Modal Deep Learning Approach for Safer Navigation. International Journal of Humanities and Information Technology, 6(03), 6-18.
7. Ayyagari, V. (2025). Model Context Protocol for Agentic AI: Enabling Contextual Interoperability Across Systems. Int. J. Comput. Exp. Sci. Eng, 11, 6072-6082.
8. Yatam, S. N. K. (2025). Secure and Scalable Messaging Ecosystems: Automating Multi-Platform Architectures with Adaptive Security in Multi-Cloud Environments. Journal Of Multidisciplinary, 5(7), 134-142.
9. Veershetty, G. (2023). SAP S/4HANA Transformation in the Electric Power and Grid Utility Sector: Combination Migration Strategy and Customer-Managed Deployment A Practitioner's Analysis. International Journal of Emerging Research in Engineering and Technology, 4(1), 218-227.
10. Gopisetty, S. (2025). The Auditor's Apprentice: Can a Language Model Learn to Translate AWS's Automated SAP Changes into Human-Friendly Compliance Stories?. European Journal of Advances in Engineering and Technology, 12(1), 43-50.
11. Polamreddy, V. R. (2025). Architecting Financially Compliant Enterprise Point-of-Sale Systems: Data Integrity and Revenue Recognition at Scale. International Journal of Advanced Research in Computer Science & Technology (IJARCST), 8(5), 12993-13104.
12. Kaushik, K., Bharti, P., Makkena, B., Narooka, P., & Soni, M. (2025, October). Data-Driven Motion Planning for Autonomous Robots Using Deep Reinforcement Learning in Dynamic Environments. In 2025 1st IEEE Uttar Pradesh Section Women in Engineering International Conference on Electrical Electronics and Computer Engineering (UPWIECON) (pp. 180-186). IEEE.
13. Navandar, P. (2024). Governance, risk, and compliance (GRC) in the age of identity and access governance (IAG): A framework for integrated enterprise security and compliance. International Journal of Research and Applied Innovations (IJRAI), 7(2), 10483–10493. https://doi.org/10.15662/IJRAI.2024.0702011
14. Gollapudi, R. (2025). Data-Driven Risk Scoring For Grid Assets Using Centralized Production Databases. International Journal Of Advances In Signal And Image Sciences, 50-87.
15. Kotla, M. R. T. (2025). Enterprise integration lessons from four digital frontlines: A comparative analysis of modern IT ecosystems. International Journal of Research Publications in Engineering, Technology and Management, 8(3), 32–42.
16. Kavuri, S. (2023). Machine learning approaches for security vulnerability detection in software testing. Computer Fraud & Security, 21-31.
17. Parasa, M. (2025). Creating hyper-personalized learning journeys using AI in SAP SuccessFactors LMS for individual development and business alignment. International Research Journal of Engineering & Applied Sciences, 13(4), 241–255. https://doi.org/10.55083/irjeas.2025.v13i04022
18. Anbalagan, B., Joyce, S., Mani, R., Bussu, V. R. R., Komarina, G. B., Mane, V., & Doshi, A. (2025, October). Accelerating SAP HANA Performance with Azure NetApp Files. In 2025 IEEE International Conference on Blockchain and Distributed Systems Security (ICBDS) (pp. 1-6). IEEE.
19. Lanka, S. (2025). Architectural patterns for AI-enabled triage and crisis prediction systems in public health platforms. International Journal of Research and Applied Innovations, 8(1), 11648–11662. https://doi.org/10.15662/IJRAI.2025.0801003
20. Anumula, S. K. (2025). Next-gen supply chains: A product lifecycle management–based approach to resilient and sustainable operations. International Journal of Managing Value and Supply Chains (IJMVSC), 16.
21. ServiceNow. (2023). *Digital workflow automation and AI operations*. https://www.servicenow.com
22. Snowflake. (2024). *Data cloud for machine learning*. https://www.snowflake.com
23. Weber, J., & Hauer, M. (2021). Intelligent enterprise architectures. *Journal of Cloud Computing*.
24. Zhang, Y., et al. (2022). Context-aware AI systems in enterprises. *IEEE Transactions on Systems, Man, and Cybernetics*.

| ISSN: 2395-0560 | www.irjie.org |editor@irjie.org| A Bimonthly, Peer-Reviewed, Scholarly Journal|

|Volume 10, Issue 3, May- June 2026|

DOI:10.15680/IRJIE.2026.1003003

25. Syed, S. (2025). Enterprise asset management digitalization for multi-site pharmaceutical manufacturing: A transatlantic Oracle eAM implementation. International Journal of Computer Technology and Electronics Communication (IJCTEC), 8(4), 11138–11146. https://doi.org/10.15680/IJCTECE.2025.0804018
26. Barigidad, S., Hameed, S., Karri, N., Jangam, S. K., Pedda, P. S. R., & Gupta, D. (2025, December). Computational Modeling of AI-Enhanced Learning Pathways: A Mathematical Framework for Optimizing Knowledge Acquisition, Cognitive Load Management, and Student Performance in STEM Education. In 2025 International Conference on AI-Driven STEM Education and Learning Technologies (AISTEMEDU) (pp. 1-7). IEEE.
27. Sarngadharan, S. (2025). Self-optimizing pipelines: ML systems that tune themselves in production. International Journal of Computer Technology and Electronics Communication (IJCTEC), 8(2), 10468–10476. https://doi.org/10.15680/IJCTECE.2025.0802015
28. Damarched, M. K. (2025). Data Governance Challenges in ITSM Platform Transitions. International Journal of Computer Technology and Electronics Communication, 8(6), 11881-11890.
29. Singh, A. (2025). AI-driven autonomous network control planes for large-scale infrastructure networks. International Journal of Computer Technology and Electronics Communication, 8(6), 11705-11715.
30. Govindan, V. (2025). Vendor dependency to enterprise sovereignty: A phased migration approach for enterprise applications. International Journal of Computer Technology and Electronics Communication (IJCTEC), 8(4), 11176–11185. https://doi.org/10.15680/IJCTECE.2025.0804021
31. Upadhyay, H. (2025). Consumer Experience Trends Based on AI Features: A Comprehensive Analysis of Conversational AI, Personalization Engines, and Voice AI. Frontiers in Emerging Artificial Intelligence and Machine Learning, 2(11), 6-15.
32. Rongali, L. P. (2025). Compliance and Governance: Address the Role of Devops in Maintaining Compliance and Ensuring Governance throughout the Development Lifecycle. SSRN Electronic Journal. https://doi.org/10.2139/ssrn.5229546
33. Makkena, B. (2023). PromptOps: Building prompt-driven DevOps workflows for infrastructure-as-code automation. International Journal of Communication Networks and Information Security, 15(10), 12–30.
34. Chenna, S. (2025). Modernizing enterprise integration architecture: A case study of Oracle Cloud Integration. International Journal of Computer Technology and Electronics Communication, 8(3), 10768–10775. https://doi.org/10.15680/IJCTECE.2025.0803012
35. Gandikota, S. P. (2025). High-availability network diagnostics and configuration platform for real-time financial service delivery. International Journal of Computer Technology and Electronics Communication (IJCTEC), 8(4), 11147–11160. https://doi.org/10.15680/IJCTECE.2025.0804019
36. Mannem, S. (2025). Automated patient quality data flow for CMS reporting accuracy. International Journal of Computer Technology and Electronics Communication (IJCTEC), 8(4), 11161–11175. https://doi.org/10.15680/IJCTECE.2025.0804020
37. Chettiyar, S. S. S. (2025). Agentic orchestration and integration of PBX and SaaS CRM platforms. International Journal of Computer Technology and Electronics Communication (IJCTEC), 8(2), 10451–10467. https://doi.org/10.15680/IJCTECE.2025.0802014
38. Goel, N. (2023). Privacy Risks and Protection in the Digital World of IoT. Panamerican Mathematical Journal, 33(1), 2023.