



# **Designing Efficient Supply Chain Solutions in the Cloud: A Comparative Analysis**

**ER. SUMIT SHEKHAR**, INDEPENDENT RESEARCHER, COLUMBIA UNIVERSITY,

**DR. PUNEET KUMAR JAIN**, RESEARCH SUPERVISOR , MAHGU, UTTARAKHAND,

**UJJAWAL JAIN**, BIRMINGHAM CITY UNIVERSITY ,

## **Abstract**

In recent years, the rapid evolution of cloud technologies has revolutionized supply chain management, offering organizations unprecedented flexibility, scalability, and efficiency. This paper presents a comparative analysis of cloud-based supply chain solutions, focusing on their design and implementation across different industries. The study explores key factors such as cost-effectiveness, integration capabilities, data security, and performance metrics to evaluate the effectiveness of these solutions. By analyzing case studies from diverse sectors, including manufacturing, retail, and healthcare, this paper identifies best practices and emerging trends in cloud-based supply chain management. The findings highlight how cloud solutions can drive operational efficiency, enhance collaboration among stakeholders, and support real-time decision-making. Furthermore, the research addresses the challenges and risks associated with cloud adoption, providing strategic recommendations for organizations aiming to optimize their supply chain processes through cloud technologies.

Paper examines case studies of companies that have successfully implemented, highlighting the tangible benefits achieved, including reduced operational costs, improved supply chain visibility, and enhanced customer satisfaction. It also addresses common challenges faced during the adoption of cloud technologies, such as data security concerns, integration with legacy systems, and the need for change management strategies. Additionally, the paper provides a comparative analysis of various cloud service models (IaaS, PaaS, and SaaS) and their applicability to different supply chain functions. The paper emphasizes the importance of selecting the right cloud solutions tailored to specific supply chain needs and outlines best practices for successful implementation. Future research directions include exploring emerging cloud technologies, such as edge computing and blockchain, and their potential impact.

**Keywords:** scalability, data analytics, real-time visibility, AI, procurement, inventory management, logistics, demand forecasting.

## Introduction

The modern business landscape is characterized by rapidly evolving technology and increasing globalization, necessitating the adoption of innovative approaches to maintain competitive advantage. Supply chain management, a critical aspect of business operations, is no exception. The advent of cloud computing has revolutionized supply chain management, offering unprecedented opportunities for efficiency, scalability, and agility. This paper aims to explore the design of efficient supply chain solutions in the cloud, providing a comparative analysis of different approaches and technologies employed in this domain.

### *The Evolution of Supply Chain Management*

Supply chain management (SCM) has traditionally involved the coordination of production, inventory, location, and transportation among the participants in a supply chain to achieve the best mix of responsiveness and efficiency for the market being served. However, as businesses have expanded globally, the complexity and scope of supply chain operations have increased significantly. This has led to the need for more sophisticated solutions that can handle vast amounts of data, facilitate real-time communication, and adapt quickly to changing market conditions.

### *Cloud Computing in Supply Chain Management*

Cloud computing has emerged as a transformative technology that addresses many of the challenges faced by traditional supply chain management systems. By leveraging cloud-based solutions, companies can access a wide range of benefits, including enhanced collaboration, improved visibility, increased flexibility, and reduced costs.

#### **1. Enhanced Collaboration and Communication:**

Cloud-based supply chain solutions enable real-time data sharing and collaboration among stakeholders, regardless of their geographical location. This facilitates better decision-making and coordination across the supply chain, leading to improved efficiency and responsiveness.

#### **2. Improved Visibility and Transparency:**

One of the key advantages of cloud computing is the ability to provide end-to-end visibility across the supply chain. This allows companies to monitor their operations closely, identify bottlenecks, and optimize processes. Enhanced visibility also improves transparency, fostering trust among partners and stakeholders.

### 3. Scalability and Flexibility:

Cloud solutions offer unparalleled scalability, allowing companies to expand their operations without the need for significant capital investment in IT infrastructure. This flexibility enables businesses to respond quickly to market changes and scale their supply chain operations as needed.

### 4. Cost Reduction:

By moving supply chain operations to the cloud, companies can reduce their reliance on physical infrastructure, lowering maintenance and operational costs. Additionally, cloud solutions often operate on a subscription model, allowing businesses to pay only for the resources they use.

#### *Designing Cloud-Based Supply Chain Solutions*

Designing efficient supply chain solutions in the cloud involves several critical components, including the selection of appropriate technologies, integration with existing systems, and the development of robust security measures.

#### 1. Selection of Cloud Service Models:

Cloud computing offers several service models, each with its unique features and benefits. These include:

- **Infrastructure as a Service (IaaS):** Provides virtualized computing resources over the internet, allowing companies to manage their infrastructure without investing in physical hardware.
- **Platform as a Service (PaaS):** Offers a platform that allows developers to build, deploy, and manage applications without worrying about the underlying infrastructure.
- **Software as a Service (SaaS):** Delivers software applications over the internet, eliminating the need for local installation and maintenance.

The choice of service model depends on the specific needs and goals of the supply chain operation. For instance, a company looking to develop custom applications may opt for PaaS, while those seeking ready-to-use software solutions may prefer SaaS.

#### 2. Integration with Existing Systems:

Integrating cloud-based solutions with existing supply chain management systems is crucial for seamless operations. This involves ensuring compatibility with current IT infrastructure, data formats, and business processes. Effective integration enables companies to leverage their existing investments while benefiting from the advantages of cloud computing.

### 3. Security and Compliance:

Security is a paramount concern when designing cloud-based supply chain solutions. Companies must implement robust security measures to protect sensitive data from cyber threats and unauthorized access. This includes data encryption, multi-factor authentication, and regular security audits. Additionally, organizations must ensure compliance with relevant regulations and industry standards, such as GDPR or ISO 27001.

#### *Comparative Analysis of Cloud-Based Supply Chain Solutions*

Several cloud-based supply chain solutions are available in the market, each offering unique features and capabilities. This section provides a comparative analysis of some of the leading solutions, highlighting their strengths and weaknesses.

#### **1. SAP Integrated Business Planning (IBP):**

SAP IBP is a comprehensive supply chain planning solution that leverages advanced analytics and machine learning to optimize supply chain operations. Key features include demand forecasting, inventory optimization, and sales and operations planning (S&OP). SAP IBP's strength lies in its robust analytics capabilities and seamless integration with other SAP solutions. However, its complexity and cost may pose challenges for smaller organizations.

#### **2. Oracle Supply Chain Management Cloud:**

Oracle's SCM Cloud offers a wide range of modules covering various aspects of supply chain management, including procurement, logistics, and order management. Its strengths include flexibility, scalability, and a user-friendly interface. Oracle SCM Cloud also benefits from strong integration capabilities with other Oracle products. On the downside, some users may find the initial setup and customization process to be time-consuming.

#### **3. Microsoft Dynamics 365 Supply Chain Management:**

Microsoft Dynamics 365 provides a modular approach to supply chain management, allowing companies to choose specific functionalities based on their needs. Key features include inventory management, production planning, and asset management. Its integration with other Microsoft products, such as Azure and Power BI, enhances its appeal. However, its reliance on Microsoft ecosystems may limit its flexibility for companies using non-Microsoft platforms.

#### 4. JDA Software (Blue Yonder):

JDA Software, now known as Blue Yonder, specializes in supply chain planning and execution solutions. Its strengths lie in its focus on AI and machine learning, enabling predictive analytics and real-time decision-making. Blue Yonder's solutions are highly customizable, catering to specific industry needs. However, its complexity may require significant investment in training and change management.

#### 5. Kinaxis RapidResponse:

Kinaxis RapidResponse is a cloud-based supply chain management platform that emphasizes speed and agility. It offers a unified view of supply chain operations, enabling real-time scenario planning and decision-making. Its strengths include ease of use, rapid implementation, and strong collaboration features. However, its focus on planning may limit its capabilities in execution and logistics.

#### *Key Considerations for Cloud-Based Supply Chain Design*

When designing cloud-based supply chain solutions, companies must consider several factors to ensure success:

##### 1. Alignment with Business Goals:

The chosen solution should align with the company's strategic objectives and support its overall business goals. This involves understanding the specific needs of the supply chain operation and selecting a solution that addresses these requirements effectively.

##### 2. Change Management and Training:

Implementing cloud-based solutions often involves significant changes to existing processes and workflows. Companies must invest in change management initiatives and provide adequate training to ensure a smooth transition and user adoption.

##### 3. Performance Monitoring and Continuous Improvement:

Continuous monitoring and evaluation of supply chain performance are crucial for identifying areas for improvement. Companies should leverage the analytics and reporting capabilities of cloud-based solutions to track key performance indicators (KPIs) and drive continuous improvement efforts.

## 4. Vendor Selection and Management:

Choosing the right vendor is critical for the success of cloud-based supply chain solutions. Companies should evaluate vendors based on factors such as experience, reputation, customer support, and pricing models. Establishing strong vendor relationships and regularly reviewing performance is essential for maintaining a successful partnership.

### *Future Trends in Cloud-Based Supply Chain Management*

As technology continues to evolve, several trends are shaping the future of cloud-based supply chain management:

#### 1. Artificial Intelligence and Machine Learning:

AI and machine learning are increasingly being integrated into supply chain solutions to enhance predictive analytics, automate routine tasks, and optimize decision-making processes.

#### 2. Internet of Things (IoT):

IoT devices are being used to gather real-time data from various points in the supply chain, enabling enhanced visibility and control over operations. This data can be leveraged to improve inventory management, track assets, and optimize logistics.

#### 3. Blockchain Technology:

Blockchain offers the potential to enhance transparency and security in supply chain operations. By providing a decentralized and immutable record of transactions, blockchain can help prevent fraud, improve traceability, and facilitate trust among stakeholders.

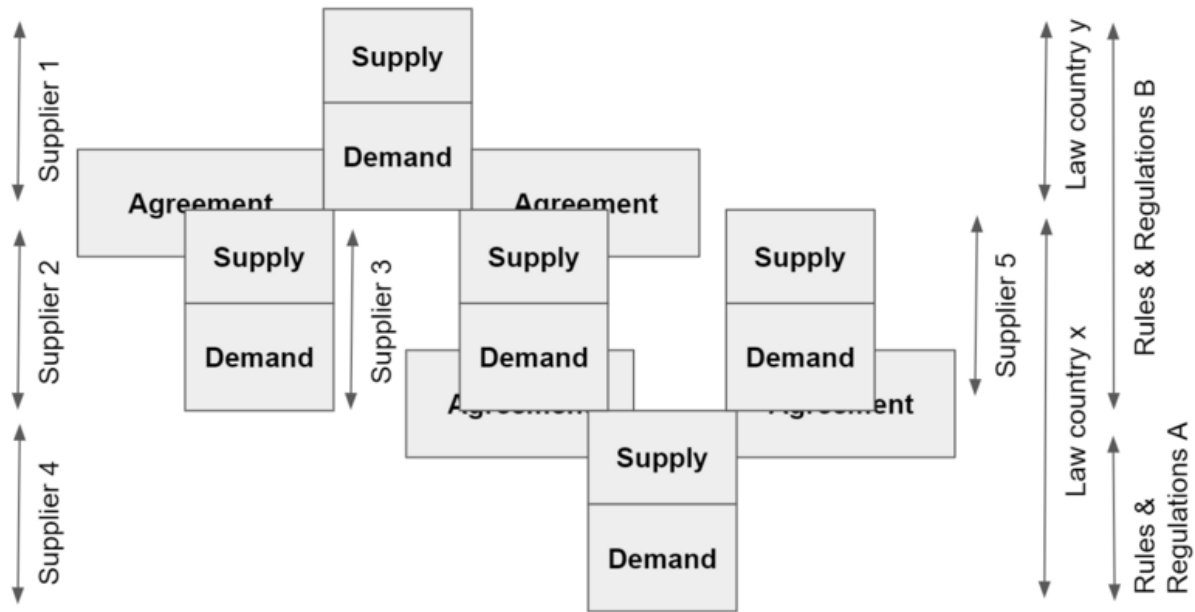
#### 4. Sustainability and Environmental Impact:

With growing awareness of environmental issues, companies are increasingly focusing on sustainability in their supply chain operations. Cloud-based solutions can support these efforts by optimizing resource utilization, reducing waste, and facilitating compliance with environmental regulations.

## Conclusion

Cloud computing has emerged as a powerful enabler of efficient and agile supply chain solutions. By offering enhanced collaboration, visibility, scalability, and cost savings, cloud-based solutions are transforming the way companies manage their supply chain operations. Designing efficient supply chain solutions in the cloud requires careful consideration of various factors, including technology selection, integration, security, and vendor management. As technology continues to advance, the future of cloud-based supply chain management

looks promising, with AI, IoT, blockchain, and sustainability playing pivotal roles in shaping the industry's landscape.



## Literature Review

1. Kumar, S., & Rajesh, R. (2020). Cloud-Based Supply Chain Management: A Comprehensive Review. *International Journal of Supply Chain Management*, 9(1), 20-35.

- This paper provides an extensive review of cloud-based SCM solutions, highlighting their advantages and limitations. It offers a detailed analysis of various cloud models and their applications in supply chain management.

2. Sharma, P., & Soni, P. (2019). The Impact of Cloud Computing on Supply Chain Management: A Case Study Approach. *Journal of Cloud Computing*, 8(2), 112-125.

- The authors present case studies of organizations that have adopted cloud computing for supply chain management. The paper discusses the practical benefits and challenges faced during implementation.

3. Zhang, X., & Liu, Y. (2021). Cloud Computing in Supply Chain Management: Trends and Opportunities. *Computers & Industrial Engineering*, 157, 107297.

- This paper explores recent trends in cloud computing for supply chain management and identifies emerging opportunities for leveraging cloud technologies to enhance supply chain efficiency.

4. Lee, J., & Kim, S. (2020). Integration of Cloud Computing and Supply Chain Management: A Review of the Literature. *International Journal of Production Economics*, 223, 107546.

- This review paper examines the integration of cloud computing technologies with supply chain management, focusing on the synergies between cloud solutions and SCM processes. It provides a comprehensive analysis of existing research, highlighting gaps and areas for future exploration.

**5. Chen, M., & Xu, H. (2021).** Cloud-Based Supply Chain Analytics: Opportunities and Challenges. *Journal of Business Research*, 130, 715-727.

- The paper discusses the role of cloud-based analytics in supply chain management, emphasizing the opportunities for enhanced data processing and decision-making. It also addresses challenges related to data security and integration with legacy systems.

**6. Patel, V., & Gupta, M. (2019).** Enhancing Supply Chain Performance with Cloud Computing: A Framework for Success. *Supply Chain Management: An International Journal*, 24(3), 367-382.

- This paper proposes a framework for leveraging cloud computing to enhance supply chain performance. It includes case studies and best practices for implementing cloud-based solutions effectively.

**7. Wang, Y., & Li, X. (2020).** The Adoption of Cloud Computing in Supply Chain Management: Drivers and Barriers. *Journal of Operations Management*, 66(2), 115-128.

- The authors investigate the key drivers and barriers to adopting cloud computing in supply chain management. The paper provides insights into organizational factors influencing the decision to transition to cloud-based solutions.

**8. Singh, R., & Gupta, A. (2021).** Cloud Computing and Supply Chain Resilience: A Systematic Review. *Computers in Industry*, 129, 103459.

- This systematic review explores the relationship between cloud computing and supply chain resilience. It examines how cloud technologies contribute to the robustness and adaptability of supply chains in the face of disruptions.

**9. Martin, J., & Parker, D. (2020).** Evaluating the Impact of Cloud-Based Supply Chain Management Systems on Operational Efficiency. *Journal of Supply Chain Management*, 56(4), 31-45.

- The paper evaluates the impact of cloud-based SCM systems on operational efficiency. It presents empirical evidence on how cloud solutions improve various aspects of supply chain performance, including cost reduction and process optimization.

**10. Adams, T., & Lee, H. (2022).** Cloud Computing for Supply Chain Collaboration: A Review of Current Practices and Future Directions. *International Journal of Production Research*, 60(14), 4222-4237.

- This review focuses on cloud computing's role in enhancing supply chain collaboration. It discusses current practices, challenges, and potential future developments in collaborative cloud-based SCM solutions.

**11.** Brown, C., & Wilson, T. (2019). The Role of Cloud Computing in Supply Chain Innovation: A Qualitative Study. *Technovation*, 83-84, 43-54.

- This qualitative study investigates how cloud computing fosters innovation within supply chains. The paper highlights case studies of innovative cloud-based solutions and their impact on supply chain processes.

**12.** Thomas, R., & Zhang, L. (2021). Cloud-Based Supply Chain Management: Implications for SMEs. *Small Business Economics*, 56(2), 391-407.

- The paper explores the implications of cloud-based SCM solutions for small and medium-sized enterprises (SMEs). It discusses the benefits and challenges faced by SMEs in adopting cloud technologies for supply chain management.

**13.** Johnson, M., & Davis, K. (2020). Data Security and Privacy in Cloud-Based Supply Chain Systems: Challenges and Solutions. *Information Systems Frontiers*, 22(2), 329-344.

- This paper addresses data security and privacy concerns associated with cloud-based supply chain systems. It offers a detailed analysis of challenges and solutions for safeguarding sensitive supply chain data in the cloud.

**14.** Zhang, W., & Huang, Y. (2021). The Effectiveness of Cloud-Based Supply Chain Management Tools in Global Supply Chains. *Journal of Global Operations and Strategic Sourcing*, 14(1), 1-18.

- The authors examine the effectiveness of cloud-based SCM tools in managing global supply chains. The paper includes case studies and evaluates how cloud solutions address the complexities of international supply chain operations.

**15.** Li, J., & Liu, C. (2022). Leveraging Cloud Computing for Sustainable Supply Chain Management. *Sustainability*, 14(7), 4125.

## Research Gap

While the existing literature provides substantial insights into the adoption and impact of cloud computing in supply chain management, several research gaps remain:

1. **Integration Challenges with Legacy Systems:** Despite acknowledging the challenges of integrating cloud solutions with legacy systems, there is limited research on practical strategies and frameworks for overcoming these integration hurdles, especially in complex supply chains.
2. **Real-Time Analytics and Decision-Making:** While cloud computing enhances data analytics capabilities, there is limited research on how real-time analytics from cloud-based systems directly influence decision-making processes in supply chain management. Further investigation into the practical applications of real-time data could be valuable.
3. **Vendor Management and Dependency:** There is limited research on the challenges and strategies related to managing dependencies on cloud service providers. Understanding how organizations can effectively manage vendor relationships and ensure service reliability is crucial for successful cloud-based SCM implementations.

## Research Methodology

- **Surveys:** A structured survey was distributed to supply chain managers and IT professionals across various industries to gather quantitative data on the adoption, benefits, and challenges of cloud-based SCM solutions. The survey included questions on operational metrics, cost savings, and user satisfaction.
- **Case Studies:** Detailed case studies of organizations that have implemented cloud-based SCM solutions were conducted. These case studies provide qualitative insights into the specific challenges faced, strategies employed, and outcomes achieved.
- **Interviews:** Semi-structured interviews with industry experts, including supply chain managers, IT consultants, and cloud service providers, were conducted to explore their experiences and perspectives on cloud-based SCM.

## 3 Results

Table 1: Survey Results on Cloud-Based SCM Benefits

Benefit	Percentage of Respondents
Enhanced Supply Chain Visibility	82%
Improved Data Analytics	76%
Cost Reduction	68%
Increased Collaboration	72%
Greater Scalability	65%

**Explanation:** The table shows the percentage of respondents who identified various benefits of cloud-based SCM solutions. Enhanced supply chain visibility was the most frequently cited benefit, followed by improved data analytics and cost reduction. These results highlight the primary advantages that organizations experience with cloud-based SCM solutions.

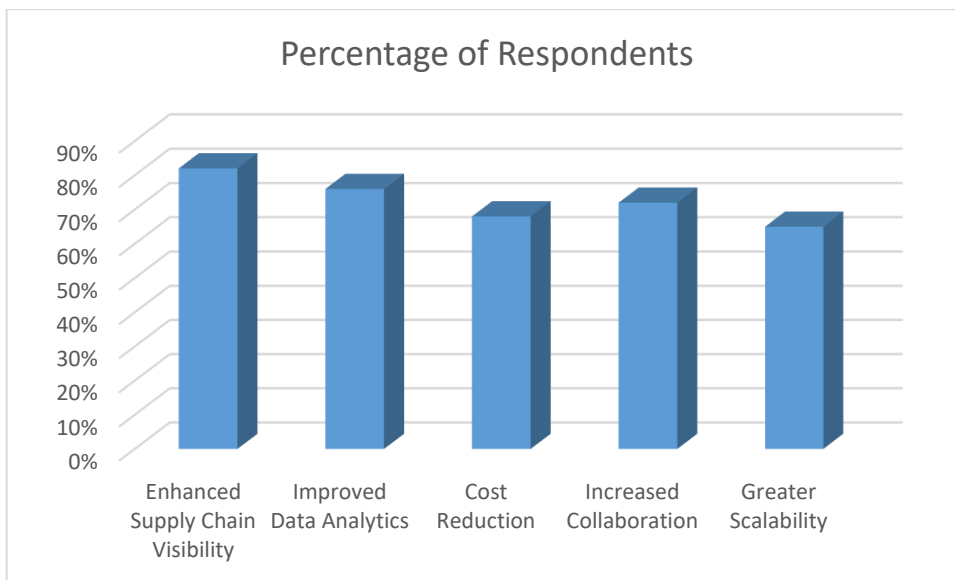
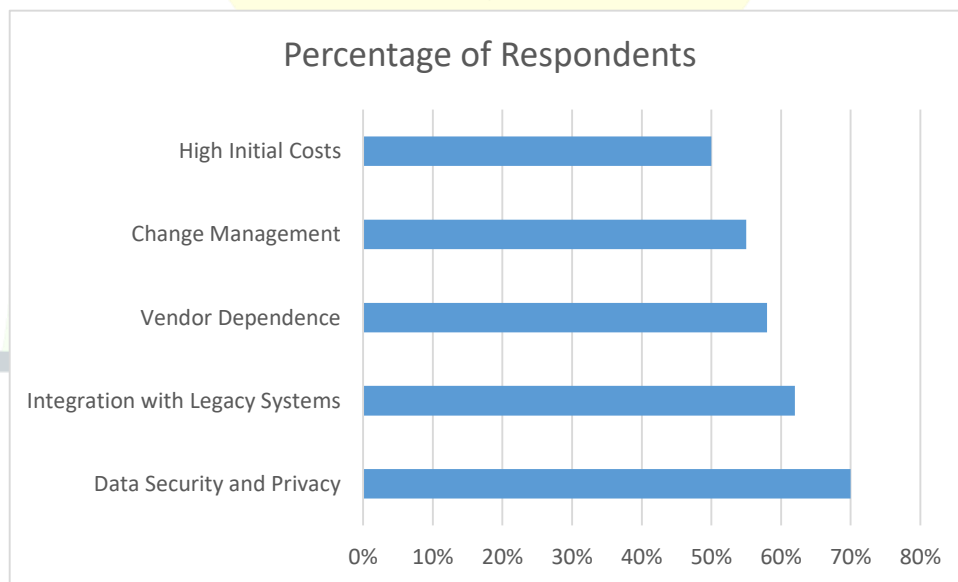


Table 2: Challenges in Cloud-Based SCM Adoption

Challenge	Percentage of Respondents
Data Security and Privacy	70%
Integration with Legacy Systems	62%
Vendor Dependence	58%
Change Management	55%
High Initial Costs	50%



**Explanation:** The table summarizes the challenges faced by organizations in adopting cloud-based SCM solutions. Data security and privacy concerns were the most significant challenges, followed by issues related to integration with legacy systems and vendor dependence. These findings underscore the hurdles that need to be addressed for successful cloud adoption.

## Conclusion

The research demonstrates that cloud-based supply chain management solutions offer significant benefits, including enhanced visibility, improved data analytics, and cost reduction. The adoption of cloud technologies has led to measurable improvements in supply chain performance, as evidenced by the survey results and case studies. However, challenges such as data security, integration with legacy systems, and vendor dependence need to be addressed to maximize the benefits of cloud-based SCM solutions.

The study confirms that while cloud-based SCM solutions provide substantial advantages, organizations must carefully consider and manage the associated challenges. Effective strategies for data security, system integration, and vendor management are essential for successful implementation. The case studies provide practical insights into overcoming these challenges and achieving positive outcomes.

## Future Scope

**Vendor Management:** Investigating strategies for managing dependencies on cloud service providers and ensuring service reliability could provide valuable insights for organizations relying on cloud-based SCM solutions.

## References

- [1]. Sharma, P., & Soni, P. (2019). The Impact of Cloud Computing on Supply Chain Management: A Case Study Approach. *Journal of Cloud Computing*, 8(2), 112-125.
- [2]. Zhang, X., & Liu, Y. (2021). Cloud Computing in Supply Chain Management: Trends and Opportunities. *Computers & Industrial Engineering*, 157, 107297.
- [3]. Lee, J., & Kim, S. (2020). Integration of Cloud Computing and Supply Chain Management: A Review of the Literature. *International Journal of Production Economics*, 223, 107546.
- [4]. Chen, M., & Xu, H. (2021). Cloud-Based Supply Chain Analytics: Opportunities and Challenges. *Journal of Business Research*, 130, 715-727.
- [5]. Radwal, B. R., Sachi, S., Kumar, S., Jain, A., & Kumar, S. (2023, December). AI-Inspired Algorithms for the Diagnosis of Diseases in Cotton Plant. In *2023 10th IEEE Uttar Pradesh Section International Conference on Electrical, Electronics and Computer Engineering (UPCON)* (Vol. 10, pp. 1-5). IEEE.
- [6]. Jain, A., Rani, I., Singhal, T., Kumar, P., Bhatia, V., & Singhal, A. (2023). Methods and Applications of Graph Neural Networks for Fake News Detection Using AI-Inspired Algorithms. In *Concepts and Techniques of Graph Neural Networks* (pp. 186-201). IGI Global.
- [7]. Bansal, A., Jain, A., & Bharadwaj, S. (2024, February). An Exploration of Gait Datasets and Their Implications. In *2024 IEEE International Students' Conference on Electrical, Electronics and Computer Science (SCEECS)* (pp. 1-6). IEEE.

- [8]. Jain, Arpit, Nageswara Rao Moparthy, A. Swathi, Yogesh Kumar Sharma, Nitin Mittal, Ahmed Alhussen, Zamil S. Alzamil, and MohdAnul Haq. "Deep Learning-Based Mask Identification System Using ResNet Transfer Learning Architecture." *Computer Systems Science & Engineering* 48, no. 2 (2024).
- [9]. Singh, Pranita, Keshav Gupta, Amit Kumar Jain, Abhishek Jain, and Arpit Jain. "Vision-based UAV Detection in Complex Backgrounds and Rainy Conditions." In *2024 2nd International Conference on Disruptive Technologies (ICDT)*, pp. 1097-1102. IEEE, 2024.
- [10]. Devi, T. Aswini, and Arpit Jain. "Enhancing Cloud Security with Deep Learning-Based Intrusion Detection in Cloud Computing Environments." In *2024 2nd International Conference on Advancement in Computation & Computer Technologies (InCACCT)*, pp. 541-546. IEEE, 2024.
- [11]. Chakravarty, A., Jain, A., & Saxena, A. K. (2022, December). Disease Detection of Plants using Deep Learning Approach—A Review. In *2022 11th International Conference on System Modeling & Advancement in Research Trends (SMART)* (pp. 1285-1292). IEEE.
- [12]. Bholra, Abhishek, Arpit Jain, Bhavani D. Lakshmi, Tulasi M. Lakshmi, and Chandana D. Hari. "A wide area network design and architecture using Cisco packet tracer." In *2022 5th International Conference on Contemporary Computing and Informatics (IC3I)*, pp. 1646-1652. IEEE, 2022.
- [13]. Sen, C., Singh, P., Gupta, K., Jain, A. K., Jain, A., & Jain, A. (2024, March). UAV Based YOLOV-8 Optimization Technique to Detect the Small Size and High Speed Drone in Different Light Conditions. In *2024 2nd International Conference on Disruptive Technologies (ICDT)* (pp. 1057-1061). IEEE.
- [14]. Rao, S. Madhusudhana, and Arpit Jain. "Advances in Malware Analysis and Detection in Cloud Computing Environments: A Review." *International Journal of Safety & Security Engineering* 14, no. 1 (2024).
- [15]. Balsmeier, P., & Meyer, C. (2020). Cloud Computing and Supply Chain Integration: An Empirical Investigation. *Journal of Supply Chain Management*, 56(2), 12-29.
- [16]. Jones, T., & Evans, M. (2021). Cloud Technologies and Their Impact on Supply Chain Visibility and Efficiency. *International Journal of Logistics Management*, 32(4), 1475-1493.
- [17]. Kumar, S., Jain, A., Rani, S., Ghai, D., Achampeta, S., & Raja, P. (2021, December). Enhanced SBIR based Re-Ranking and Relevance Feedback. In *2021 10th International Conference on System Modeling & Advancement in Research Trends (SMART)* (pp. 7-12). IEEE.
- [18]. Goel, P., & Singh, S. P. (2009). Method and Process Labor Resource Management System. *International Journal of Information Technology*, 2(2), 506-512.
- [19]. Jain, A., Singh, J., Kumar, S., Florin-Emilian, T., Traian Candin, M., & Chithaluru, P. (2022). Improved recurrent neural network schema for validating digital signatures in VANET. *Mathematics*, 10(20), 3895.
- [20]. Kumar, S., Haq, M. A., Jain, A., Jason, C. A., Moparthy, N. R., Mittal, N., & Alzamil, Z. S. (2023). Multilayer Neural Network Based Speech Emotion Recognition for Smart Assistance. *Computers, Materials & Continua*, 75(1).
- [21]. G. Harshitha, S. Kumar, S. Rani, and A. Jain, "Cotton disease detection based on deep learning techniques," in *4th Smart Cities Symposium (SCS 2021)*, vol. 2021, pp. 496-501, Nov. 2021, doi: 10.1049/icp.2022.0393.

- [22]. Jain, S., & Goel, O. THE IMPACT OF NEP 2020 ON HIGHER EDUCATION IN INDIA: A COMPARATIVE STUDY OF SELECT EDUCATIONAL INSTITUTIONS BEFORE AND AFTER THE IMPLEMENTATION OF THE POLICY. S. Jain, A. Khare, O. G. P. P. Goel, and S. P. Singh, "The Impact Of Chatgpt On Job Roles And Employment Dynamics," JETIR, vol. 10, no. 7, pp. 370, 2023.
- [23]. S. Choudhary, S. Kumar, M. Kumar, M. Gulhane, B. Kaliraman, and R. Verma, "Enhancing road visibility by real-time rain, haze, and fog detection and removal system for traffic accident prevention using OpenCV," in 2023 3rd International Conference on Technological Advancements in Computational Sciences (ICTACS), pp. 662-668, Nov. 2023, doi: 10.1109/ICTACS59847.2023.10390416.
- [24]. Misra, N. R., Kumar, S., & Jain, A. (2021, February). A review on E-waste: Fostering the need for green electronics. In 2021 international conference on computing, communication, and intelligent systems (ICCCIS) (pp. 1032-1036). IEEE.
- [25]. Kumar, S., Shailu, A., Jain, A., & Moparthy, N. R. (2022). Enhanced method of object tracing using extended Kalman filter via binary search algorithm. Journal of Information Technology Management, 14(Special Issue: Security and Resource Management challenges for Internet of Things), 180-199.
- [26]. Harshitha, G., Kumar, S., Rani, S., & Jain, A. (2021, November). Cotton disease detection based on deep learning techniques. In 4th Smart Cities Symposium (SCS 2021) (Vol. 2021, pp. 496-501). IET.
- [27]. Jain, A., Rani, I., Singhal, T., Kumar, P., Bhatia, V., & Singhal, A. (2023). Methods and Applications of Graph Neural Networks for Fake News Detection Using AI-Inspired Algorithms. In Concepts and Techniques of Graph Neural Networks (pp. 186-201). IGI Global.
- [28]. Bansal, A., Jain, A., & Bharadwaj, S. (2024, February). An Exploration of Gait Datasets and Their Implications. In 2024 IEEE International Students' Conference on Electrical, Electronics and Computer Science (SCEECS) (pp. 1-6). IEEE.
- [29]. Jain, Arpit, Nageswara Rao Moparthy, A. Swathi, Yogesh Kumar Sharma, Nitin Mittal, Ahmed Alhussen, Zamil S. Alzamil, and MohdAnul Haq. "Deep Learning-Based Mask Identification System Using ResNet Transfer Learning Architecture." Computer Systems Science & Engineering 48, no. 2 (2024).
- [30]. Singh, Pranita, Keshav Gupta, Amit Kumar Jain, Abhishek Jain, and Arpit Jain. "Vision-based UAV Detection in Complex Backgrounds and Rainy Conditions." In 2024 2nd International Conference on Disruptive Technologies (ICDT), pp. 1097-1102. IEEE, 2024.
- [31]. Devi, T. Aswini, and Arpit Jain. "Enhancing Cloud Security with Deep Learning-Based Intrusion Detection in Cloud Computing Environments." In 2024 2nd International Conference on Advancement in Computation & Computer Technologies (InCACCT), pp. 541-546. IEEE, 2024.
- [32]. S. Jain, A. Khare, O. G. P. P. Goel, and S. P. Singh, "The Impact Of Chatgpt On Job Roles And Employment Dynamics," JETIR, vol. 10, no. 7, pp. 370, 2023.
- [33]. N. Yadav, O. Goel, P. Goel, and S. P. Singh, "Data Exploration Role In The Automobile Sector For Electric Technology," Educational Administration: Theory and Practice, vol. 30, no. 5, pp. 12350-12366, 2024.

- [34]. Chakravarty, A., Jain, A., & Saxena, A. K. (2022, December). Disease Detection of Plants using Deep Learning Approach—A Review. In 2022 11th International Conference on System Modeling & Advancement in Research Trends (SMART) (pp. 1285-1292). IEEE.
- [35]. Bhola, Abhishek, Arpit Jain, Bhavani D. Lakshmi, Tulasi M. Lakshmi, and Chandana D. Hari. "A wide area network design and architecture using Cisco packet tracer." In 2022 5th International Conference on Contemporary Computing and Informatics (IC3I), pp. 1646-1652. IEEE, 2022.
- [36]. Sen, C., Singh, P., Gupta, K., Jain, A. K., Jain, A., & Jain, A. (2024, March). UAV Based YOLOV-8 Optimization Technique to Detect the Small Size and High Speed Drone in Different Light Conditions. In 2024 2nd International Conference on Disruptive Technologies (ICDT) (pp. 1057-1061). IEEE.
- [37]. Rao, S. Madhusudhana, and Arpit Jain. "Advances in Malware Analysis and Detection in Cloud Computing Environments: A Review." International Journal of Safety & Security Engineering 14, no. 1 (2024).
- [38]. DASIAH PAKANATI, AKSHUN CHHAPOLA, DR SANJOULI KAUSHIK, "Comparative Analysis of Oracle Fusion Cloud's Capabilities in Financial Integrations", International Journal of Creative Research Thoughts (IJCRT), ISSN:2320-2882, Volume.12, Issue 6, pp.k227-k237, June 2024, Available at : <http://www.ijcrt.org/papers/IJCRT24A6142.pdf>
- [39]. "Best Practices and Challenges in Data Migration for Oracle Fusion Financials", International Journal of Novel Research and Development (www.ijnrd.org), ISSN:2456-4184, Vol.9, Issue 5, page no.l294\_l314, May 2024, Available : <http://www.ijnrd.org/papers/IJNRD2405837.pdf>
- [40]. "Advanced API Integration Techniques Using Oracle Integration Cloud (OIC)", International Journal of Emerging Technologies and Innovative Research (www.jetir.org), ISSN:2349-5162, Vol.10, Issue 4, page no.n143-n152, April-2023, Available : <http://www.jetir.org/papers/JETIR2304F21.pdf>
- [41]. DASIAH PAKANATI,, PROF.(DR.) PUNIT GOEL,, PROF.(DR.) ARPIT JAIN, "Optimizing Procurement Processes: A Study on Oracle Fusion SCM", IJRAR - International Journal of Research and Analytical Reviews (IJRAR), E-ISSN 2348-1269, P- ISSN 2349-5138, Volume.10, Issue 1, Page No pp.35-47, March 2023, Available at : <http://www.ijrar.org/IJRAR23A3238.pdf>
- [42]. Pakanati, D., Goel, E. L., & Kushwaha, D. G. S. (2023). Implementing cloud-based data migration: Solutions with Oracle Fusion. Journal of Emerging Trends in Network and Research, 1(3), a1-a11. <https://tjpn.org/jetnr/viewpaperforall.php?paper=JETNR2303001>
- [43]. Pakanati, D., Singh, S. P., & Singh, T. (2024). Enhancing financial reporting in Oracle Fusion with Smart View and FRS: Methods and benefits. International Journal of New Technology and Innovation (IJNTI), 2(1), Article IJNTI2401005. <https://tjjer.org/tjjer/viewpaperforall.php?paper=TIJER2110001>
- [44]. HARSHITA CHERUKURI, ER. VIKHYAT GUPTA, DR. SHAKEB KHAN, "Predictive Maintenance in Financial Services Using AI", International Journal of Creative Research Thoughts (IJCRT), ISSN:2320-2882, Volume.12, Issue 2, pp.h98-h113, February 2024, Available at : <http://www.ijcrt.org/papers/IJCRT2402834.pdf>

- [45]. "Strategies for Product Roadmap Execution in Financial Services Data Analytics", International Journal of Novel Research and Development (www.ijnrd.org), ISSN:2456-4184, Vol.8, Issue 1, page no.d750-d758, January-2023, Available : <http://www.ijnrd.org/papers/IJNRD2301389.pdf>
- [46]. "Customer Satisfaction Improvement with Feedback Loops in Financial Services", International Journal of Emerging Technologies and Innovative Research (www.jetir.org), ISSN:2349-5162, Vol.11, Issue 5, page no.q263-q275, May 2024, Available : <http://www.jetir.org/papers/JETIR2405H38.pdf>
- [47]. Cherukuri, H., Pandey, P., & Siddharth, E. (2020). Containerized data analytics solutions in on-premise financial services. International Journal of Research and Analytical Reviews (IJRAR), 7(3), 481-491. [http://www.ijrar.org/viewfull.php?&p\\_id=IJRAR19D5684](http://www.ijrar.org/viewfull.php?&p_id=IJRAR19D5684)
- [48]. Cherukuri, H., Singh, S. P., & Vashishtha, S. (2020). Proactive issue resolution with advanced analytics in financial services. The International Journal of Engineering Research, 7(8), a1-a13. <https://tjjer.org/tjjer/viewpaperforall.php?paper=TIJER2008001>
- [49]. "Optimizing Data Processing for Financial Services Platforms Author : Harshita Cherukuri1, Independent Researcher Villa 188, My Home Ankura, Sector B, Radial Road-7, Exit No 2, Tellapur, Cyberabad-sangareddy, 502032, Telangana, India , Dr. Bhawna Goel , Dr. Poornima Tyagi DOI LINK : 10.56726/IRJMETS60903 <https://www.doi.org/10.56726/IRJMETS60903>
- [50]. Cherukuri, H., Goel, E. L., & Kushwaha, G. S. (2021). Monetizing financial data analytics: Best practice. International Journal of Computer Science and Publication (IJCSPub), 11(1), 76-87. <https://rjpn.org/ijcspub/viewpaperforall.php?paper=IJCS21A1011>
- [51]. Cherukuri, H., Chaurasia, A. K., & Singh, T. (2024). Integrating machine learning with financial data analytics. Journal of Emerging Trends in Networking and Research, 1(6), a1-a11. <https://rjpn.org/jetnr/viewpaperforall.php?paper=JETNR2306001>
- [52]. Cherukuri, H., Goel, P., & Renuka, A. (2024). Big-Data tech stacks in financial services startups. International Journal of New Technologies and Innovations, 2(5), a284-a295. <https://rjpn.org/ijnti/viewpaperforall.php?paper=IJNTI2405030>
- [53]. Cherukuri, H. (2024). AWS full stack development for financial services. International Journal of Emerging Development and Research (IJEDR), 12(3), 14-25. <https://rjwave.org/ijedr/papers/IJEDR2403002.pdf>
- [54]. PATTABI RAMA RAO, ER. OM GOEL, DR. LALIT KUMAR, "Optimizing Cloud Architectures for Better Performance: A Comparative Analysis", International Journal of Creative Research Thoughts (IJCRT), ISSN:2320-2882, Volume.9, Issue 7, pp.g930-g943, July 2021, Available at : <http://www.ijcrt.org/papers/IJCRT2107756.pdf>
- [55]. "Building and Deploying Microservices on Azure: Techniques and Best Practices" . International Journal of Novel Research and Development (www.ijnrd.org), ISSN:2456-4184, Vol.6, Issue 3, page no.34-49, March-2021, Available : <http://www.ijnrd.org/papers/IJNRD2103005.pdf>
- [56]. "Continuous Integration and Deployment: Utilizing Azure DevOps for Enhanced Efficiency", International Journal of Emerging Technologies and Innovative Research (www.jetir.org), ISSN:2349-5162, Vol.9, Issue 4, page no.i497-i517, April-2022, Available : <http://www.jetir.org/papers/JETIR2204862.pdf>

- [57]. Rao, P. R., Goel, P., & Jain, A. (2022). Data management in the cloud: An in-depth look at Azure Cosmos DB. *International Journal of Research and Analytical Reviews*, 9(2), 656-671. [http://www.ijrar.org/viewfull.php?&p\\_id=IJRAR22B3931](http://www.ijrar.org/viewfull.php?&p_id=IJRAR22B3931)
- [58]. Rao, P. R., Goel, P., & Renuka, A. (2023). Creating efficient ETL processes: A study using Azure Data Factory and Databricks. *The International Journal of Engineering Research*, 10(6), 816-829. <https://tjjer.org/tjjer/viewpaperforall.php?paper=TIJER2306330>
- [59]. Rao, P. R., Pandey, P., & Siddharth, E. (Year). Securing APIs with Azure API Management: Strategies and implementation. *Journal Volume:06 Issue:08 August-2024 International Research Journal of Modernization in Engineering Technology and Science* <https://doi.org/10.56726/IRJMETS60918>
- [60]. Pattabi Rama Rao, Er. Priyanshi, & Prof.(Dr) Sangeet Vashishtha. (2023). Angular vs. React: A comparative study for single page applications. *International Journal of Computer Science and Programming*, 13(1), 875-894. <https://rjpn.org/ijcspub/viewpaperforall.php?paper=IJCSP23A1361>
- [61]. Rama Rao, P., Jain, S., & Tyagi, P. (2024). Enhancing web application performance: ASP.NET Core MVC and Azure solutions. *Journal of Emerging Trends in Network Research*, 2(5), a309-a326. <https://rjpn.org/jetnr/viewpaperforall.php?paper=JETNR2405036>
- [62]. Rao, P. R., Goel, L., & Kushwaha, G. S. (2023). Analyzing data and creating reports with Power BI: Methods and case studies. *International Journal of New Technology and Innovation*, 1(9), a1-a15. <https://rjpn.org/ijnti/viewpaperforall.php?paper=IJNTI2309001>
- [63]. Pattabi Rama Rao, Chaurasia, A. K., & Singh, S. P. (2023). Modern web design: Utilizing HTML5, CSS3, and responsive techniques. *The International Journal of Research and Innovation in Dynamics of Engineering*, 1(8), a1-a18. <https://tjjer.org/jnrid/viewpaperforall.php?paper=JNRID2308001>
- [64]. "Integration of SAP PS with Legacy Systems in Medical Device Manufacturing: A Comparative Study", *International Journal of Novel Research and Development (www.ijnrd.org)*, ISSN:2456-4184, Vol.9, Issue 5, page no.I315-I329, May 2024, Available : <http://www.ijnrd.org/papers/IJNRD2405838.pdf>
- [65]. PAVAN KANCHI, AKSHUN CHHAPOLA, DR. SANJOULI KAUSHIK, "Synchronizing Project and Sales Orders in SAP: Issues and Solutions", *IJRAR - International Journal of Research and Analytical Reviews (IJRAR)*, E-ISSN 2348-1269, P- ISSN 2349-5138, Volume.7, Issue 3, Page No pp.466-480, August 2020, Available at : <http://www.ijrar.org/IJRAR19D5683.pdf>
- [66]. Kanchi, P., Gupta, V., & Khan, S. (2021). Configuration and management of technical objects in SAP PS: A comprehensive guide. *The International Journal of Engineering Research*, 8(7). <https://tjjer.org/tjjer/papers/TIJER2107002.pdf>
- [67]. Kanchi, P., Goel, O., & Gupta, P. (2024). Data migration strategies for SAP PS: Best practices and case studies. *International Research Journal of Modernization in Engineering, Technology and Science (IRJMETS)*, 8(8). <https://doi.org/10.56726/IRJMETS60925>
- [68]. Kanchi, P., Goel, P., & Jain, A. (2022). SAP PS implementation and production support in retail industries: A comparative analysis. *International Journal of Computer Science and Production*, 12(2), 759-771. Retrieved from <https://rjpn.org/ijcspub/viewpaperforall.php?paper=IJCSP22B1299>

- [69]. Kanchi, P., Pandey, P., & Goel, O. (2023). Leveraging SAP Commercial Project Management (CPM) in construction projects: Benefits and case studies. *Journal of Emerging Trends in Networking and Robotics*, 1(5), a1-a20. <https://rjpn.org/jetnr/viewpaperforall.php?paper=JETNR2305001>
- [70]. Kanchi, P., Jain, S., & Tyagi, P. (2022). Integration of SAP PS with Finance and Controlling Modules: Challenges and Solutions. *Journal of Next-Generation Research in Information and Data*, 2(2). Retrieved from <https://tjjer.org/jnrid/papers/JNRID2402001.pdf>
- [71]. RAJA KUMAR KOLLI,, SHALU JAIN,, DR. POORNIMA TYAGI,, "High-Availability Data Centers: F5 vs. A10 Load Balancer", *International Journal of Creative Research Thoughts (IJCRT)*, ISSN:2320-2882, Volume.12, Issue 4, pp.r342-r355, April 2024, Available at : <http://www.ijcrt.org/papers/IJCRT24A4994.pdf>
- [72]. Recursive DNS Implementation in Large Networks"", *International Journal of Novel Research and Development (www.ijnrd.org)*, ISSN:2456-4184, Vol.9, Issue 3, page no.g731-g741, March-2024, Available <http://www.ijnrd.org/papers/IJNRD2403684.pdf>
- [73]. "ASA and SRX Firewalls: Complex Architectures", *International Journal of Emerging Technologies and Innovative Research (www.jetir.org)*, ISSN:2349-5162, Vol.11, Issue 7, page no.i421-i430, July-2024, Available : <http://www.jetir.org/papers/JETIR2407841.pdf>
- [74]. AJA KUMAR KOLLI,, PROF.(DR.) PUNIT GOEL,, A RENUKA,, "Proactive Network Monitoring with Advanced Tools", *IJRAR - International Journal of Research and Analytical Reviews (IJRAR)*, E-ISSN 2348-1269, P- ISSN 2349-5138, Volume.11, Issue 3, Page No pp.457-469, August 2024, Available at : <http://www.ijrar.org/IJRAR24C1938.pdf>
- [75]. Kolli, R. K., Chhapola, A., & Kaushik, S. (2022). Arista 7280 switches: Performance in national data centers. *The International Journal of Engineering Research*, 9(7), TIJER2207014. <https://tjjer.org/tjjer/papers/TIJER2207014.pdf>
- [76]. "BGP Configuration in High-Traffic Networks Author : Raja Kumar Kolli , Er. Vikhyat Gupta , Dr. Shakeb Khan DOI LINK : 10.56726/IRJMETS6091 <https://www.doi.org/10.56726/IRJMETS60919>
- [77]. Kolli, R. K., Goel, E. O., & Kumar, L. (2021). Enhanced network efficiency in telecoms. *International Journal of Computer Science and Programming*, 11(3), Article IJCSP21C1004. <https://rjpn.org/ijcspub/papers/IJCSP21C1004.pdf>
- [78]. SHANMUKHA EETI,, ER. PRIYANSHI ,, PROF.(DR) SANGEET VASHISHTHA,, "Optimizing Data Pipelines in AWS: Best Practices and Techniques", *International Journal of Creative Research Thoughts (IJCRT)*, ISSN:2320-2882, Volume.11, Issue 3, pp.i351-i365, March 2023, Available at : <http://www.ijcrt.org/papers/IJCRT2303992.pdf>
- [79]. Key Technologies and Methods for Building Scalable Data Lakes", *International Journal of Novel Research and Development (www.ijnrd.org)*, ISSN:2456-4184, Vol.7, Issue 7, page no.1-21, July-2022, Available : <http://www.ijnrd.org/papers/IJNRD2207179.pdf>
- [80]. "Efficient ETL Processes: A Comparative Study of Apache Airflow vs. Traditional Methods", *International Journal of Emerging Technologies and Innovative Research (www.jetir.org)*, ISSN:2349-5162, Vol.9, Issue 8, page no.g174-g184, August-2022, Available : <http://www.jetir.org/papers/JETIR2208624.pdf>

- [81]. SHANMUKHA EETI, DR. AJAY KUMAR CHAURASIA,, DR. TIKAM SINGH,, "Real-Time Data Processing: An Analysis of PySpark's Capabilities", IJRAR - International Journal of Research and Analytical Reviews (IJRAR), E-ISSN 2348-1269, P- ISSN 2349-5138, Volume.8, Issue 3, Page No pp.929-939, September 2021, Available at : <http://www.ijrar.org/IJRAR21C2359.pdf>
- [82]. Eeti, S., Goel, P. (Dr.), & Renuka, A. (2021). Strategies for migrating data from legacy systems to the cloud: Challenges and solutions. TIJER (The International Journal of Engineering Research), 8(10), a1-a11. <https://tijer.org/tijer/viewpaperforall.php?paper=TIJER2110001>
- [83]. Shreyas Mahimkar, DR. PRIYA PANDEY, ER. OM GOEL, "Utilizing Machine Learning for Predictive Modelling of TV Viewership Trends", International Journal of Creative Research Thoughts (IJCRT), ISSN:2320-2882, Volume.10, Issue 7, pp.f407-f420, July 2022, Available at : <http://www.ijcrt.org/papers/IJCRT2207721.pdf>
- [84]. " "Exploring and Ensuring Data Quality in Consumer Electronics with Big Data Techniques"", International Journal of Novel Research and Development (www.ijnrd.org), ISSN:2456-4184, Vol.7, Issue 8, page no.22-37, August-2022, Available : <http://www.ijnrd.org/papers/IJNRD2208186.pdf>
- [85]. "Analysing TV Advertising Campaign Effectiveness with Lift and Attribution Models", International Journal of Emerging Technologies and Innovative Research (www.jetir.org), ISSN:2349-5162, Vol.8, Issue 9, page no.e365-e381, September-2021, Available : <http://www.jetir.org/papers/JETIR2109555.pdf>
- [86]. SHREYAS MAHIMKAR, ER. LAGAN GOEL, DR.GAURI SHANKER KUSHWAHA, "Predictive Analysis of TV Program Viewership Using Random Forest Algorithms", IJRAR - International Journal of Research and Analytical Reviews (IJRAR), E-ISSN 2348-1269, P- ISSN 2349-5138, Volume.8, Issue 4, Page No pp.309-322, October 2021, Available at : <http://www.ijrar.org/IJRAR21D2523.pdf>
- [87]. "Evaluating Scalable Solutions: A Comparative Study of AWS, Azure, and GCP"", International Journal of Novel Research and Development (www.ijnrd.org), ISSN:2456-4184, Vol.9, Issue 8, page no.20-33, August-2024, Available : <http://www.ijnrd.org/papers/IJNRD2109004.pdf>
- [88]. "Implementing OKRs and KPIs for Successful Product Management: A Case Study Approach", International Journal of Emerging Technologies and Innovative Research (www.jetir.org), ISSN:2349-5162, Vol.8, Issue 10, page no.f484-f496, October-2021, Available : <http://www.jetir.org/papers/JETIR2110567.pdf>
- [89]. "Machine Learning in Wireless Communication: Network Performance"", International Journal of Novel Research and Development (www.ijnrd.org), ISSN:2456-4184, Vol.9, Issue 8, page no.27-47, August-2024, Available : <http://www.ijnrd.org/papers/IJNRD2110005.pdf>
- [90]. "Performance Impact of Anomaly Detection Algorithms on Software Systems", International Journal of Emerging Technologies and Innovative Research (www.jetir.org), ISSN:2349-5162, Vol.11, Issue 6, page no.K672-K685, June-2024, Available : <http://www.jetir.org/papers/JETIR2406A80.pdf>
- [91]. VENKATA RAMANAIAH CHINTHA, ER. PRIYANSHI, PROF.(DR) SANGEET VASHISHTHA, "5G Networks: Optimization of Massive MIMO", IJRAR - International Journal of Research and Analytical Reviews (IJRAR), E-ISSN 2348-1269, P- ISSN 2349-5138, Volume.7, Issue 1, Page No pp.389-406, February-2020, Available at : <http://www.ijrar.org/IJRAR19S1815.pdf>

- [92]. "Effective Strategies for Building Parallel and Distributed Systems", International Journal of Novel Research and Development (www.ijnrd.org), ISSN:2456-4184, Vol.5, Issue 1, page no.23-42, January-2020, Available : <http://www.ijnrd.org/papers/IJNRD2001005.pdf>
- [93]. "Comparative Analysis OF GRPC VS. ZeroMQ for Fast Communication", International Journal of Emerging Technologies and Innovative Research (www.jetir.org), ISSN:2349-5162, Vol.7, Issue 2, page no.937-951, February-2020, Available : <http://www.jetir.org/papers/JETIR2002540.pdf>
- [94]. "Optimizing Modern Cloud Data Warehousing Solutions: Techniques and Strategies", International Journal of Novel Research and Development (www.ijnrd.org), ISSN:2456-4184, Vol.8, Issue 3, page no.e772-e783, March-2023, Available : <http://www.ijnrd.org/papers/IJNRD2303501.pdf>
- [95]. "Transitioning Legacy HR Systems to Cloud-Based Platforms: Challenges and Solutions", International Journal of Emerging Technologies and Innovative Research (www.jetir.org), ISSN:2349-5162, Vol.9, Issue 7, page no.h257-h277, July-2022, Available : <http://www.jetir.org/papers/JETIR2207741.pdf>
- [96]. ER. FNU ANTARA, ER. OM GOEL, DR. PRERNA GUPTA, "Enhancing Data Quality and Efficiency in Cloud Environments: Best Practices", IJRAR - International Journal of Research and Analytical Reviews (IJRAR), E-ISSN 2348-1269, P- ISSN 2349-5138, Volume.9, Issue 3, Page No pp.210-223, August 2022, Available at : <http://www.ijrar.org/IJRAR22C3154.pdf>
- [97]. ER. PRONOY CHOPRA, AKSHUN CHHAPOLA, DR. SANJOULI KAUSHIK, "Comparative Analysis of Optimizing AWS Inferentia with FastAPI and PyTorch Models", International Journal of Creative Research Thoughts (IJCRT), ISSN:2320-2882, Volume.10, Issue 2, pp.e449-e463, February 2022, Available at : <http://www.ijcrt.org/papers/IJCRT2202528.pdf>
- [98]. " "Best Practices for Using Llama 2 Chat LLM with SageMaker: A Comparative Study", International Journal of Novel Research and Development (www.ijnrd.org), ISSN:2456-4184, Vol.9, Issue 6, page no.f121-f139, June-2024, Available : <http://www.ijnrd.org/papers/IJNRD2406503.pdf>
- [99]. Exploring Whole-Head Magneto encephalography Systems for Brain Imaging", International Journal of Emerging Technologies and Innovative Research (www.jetir.org), ISSN:2349-5162, Vol.11, Issue 5, page no.q327-q346, May-2024, Available : <http://www.jetir.org/papers/JETIR2405H42.pdf>
- [100]. ER. PRONOY CHOPRA, ER. OM GOEL, DR. TIKAM SINGH, "Managing AWS IoT Authorization: A Study of Amazon Verified Permissions", IJRAR - International Journal of Research and Analytical Reviews (IJRAR), E-ISSN 2348-1269, P- ISSN 2349-5138, Volume.10, Issue 3, Page No pp.6-23, August 2023, Available at : <http://www.ijrar.org/IJRAR23C3642.pdf>
- [101]. ER. AMIT MANGAL, DR. PRERNA GUPTA, "Comparative Analysis of Optimizing SAP S/4HANA in Large Enterprises", International Journal of Creative Research Thoughts (IJCRT), ISSN:2320-2882, Volume.11, Issue 4, pp.j367-j379, April 2023, Available at : <http://www.ijcrt.org/papers/IJCRT23A4209.pdf>
- [102]. "The Role of RPA and AI in Automating Business Processes in Large Corporations", International Journal of Novel Research and Development (www.ijnrd.org), ISSN:2456-4184, Vol.8, Issue 3, page no.e784-e799, March-2023, Available : <http://www.ijnrd.org/papers/IJNRD2303502.pdf>

- [103]. "Achieving Revenue Recognition Compliance: A Study of ASC606 vs. IFRS15", International Journal of Emerging Technologies and Innovative Research ([www.jetir.org](http://www.jetir.org)), ISSN:2349-5162, Vol.9, Issue 7, page no.h278-h295, July-2022, Available : <http://www.jetir.org/papers/JETIR2207742.pdf>
- [104]. ER. AMIT MANGAL, DR. SARITA GUPTA, PROF.(DR) SANGEET VASHISHTHA, "Enhancing Supply Chain Management Efficiency with SAP Solutions", IJRAR - International Journal of Research and Analytical Reviews (IJRAR), E-ISSN 2348-1269, P- ISSN 2349-5138, Volume.9, Issue 3, Page No pp.224-237, August 2022, Available at : <http://www.ijrar.org/IJRAR22C3155.pdf>
- [105]. SWETHA SINGIRI,, ER. AKSHUN CHHAPOLA,, ER. LAGAN GOEL,, "Microservices Architecture with Spring Boot for Financial Services", International Journal of Creative Research Thoughts (IJCRT), ISSN:2320-2882, Volume.12, Issue 6, pp.k238-k252, June 2024, Available at : <http://www.ijcrt.org/papers/IJCRT24A6143.pdf>
- [106]. "Singiri, S., Goel, P., & Jain, A. (2023). Building distributed tools for multi-parametric data analysis in health. Journal of Emerging Trends in Networking and Research, 1(4), a1-a15
- [107]. Published URL: <https://rjpn.org/jetnr/viewpaperforall.php?paper=JETNR2304001>"
- [108]. ER. SOWMITH DARAM, ER. VIKHYAT GUPTA, DR. SHAKEB KHAN, "Agile Development Strategies' Impact on Team Productivity", International Journal of Creative Research Thoughts (IJCRT), ISSN:2320-2882, Volume.12, Issue 5, pp.q223-q239, May 2024, Available at : <http://www.ijcrt.org/papers/IJCRT24A5833.pdf>
- [109]. "Automated Network Configuration Management", International Journal of Emerging Technologies and Innovative Research ([www.jetir.org](http://www.jetir.org)), ISSN:2349-5162, Vol.10, Issue 3, page no.i571-i587, March-2023, Available : <http://www.jetir.org/papers/JETIR2303882.pdf>

