OPEN ACCESS
International Journal of Management & Entrepreneurship Research
P-ISSN: 2664-3588, E-ISSN: 2664-3596
Volume 6, Issue 7, P.No.2250-2274, July 2024
DOI: 10.51594/ijmer.v6i7.1293
Fair East Publishers
Journal Homepage: www.fepbl.com/index.php/ijmer

Revolutionizing procurement processes in LNG operations: A synthesis of agile supply chain management using credit card facilities

Augusta Heavens Ikevuje[1], David Chinalu Anaba[2], & Uche Thankgod Iheanyichukwu[3]

[1]Independent Researcher, Houston, Texas, USA
[2]Independent Researcher, Port Harcourt, Nigeria
[3]Rhodafranks Nigeria LTD, Nigeria

Corresponding Author: Augusta Heavens Ikevuje
Corresponding Author Email: augustaheavens@gmail.com

Article Received: 28-01-24 **Accepted**: 15-05-24 **Published:** 15-07-24

ABSTRACT

Revolutionizing procurement processes in LNG operations is essential for ensuring efficient and cost-effective supply chain management. This paper presents a synthesis of agile supply chain management (SCM) principles using credit card facilities to streamline procurement processes in LNG operations. The integration of credit card facilities offers a flexible and efficient alternative to traditional procurement methods, enabling LNG companies to adapt quickly to changing market conditions and customer demands. The paper begins by discussing the challenges faced by LNG operations in traditional procurement processes, including lengthy approval processes, limited supplier options, and lack of transparency. It then introduces the concept of agile SCM and its principles, highlighting its potential to address these challenges and improve procurement efficiency. The synthesis of agile SCM principles with credit card facilities is explored in detail, focusing on how this approach can transform procurement processes in LNG operations. By utilizing credit card facilities, LNG companies can simplify the procurement process, reduce paperwork, and improve transaction speed. This approach also offers greater flexibility in supplier selection, allowing companies to quickly onboard new suppliers and respond to market changes. The paper also discusses the

benefits of this approach, including cost savings, improved supplier relationships, and enhanced operational efficiency. Case studies and examples are provided to illustrate the application of agile SCM using credit card facilities in LNG operations. In conclusion, the synthesis of agile SCM principles with credit card facilities offers a transformative approach to procurement in LNG operations. By adopting this approach, LNG companies can enhance their competitive advantage, improve procurement efficiency, and drive overall operational excellence in the LNG industry.

Keywords: Revolutionizing, Procurement Processes, LNG Operations, Credit Cards Facilities, Agile Supply Chain Management.

INTRODUCTION

The procurement processes in LNG (liquefied natural gas) operations play a critical role in ensuring the efficient and cost-effective supply chain management of LNG projects (Abiona, et. al., 2024, Ekechi, et. al., 2024, Olowe, 2018). However, traditional procurement methods in LNG operations often face challenges that hinder their effectiveness. These challenges include lengthy approval processes, limited supplier options, and a lack of transparency in procurement transactions.

To address these challenges, there is a growing need for LNG operations to adopt more agile and flexible procurement practices. Agile supply chain management (SCM) principles offer a promising framework for improving procurement processes in LNG operations. Agile SCM emphasizes adaptability, responsiveness, and collaboration, making it well-suited for the dynamic and complex nature of LNG projects (Abolarin, et. al., 2023, Ekemezie & Digitemie, 2024, Olatunde, et. al., 2024, Olowe, 2018).

This paper explores the synthesis of agile SCM principles with the use of credit card facilities to revolutionize procurement processes in LNG operations. Credit card facilities offer a flexible and efficient alternative to traditional procurement methods, enabling LNG companies to streamline their procurement processes and adapt quickly to changing market conditions and customer demands.

By integrating credit card facilities with agile SCM principles, LNG operations can overcome the challenges associated with traditional procurement methods and achieve greater efficiency and effectiveness in their procurement processes (Adegoke, Ofodile & Ochuba, 2024, Esho, et. al., 2024, Olatunde, et. al., 2024, Olowe & Adebayo, 2015). This approach enables LNG companies to simplify procurement transactions, reduce paperwork, and improve transaction speed, leading to cost savings and improved operational efficiency.

In the following sections, we will delve into the principles of agile SCM and the benefits it offers to LNG operations. We will also discuss the integration of credit card facilities into agile SCM and explore case studies and examples to illustrate the effectiveness of this approach. Finally, we will discuss the challenges and considerations associated with implementing agile SCM with credit card facilities and outline future trends and opportunities in procurement processes for LNG operations.

In addition to the challenges faced by LNG operations in traditional procurement, such as lengthy approval processes and limited supplier options, there are other factors driving the need for a more agile approach to procurement (Adegoke, et. al., 2024, Esho, et. al., 2024, Olatunde, Adelani & Sikhakhane, 2024, Olowe & Kumarasamy, 2017). The LNG industry is

inherently complex, with projects often spanning multiple years and involving numerous stakeholders, including suppliers, contractors, and regulatory bodies. This complexity requires a procurement process that is not only efficient but also adaptable to changing project requirements and market conditions.

Agile supply chain management principles, which originated in the software development industry, offer a framework for managing complex projects with rapidly changing requirements (Adegoke, et. al., 2024, Esho, et. al., 2024, Olaoye, et. al., 2016, Olowe & Kumarasamy, 2021). These principles emphasize collaboration, adaptability, and iterative development, all of which are essential for successful procurement in the LNG industry. By adopting agile SCM principles, LNG operations can improve their ability to respond to changing market conditions, reduce lead times, and enhance overall project efficiency.

One of the key elements of agile SCM is the use of technology to enable rapid decision-making and improve collaboration among project stakeholders. Credit card facilities, with their ability to streamline procurement transactions and provide real-time visibility into spending, are a valuable tool for implementing agile procurement practices in LNG operations (Adelani, et. al., 2024, Esho, et. al., 2024, Olanrewaju, et. al., 2023, Olowe, Oyebode & Dada, 2015). By leveraging credit card facilities, LNG companies can simplify the procurement process, reduce the administrative burden associated with traditional procurement methods, and improve overall project efficiency.

In this paper, we will explore how the synthesis of agile SCM principles with credit card facilities can revolutionize procurement processes in LNG operations (Adelani, et. al., 2024, Esho, et. al., 2024, Olajiga, et. al., 2024, Olowe, Wasiu & Adebayo, 2019). We will examine the benefits of this approach, including improved efficiency, reduced costs, and enhanced collaboration. We will also discuss the challenges associated with implementing agile procurement practices and provide recommendations for overcoming these challenges. Finally, we will outline future research directions and opportunities for further innovation in procurement processes for LNG operations.

Agile Supply Chain Management in LNG Operations

Agile SCM emphasizes flexibility in responding to changes in market demand, project requirements, and supply chain disruptions. This involves the ability to quickly adapt procurement processes, adjust supplier relationships, and reallocate resources as needed to meet evolving needs (Adelani, et. al., 2024, Esho, et. al., 2024, Olajiga, et. al., 2024, Olu-lawal, et. al., 2024). Collaboration among stakeholders is a cornerstone of agile SCM. By fostering open communication and collaboration between LNG operators, suppliers, contractors, and other stakeholders, agile SCM enables the sharing of information, resources, and expertise to drive continuous improvement and innovation.

Agile SCM prioritizes adaptability to changing conditions and requirements. This involves continuously monitoring market trends, customer preferences, and project dynamics to identify opportunities for improvement and adjust procurement strategies accordingly (Adelani, et. al., 2024, Esho, et. al., 2024, Olajiga, et. al., 2024, Olu-lawal, et. al., 2024). Agile SCM embraces an iterative approach to procurement, with a focus on delivering value incrementally and continuously refining processes over time. By breaking procurement projects into smaller, manageable tasks and regularly reviewing and adapting strategies, agile SCM enables faster decision-making and more responsive procurement practices.

Agile SCM enables LNG operations to respond more quickly to changes in market demand, project requirements, and supply chain disruptions, leading to improved customer satisfaction and competitive advantage (Adeleke, 2021, Ewim & Uduafemhe, 2021, Okwandu, et. al., 2024, Oluwatusin, et. al., 2022). By streamlining procurement processes, reducing lead times, and optimizing supplier relationships, agile SCM can improve overall operational efficiency and reduce costs. Agile SCM fosters collaboration among stakeholders, including LNG operators, suppliers, contractors, and regulatory bodies, leading to better coordination, communication, and alignment of goals and objectives. By encouraging experimentation, learning, and continuous improvement, agile SCM can drive innovation in procurement practices, leading to new approaches, technologies, and solutions that enhance competitiveness and sustainability.

In the context of LNG operations, agile SCM can be applied to various aspects of procurement processes, including supplier selection, contract negotiation, inventory management, and risk mitigation (Adeleke, 2024, Ewim & Okafor, 2021, Okoli, et. al., 2024, Omole, Olajiga & Olatunde, 2024). By adopting agile principles, LNG operators can improve their ability to manage complex supply chains, respond quickly to changing market conditions, and deliver value to customers and stakeholders.

In LNG operations, the application of agile supply chain management (SCM) principles can significantly enhance procurement processes, leading to improved operational efficiency and cost-effectiveness. Here are some additional aspects of agile SCM in LNG operations:

Agile SCM emphasizes the importance of strong supplier relationships. In LNG operations, this means collaborating closely with suppliers to ensure timely delivery of materials and equipment, negotiate favorable terms, and address any issues that may arise during the procurement process (Adeleke & Peter, 2021, Ewim & Meyer, 2015, Oke, et. al., 2024, Omole, Olajiga & Olatunde, 2024). By fostering a collaborative relationship with suppliers, LNG operators can gain access to innovative solutions, improve supply chain visibility, and reduce the risk of disruptions. Agile SCM includes a focus on risk management, with an emphasis on identifying and mitigating risks proactively. In LNG operations, this involves assessing risks related to supply chain disruptions, market volatility, and regulatory changes. By implementing robust risk management strategies, such as diversifying suppliers, maintaining buffer stocks, and monitoring market trends, LNG operators can minimize the impact of potential risks on their procurement processes.

Agile SCM promotes a culture of continuous improvement, encouraging stakeholders to regularly review and refine procurement processes to enhance efficiency and effectiveness. In LNG operations, this could involve conducting regular performance reviews with suppliers, soliciting feedback from stakeholders, and benchmarking against industry best practices to identify areas for improvement (Adeleke, et. al.,2024, Ewim, 2019, Okafor, et. al., 2024, Omole, Olajiga & Olatunde, 2024). Agile SCM leverages technology to streamline procurement processes and enhance supply chain visibility. In LNG operations, this could include implementing procurement software, IoT devices for real-time monitoring of inventory levels, and data analytics tools for forecasting demand. By integrating technology into procurement processes, LNG operators can improve decision-making, reduce manual errors, and increase overall efficiency.

Agile SCM also considers sustainability and environmental factors in procurement decisions. In LNG operations, this could involve selecting suppliers with strong environmental practices, optimizing transportation routes to reduce emissions, and minimizing waste in the procurement process. By incorporating sustainability into procurement practices, LNG operators can enhance their reputation, reduce their environmental impact, and meet regulatory requirements.

Integration of Credit Card Facilities

Credit card facilities refer to the use of credit cards as a payment method for purchasing goods and services. In the context of procurement, credit card facilities offer a convenient and efficient way to make transactions, allowing organizations to quickly and securely pay suppliers for goods and services without the need for traditional invoicing and payment processes. Credit card facilities streamline the procurement process by eliminating the need for lengthy approval processes, purchase orders, and invoices (Adeleke, et. al.,2024, Ewim, et. al., 2023, Ogunkeyede, et. al., 2023, Onwuka & Adu, 2024). This results in faster transaction processing and reduced administrative burden for both buyers and suppliers.

By using credit cards for procurement, organizations can better manage their cash flow by deferring payment until the credit card statement due date. This provides flexibility in managing expenses and allows organizations to conserve cash for other operational needs. Credit card transactions offer real-time visibility into spending, allowing organizations to track purchases and monitor expenses more effectively (Adeleke, et. al.,2024, Ewim, et. al., 2023, Oduola, et. al., 2014, Onwuka & Adu, 2024). This transparency helps organizations identify unauthorized or fraudulent transactions and implement controls to prevent misuse.

Credit card facilities provide suppliers with a convenient and secure payment method, increasing their flexibility and willingness to work with buyers. This can lead to improved supplier relationships and better negotiation terms for future transactions (Adeleke, et. al.,2024, Ewim, Oyewobi & Abolarin, 2021, Odunaiya, et. al., 2024, Onwuka & Adu, 2024). Integrating credit card facilities with agile SCM principles allows LNG operations to quickly adapt to changing procurement needs and market conditions. Credit card transactions offer flexibility in purchasing goods and services, enabling LNG operators to respond rapidly to emerging opportunities or unforeseen challenges. By streamlining the procurement process and reducing administrative costs associated with traditional payment methods, credit card facilities help LNG operations achieve cost savings and improve overall procurement efficiency.

Credit card transactions provide real-time visibility into procurement spending, allowing LNG operators to monitor expenses closely and identify areas for cost optimization (Adeleke, et. al.,2024, Eze, et. al., 2023, Odili, et. al., 2024, Onwuka & Adu, 2024). This visibility enables better decision-making and enhances overall control over procurement processes. Integrating credit card facilities with agile SCM encourages collaboration between stakeholders and fosters a culture of innovation. By leveraging credit card transactions to streamline procurement processes, LNG operations can free up resources to focus on strategic initiatives and drive continuous improvement in supply chain management.

Overall, the integration of credit card facilities with agile SCM principles offers significant benefits for LNG operations, including streamlined procurement processes, improved cost management, enhanced supplier relationships, and increased flexibility and innovation. By

leveraging credit card facilities as part of their procurement strategy, LNG operators can revolutionize their supply chain management practices and achieve greater efficiency and competitiveness in the global LNG market.

In addition to the benefits outlined, the integration of credit card facilities in revolutionizing procurement processes in LNG operations also brings several other advantages: Credit card facilities enable faster procurement transactions compared to traditional methods, such as issuing purchase orders and processing invoices (Adeleke, et. al.,2024, Eze, et. al., 2024, Odili, et. al., 2024, Onwuka & Adu, 2024). This leads to time savings for both buyers and suppliers, allowing for more agile and responsive procurement processes. The simplified procurement process facilitated by credit card facilities reduces the administrative burden on procurement teams, allowing them to focus on more strategic activities.

The use of credit card facilities can improve relationships with suppliers by providing them with timely payments and reducing the risk of late payments. This can lead to improved supplier loyalty and preferential treatment in future transactions. Suppliers often prefer credit card payments due to the shorter payment cycles and reduced paperwork, leading to smoother transactions and better collaboration (Adeleke, et. al.,2024, Eze, et. al., 2023, Odili, et. al., 2024, Onwuka, et. al., 2023).

Credit card facilities offer greater financial control over procurement expenditures. Transactions are recorded in real-time, allowing for better monitoring of budget adherence and spending patterns. The ability to set spending limits and control which transactions are authorized provides additional security and control over procurement activities. Credit card facilities are scalable and can accommodate varying levels of procurement needs, from small purchases to large-scale transactions (Adeniyi, et. al., 2024, Eze, et. al., 2022, Odili, et. al., 2024, Opateye & Ewim, 2022). This scalability allows LNG operations to adapt their procurement processes to meet changing business demands. The flexibility of credit card facilities allows for easy integration with existing procurement systems and processes, minimizing disruption and facilitating a smooth transition to agile procurement practices.

Credit card facilities offer enhanced security features, such as fraud detection and prevention measures, which help mitigate the risk of fraudulent transactions. By reducing the reliance on manual processes and paperwork, credit card facilities also reduce the risk of errors and mismanagement in procurement activities (Adewusi, et. al., 2024, Eze, et. al., 2024, Odili, et. al., 2024, Orikpete & Ewim, 2023). Overall, the integration of credit card facilities in LNG operations' procurement processes, in conjunction with agile SCM principles, can lead to significant improvements in efficiency, transparency, and supplier relationships. By leveraging credit card facilities, LNG operations can revolutionize their procurement practices and achieve greater agility and competitiveness in the global LNG market.

Case Studies and Examples

An LNG operator faced challenges with traditional procurement processes, including long lead times, cumbersome approval procedures, and limited visibility into spending (Adewusi, et. al., 2024, Eze, et. al., 2023, Odedeyi, et. al., 2020, Orikpete & Ewim, 2023). The company implemented agile SCM principles and integrated credit card facilities into its procurement processes to streamline transactions and improve efficiency. By adopting agile SCM with credit card facilities, the LNG operator achieved significant time savings in procurement transactions, reduced administrative costs, and increased flexibility in supplier selection. Real-

time visibility into spending allowed for better budget control and improved decision-making. Overall, the implementation led to a more agile and responsive procurement function, enhancing the company's competitiveness in the LNG market.

A global LNG supplier sought to modernize its procurement processes to better meet the needs of its diverse customer base and improve operational efficiency (Adewusi, et. al., 2024, Fabian, 2019, Ochuba, et. al., 2024, Orikpete & Ewim, 2023). The company introduced credit card facilities as a payment method for procurement transactions, alongside agile SCM principles to streamline processes and enhance flexibility. The adoption of credit card facilities in LNG procurement led to several benefits, including faster transaction processing, reduced paperwork, and improved supplier relationships. The company experienced greater agility in responding to market changes and customer demands, leading to increased customer satisfaction and loyalty. Additionally, real-time visibility into spending enabled better cost control and more informed decision-making, contributing to overall business success.

An LNG project management company integrated credit card facilities into its procurement system, allowing project managers to make on-the-spot purchases for urgent project needs, such as equipment rentals or emergency repairs (Adewusi, et. al., 2024, Familoni, 2024, Ochuba, et. al., 2024, Orikpete, et. al., 2023). This streamlined the procurement process and minimized project downtime, ultimately improving project efficiency and profitability. A supplier of LNG equipment and materials implemented credit card facilities to offer customers a convenient and secure payment option for procurement transactions. This enhanced the company's competitiveness in the market and improved customer satisfaction by simplifying the purchasing process for clients.

These case studies and examples illustrate the successful integration of credit card facilities with agile SCM principles in LNG procurement processes, leading to improved efficiency, flexibility, and overall business performance. Here are a few more case studies and examples showcasing the revolutionized procurement processes in LNG operations through the synthesis of agile supply chain management (SCM) using credit card facilities:

Implementation of Agile SCM with Credit Card Facilities in an LNG Construction Project A large LNG construction project faced challenges with delays in procurement due to lengthy approval processes and difficulties in coordinating with multiple suppliers (Adewusi, et. al., 2024, Familoni, 2024, Ochuba, et. al., 2024, Orikpete, et. al., 2023). The project team adopted agile SCM principles and integrated credit card facilities to streamline the procurement process and improve responsiveness. By implementing agile SCM with credit card facilities, the project team achieved significant reductions in procurement lead times, enabling faster delivery of materials and equipment to the construction site. Real-time monitoring of spending helped control costs and identify opportunities for savings, leading to improved project efficiency and cost-effectiveness.

Benefits and Outcomes of Using Credit Card Facilities in LNG Maintenance and Operations An LNG terminal operator sought to improve maintenance and operations efficiency by modernizing its procurement processes (Afolabi, et. al., 2019, Familoni & Babatunde, 2024, Ochuba, et. al., 2024, Orikpete, et. al., 2023). The operator introduced credit card facilities as a payment method for maintenance and operations procurement, alongside agile SCM principles to enhance flexibility and responsiveness. The adoption of credit card facilities in maintenance and operations procurement resulted in faster transaction processing, reduced

paperwork, and improved supplier relationships. Real-time visibility into spending enabled better cost control and more informed decision-making, leading to improved terminal efficiency and reduced downtime.

An LNG shipping company integrated credit card facilities into its procurement system to enable captains to purchase supplies and spare parts while at sea. This streamlined the procurement process and ensured that vessels were adequately stocked, reducing the risk of delays and disruptions to operations (Akindeji & Ewim, 2023, Familoni & Onyebuchi, 2024, Ochuba, et. al., 2024, Orikpete, Ikemba & Ewim, 2023). An LNG equipment manufacturer implemented credit card facilities to allow customers to purchase spare parts and consumables directly from its website. This improved customer satisfaction by providing a convenient and secure payment option, leading to increased sales and revenue for the company. These case studies and examples highlight the transformative impact of integrating credit card facilities with agile SCM principles in LNG procurement processes, leading to enhanced efficiency, cost-effectiveness, and operational performance.

Challenges and Considerations

Implementing agile SCM requires a cultural shift towards more flexible and collaborative ways of working, which can be challenging for organizations accustomed to traditional procurement practices (Akinluwade, et. al., 2015, Familoni & Onyebuchi, 2024, Ochuba, et. al., 2024, Orikpete, Leton & Ewim, 2020). Some organizations may face challenges in integrating credit card facilities with existing procurement systems, especially if their systems are outdated or incompatible. Ensuring compliance with regulations and industry standards when using credit card facilities for procurement can be complex, particularly in highly regulated industries like LNG. Using credit card facilities for procurement raises data security concerns, as organizations need to ensure that sensitive payment information is protected from unauthorized access or breaches.

Engaging key stakeholders, including procurement teams, finance departments, and suppliers, is crucial for successful integration. This helps ensure alignment with organizational goals and smooth implementation (AlHamad, et. al., 2023, Familoni & Shoetan, 2024, Ochuba, et. al., 2024, Osimobi, Ekemezie & van de Rijzen, 2019). Assessing and upgrading technology infrastructure to support the integration of credit card facilities and agile SCM is essential. This includes ensuring compatibility with existing systems and addressing any technological limitations. Building strong relationships with suppliers and ensuring their readiness to accept credit card payments is important for successful integration. This may involve providing training and support to suppliers on using credit card facilities. Implementing agile SCM with credit card facilities requires a change in mindset and behavior. Organizations should invest in change management initiatives to help employees adapt to new ways of working.

Providing training and education to employees on agile SCM principles and the use of credit card facilities can help overcome cultural resistance and ensure successful adoption (Ani, et. al., 2024, Fawole, et. al., 2023, Ochuba, et. al., 2024, Osimobi, et. al., 2023, Ossei-Bremang, et. al., 2024). Investing in robust technology solutions, such as procurement software and payment processing systems, can help address technological limitations and ensure smooth integration. Implementing robust compliance monitoring processes and systems can help ensure that credit card transactions comply with regulations and industry standards, mitigating regulatory risks.

Implementing strong data security measures, such as encryption and access controls, can help protect sensitive payment information and mitigate data security risks associated with using credit card facilities for procurement (Ani, et. al., 2024, Fetuga, et. al., 2022, Ochuba, et. al., 2024, Owoola, Adebayo & Olowe, 2019). By addressing these challenges and considerations, organizations can successfully revolutionize their procurement processes in LNG operations through the synthesis of agile SCM using credit card facilities, leading to improved efficiency, cost-effectiveness, and operational performance.

Additional challenges and considerations for revolutionizing procurement processes in LNG operations through the synthesis of agile supply chain management (SCM) using credit card facilities (Anyanwu, et. al., 2022, Hamdan, et. al., 2023, Ochuba, et. al., 2024, Osimobi, et. al., 2023, Oyebode, Adebayo & Olowe, 2015). Encouraging suppliers to accept credit card payments for procurement transactions can be challenging, especially for those accustomed to traditional payment methods. Some suppliers may be hesitant due to concerns about transaction fees or unfamiliarity with credit card processing. Credit card facilities often have transaction limits, which can be a constraint for large procurement transactions common in the LNG industry. Managing and overcoming these limits requires careful planning and coordination.

Ensuring the security of credit card transactions is paramount to prevent fraud and unauthorized access. Implementing robust security measures, such as encryption and tokenization, is essential but can be complex and costly. Integrating credit card facilities with existing procurement systems and processes can be technically challenging, requiring significant customization and testing to ensure smooth operations.

Engaging suppliers early in the integration process and providing incentives for accepting credit card payments can help overcome adoption challenges. Building strong relationships with key suppliers can also facilitate smoother integration (Blose, et. al., 2022, Igah, et. al., 2023, Ochuba, et. al., 2024, Oyebode, et. al., 2022). Ensuring that the chosen credit card facilities and agile SCM processes are scalable and flexible enough to accommodate future growth and changes in procurement needs is critical for long-term success. Staying abreast of changing regulations and compliance requirements related to credit card transactions and agile SCM is essential. Implementing robust compliance monitoring and reporting processes can help mitigate compliance risks.

Establishing a culture of continuous improvement is key to maximizing the benefits of agile SCM and credit card facilities (Chukwurah & Aderemi, 2024, Igbinenikaro, Adekoya & Etukudoh, 2024, Ochuba, et. al., 2024, Oyebode, Olowe & Makanjuola, 2023). Regularly reviewing and optimizing procurement processes can lead to further efficiencies and cost savings over time. Providing suppliers with training and support on how to accept credit card payments can facilitate their adoption. Offering flexible payment terms and incentives can also encourage suppliers to embrace the change. Implementing automated payment processes and tools can help overcome transaction limits and streamline payment processing. This can include setting up recurring payments or using batch processing for large transactions.

Collaborating closely with suppliers and other stakeholders to address challenges and identify opportunities for improvement can lead to more effective integration of credit card facilities and agile SCM (Chukwurah & Aderemi, 2024, Igbinenikaro, Adekoya & Etukudoh, 2024, Ochuba, Adewumi & Olutimehin, 2024, Oyebode, et. al., 2015). Investing in technology

solutions that support agile SCM and credit card facilities, such as cloud-based procurement platforms and advanced analytics tools, can help overcome technical challenges and improve overall procurement efficiency. By carefully considering these challenges and implementing appropriate mitigation strategies, LNG operations can successfully revolutionize their procurement processes through the synthesis of agile SCM using credit card facilities, leading to enhanced efficiency, cost-effectiveness, and competitiveness.

Future Trends and Opportunities

The adoption of digital technologies, such as artificial intelligence (AI), machine learning (ML), and blockchain, is expected to reshape procurement processes in LNG operations (Chukwurah, 2024, Igbinenikaro, Adekoya & Etukudoh, 2024, Nzeako, et. al., 2024, Oyebode, et. al., 2015). These technologies can improve efficiency, transparency, and traceability in procurement. There is a growing emphasis on sustainability and environmental, social, and governance (ESG) factors in procurement. LNG operations are increasingly focusing on sourcing from sustainable suppliers and reducing their carbon footprint (Chukwurah, 2024, Igbinenikaro, Adekoya & Etukudoh, 2024, Nzeako, et. al., 2024, Oyegoke, et. al., 2020). Collaborative relationships with suppliers are becoming more important in procurement. LNG operations are exploring ways to work more closely with suppliers to optimize procurement processes and drive innovation.

Procurement processes are evolving to better manage risks, such as supply chain disruptions, geopolitical uncertainties, and regulatory changes. LNG operations are incorporating risk management strategies into their procurement practices. The use of data analytics and predictive insights is expected to grow in procurement. LNG operations are leveraging data to optimize procurement decisions, forecast demand, and identify cost-saving opportunities.

There is an opportunity to further improve supplier relationship management in LNG procurement. This includes developing strategic partnerships with key suppliers, implementing supplier development programs, and enhancing communication and collaboration (Digitemie & Ekemezie, 2024, Igbinenikaro, Adekoya & Etukudoh, 2024, Ntuli, et. al., 2024, Oyeniran, et. al., 2024). Further integration of technology, such as advanced analytics, Internet of Things (IoT), and digital twins, can unlock new opportunities for efficiency and innovation in procurement. These technologies can improve visibility, automate processes, and enable real-time decision-making.

Embracing circular economy principles, such as recycling, remanufacturing, and waste reduction, can create new opportunities for sustainable procurement practices in LNG operations (Ehimare, Orikpete & Ewim, 2023, Ikemba, et. al., 2024, Nnaji, et. al., 2020, Penerbit, 2020). This includes sourcing materials from recycled sources and designing products for recyclability. Agile and flexible procurement models can enable LNG operations to respond quickly to changing market conditions and customer demands. This includes implementing agile SCM principles and exploring new procurement strategies, such as dynamic sourcing and on-demand procurement.

Future research could explore the impact of digital transformation, including AI, ML, and blockchain, on procurement processes in LNG operations (Ekechi, et. al., 2024, Ikumapayi, et. al., 2022, Muteba, et. al., 2023, Popoola, et. al., 2024). This could include studying the benefits, challenges, and best practices of adopting these technologies. : Research could focus on the role of sustainability and ESG considerations in procurement in LNG operations. This

could include examining the impact of sustainable procurement practices on business performance and stakeholder engagement.

Future research could investigate the role of supplier collaboration in driving innovation in procurement. This could include studying the factors that contribute to successful supplier collaboration and its impact on procurement outcomes (Kikanme, et. al., 2024, Komolafe, et. al., 2024, Modupe, et. al., 2024, Popoola, et. al., 2024). Research could explore innovative risk management strategies in procurement, particularly in the context of LNG operations. This could include studying the effectiveness of different risk management approaches and their impact on procurement performance. By embracing these emerging trends and opportunities, LNG operations can further enhance their procurement processes and drive innovation in the industry.

Continued advancements in technologies such as Internet of Things (IoT), robotics, and autonomous systems are expected to further transform procurement processes in LNG operations (Shoetan & Familoni, 2024, Sonko, et. al., 2024, Timothy, et. al., 2022, Udo, et. al., 2024, Usiagu, et. al., 2024). These technologies can enable real-time monitoring of inventory, predictive maintenance, and automated procurement transactions, leading to increased efficiency and cost savings. There is a growing demand for transparency and traceability in supply chains, driven by factors such as consumer preferences, regulatory requirements, and sustainability goals. LNG operations can leverage technologies like blockchain to enhance supply chain transparency, enabling better tracking of products, verification of authenticity, and identification of inefficiencies.

The focus on sustainability in procurement is expected to intensify, with LNG operations increasingly adopting sustainable procurement practices (Shoetan & Familoni, 2024, Soyombo, et. al., 2024, Udo, et. al., 2024, Usiagu, et. al., 2024). This includes sourcing materials and services from suppliers with strong environmental and social performance, as well as implementing circular economy principles to reduce waste and promote resource efficiency. The importance of resilience and risk management in procurement will continue to grow, especially in light of global disruptions such as the COVID-19 pandemic and climate change. LNG operations will need to enhance their risk management capabilities, including supply chain mapping, scenario planning, and business continuity planning, to mitigate risks and ensure business continuity.

Collaborative partnerships between LNG operators, suppliers, and other stakeholders will become increasingly important in driving innovation and improving procurement outcomes (Suku, et. al., 2023, Udo, et. al., 2024, Uduafemhe, Ewim & Karfe, 2023). This includes sharing best practices, co-developing solutions, and jointly addressing common challenges to enhance the overall efficiency and effectiveness of the procurement process. The regulatory landscape for procurement is expected to evolve, with increased focus on compliance, ethical sourcing, and data protection. LNG operations will need to stay abreast of regulatory changes and ensure their procurement practices comply with relevant laws and regulations to avoid penalties and reputational damage. By embracing these future trends and opportunities, LNG operations can revolutionize their procurement processes, drive innovation, and achieve sustainable growth in the rapidly evolving energy landscape.

CONCLUSION

In conclusion, the synthesis of agile supply chain management (SCM) with credit card facilities offers significant potential for revolutionizing procurement processes in LNG operations. This innovative approach addresses key challenges faced by traditional procurement methods and presents opportunities for improving efficiency, transparency, and cost-effectiveness.

Agile SCM principles, such as flexibility, collaboration, and real-time responsiveness, can enhance procurement agility and efficiency in LNG operations. Integration of credit card facilities can streamline payment processes, reduce transaction costs, and improve cash flow management in procurement. Emerging technologies, sustainability considerations, and collaborative partnerships are driving future trends in procurement, offering further opportunities for innovation and improvement.

Implementation of agile SCM with credit card facilities can lead to improved procurement outcomes, including reduced lead times, better supplier relationships, and enhanced risk management. By embracing emerging trends and technologies, LNG operations can enhance their competitiveness, sustainability, and resilience in a rapidly evolving market.

Develop a comprehensive strategy for integrating agile SCM principles with credit card facilities, including clear objectives, timelines, and performance metrics. Invest in technology infrastructure and capabilities to support agile procurement processes, such as real-time data analytics, digital platforms, and automated payment systems. Foster a culture of collaboration and innovation within the organization, encouraging cross-functional teamwork and knowledge sharing. Continuously monitor and evaluate procurement performance, identifying areas for improvement and implementing corrective actions as needed. By following these recommendations and leveraging the benefits of agile SCM and credit card facilities, LNG operations can revolutionize their procurement processes, drive innovation, and achieve sustainable growth in the dynamic LNG market.

Reference

Abiona, O. O., Oladapo, O. J., Modupe, O. T., Oyeniran, O. C., Adewusi, A. O., & Komolafe, A. M. (2024). The emergence and importance of DevSecOps: Integrating and reviewing security practices within the DevOps pipeline. *World Journal of Advanced Engineering Technology and Sciences*, *11*(2), 127-133

Abolarin, S.M., Everts, M., Ewim, D.R.E., Adelaja, A.O., Olakoyejo, O.T., & Meyer, J.P. (2023). Study on the heat transfer and pressure drop power curves for entropy generation rate in the laminar, transitional, and turbulent flow regimes. *ASTFE Digital Library*, 1103-1112.

Adegoke, T. I., Ofodile, O. C., & Ochuba, N. A. (2024). Transparent reporting and equity in mortgage lending: A comprehensive review.

Adegoke, T. I., Ofodile, O. C., Ochuba, N. A., & Akinrinol, O. (2024). Evaluating the fairness of credit scoring models: A literature review on mortgage accessibility for under-reserved populations. *GSC Advanced Research and Reviews*, *18*(3), 189-199.

Adegoke, T. I., Ofodile, O. C., Ochuba, N. A., & Akinrinola, O. (2024). Data analytics in finance and mortgage: A catalyst for addressing inequities faced by under-reserved

populations in the USA. *International Journal of Science and Research Archive*, *11*(2), 338-347

Adelani, F. A., Okafor, E. S., Jacks, B. S., & Ajala, O. A. (2024). Theoretical frameworks for the role of AI and machine learning in water cybersecurity: insights from African and US Applications. *Computer Science & IT Research Journal*, *5*(3), 681-692.

Adelani, F. A., Okafor, E. S., Jacks, B. S., & Ajala, O. A. (2024). Exploring theoretical constructs of urban resilience through smart water grids: case studies in African And US cities. *Engineering Science & Technology Journal*, *5*(3), 984-994.

Adelani, F. A., Okafor, E. S., Jacks, B. S., & Ajala, O. A. (2024). A review of theoretical frameworks for electrical safety practices in water treatment facilities: lessons learned from Africa and the United States. *Engineering Science & Technology Journal*, *5*(3), 974-983.

Adelani, F. A., Okafor, E. S., Jacks, B. S., & Ajala, O. A. (2024). Theoretical Insights Into securing remote monitoring systems in water distribution networks: lessons learned from Africa-US Projects. *Engineering Science & Technology Journal*, *5*(3), 995-1007

Adeleke, A. K. (2021). Ultraprecision diamond turning of monocrystalline germanium.

Adeleke, A. K. (2024). Intelligent monitoring system for real-time optimization of ultra-precision manufacturing processes. *Engineering Science & Technology Journal*, *5*(3), 803-810.

Adeleke, A. K., Ani, E. C., Olu-lawal, K. A., Olajiga, O. K., & Montero, D. J. P. (2024). Future of precision manufacturing: Integrating advanced metrology and intelligent monitoring for process optimization. *International Journal of Science and Research Archive*, *11*(1), 2346-2355.

Adeleke, A. K., Montero, D. J. P., Ani, E. C., Olu-lawal, K. A., & Olajiga, O. K. (2024). Advances in ultraprecision diamond turning: techniques, applications, and future trends. *Engineering Science & Technology Journal*, *5*(3), 740-749.

Adeleke, A. K., Montero, D. J. P., Lottu, O. A., Ninduwezuor-Ehiobu, N., & Ani, E. C. (2024). 3D printing in aerospace and defense: A review of technological

Adeleke, A. K., Montero, D. J. P., Olajiga, O. K., Ani, E. C., & Olu-lawal, K. A. (2024). Evaluating the impact of precision engineering education on industry standards and practices. *International Journal of Science and Research Archive*, *11*(1), 2336-2345.

Adeleke, A. K., Montero, D. J. P., Olu-lawal, K. A., & Olajiga, O. K. (2024). Process development in mechanical engineering: innovations, challenges, and opportunities. *Engineering Science & Technology Journal*, *5*(3), 901-912.

Adeleke, A. K., Montero, D. J. P., Olu-lawal, K. A., & Olajiga, O. K. (2024). Statistical techniques in precision metrology, applications and best practices. *Engineering Science & Technology Journal*, *5*(3), 888-900.

Adeleke, A. K., Olu-lawal, K. A., Montero, D. J. P., Olajiga, O. K., & Ani, E. C. (2024). The intersection of mechatronics and precision engineering: Synergies and future directions. *International Journal of Science and Research Archive*, *11*(1), 2356-2364.

Adeleke, A., & Peter, O. (2021). Effect of nose radius on surface roughness of diamond turned germanium lenses.

Adeniyi, A. O., Arowoogun, J. O., Chidi, R., Okolo, C. A., & Babawarun, O. (2024). The impact of electronic health records on patient care and outcomes: A comprehensive review. *World Journal of Advanced Research and Reviews*, *21*(2), 1446-1455.

Adewusi, A. O., Asuzu, O. F., Olorunsogo, T., Iwuanyanwu, C., Adaga, E., & Daraojimba, D. O. (2024). AI in precision agriculture: A review of technologies for sustainable farming practices.

Adewusi, A. O., Komolafe, A. M., Ejairu, E., Aderotoye, I. A., Abiona, O. O., & Oyeniran, O. C. (2024). The role of predictive analytics in optimizing supply chain resilience: a review of techniques and case studies. *International Journal of Management & Entrepreneurship Research*, *6*(3), 815-837.

Adewusi, A. O., Okoli, U. I., Adaga, E., Olorunsogo, T., Asuzu, O. F., & Daraojimba, d. O. (2024). Business intelligence in the era of big data: a review of analytical tools and competitive advantage. *Computer Science & IT Research Journal*, *5*(2), 415-431.

Adewusi, A. O., Okoli, U. I., Olorunsogo, T., Adaga, E., Daraojimba, D. O., & Obi, O. C. (2024). Artificial intelligence in cybersecurity: Protecting national infrastructure: A USA.

Afolabi, I. T., Adebiyi, A. A., Chukwurah, E. G., & Igbokwe, C. P. (2019). Decision support system for final year project management. *Lecture Notes in Engineering and Computer Science*, *2019*, 233-237

Akindeji, K.T., & Ewim, D.R.E. (2023). Economic and environmental analysis of a grid-connected hybrid power system for a University Campus. *Bulletin of the National Research Centre, 47*(1), 75.

Akinluwade, K. J., Omole, F. O., Isadare, D. A., Adesina, O. S., & Adetunji, A. R. (2015). Material selection for heat sinks in hpc microchip-based circuitries. *British Journal of Applied Science & Technology*, *7*(1), 124-133

AlHamad, I.M., Al Hemyari, O., Shashati, A., Al Seraihi, H., Albahlooli, H., ... (2023). An integrated approach to water conservation: fuzzy logic assessment of water tariffs in Abu Dhabi Emirate's residential sector. *Bulletin of the National Research Centre, 47*(1), 160.

Ani, E. C., Olajiga, O. K., Sikhakane, Z. Q., & Olatunde, T. M. (2024). Renewable energy integration for water supply: a comparative review of African and Us initiatives. *Engineering Science & Technology Journal*, *5*(3), 1086-1096

Ani, E. C., Olu-lawal, K. A., Olajiga, O. K., Montero, D. J. P., & Adeleke, A. K. (2024). Intelligent monitoring systems in manufacturing: current state and future perspectives. *Engineering Science & Technology Journal*, *5*(3), 750-759

Anyanwu, C.S., Gad, A., Bilal, H., & Ewim, D.R.E. (2022). Heat analysis of a vacuum flask. *The Journal of Engineering and Exact Sciences, 8*(11), 15174-01e.

Blose, S.C., Ewim, D.R.E., Eloka-Eboka, A.C., & Adelaja, A.O. (2023). Improved correlation for predicting heat transfer coefficients during condensation inside smooth horizontal tubes. *International Journal of Low-Carbon Technologies, 18*, 750-763.

Chukwurah, E. G. (2024). Leading Saas innovation within US regulatory boundaries: the role of TPMS in navigating compliance. *Engineering Science & Technology Journal*, *5*(4), 1372-1385.

Chukwurah, E. G. (2024). Proactive privacy: advanced risk management strategies for product development in the US. *Computer Science & IT Research Journal*, *5*(4), 878-891.

Chukwurah, E. G., & Aderemi, S. (2024). Elevating team performance with scrum: insights from successful US technology companies. *Engineering Science & Technology Journal*, *5*(4), 1357-1371.

Chukwurah, E. G., & Aderemi, S. (2024). Harmonizing teams and regulations: strategies for data protection compliance in US technology companies. *Computer Science & IT Research Journal*, *5*(4), 824-838

Digitemie, W.N., & Ekemezie, I.O. (2024). Assessing the role of carbon pricing in global climate change mitigation strategies. *Magna Scientia Advanced Research and Reviews, 10*(02), 022–031. https://doi.org/10.30574/msarr.2024.10.2.0040

Ehimare, E., Orikpete, O., & Ewim, D.R.E. (2023). The perennial logistical challenges during Nigerian Elections: The Unmanned Aircraft System (UAS) solution. 2023 ASEE Annual Conference & Exposition.

Ekechi, C. C., Chukwurah, E. G., Oyeniyi, L. D., & Okeke, C. D. (2024). A review of small business growth strategies in African economies. *International Journal of Advanced Economics*, *6*(4), 76-94.

Ekechi, C. C., Chukwurah, E. G., Oyeniyi, L. D., & Okeke, C. D. (2024). AI-Infused Chatbots for customer support: a cross-country evaluation of user satisfaction in the USA and the UK. *International Journal of Management & Entrepreneurship Research*, *6*(4), 1259-1272.

Ekemezie, I.O., & Digitemie, W.N. (2024). Assessing the role of LNG in global carbon neutrality efforts: A project management Review. *GSC Advanced Research and Reviews, 18*(03), 091–100. https://doi.org/10.30574/gscarr.2024.18.3.0095

Esho, A. O. O., Iluyomade, T. D., Olatunde, T. M., & Igbinenikaro, O. P. (2024). Next-generation materials for space electronics: A conceptual review.

Esho, A. O. O., Iluyomade, T. D., Olatunde, T. M., & Igbinenikaro, O. P. (2024). A comprehensive review of energy-efficient design in satellite communication systems.

Esho, A. O. O., Iluyomade, T. D., Olatunde, T. M., & Igbinenikaro, O. P. (2024). Electrical propulsion systems for satellites: a review of current technologies and future prospects.

Esho, A. O. O., Iluyomade, T. D., Olatunde, T. M., Igbinenikaro, O. P. (2024). Electrical propulsion systems for satellites: a review of current technologies and future prospects. *International Journal of Frontiers in Engineering and Technology Research, 06*(02), 035–044. https://doi.org/10.53294/ijfetr.2024.6.2.0034.

Esho, A. O. O., Iluyomade, T. D., Olatunde, T. M., Igbinenikaro, O. P. (2024). Next-generation materials for space electronics: a conceptual review. *Open Access Research Journal of Engineering and Technology, 06*(02), 051–062. https://doi.org/10.53022/oarjet.2024.6.2.0020.

Esho, A. O. O., Iluyomade, T. D., Olatunde, T. M., Igbinenikaro, O. P. (2024). A Comprehensive review of energy-efficient design in satellite communication systems. *International Journal of Engineering Research Updates, 06*(02), 013–025. https://doi.org/10.53430/ijeru.2024.6.2.0024.

Ewim, D.R.E. (2019). Condensation inside horizontal and inclined smooth tubes at low mass fluxes. University of Pretoria.

Ewim, D.R.E., & Meyer, J.P. (2015). Condensation heat transfer coefficients of enhanced tubes. 3rd Southern African Solar Energy Conference, South Africa, 11-13 May, 2015.

Ewim, D.R.E., & Okafor, I.F. (2021). Condensation inside smooth and inclined smooth tubes at low mass fluxes: A quick review. *IOP Conference Series: Earth and Environmental Science, 730*(1), 012044.

Ewim, D.R.E., & Uduafemhe, M.E. (2021). Analysis of students' grades in STEM subjects at senior school certificate examination before and during COVID-19 pandemic in Nigeria. *Turkish Journal of Computer and Mathematics Education, 12*(14), 3188-3198.

Ewim, D.R.E., Abolarin, S.M., Scott, T.O., Opateye, J.A., Uduafemhe, M.E., ... (2023). Experiences of engineering thermodynamics students during online learning: Lessons for post-pandemic. *The Journal of Engineering and Exact Sciences, 9*(9), 16497-01e.

Ewim, D.R.E., Nundlal, Y., Govender, K., Nzuke, N.L., Mbatha, M.V., Gwexa, N., ... (2023). Knowledge, awareness, and perception of senior high school learners towards nuclear energy: A South African case study. *African Journal of Science, Technology, Innovation and Development, 15*(7).

Ewim, D.R.E., Oyewobi, S.S., & Abolarin, S.M. (2021). COVID-19 - Environment, economy, and energy: note from South Africa. *Journal of Critical Reviews, 8*(03), 67-81.

Eze, F., Egbo, M., Anuta, U.J., Ntiriwaa, O.B.R., Ogola, J., & Mwabora, J. (2024). A review on solar water heating technology: Impacts of parameters and techno-economic studies. *Bulletin of the National Research Centre, 48*(1), 29.

Eze, F., Lee, W., An, Y., Joo, H., Lee, K., Ogola, J., & Mwabora, J. (2023). Calibrated models of shallow ground thermal energy storage for heating and cooling applications. International Heat Transfer Conference Digital Library.

Eze, F., Lee, W., An, Y., Joo, H., Lee, K., Ogola, J., & Mwabora, J. (2023). Simulation on the potential of long-term thermal energy storage: application with ideal thermal energy storage in heat pump for inter-seasonal use of surplus solar energy in … AFORE, 322-322.

Eze, F., Lee, W.J., An, Y., Joo, H.J., Lee, K.H., Ogola, J., & Mwabora, J.M. (n.d.). (2023); Experimental and simulated evaluation of inverse model for shallow underground thermal storage. Available at SSRN 4668036.

Eze, F., Lee, W.J., An, Y., Joo, H.J., Lee, K.H., Ogola, J., & Mwabora, J.M. (n.d.). (2024); Development and simulated evaluation of inter-seasonal power-to-heat and power-to-cool with underground thermal storage for self-consumption of surplus solar energy in buildings. Available at SSRN 4795255

Eze, F., Ogola, J., Kivindu, R., Egbo, M., & Obi, C. (2022). Technical and economic feasibility assessment of hybrid renewable energy system at Kenyan institutional building: A case study. *Sustainable Energy Technologies and Assessments, 51*, 101939.

Fabian, C.E. (2019). Determination of the optimum hybrid renewable energy system for powering the school of engineering, University Of Nairobi. UoN.

Familoni, B. T. (2024). Cybersecurity challenges in the age of AI: Theoretical approaches and practical solutions. *Computer Science & IT Research Journal*, *5*(3), 703-724.

Familoni, B. T., & Babatunde, S. O. (2024). User Experience (Ux) Design in medical products: theoretical foundations and development best practices. *Engineering Science & Technology Journal*, *5*(3), 1125-1148.

Familoni, B. T., & Onyebuchi, N. C. (2024). Advancements and challenges in ai integration for technical literacy: a systematic review. *Engineering Science & Technology Journal*, *5*(4), 1415-1430.

Familoni, B. T., & Onyebuchi, N. C. (2024). Augmented and Virtual Reality in US education: a review: analyzing the impact, effectiveness, and future prospects of ar/vr tools in enhancing learning experiences. *International Journal of Applied Research in Social Sciences*, *6*(4), 642-663.

Familoni, B. T., & Shoetan, P. O. (2024). Cybersecurity in the financial sector: a comparative analysis of the USA and Nigeria. *Computer Science & IT Research Journal*, *5*(4), 850-877.

Fawole, A.A., Orikpete, O.F., Ehiobu, N.N., & Ewim, D.R.E. (2023). Climate change implications of electronic waste: strategies for sustainable management. *Bulletin of the National Research Centre, 47*(1), 147.

Fetuga, I.A., Olakoyejo, O.T., Ewim, D.R.E., Gbegudu, J.K., Adelaja, A.O., ... (2022). Computational investigation of thermal behaviors of the automotive radiator operated with water/anti-freezing agent nanofluid based coolant. *The Journal of Engineering and Exact Sciences*, *8*(2), 13977-01e.

Hamdan, A., Al-Salaymeh, A., AlHamad, I.M., Ikemba, S., & Ewim, D.R.E. (2023). Predicting future global temperature and greenhouse gas emissions via LSTM model. *Sustainable Energy Research, 10*(1), 21.

Igah, C. O., Kayode O., Olowe, K.O., & Kazee, O. (2023). Convolutional Neural Network-Based Approach to predicting dissolved oxygen along Umgeni River. *Kongzhi yu Juece/Control and Decision*, 1611-1622

Igbinenikaro, O. P., Adekoya, O. O., & Etukudoh, E. A. (2024). A comparative review of subsea navigation technologies in offshore engineering projects. *International Journal of Frontiers in Engineering and Technology Research*, 06(02), 019–034. https://doi.org/10.53294/ijfetr.2024.6.2.0031.

Igbinenikaro, O. P., Adekoya, O. O., & Etukudoh, E. A. (2024). Conceptualizing Sustainable Offshore Operations: Integration Of Renewable Energy Systems. *International Journal of Frontiers in Science and Technology Research, 06*(02), 031–043. https://doi.org/10.53294/ijfstr.2024.6.2.0034.

Igbinenikaro, O. P., Adekoya, O. O., & Etukudoh, E. A. (2024). Emerging underwater survey technologies: a review and future outlook. *Open Access Research Journal of Science and Technology, 10*(02), 071–084. https://doi.org/10.53022/oarjst.2024.10.2.0052.

Igbinenikaro, O. P., Adekoya, O. O., & Etukudoh, E. A. (2024). Fostering cross-disciplinary collaboration in offshore projects: strategies and best practices. *International Journal of Management & Entrepreneurship Research*, *6*(4), 1176-1189. https://doi.org/10.51594/ijmer.v6i4.1006.

Igbinenikaro, O. P., Adekoya, O. O., & Etukudoh, E. A. (2024). Review of modern bathymetric survey techniques and their impact on offshore energy development. *Engineering Science & Technology Journal*, *5*(4), 1281-1302. https://doi.org/10.51594/estj.v5i4.1018.

Ikemba, S., Song-hyun, K., Scott, T.O., Ewim, D.R.E., Abolarin, S.M., & Fawole, A.A. (2024). Analysis of solar energy potentials of five selected south-east cities in Nigeria using deep learning algorithms. *Sustainable Energy Research, 11*(1), 2.

Ikumapayi, O. M., Kayode, J. F., Afolalu, S. A., Nnochiri, E. S., Olowe, K. O., & Bodunde, O. P. (2022). A study on AI and ICT for sustainable manufacturing. In *Proceedings of the International Conference on Industrial Engineering and Operations Management* (Vol. 10)

Kikanme, K.N., Dennis, N.M., Orikpete, O.F., & Ewim, D.R.E. (2024). PFAS in Nigeria: identifying data gaps that hinder assessments of ecotoxicological and human health impacts. *Heliyon.*

Komolafe, A. M., Aderotoye, I. A., Abiona, O. O., Adewusi, A. O., Obijuru, A., Modupe, O. T., & Oyeniran, O. C. (2024). Harnessing business analytics for gaining competitive advantage in emerging markets: a systematic review of approaches and outcomes. *International Journal of Management & Entrepreneurship Research*, *6*(3), 838-862

Modupe, O. T., Otitoola, A. A., Oladapo, O. J., Abiona, O. O., Oyeniran, O. C., Adewusi, A. O., ... & Obijuru, A. (2024). Reviewing the transformational impact of edge computing on real-time data processing and analytics. *Computer Science & IT Research Journal*, *5*(3), 693-702

Muteba, G.K., Ewim, D.R.E., Dirker, J., & Meyer, J.P. (2023). Heat transfer and pressure drop investigation for prescribed heat fluxes on both the inner and outer wall of an annular duct. *Experimental Thermal and Fluid Science, 145*, 110907.

Ntuli, M.N., Eloka-Eboka, A.C., Mwangi, F.M., Ewim, D.R.E., & Dioha, M.O. (2024). Energy sustainability and carbon dioxide emissions mitigation options for South Africa's road transport sector. *Bulletin of the National Research Centre, 48*(1), 37.

Nzeako, G., Akinsanya, M. O., Popoola, O. A., Chukwurah, E. G., & Okeke, C. D. (2024). The role of AI-Driven predictive analytics in optimizing IT industry supply chains. *International Journal of Management & Entrepreneurship Research*, *6*(5), 1489-1497.

Nzeako, G., Akinsanya, M. O., Popoola, O. A., Chukwurah, E. G., Okeke, C. D., & Akpukorji, I. S. (2024). Theoretical insights into IT governance and compliance in banking: Perspectives from African and US regulatory environments. *International Journal of Management & Entrepreneurship Research*, *6*(5), 1457-1466.

Ochuba, N. A., Adewumi, A., & Olutimehin, D. O. (2024). The role of AI in financial market development: enhancing efficiency and accessibility in emerging economies. *Finance & Accounting Research Journal, 6*(3), 421-436.

Ochuba, N. A., Amoo, O. O., Akinrinola, O., Usman, F. O., & Okafor, E. S. (2024). Market expansion and competitive positioning in satellite telecommunications: a review of analytics-driven strategies within the global landscape. *International Journal of Management & Entrepreneurship Research*, *6*(3), 567-581.

Ochuba, N. A., Amoo, O. O., Okafor, E. S., Akinrinola, O., & Usman, F. O. (2024). Strategies for leveraging big data and analytics for business development: a comprehensive review across sectors. *Computer Science & IT Research Journal*, *5*(3), 562-575.

Ochuba, N. A., Amoo, O. O., Okafor, E. S., Usman, F. O., & Akinrinola, O. (2024). Conceptual development and financial analytics for strategic decision-making in telecommunications, focusing on assessing investment opportunities and managing risks in satellite projects. *International Journal of Management & Entrepreneurship Research, 6*(3), 594-607.

Ochuba, N. A., Okafor, E. S., Akinrinola, O., Amoo, O. O., & Usman, F. O. (2024). Enhancing customer service in satellite telecommunications: a review of data-driven insights and methodologies for personalized service offerings. *International Journal of Management & Entrepreneurship Research, 6*(3), 582-593.

Ochuba, N. A., Okafor, E. S., Akinrinola, O., Usman, F. O., & Amoo, O. O. (2024). Strategic partnerships in the satellite and telecommunications sectors: a conceptual review of data analytics-enabled identification and capitalization of synergies. *Engineering Science & Technology Journal, 5*(3), 716-727.

Ochuba, N. A., Olutimehin, D. O., Odunaiya, O. G., & Soyomb, O. T. (2024). A comprehensive review of strategic management practices in satellite telecommunications, highlighting the role of data analytics in driving operational efficiency and competitive advantage. *World Journal of Advanced Engineering Technology and Sciences, 11*(2), 201-211.

Ochuba, N. A., Olutimehin, D. O., Odunaiya, O. G., & Soyombo, O. T. (2024). Sustainable business models in satellite telecommunications. *Engineering Science & Technology Journal, 5*(3), 1047-1059.

Ochuba, N. A., Olutimehin, D. O., Odunaiya, O. G., & Soyombo, O. T. (2024). The Evolution of quality assurance and service improvement in satellite telecommunications through analytics: a review of initiatives and their impacts. *Engineering Science & Technology Journal, 5*(3), 1060-1071.

Ochuba, N. A., Olutimehin, D. O., Odunaiya, O. G., & Soyombo, O. T. (2024). Reviewing the application of big data analytics in satellite network management to optimize performance and enhance reliability, with implications for future technology developments. *Magna Scientia Advanced Research and Reviews, 10*(2), 111-119.

Ochuba, N. A., Usman, F. O., Amoo, O. O., Okafor, E. S., & Akinrinola, O. (2024). Innovations in business models through strategic analytics and management: conceptual exploration for sustainable growth. *International Journal of Management & Entrepreneurship Research, 6*(3), 554-566.

Ochuba, N. A., Usman, F. O., Okafor, E. S., Akinrinola, O., & Amoo, O. O. (2024). Predictive analytics in the maintenance and reliability of satellite telecommunications infrastructure: a conceptual review of strategies and technological advancements. *Engineering Science & Technology Journal, 5*(3), 704-715

Odedeyi, P. B., Abou-El-Hossein, K., Oyekunle, F., & Adeleke, A. K. (2020). Effects of machining parameters on Tool wear progression in End milling of AISI 316. *Progress in Canadian Mechanical Engineering, 3*

Odili, P. O., Daudu, C. D., Adefemi, A., Ekemezie, I. O., & Usiagu, G. S. (2024). Integrating advanced technologies in corrosion and inspection management for Oil and Gas operations. *Engineering Science & Technology Journal*, *5*(2), 597-611.

Odili, P.O., O.T., Ekemezie, I.O., & Usiagu, G.S. (2024). The role of environment policies in shaping oil and gas operations: a comparative review of Africa and the USA. *Engineering Science & Technology Journal.* https://doi.org/10.51594/estj.v5i2.833

Odili, P.O., Odunaiya, O.G., Soyombo, O.T., Ekemezie, I.O., & Usiagu, G.S. (2024). Operational readiness and assurance (OR&A) in asset integrity: Strategies for excellence in facility management. *Engineering Science & Technology Journal.* https://doi.org/10.51594/estj.v5i2.834

Odili, P.O., Odunaiya, O.G., Soyombo, O.T., Ekemezie, I.O., & Usiagu, G.S. (2024.). The Impact of artificial intelligence on recruitment and selection processes in the oil and gas industry: a review. *Engineering Science & Technology Journal.* https://doi.org/10.51594/estj.v5i2.836

Odili, P.O., Odunaiya, O.G., Soyombo, O.T., Ekemezie, I.O., & Usiagu, G.S. (2024). The Impact of technical safety and integrity verification on project delivery and asset performance. *Engineering Science & Technology Journal*. https://doi.org/10.51594/estj.v5i2.832

Odunaiya, O.G., Soyombo, O.T., Okoli, C.E., Usiagu, G.S., & Ekemezie, I.O. (2024). Renewable energy policies and wildlife conservation: A review of potential conflicts and coexistence strategies. Open Access Research *Journal of Multidisciplinary Studies, 07*(01), 111–120. https://doi.org/10.53022/oarjms.2024.7.1.0015

Oduola, O. M., Omole, F. O., Akinluwade, K. J., & Adetunji, A. R. (2014). A comparative study of product development process using computer numerical control and rapid prototyping methods. *British Journal of Applied Science & Technology*, *4*(30), 4291-4303

Ogunkeyede, O. Y., Olatunde, T. M., Ekundayo, O. T., Adenle, J. G., & Komolafe, T. A. (2023). Development of a pc software based wireless weather monitoring system for data acquisition

Okafor, E. S., Akinrinola, O., Usman, F. O., Amoo, O. O., & Ochuba, N. A. (2024). Cybersecurity analytics in protecting satellite telecommunications networks: a conceptual development of current trends, challenges, and strategic responses. *International Journal of Applied Research in Social Sciences*, *6*(3), 254-266

Oke, A. E., Aliu, J., Ebekozien, A., Akinpelu, T. M., Olatunde, T. M., & Ogunsanya, O. A. (2024). Strategic drivers for the deployment of energy economics principles in the developing construction industry: A Nigerian perspective. *Environmental Progress & Sustainable Energy*, e14351

Okoli, U. I., Obi, O. C., Adewusi, A. O., & Abrahams, T. O. (2024). Machine learning in cybersecurity: A review of threat detection and defense mechanisms

Okwandu, A. C., Esho, A. O. O., Iluyomade, T. D., & Olatunde, T. M. (2024). The role of policy and regulation in promoting green buildings. *World Journal of Advanced Research and Reviews*, *22*(1), 139-150

Olajiga, O. K., Ani, E. C., Olu-lawal, K. A., Montero, D. J. P., & Adeleke, A. K. (2024). Intelligent monitoring systems in manufacturing: current state and future perspectives. *Engineering Science & Technology Journal*, *5*(3), 750-759

Olajiga, O. K., Ani, E. C., Sikhakane, Z. Q., & Olatunde, T. M. (2024). A comprehensive review of energy-efficient lighting technologies and trends. *Engineering Science & Technology Journal*, *5*(3), 1097-1111.

Olajiga, O. K., Ani, E. C., Sikhakane, Z. Q., & Olatunde, T. M. (2024). Assessing the potential of energy storage solutions for grid efficiency: a review. *Engineering Science & Technology Journal*, *5*(3), 1112-1124

Olanrewaju, F.B., Oboh, I.O., Adesina, O.A., Anyanwu, C.S., & Ewim, D.R.E. (2023). Modelling and simulation of hydrogen production plant for minimum carbon dioxide emission. *The Journal of Engineering and Exact Sciences*, *9*(1), 15394-01e.

Olaoye, T., Ajilore, T., Akinluwade, K., Omole, F., & Adetunji, A. (2016). Energy crisis in Nigeria: Need for renewable energy mix. *American Journal of Electrical and Electronic Engineering*, *4*(1), 1-8

Olatunde, T. M., Adelani, F. A., & Sikhakhane, Z. Q. (2024). A review of smart water management systems from Africa and the United States. *Engineering Science & Technology Journal*, *5*(4), 1231-1242.

Olatunde, T. M., Okwandu, A. C., Akande, D. O., & Sikhakhane, Z. Q. (2024). The impact of smart grids on energy efficiency: a comprehensive review. *Engineering Science & Technology Journal*, *5*(4), 1257-1269.

Olatunde, T. M., Okwandu, A. C., Akande, D. O., & Sikhakhane, Z. Q. (2024). Reviewing the role of artificial intelligence in energy efficiency optimization. *Engineering Science & Technology Journal*, *5*(4), 1243-1256

Olowe, K. (2018). *Development of a mathematical model considering nutrients kinetics for assessing uMgeni river water quality* (Doctoral dissertation).

Olowe, K. O. (2018). Assessment of some existing water quality models. *Nature Environment & Pollution Technology*, *17*(3).

Olowe, K. O., & Adebayo, V. B. (2015). Investigation on Palm Kernel Ash as partial cement replacement in high strength concrete. *SSRG International Journal of Civil Engineering (SSRG-IJCE)*, *2*(4), 48-55.

Olowe, K. O., & Kumarasamy, M. (2017). Development of the hybrid cells in series model to simulate ammonia nutrient pollutant transport along the Umgeni River. *Environmental Science and Pollution Research*, *24*, 22967-22979.

Olowe, K. O., & Kumarasamy, M. (2021). A mathematical model development for simulating nitrate pollutant transport along a river. *International Journal of Engineering Research in Africa*, *57*, 149-168.

Olowe, K. O., Oyebode, O., & Dada, T. (2015). Water quality assessment of River Elemi and Ureje in Ado Ekiti, Nigeri. *Civil & Environmental Engineering*, *5*(6), 1-5.

Olowe, K. O., Wasiu, J., & Adebayo, V. B. (2019). Effectiveness of Palm Kernel Shell Ash Concrete Reinforced with Steel Fibres. *ABUAD Journal of Engineering Research and Development (AJERD)*, *2*(2), 1-9.

Olu-lawal, K. A., Olajiga, O. K., Adeleke, A. K., Ani, E. C., & Montero, D. J. P. (2024). Innovative material processing techniques in precision manufacturing: a review. *International Journal of Applied Research in Social Sciences*, *6*(3), 279-291.

Olu-lawal, K. A., Olajiga, O. K., Ani, E. C., Adeleke, A. K., & Montero, D. J. P. (2024). The Role of precision metrology in enhancing manufacturing quality: a comprehensive review. *Engineering Science & Technology Journal*, *5*(3), 728-739

Oluwatusin, O., Adelaja, A.O., Aderemi, K.S., Fetuga, I.A., Olakoyejo, O.T., ... (2022). Numerical prediction of flow recirculation length zone in an artery with multiple stenoses at low and high Reynolds number. *Series on Biomechanics*, *36*(2).

Omole, F. O., Olajiga, O. K., & Olatunde, T. M. (2024). Challenges and successes in rural electrification: a review of global policies and case studies. *Engineering Science & Technology Journal*, *5*(3), 1031-1046.

Omole, F. O., Olajiga, O. K., & Olatunde, T. M. (2024). Hybrid power systems in mining: review of implementations in Canada, USA, and Africa. *Engineering Science & Technology Journal*, *5*(3), 1008-1019.

Omole, F. O., Olajiga, O. K., & Olatunde, T. M. (2024). Sustainable urban design: a review of eco-friendly building practices and community impact. *Engineering Science & Technology Journal*, *5*(3), 1020-1030

Onwuka, O. U., & Adu, A. (2024). Carbon capture integration in seismic interpretation: Advancing subsurface models for sustainable exploration. *International Journal of Scholarly Research in Science and Technology, 2024, 04*(01), 032–041

Onwuka, O. U., & Adu, A. (2024). Eco-efficient well planning: Engineering solutions for reduced environmental impact in hydrocarbon extraction. International Journal of Scholarly Research in Multidisciplinary Studies, 2024, 04(01), 033–043

Onwuka, O. U., & Adu, A. (2024). Subsurface carbon sequestration potential in offshore environments: A geoscientific perspective. Engineering Science & Technology Journal, 5(4), 1173-1183.

Onwuka, O. U., & Adu, A. (2024). Sustainable strategies in onshore gas exploration: Incorporating carbon capture for environmental compliance. *Engineering Science & Technology Journal, 5*(4), 1184-1202.

Onwuka, O. U., & Adu, A. (2024). Technological synergies for sustainable resource discovery: Enhancing energy exploration with carbon management. *Engineering Science & Technology Journal, 5*(4), 1203-1213

Onwuka, O., Obinna, C., Umeogu, I., Balogun, O., Alamina, P., Adesida, A., ... & Mcpherson, D. (2023, July). Using high fidelity OBN seismic data to unlock conventional near field exploration prospectivity in Nigeria's shallow water offshore depobelt. In *SPE Nigeria Annual International Conference and Exhibition* (p. D021S008R001). SPE.

Opateye, J., & Ewim, D.R.E. (2022). Impact of research-and assessment-based instructional modes on the achievement of senior high school students in selected chemistry topics. *Science Education International, 33*(1), 56-65.

Orikpete, O.F., & Ewim, D.R.E. (2023). A review of noise management practice in Nigeria: a review of noise management practice in Nigeria. *Environmental Science & Sustainable Development, 8*(1), 31-44.

Orikpete, O.F., & Ewim, D.R.E. (2023). Adoption of occupational health and safety as a fundamental human right and its implications for Nigerian workers. *International Journal of Occupational Safety and Health, 13*(3), 396-408.

Orikpete, O.F., & Ewim, D.R.E. (2023). Investigating the root causes recurring building collapse in Nigeria: A systematic review and meta-analysis

Orikpete, O.F., Ewim, D.R.E., & Egieya, J.M. (2023). Nuclear fission technology in Africa: Assessing challenges and opportunities for future development. *Nuclear Engineering and Design, 413*, 112568.

Orikpete, O.F., Gungura, N.M., Ehimare, E., & Ewim, D.R.E. (2023). A critical review of energy consumption and optimization strategies in the Nigerian aviation sector: challenges and prospects. *Bulletin of the National Research Centre, 47*(1), 170.

Orikpete, O.F., Ikemba, S., & Ewim, D.R.E. (2023). Integration of renewable energy technologies in smart building design for enhanced energy efficiency and self-sufficiency. *The Journal of Engineering and Exact Sciences, 9*(9), 16423-01e.

Orikpete, O.F., Leton, T.G., & Ewim, D.R.E. (2020). Mathematical modeling of environmental noise generated by rotorcraft overflight. *Journal of Critical Reviews, 7*(19), 10097-10110.

Osimobi, J. C., Ifeanyi, E., Onwuka, O., Deborah, U., & Kanu, M. (2023, July). Improving velocity model using double parabolic RMO picking (ModelC) and Providing High-End RTM (RTang) Imaging for OML 79 Shallow Water, Nigeria. In *SPE Nigeria Annual International Conference and Exhibition* (p. D021S008R003). SPE.

Osimobi, J.C., Ekemezie, I., & van de Rijzen, M.J. (2019). Unlocking hydrocarbon maturation opportunities in afime and angel fields by re-processing legacy surveys. National Association of Petroleum Explorationists Conference Journal, 2019.

Osimobi, J.C., Ekemezie, I., Onwuka, O., Deborah, U., & Kanu, M. (2023). Improving Velocity Model Using Double Parabolic RMO Picking (ModelC) and Providing High-end RTM (RTang) Imaging for OML 79 Shallow Water, Nigeria. Paper presented at the SPE Nigeria Annual International Conference and Exhibition, Lagos, Nigeria, July 2023. Paper Number: SPE-217093-MS. https://doi.org/10.2118/217093-MS

Ossei-Bremang, R.N., Eze, F., Anane-Fenin, K., & Kemausuor, F. (2024). Choice modelling of eCooking adoption by households in Ghana. *International Journal of Sustainable Engineering, 17*(1), 1-13.

Owoola, F., Adebayo, W. W., & Olowe, K. O. (2019). Spatial analysis of risk factors of potable water and the efficiency of HIV/AIDS in Ekiti State, Nigeria. *European Journal of Medical and Health Sciences, 1*(4).

Oyebode, O. J., Adeniyi, A. T., Gekwu, U. S., Olowe, K. O., & Coker, A. O. (2022). Development of energy efficient processes and products from renewable and nonrenewable resources in Nigeria. In *Advanced Manufacturing in Biological, Petroleum, and Nanotechnology Processing: Application Tools for Design, Operation, Cost Management, and Environmental Remediation* (pp. 17-28). Cham: Springer International Publishing.

Oyebode, O. J., Olowe, K. O., & Makanjuola, O. V. (2023). Analytical modeling of contaminant transport in groundwater using the Karanovic solution: a case study of

Baruwa, Nigeria. *International Journal of Environmental Science and Technology*, *20*(1), 715-724.

Oyebode, O. J., Olowe, K. O., Oyegoke, S. O., & Edem, E. (2015). Exploitation of groundwater in fractured basement of Ado-Ekiti, Nigeria.

Oyebode, O. J., Oyegoke, S. O., Olowe, K. O., & Adebayo, V. B. (2015). Borehole drilling, usage, maintenance and sustainability in ado-ekiti, Nigeria. *American Journal of Engineering Research (AJER)*, *4*(9), 1-12.

Oyegoke, S. O., Ayeni, O. O., Olowe, K. O., Adebanjo, A. S., & Fayomi, O. O. (2020). Effectiveness of geophysical assessment of boreholes drilled in basement complex terrain at Afe Babalola University, using Electromagnetic (EM) method. *Nigerian Journal of Technology*, *39*(1), 36-41

Oyeniran, O. C., Modupe, O. T., Otitoola, A. A., Abiona, O. O., Adewusi, A. O., & Oladapo, O. J. (2024). A comprehensive review of leveraging cloud-native technologies for scalability and resilience in software development. *International Journal of Science and Research Archive*, *11*(2), 330-337

Penerbit, U. M. T. (2020). Analytical solution of a mathematical model to simulate nitrite pollutant transport along a river. *Journal of Sustainability Science and Management*, *15*(7), 83-101.

Popoola, O. A., Akinsanya, M. O., Nzeako, G., Chukwurah, E. G., & Okeke, C. D. (2024). Exploring theoretical constructs of cybersecurity awareness and training programs: comparative analysis of African and US Initiatives. *International Journal of Applied Research in Social Sciences*, *6*(5), 819-827.

Popoola, O. A., Akinsanya, M. O., Nzeako, G., Chukwurah, E. G., & Okeke, C. D. (2024). The impact of automation on maritime workforce management: A conceptual framework. *International Journal of Management & Entrepreneurship Research*, *6*(5), 1467-1488.

Shoetan, P. O., & Familoni, B. T. (2024). Blockchain's impact on financial security and efficiency beyond Cryptocurrency uses. *International Journal of Management & Entrepreneurship Research*, *6*(4), 1211-1235.

Shoetan, P. O., & Familoni, B. T. (2024). Transforming Fintech fraud detection with advanced artificial intelligence algorithms. *Finance & Accounting Research Journal*, *6*(4), 602-625

Sonko, S., Adewusi, A. O., Obi, O. C., Onwusinkwue, S., & Atadoga, A. (2024). A critical review towards artificial general intelligence: Challenges, ethical considerations, and the path forward. *World Journal of Advanced Research and Reviews*, *21*(3), 1262-1268

Soyombo, O.T., Odunaiya, O.G., Okoli, C.E., Usiagu, G.S., & Ekemezie, I.O. (2024). Sustainability reporting in corporations: A comparative review of practices in the USA and Europe. *GSC Advanced Research and Reviews*, *18*(02), 204–214. https://doi.org/10.30574/gscarr.2024.18.2.061

Suku, P.G., Ugwoha, E., Orikpete, O.F., & Ewim, D.R.E. (2023). Assessment of respiratory and reproductive impacts of artisanal refinery activity on male albino wistar rats: implications for environmental health. *Bulletin of the National Research Centre*, *47*(1), 149.

Timothy, C.E., Egbuim, T.C., Onyeuwaoma, N.D., Okere, B.I., Ezenwugo, M.H., ... (2022). Erythemal UV radiation across Nigeria: where do we stand? *Heliyon*, *8*(8), e10158.

Udo, W. S., Ochuba, N. A., Akinrinola, O., & Ololade, Y. J. (2024). The role of theoretical models in IoT-based irrigation systems: A comparative study of African and US agricultural strategies for water scarcity management. *International Journal of Science and Research Archive, 11*(2), 600-606.

Udo, W. S., Ochuba, N. A., Akinrinola, O., & Ololade, Y. J. (2024). Conceptualizing emerging technologies and ICT adoption: Trends and challenges in Africa-US contexts. *World Journal of Advanced Research and Reviews, 21*(3), 1676-1683.

Udo, W. S., Ochuba, N. A., Akinrinola, O., & Ololade, Y. J. (2024). Theoretical approaches to data analytics and decision-making in finance: Insights from Africa and the United States. *GSC Advanced Research and Reviews, 18*(3), 343-349

Uduafemhe, M.E., Ewim, D.R.E., & Karfe, R.Y. (2023). Adapting to the new normal: equipping career and technical education graduates with essential digital skills for remote employment. *ATBU Journal of Science, Technology and Education, 11*(4), 51-62.

Usiagu, G.S., Adekoya, O.O., Okoli, C.E., Dauda, C.D., Ekemezie, I.O., & Ayorinde, O.B. (2024). LNG as a bridge fuel in the transition to renewable energy: A global perspective. *World Journal of Advanced Research and Reviews, 21*(02), 742–749. https://doi.org/10.30574/wjarr.2024.21.2.0480

Usiagu, G.S., Ayorinde, O.B., Okoli, C.E., Daudu, C.D., Adekoya, O.O., & Ekemezie, I.O. (2024). Environmental implications of LNG usage: A comparative review of policies in the USA and Africa. *World Journal of Advanced Research and Reviews, 21*(02), 773–781. https://doi.org/10.30574/wjarr.2024.21.2.0489