



OCMT

Oman College of Management and Technology

**Proceeding
(Abstracts)**

**International Conference :
Smart Solutions for Modern Design ,
Business and Computer Innovations**

OCMT' 2025

Hybrid Mode

**16 April
2025**
(offline)

**17 April
2025**
(online)



EuroMid
ACADEMY OF BUSINESS
AND TECHNOLOGY



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Oman College of Management and Technology



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ABSTRACTS PROCEEDING



Proceeding (Abstracts)

International Conference : Smart Solutions for Modern Design , Business and Computer Innovations OCMT' 2025

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International Conference Smart Solutions for Modern Design, Business and Computer Innovations (OCMT'2025)

About OCMT

Oman College of Management and Technology (OCMT) was established in 2004 as a private college. Its mission is that it strives to provide the local community an environment which is conducive for effective teaching-learning process by well qualified professionals supported by latest technological facilities. We also seek to provide the society, graduates who exhibit sound knowledge and skills required to meet the challenges of a dynamic modern society. OCMT vision is that it aspires to become a leading institution of higher education nationally and regionally, where quality and excellence are maintained in line with international standards, to produce top caliber graduates with knowledge, skills and attitude.

Mission

Oman College of Management & Technology strives to provide the local community with an environment, which is conducive for effective teaching-learning process and research delivered by well-qualified professionals supported by the latest technological facilities. The college is committed to provide the society with graduates who exhibit sound knowledge, skills, and attitudes required to meet the challenges of a dynamic modern society.

Vision

Oman College of Management & Technology aspires to become a leading institution of higher education nationally and regionally, where quality and excellence are maintained in line with international standards, to produce top caliber graduates with knowledge, skills and attitude.

Values

We at OCMT believe in success through the core value groups at the college that comprise of excellence, creativity, mutual respect, collegiality, honesty, tolerance, intellectual openness and freedom of opinion, and receptiveness to the diversity of cultures, ideas and people.



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Graduate Attributes

- | | |
|-----------------------------------|----------------------------------------|
| 1. Knowledgeable | 7. Leader & Initiator |
| 2. Creative & Innovation oriented | 8. Agile in Technology |
| 3. Critical Thinker | 9. Ethical with Professional Values |
| 4. Problem Solver | 10. Active Citizenship & Belongingness |
| 5. Effective Communicator | 11. Adaptable |
| 6. Team worker | 12. Life-long learner |

About The Conference

The International Conference: Smart Solutions for Modern Design, Business and Computer Innovations (OCMT'2025) is a landmark event designed to address the unique challenges and opportunities in the realms of advanced design, digital finance, and computer innovations. Hosted by the Oman College of Management and Technology (OCMT), this conference aims to create a dynamic and engaging environment where experts from various fields can come together to share their latest research, discuss emerging trends, and showcase practical applications.

OCMT plays a pivotal role in organizing this conference, leveraging its academic expertise and industry connections to bring together thought leaders and innovators who are at the forefront of technological and financial advancements. The college's commitment to fostering quality education and innovation is reflected in the diverse range of sessions, including keynote speeches, panel discussions, and interactive workshops, all tailored to provide deep insights and foster meaningful dialogue.

Participants will have the chance to connect with peers and industry leaders, building valuable connections that can drive future collaborations. By participating in this conference, you will gain fresh perspectives and be part of the conversation that is shaping the future of technology and finance. Join us in Muscat to be a part of this transformative experience and contribute to progress in these critical areas.



Objectives

1. Facilitate Cross-Disciplinary Collaboration
2. Highlight Innovations in Design, Finance, and Computing
3. Explore Real-World Applications
4. Promote Sustainable and Inclusive Growth
5. Examine the Ethical and Regulatory Landscape
6. Envision Future Trends and Solutions

Themes

1- "Designing Tomorrow: The Role of Innovation in Modern Infrastructure"

- This theme can focus on how advanced design principles and smart technologies are reshaping industries such as urban development, architecture, and engineering. Sessions can explore sustainable design, smart cities, and the future of construction.

2- "Revolutionizing Finance: Digital Technologies and Financial Inclusion"

- This theme would cover digital finance innovations, including blockchain, AI in financial services, mobile banking, and how technology can increase financial inclusion in emerging markets.

3- "The Future of Computing: Integrating AI, Quantum, and Cloud Technologies"

- Sessions under this theme could delve into the latest advancements in AI, quantum computing, cloud infrastructure, and how they intersect to solve modern challenges in industries like healthcare, logistics, and education.

Tracks

1- Advanced Design and Smart Infrastructure

Focus Areas:

- Smart city development and sustainable urban planning.
- IoT and sensor-based infrastructure systems.
- Innovative architectural design for energy efficiency.
- Human-centered design for public spaces.
- Automation in construction and building technologies.



2- Digital Finance and Blockchain Innovations

Focus Areas:

- Blockchain technology and its applications in banking, supply chain, and asset management.
- FinTech developments in mobile banking and digital wallets.
- AI and machine learning for fraud detection and risk management.
- Cryptocurrency trends and regulations.
- Financial inclusion through digital platforms in underserved regions.

3- Artificial Intelligence and Machine Learning in Industry

Focus Areas:

- AI-driven automation in manufacturing and logistics.
- Machine learning applications in healthcare, finance, and education.
- Ethical AI and bias reduction in AI systems.
- Natural language processing and its impact on customer service.
- AI-powered predictive analytics for business decisions.

4- Cybersecurity and Data Privacy

Focus Areas:

- Cybersecurity challenges in digital finance.
- Data encryption and secure transaction mechanisms.
- Privacy-preserving AI and machine learning models.
- Regulation and compliance in a data-driven economy.
- Emerging threats and mitigation strategies for cloud and IoT systems.

5- Smart Business Administration and Strategic Solutions

Focus Areas:

- Smart tools for organizational leadership and decision-making.
- Digital transformation for small and medium enterprises (SMEs).
- Enhancing productivity through business process automation.
- Data-driven strategies for performance improvement and growth.
- Smart HR solutions for workforce management

6- E-Marketing Strategies for the Digital Era Focus Areas:

- Smart social media campaigns for effective branding.
- Data analytics for personalized customer engagement.
- Search Engine Optimization (SEO) and Search Engine Marketing (SEM).
- Consumer behavior analysis in digital environments.
- AI tools for smart digital marketing strategies.

7- Management Information Systems (MIS) for Business Innovation

- **Focus Areas:**
 - Smart MIS tools for decision-making and workflow optimization.
 - ERP systems to streamline business operations.
 - Enhancing organizational performance with data analytics.
 - Supply chain and inventory management using MIS.
 - Digital solutions for project and resource management

8- Sustainability and Green Innovation

- **Focus Areas:**
 - Renewable energy solutions for infrastructure and design.
 - Sustainable urban development and eco-friendly construction.
 - Circular economy practices in business and industry.
 - Reducing carbon footprints through smart design and operations.
 - Waste management and water conservation strategies.



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(OCMT'2025)

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Paper Code: OCMT'2025 0110

Perception of Being Phubbed: Understanding Conflict and Communication Quality in Romantic Relationships in Young Adults

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Abstract. Phubbing, or phone snubbing, has emerged as a significant relational issue, affecting emotional connection, relationship satisfaction, and conflict resolution dynamics. This study aims to explore the subjective experiences of young adults who are being phubbed and how they perceive conflict and the quality of communication in their romantic relationships. A qualitative research approach was employed. Participants were screened by administering a 9 item Partner Phubbing Scale (PPS) by James A. Roberts and Meredith E. David and data was collected using semi-structured interviews from 9 young adults who reported experiencing phubbing in their romantic relationships. Thematic analysis was conducted manually by using the Braun and Clarke's model to identify recurring codes, themes, and subthemes. The findings revealed three major themes: perceived quality of communication in relationships, perceptions of relationship conflicts due to phubbing, and the emotional and psychological effects of phubbing. Participants reported feeling neglected, ignored, and emotionally disconnected, which contributed to frustration, loneliness, and insecurity. Addressing this issue through open discussions, boundary-setting, and conscious efforts to prioritize in-person interactions and encouraging healthier digital habits in our relationships not only boosts mental well-being but also contributes to the larger aim of sustainable development by enhancing social connections and unity.

Keywords: Phubbing, romantic relationships, communication quality, relationship conflicts, emotional impact, mental well-being, sustainability



Paper Code: OCMT'2025_0109

Financial Distress Prediction of Non-Financial Companies Listed on the ASE Using Logistic Regression

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Abstract. This study investigates the effectiveness of logistic regression in predicting financial distress among 150 non-financial companies listed on the Amman Stock Exchange (ASE) over the period 2021–2023. The analysis begins with 13 financial ratios traditionally associated with financial health and corporate failure. Firms were classified as distressed or non-distressed based on Altman's (1968) Z-score model. The initial logistic regression model revealed that only four financial ratios—Return on Capital, Return on Equity, Total Debt to Capital, and Total Liabilities to Assets—made statistically significant contributions to predicting financial distress. A refined model using only these variables demonstrated strong explanatory power, with a Nagelkerke R^2 of 55% and an overall classification accuracy of 84.3%. Multicollinearity diagnostics confirmed that the model was statistically sound. The results underscore the predictive value of profitability and leverage ratios and provide a practical tool for early warning systems in emerging markets. The findings have important implications for investors, regulators, and corporate stakeholders concerned with financial risk assessment and firm stability, especially in an emerging market like Jordan.

Keywords: Financial Distress Prediction, Logistic Regression, Amman Stock Exchange, Financial Ratios, Emerging Markets.



Paper Code: OCMT'2025_0108

Beyond Trust and Openness: How OCTAPACE Dimensions Predict Teachers' Affective and Normative Commitment

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Abstract. What if the most undervalued element of school culture is not trust or collaboration, but confrontation? In our exploration of the OCTAPACE cultural framework, we discovered that the emotional loyalty and moral dedication of teachers may be shaped not only by warmth and support, but also by honest tension. This research explores whether lesser-studied cultural dimensions—such as confrontation—also significantly influence commitment among public school teachers. Using a descriptive-correlational design, the study surveyed 105 public school teachers in the Philippines. Organizational culture was measured through the OCTAPACE framework, and commitment was assessed across affective, continuance, and normative dimensions. Multiple regression analysis identified significant predictors. Findings revealed that confrontation significantly predicted both affective and normative commitment, while openness and trust were associated with continuance commitment. These results challenge assumptions by demonstrating that confrontation can foster deeper emotional and moral attachment among educators. The study expands our understanding of how organizational culture affects teacher engagement and highlights the value of constructive confrontation. Insights can inform leadership practices to enhance teacher retention and institutional loyalty in public education.

Keywords: OCTAPACE, Organizational Culture, Teacher Commitment, Affective Commitment, Normative Commitment, Confrontation, Public Schools, Philippines, Regression Analysis



Paper Code: OCMT'2025_0107

Evaluating Teacher Motivation and Performance: Implications for Educational Policy and Practice

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Abstract. Teacher performance, motivation, and self-identity are critical for the success of Chinese vocational colleges. These factors shape educational quality and institutional effectiveness. Despite their importance, few studies have explored the interplay in this educational context.

This study employed a descriptive-correlational research design to examine the relationships between teacher self-identity, job satisfaction, and performance. Data from 100 teachers were analyzed using validated survey instruments. Descriptive statistics summarized the trends, while regression and correlation tests determined the strength of the relationships.

The findings revealed high levels of self-identity ($M = 3.376$, $SD = 0.44$), job satisfaction ($M = 3.41$, $SD = 0.43$) and teaching performance ($M = 3.52$, $SD = 0.42$). Teachers have excelled in adapting teaching methods and fostering student engagement. Interpersonal relationships, including collaboration and trust, further enhance satisfaction and performance.

This study highlights the interconnectedness between teacher identity, motivation, and effectiveness. These results emphasize the need for professional development, equitable resource allocation, and collaborative environments to sustain high performance. By addressing these areas, institutions can enhance teacher satisfaction, improve student outcomes, and support vocational education reform. Future research should expand on these findings across diverse contexts.

Keywords: Teacher Self-Identity, Job Satisfaction, Teaching Performance, Vocational Education, Chinese Vocational colleges.

Paper Code: OCMT'2025_0106

Experimental Investigation on Solar Panels to Enhance Output Power by Using Organic Phase Change Materials in Sultanate of Oman

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Abstract. Solar energy is a crucial component of renewable energy resources. The power output of solar energy primarily depends on irradiance and temperature, with the operating temperature of solar photovoltaic (SPV) panels significantly impacting their efficiency. While high irradiance enhances electrical output, it also raises panel temperatures, which negatively affects efficiency. This experiment aimed to cool solar PV panels to improve their efficiency. In this study, paraffin wax and soya wax were used as phase change materials (PCM) to regulate the panel temperature. The experiment was conducted at the University of Technology and Applied Sciences (UTAS)-Shinas during the winter season in the Sultanate of Oman. Performance comparisons were made between a conventional 30-watt SPV panel and a PCM-applied SPV panel. The experimental results demonstrated a significant improvement in the open-circuit voltage (Voc), Voltage at maximum load, Cell temperature and power output of the PCM-applied SPV panel compared to the conventional panel. The PCM-integrated panel achieved a 10% more output power than the standard SPV panel. These findings contribute to enhancing sustainability in renewable energy projects by improving solar PV performance through effective thermal management.

Keywords: Paraffin Wax, Solar panels, Phase change material, Power output, Open circuit voltage, output power, Soya wax.



Paper Code: OCMT'2025_0105

Drivers of ESG Performance among SMEs in Cagayan de Oro City, Philippines: The Moderating Role of Technology Adoption on Motivation and External Pressure

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Abstract. The purpose of this study is to examine how technology adoption could influence the effect of internal and external factors on enhancing ESG performance among SMEs in the Cagayan de Oro City area in the Philippines. The analysis was performed using Partial Least Squares Structural Equation Modeling (PLS-SEM) on data extracted from survey questionnaires completed by 151 SME owners and managers. While external pressure had a slight non-significant impact on the latter, the findings revealed that both intrinsic motivation and technology adoption significantly influenced ESG performance. Statistical support did not show the moderating effect of technology adoption on the impact of external pressure and intrinsic motivation, implying that technology adoption is a direct enabler rather than a moderator. The model fit (SRMR = 0.064, NFI = 0.861) suggest accepted fit between data and proposed model. The results emphasize the value of internal commitment and digital capability in driving ESG goals providing both practical insights for policymakers and SME managers aiming to strengthen sustainability among local enterprises.

Keywords: ESG Performance, External pressure, internal motivation, SMEs, Technology Adoption.



Paper Code: OCMT'2025_0104

Management Information Systems in Crisis Management: AI-Driven Decision Making During Organizational Crises

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Abstract. Management Information Systems (MIS) help systematically analyze data for decision-making, enhancing operational efficiency and ensuring business continuity in times of crisis. Yet, Traditional MIS often face challenges such as delayed response times, focusing on past data, inefficient processing of unstructured data during crisis. With advancements in artificial intelligence, machine learning, Big Data, MIS can be improved considerably to address these challenges. This study explores the role of MIS in crisis preparedness, focusing on decision making and real-time crisis response. It explores how AI-driven MIS and predictive analysis can help improve crisis preparedness, enhance resource management.

Keywords: Crisis Management, Management Information Systems, AI, Organization



Paper Code: OCMT'2025_0103

Risk Attitude as a Mediator in the Adoption of Islamic Finance: The Case of Households in the Bangsamoro Re-gion, Philippines

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Abstract. This study looked into the behavioural antecedents of Islamic finance adoption among household consumers in the Bangsamoro Autonomous Region in Muslim Mindanao (BARMM) by focusing on the mediation effect of risk attitude in the context of Theory of Planned Behaviour (TPB). With data collected from 416 respondents and an analysis using PLS-SEM, the results showed that both attitude and perceived behavioural control have a direct and indirect effect on intention to adopt Islamic finance. Risk attitude was a significant mediator of those relationships suggesting that the perceived risk of loss or gain was an important part of participants' decisions in regard to finances. In contrast, subjective norms were not significant in predicting intention. Confirmatory factor analysis indicated that the measurement model had adequate reliability and validity; model fit indices (SRMR = 0.072, NFI = 0.759) confirmed a good fit. The study's conclusion suggests that generating increased risk awareness and personal financial confidence might work better than social influence alone in supporting Islamic Finance. Such findings provide practical knowledge for financial institutions and policymakers to improve Islamic financial inclusion in various cultural and eco-nomic contexts, as is the case with BARMM.

Keywords: Risk Attitude, Islamic Finance, Perceived Behavioural Control, Subjective Norms.



Paper Code: OCMT'2025_0102

Regulation and Compliance in a Data-Driven Economy: Challenges and Opportunities for Legal Frameworks

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Abstract. In an increasingly data-driven economy, regulatory frameworks and compliance mechanisms are under growing scrutiny as industries and governments grapple with the challenges of managing vast amounts of data. Data protection has become an increasingly critical aspect of cyber law in the digital age. With the widespread use of technology and the internet, individuals share a significant amount of personal information online, making it essential to establish legal frameworks that safeguard their privacy and prevent misuse of their data. The major challenge is the global nature of the internet, where data flows across borders, making it difficult to enforce consistent data protection standards world-wide. Another challenge lies in the rapidly evolving technology landscape, which necessitates continuous updates to laws and regulations to address new threats and emerging issues. The research article evaluates international best practices and their relevance to Oman, particularly considering Oman's Personal Data Protection Law (PDPL) and other regulatory initiatives. Furthermore, ensuring compliance with personal data protection laws requires a collective effort from various stakeholders, including governments, organizations, and individuals. Building awareness and promoting a culture of privacy and data security are vital to fostering a safe and responsible digital environment.

Keywords: cybersecurity, data protection, regulations, digital media, privacy



Paper Code: OCMT'2025_0101

Exploring the Integration of Solar-Powered Microgrids in Oman's Agricultural Landscape: Opportunities and Challenges

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Abstract. Oman's agricultural sector is facing growing energy demands, prompting a need for sustainable power solutions. This study investigates how solar-powered microgrids can meet these needs in alignment with Oman Vision 2040. The research draws on a mixed-methods approach, including interviews with stakeholders and survey responses from 286 participants. Using SmartPLS 4, the study tested a structural model to examine how economic viability, regulatory policies, solar technology, and innovation affect adoption. The results highlight technological readiness and reliable systems as key drivers, while policy-related barriers remain a challenge. Based on the findings, the study outlines practical recommendations to improve adoption, strengthen rural energy resilience, and support sustainable agricultural development.

Keywords: Renewable energy, Solar power, Electricity Micro Grids, Agriculture, Sustainability



Paper Code: OCMT'2025 0096

An Integrated Sensor based Machine learning frame-work for the Optimal agriculture crop selection in Sul-tanate of Oman through Artificial Intelligence

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Abstract. In the Sultanate of Oman, optimizing agricultural crop selection is crucial for enhancing food security and sustainability. This innovative approach aims to increase agricultural productivity in Oman while promoting sustainable practices, ultimately contributing to the nation's food security and economic re-silience. This study proposes an integrated sensor-based machine learning frame-work that leverages artificial intelligence to facilitate optimal crop selection tailored to the unique environmental and climatic conditions of the region. By utilizing various sensors such as soil moisture, temperature, humidity, Ph value of soil and rain data is collected and analyzed to assess the suitability of different crops. Machine learning algorithms, including decision trees, random forests, and support vector machines, are employed to model crop performance based on historical data and current environmental factors. The framework provides farmers with actionable insights and recommendations, enabling them to make informed decisions that improve yield and resource efficiency. The study findings show that Maize is proved to be the best crop under conditions of measured values of Temperature, Humidity, Soil moisture, pH value of soil and rainfall. In contrast the least cultivated crop under the same conditions is muskmelon.

Keywords: Integrated Sensor Systems, Machine Learning, Random Forest, Crop Selection, Optimal Agriculture



Paper Code: OCMT'2025 0095

Transforming Amjad Library into a Contemporary Bookstore and Coffee Shop Design in Oman

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Abstract. The study aims to redesign the traditional and uninspiring Amjad Library, transforming it into a modern facility with a coffee shop, various seating areas, and meeting rooms. This library suffers from poor organization and lacks a specialized collection of books. It offers school supplies and stationery, sells books only, and lacks seating areas and other amenities, which detracts from the visitor experience. This redesign aims to make the library more attractive by providing an environment that suits the modern generation and meets their needs. Additionally, it highlights the significance of the library's design and layout for the visitor experience and how the redesign will enable the library to cater to a broader audience. The addition of the coffee shop will complement the library's primary purpose. The library will accommodate approximately 80-90 visitors at a time, allowing for comfortable movement, with a target age of 15 years and above. Visitors will have an immersive experience in this library. This project aligns with the goals of Oman Vision 2040, promoting education and innovation to raise the quality of life while creating a modern and sustainable environment that inspires individuals and enhances cultural identity.

Keywords: Library Interior Design, Coffee Shop, Modernity, Sustainability, Oman Vision 2040.

Paper Code: OCMT'2025 0094

Embracing Life: Innovative Interior Design for Elderly Welfare Home in Rustaq, Sultanate Oman

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Abstract. In an era characterized by a demographic shift towards an aging population, the relationship between environmental factors and the well-being of older individuals emerges as a critical area of inquiry. The study focuses on the role of a supportive environment within the context of Rustaq's social welfare homes, which are renowned for their commitment to elder care through biophilic design. Despite notable progress, persistent challenges underscore the need for comprehensive approaches that address various dimensions of the environment. By conducting a thorough examination of Rustaq's social welfare homes, the study aims to identify specific environmental factors that influence the health and quality of life of older residents and propose strategies for enhancing overall environmental quality. The findings of this exploration will provide policymakers and stakeholders with valuable insights into the importance of creating healthy living environments for seniors, thereby promoting their health, autonomy, and overall well-being. The study examines the impact of innovative design on elderly individuals in care homes in Rustaq. Furthermore, by integrating insights from Sugiyama and Thompson's seminal work in environmental gerontology, this study provides a robust foundation for advancing research, shaping policies, and implementing practices to improve the lives of aging populations globally. This interdisciplinary approach emphasizes the importance of creating inclusive, age-friendly environments that foster longevity, vitality, and fulfillment in older adulthood. Finally, the study concluded that the redesign of a care home for older adults in Rustaq had a significant impact, focusing on innovative interior designs, embracing life, and revitalizing care. The aim was to create a more comfortable and transformative environment that could positively influence the behavior of older people, emphasizing the importance of creating space for relaxation and comfort through the redesign of a welfare home in Rustaq, Sultanate of Oman.

Keywords: Elderly Welfare Home, Biophilic Design, Human Contact with Nature, Eco-friendly Materials, Aging in Place



Paper Code: OCMT'2025_0093

A Review of Conversational AI in HR and Payroll Systems: Technologies and Challenges

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Abstract. Nowadays, artificial intelligence and its technologies have shaped and changed HR and payroll systems by automating many routine and repetitive tasks, resulting in a noticeable positive impact on improving employee interaction, streamlining HR processes, and increasing HR efficiency. This paper analyzes how conversational AI and chatbots can change HR processes, handling common headaches like manual inefficiencies, payroll mistakes, compliance risks, and communication gaps. Additionally, we discuss the core technical components that chatbots are built upon, such as natural language processing (NLP), common conversational systems, and deep learning (DL), while considering the context of HR and payroll systems. Using existing applications of HR and payroll chatbots, we highlight the advantages and challenges these companies have faced. Finally, we explore the limitations, concerns, and ethical dilemmas that the use of chatbots in HR systems may raise.

Keywords: Conversational AI, Human Resource Management, Payroll Automation, Natural Language Processing, chatbots.



Paper Code: OCMT'2025 0092

Artificial Intelligence Based Heart Disease Detection by Using Machine Learning Algorithms and A Real-Time Cardiovascular Health Monitoring System

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Abstract. Heart disease has long posed health challenges in humans across the globe, predominantly affecting elderly individuals. With evolving lifestyles and dietary preferences, heart disease is now increasingly prevalent in younger individuals. The heart is a muscular organ about the size of a fist that functions as the human body's circulatory pump. Life or death might be determined by cardiovascular health. When individuals learn about heart disease, their first concern is coronary artery disease, which is a heart ailment that can lead to myocardial infarction or cardiac arrest. Blockages in the coronary artery cause myocardial infarction, which varies from 50% to 70% in the number of cases of valvular heart disease. Stroke, aortic aneurysm, and peripheral artery disease are further serious health issues caused by heart disease. Emerging technologies such as machine learning algorithms, logistic regression models, and the Internet of Things (IoT) present promising means of detecting cardiac illness and providing a real-time cardiovascular health monitoring system. Beyond the word Heart and cardiovascular disorders are on the rise, particularly in Oman, where they are responsible for 36% of all deaths from non-communicable diseases. This is brought on by bad habits, inactivity, skipping routine checkups, and not going to the doctor. It is not always feasible to monitor each patient accurately, and the extra time and expertise needed to consult with patients every 24 hours prevents practitioners from doing so. Our goal in this research is to use the machine learning technique of logistic regression to forecast and account for the patient's likelihood of having a heart attack.

Keywords: Artificial Intelligence, Machine Learning, Logistic regression, Internet-of-Things (IoT), Raspberry P



Paper Code: OCMT'2025_0091

Sustainable Supply Chain Management as a Mediator Between Enterprise Risk Management and Performance in Southern Philippines Food Enterprises

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Abstract. This paper investigated how Sustainable Supply Chain Management (SSCM) might possibly moderate the link between Enterprise Risk Management (ERM) and Organizational Performance (OP). Data were gathered via structured questionnaires and PLS-SEM was used to evaluate the same focusing on food-based service companies in Southern Philippines. Results from the measurement model confirmed both construct validity and reliability. The path analysis affirms that ERM significantly enhances economic and operational performance positively. In addition, the findings revealed a significant positive effect for sustainable packaging practices on both performance dimensions while environmental purchasing on operational performance only. Furthermore, mediation analysis revealed that SP fully mediates the ERM–performance relationship, while EP only exhibited partial mediation on the ERM–operational link and not on economic performance. Indices of model fit (SRMR = 0.073, NFI = 0.902) resulted to a good fit suggesting strategic importance of connecting ERM being effective and SSCM practices, sustainable packaging in particular, to organizational performance especially for food-based services organizations operating in developing economies like the Philippines.

Keywords: Enterprise Risk Management, Organizational Performance, Sustainable Supply Chain Management.



Paper Code: OCMT'2025 0090

Electronic Waste Management: Fourth Industrial Revolution Technology Advancements and Opportunities

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Abstract. This paper examines the application of Fourth Industrial Revolution (4IR) technologies in electronic waste management. The rapid expansion of the technology sector and the increase in demand for electronic devices, which as a result produced millions of tons of discarded electronic waste. Traditional disposal methods have become unsustainable and environmentally harmful. The integration of 4IR technologies such as blockchain, artificial intelligence, Internet of Things (IoT), and big data can significantly improve the entire process of e-waste management, from collection and sorting to recycling. However, there is limited research that explores the application of 4IR technologies in e-waste management. This paper provides a comprehensive mapping of previous studies that have applied advanced ICT solutions and analyzes the advantages and challenges associated with these approaches. Furthermore, the paper proposes a recommended solution for e-waste management using 4IR technologies, emphasizing the importance of implementing a safe and intelligent e-waste collection method. The research showcases the potential of 4IR technologies to revolutionize e-waste management and contribute to a more sustainable future. The study examines prior work on the implementation of 4IR technologies in e-waste management and describes the current state of each technology in the context of e-waste management. The results of this mapping study showcase the potential of 4IR technologies in sustainable e-waste management.

Keywords: E-Waste, 4IR, Blockchain, IoT, Artificial intelligence, deep learning, big data.



Paper Code: OCMT'2025 0089

The Effectiveness of AI Tools Among Students in Interior Design Program at Oman College of Management and Technology

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Abstract. This research explores the effectiveness of artificial intelligence (AI) tools used in the Interior Design program at the Oman College of Management and Technology. This study's significance lies in its potential to transform the learning environment, making it more dynamic and interactive—an essential aspect for equipping students with the skills and knowledge they will need for their future careers. A survey analysing the effectiveness of AI tools among students in the ID program at OCMT will be distributed among ID program students at OCMT. This survey aims to measure AI usage in assessment, explore perceptions of AI and creativity, assess AI policy awareness, measure AI roles in teaching and learning, and identify challenges and gaps. Based on the survey results and discussion, the paper will extract a set of recommendations that will help students understand AI roles in the ID program, identify the effectiveness of AI, raise awareness of AI's impact on teaching and learning, and address challenges for students. On the other side, for the instructors, it will identify the gap between course material and teaching methods, enhancing academic integrity and AI policy awareness among students, which will improve teaching and learning methods aligned with AI advantages in the interior design industry and local market.

Keywords: Artificial Intelligence, Interior Design, Assessment, OCMT.



Paper Code: OCMT'2025 0088

Ethical AI Frameworks for Gender-Sensitive Alerts in Women's Compartments, Ensuring Privacy, Mitigating Bias, and Building Public Trust

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Abstract. Public transport serves as an important infrastructure in urban areas, facilitating mobility and connectivity for different populations. As artificial intelligence continues to revolutionize this sector, its integration offers opportunities to improve safety, efficiency, and accessibility. However, the use of AI-enabled technologies in women's rooms requires more attention to ethical considerations. Transparency, fairness, and reliability were identified as important factors, particularly in the development of gender-specific alert systems. These systems, often based on modified algorithms, will address issues such as algorithmic bias, data protection, and the cultural sensitivity of different user groups. The study advocates innovations that combine technological innovation with ethical standards, emphasizing inclusiveness, transparency, and transparency to promote trust and acceptance among travellers. The integration of AI in public transport has the potential to improve the safety and efficiency of operations. But for women's boxes, ensuring privacy, integrity, and trust is essential. Gender-specific prediction systems, which often rely on AI algorithms, face ethical challenges stemming from the potential for bias, data misuse, and conflicting surveillance. This paper presents a comprehensive framework that promotes trust and confidence among travellers, along with ethical guidelines for new AI technologies.

Keywords: AI, GDPR, FAT



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Financial Distress Prediction Using Artificial Neural Net-works Amidst the Russia-Ukraine Conflict

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Abstract. This study examines the impact of the Russia-Ukraine war on the financial status of Russian and Ukrainian companies and identifies the most important predictors of financial distress. The war in Ukraine has significant global implications, causing casualties and disrupting trade. This disruption affects vital goods like wheat, fertilizers, oil, and gas, and leads to inflationary pressures. While most countries report positive GDP growth in 2022, Russia and Ukraine are exceptions, with Ukraine experiencing a severe GDP decline. Artificial Neural Networks (ANNs) are used to create financial distress prediction models on a dataset comprised of 38 Russian and Ukrainian publicly traded companies listed on their respective stock exchanges. The study includes a panel dataset consisting of publicly listed Russian and Ukrainian companies used to construct a machine learning model in order to ascertain the impact of the war on the financial status of companies. The ANN model had an overall classification accuracy of 90.6% and an area under the ROC curve of 95.1%. The three most important predictors of financial distress were found to be Return on Assets, Debt-to-Capital, and Debt-to-Equity ratios.

Keywords: Financial Distress Prediction, Machine Learning, Artificial Neural Networks, Russia-Ukraine War.



Paper Code: OCMT'2025 0086

The impact of electronic trust on reducing financial risks in Jordanian commercial banks

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Abstract. This paper aimed to demonstrate the impact of electronic trust, with its dimensions (source credibility, information quality, and website quality), on reducing financial risks in Jordanian commercial banks. To achieve its objectives, a descriptive analytical approach was used. 480 questionnaires were distributed to the sample, and 451 questionnaires were returned and analyzed. These questionnaires were analyzed using SPSS software. The most prominent results were that electronic trust, with its dimensions (source credibility, information quality, and website quality), has an impact on reducing financial risks in Jordanian commercial banks. The paper recommended that Jordanian commercial banks provide more accurate and reliable information on their websites about the banking services provided, and work to provide objective content that enhances customer confidence.

Keywords: financial risks; Jordanian commercial banks; Fintech.



Paper Code: OCMT'2025 0085

Leveraging Artificial Intelligence for Enhancing Sustainable Financial Decision-Making in Fintech Startups

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Abstract. The rapid growth of Fintech startups in the Middle East has revolutionized financial services, yet sustainability often lags behind innovation. This study examines how Artificial Intelligence (AI) enhances sustainable financial decision-making in Fintech startups across the UAE, Saudi Arabia, and Bahrain using secondary data sources, including financial reports, industry databases, and regulatory documents. Grounded in the Triple Bottom Line (TBL) and Technology-Organization-Environment (TOE) frameworks, the analysis employs econometric modeling, regression analysis, and qualitative document analysis. Findings reveal that AI adoption significantly correlates with sustainability integration, influencing economic ($\beta = 0.48$, $p < 0.01$), environmental ($\beta = 0.55$, $p < 0.001$), and social ($\beta = 0.67$, $p < 0.001$) outcomes. AI-driven technologies, particularly machine learning (ML) and natural language processing (NLP), enhance ESG scores (+15% financial inclusion) and optimize resource allocation (carbon reduction: up to 1250 kg CO₂e per year). The UAE outperforms the region (ESG = 65.8), attributed to its AI Strategy 2031, while Saudi Arabia (ESG = 60.1) and Bahrain (ESG = 62.3) continue to refine their regulatory frameworks to foster AI-driven sustainability. Policy analysis suggests that regulatory clarity, AI talent development, and cross-border collaboration are critical to maximizing AI's role in sustainable finance. This research advances theoretical discourse on AI-driven sustainability in emerging markets and offers policy recommendations for aligning Fintech innovation with ESG goals in the Middle East and beyond.

Keywords: Artificial Intelligence, Fintech, Triple Bottom Line, Technology-Organization-Environment, AI-driven sustainability



Paper Code: OCMT'2025 0084

Whistleblowing Governance: An Independent Detective Approach to Exposing Corporate Scams for Sustainable Practices and Ethical Governance

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Abstract. Whistleblower governance is a critical tool used to unearth corporate fraud, regulatory violations, and other unethical practices. This study focuses on Detective Governance, to promote this type of independent mechanisms of investigation in ensuring that organizations are held accountable for their actions. Using sec-ondary data analysis of eight significant cases of whistleblowing such as Hindenburg Research's Adani investi-gation, the Danske Bank money laundering scandal, and WikiLeaks disclosures, the research examines the chal-lenges met by whistleblowers and assesses the importance of investigative bodies behind the veil of enabling transparency. The findings emphasize how independent scrutiny, regulatory oversight, and forensic analysis drive effective governance. There are further modern technologies which include AI and Blockchain systems to help combat fraud detection and provide security for whistleblowers to check on disclosure. That said, the study concludes that strengthening Detective Governance through ensuring institutional independence, legal protection, and investigative integrity will largely help ensure the corporate world is accountable and governed by ethics.

Keywords: Corporate Scams, Blockchain, Sustainable Practices, Hindenburg Research, Whistleblowing, Wikileaks, Ethical Oversight, Detective Governance.



Paper Code: OCMT'2025 0083

Impact of Corporate Characteristics on Climate Change disclosures in Listed Environmentally Sensitive Firms in Nigeria.

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Abstract. This study examines the impact of corporate characteristics on climate change disclosures in listed environmentally sensitive firms in Nigeria between the period 2019 and 2024 against the background of the persisting contradictions between profitability, return on equity, foreign ownership, cashflow asset ratio and leverage, which have been a bone of contention in previous explorations. With reference to environmentally sensitive firms, this study precisely sampled manufacturing firms. The corporate characteristics examined in the study include return on equity (ROA), Managerial ownership (MOWN), foreign Ownership (FOWN), Investing Cash flow-Asset ratio (INVCF) and leverage (LEV). Firstly, the study found that disclosures related to climate change for Nigerian is below average and suggestive that the extent and quality of disclosures in developing economies like Nigeria is still abysmally low. Secondly, profitability has a positive impact on CCD and hence more profitable companies are attuned towards receiving more climate change responsibility. The study recommends that concurrence to climate responsibility should not be attuned by companies as off-shoot of profit maximization. Irrespective of whether firms post profitable accounting numbers, the question of climate change should be an issue that corporate policy enablers in companies in Nigeria underscore. However, this can only become statutory when there are legislative actions that obligate companies to disclose their activities in concurrence for climate change.

Keywords: Corporate characteristics, Climate change, disclosures, Environmental sensitive firms, Profitability, leverage.



Paper Code: OCMT'2025 0082

Challenges in Financing Small and Medium Enterprises: A Case Study of Oman ORIX and Bank Muscat

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Abstract. A Small and Medium Enterprises (SME's) are playing vital role in contribution to the economy of Oman's growth and diversification. However, this sector lack of access to financing which is one of the significant obstacles the entry face and this is limiting their growth and sustainability. This research focus on two significant financial institutions; Oman ORIX and Bank Muscat to examine the primary obstacles that SME's face in securing financial support.

This study aiming to explore the problems faced by Small and Medium Enterprises (SME's) in securing finance through Bank Muscat and OMAN ORIX. SME's are vital engines of economic growth and diversification therefore it's required a solid financial support; however, they are likely to be faced with such challenges and high interest rate, complex and time-consuming bureaucratic processes, as well as the requirements for collateral, this is highlighted the importance of this study. The study identifies a major issue that SME's encounter in their access to funding by analyzing the financial options available from Oman ORIX and Bank Muscat.

To Explore SME's financing problems in Oman a secondary data has been obtained and used in this study through gathering and classifying financial reports, policy documents, and institutional data from sources which are relevant to Oman ORIX and Bank Muscat.

Keywords: Oman ORIX, Bank Muscat, Financial Support, Financial Challenges, Loan Accessibility, Collateral Requirements, Risk Management, Regulatory Constraints, Economic Growth, Business Sustainability.



Paper Code: OCMT'2025_0080

Financial services and brand equity: a green approach

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Abstract. Understanding the intrinsic association between sustainable business practices (green approach) and brand equity (its financial perspective), based on the research-results, make business functions, especially marketing, more environment-friendly, and evolve into (the term and culture) a green approach to marketing, in order to positively influence customer perception and, as a result, gain better brand equity for incremental revenue. The objective of the study was to find out how green or environment-friendly the financial service organizations in developing economies like India are with reference to its offering, communicating and delivering financial services to its customers, and how such green efforts have an impact on the financial perspective of its perceived brand equity. The primary data gathered from 331 customers of diverse financial organizations in the southernmost state of India, Kerala, by using a quantitative questionnaire survey was subjected to an empirical analysis through critical review and causal modeling. The study confirmed that, in the revealed perceptions of the respondents (the target customers), green approach to financial services has a positive impact on the financial perspective of the perceived brand equity.

Keywords: green approach; financial perspective; perceived brand equity; Kerala

Paper Code: OCMT'2025 0078

Transforming Higher Education with AI: Analyzing the Role of Machine Learning in Academic Success Prediction

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Abstract. Machine learning (ML) is a powerful AI tool, that has a potential to transform higher education by enabling accurate student success and retention predictions. Numerous studies presented several factors regarding the opportunities, challenges and significance of ML. This paper identifies ML algorithms usage in diverse data sources, including academic records, engagement metrics, and socio-demographic characteristics, to forecast student outcomes. The study adopts a narrative review through randomly screened previous literature to address AI and ML based on the last ten years. The results shows that predictive ML and AI models, like Artificial Neural Network (ANN), Decision Trees, Hybrid Deep Neural Network (HDNN), and Clustering Algorithms, can be implemented in higher education institutions to identify at-risk students, allowing them for timely interventions and personalized support to improve their academic success. Additionally, this research addresses ethical considerations, especially regarding data privacy and potential biases in ML models affecting specific student demographics. Findings realized that AI enhanced academic performance, continuous evaluation, and refinement are essential to mitigate student outcomes and ensure ethical data use in higher education. Educational stakeholders and researchers should manifest the effective policies to deal with the challenges of implementing AI-based and ML-based models.

Keywords: Performance, Retention rates, Machine Learning, Artificial Intelligence, Security, Personalized Learning.



Paper Code: OCMT'2025 0076

Persistence of Financial Shocks: Quantifying Short and Long-run Spillover Effects Between BSE SENSEX and World Markets

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Abstract. This study examines the dynamic volatility transmission between India's BSESENSEX and major global market indices using the DCC-GARCH framework. By analyzing daily data from January 2000 to the present across thirteen international indices, we decompose volatility spillovers into short-run impacts and long-run persistence components. The results indicate statistically significant bidirectional volatility transmission across all markets. The DCC alpha parameters, which capture short-run spillovers, are consistently significant, with most indices around 0.1, while NASDAQ100 exhibits notably stronger short-term transmission (0.456). Similarly, the DCC beta parameters, representing long-run persistence, show values close to 0.88 for most indices, signifying a lasting effect of volatility shocks, though NASDAQ100 exhibits relatively lower persistence (0.544). The near unity sum of alpha and beta for most indices suggests an integrated volatility process, emphasizing strong interdependence between Indian and global markets. Augmented Dickey-Fuller tests confirm stationarity, supporting the robustness of the methodology. These findings have major implications for portfolio diversification, indicating reduced benefits during market turbulence. The strong link between US technology stocks and Indian equities underscores India's expanding technology sector and rising foreign institutional investments. This research contributes to the literature on financial contagion and interdependence, offering empirical evidence of immediate and persistent volatility spillovers. The study provides valuable insights for investors optimizing global portfolios and policymakers ensuring financial stability in an increasingly interconnected market, especially during periods of heightened volatility.

Keywords: Volatility transmission, DCC-GARCH, BSESENSEX, Financial interdependence, Portfolio diversification



Paper Code: OCMT'2025 0075

The Rise of FinTech in Oman: Digital Transformation and Advancing Financial Inclusion in Line with Oman Vision 2040

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Abstract. The aim of this paper is to study Oman Vision 2040 and its directions towards the inclusion of digital solutions in the financial sector. The article will encompass themes that will identify how Oman is traversing its digital transformation objective to develop an economy that is diversified and inclusive. Areas of opportunities and potential challenges arising out of the implementation of digital initiatives will be identified and studied alongside the risks and benefits it may bring to the Omani people.

Design/methodology/approach – The paper is based on the adoption of the systematic literature review method. The primary step was to frame the research objectives that led to the development of research questions. The authors formalized the exclusion criteria and thereafter a search for relevant research articles was undertaken on established databases as well as a general Google Search was conducted using the identified keywords and Boolean operators. Several articles were studied, critiqued and findings have been summarized and presented.

Findings – The findings clearly indicate that Oman Vision 2040 is an incredibly futuristic document which when followed will put Oman in global map as a technology and financial hub. Going forward, FinTech as an implementation will remain a mainstay and will evolve from its current state wherein it is more popular as a B2C or a C2C financial service provider to becoming both B2B and a B2G financial solutions implementor. FinTech solutions have the reach to create financial inclusions due to high levels of mobile penetration and overall lower costs of transactions. Digital transformation is the cornerstone for progress is a fact clearly accepted by both the government and regulatory bodies and thus they are both involved in building a financial environment that is conducive for the same.

Practical implications – On the basis of what emerged as the findings in this article, it seems fair to say that FinTech and inclusion of blockchain technologies is moving steadily ahead in Oman and is creating the required diversification in the



national economy. This article should be encouraging to budding fintech entrepreneurs who are looking at attracting foreign investments to fund their innovative ideas. Since this paper provides insights into the current financial landscape and the technology interventions that have happened already, it will also identify themes for future research on variations of this topic and other related domains.

Originality/value – The contribution of this paper is towards developing an understanding of the current financial landscape and the impact that digital transformation has had on traditional financial services. Oman as a nation is less research when compared to other nations, thus this paper should add to the existing body of knowledge urging exploratory studies in the area of FinTech and its resultant digital inclusion in Oman

Keywords: Oman Vision 2040, FinTech, diversification, digital transformation, inclusion Paper type Research



Paper Code: OCMT'2025_0074

Carbon Capture Systems impact on firms Environmental and Economic performance: Empirical study from Canadian energy firms.

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Abstract. As part of the sustainability initiative, in meeting net zero emissions, oil and gas firms in Canada, is investing in Carbon capture storage system(ccs) as part of greenhouse gas emissions reductions strategy. This research paper investigates the impact of CCS investments on firm's value, firms' profitability and environmental performance using panel data regression methodology, for the years 2010-2022. Enviromental score is negatively affecting firm value metric Tobin's Q and EVA, but positive impact on accounting measures ROA and ROE. Reduction of Scope 1 emissions is having positive impact on firm value and accounting profit. The study also identifies a curvilinear relationship between environmental performance and firm value, suggesting initial costs outweigh benefits before yielding positive outcomes. These findings highlight the need for cost-efficient CCS innovations and stricter governance to ensure genuine environmental progress rather than greenwashing. Further research is recommended to explore CCS scalability and its integration with other sustainable practices.

Keywords: Carbon Capture Systems, Tobin's Q , Economic Value added, ROA ,ROE

Paper Code: OCMT'2025 0073

Information and Communication Approaches to Managing Innovative Technologies for Hedging Global Risks of Social Inclusion

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Abstract. Social inclusion is based on the principles of supporting people who find themselves in difficult life circumstances that exceed their available resources and capabilities for independent overcoming. The growth of global risks, such as the intensification of military conflicts, migration due to danger, social and digital inequality requires innovative approaches to management and hedging. The essence and specificity of social sphere innovations as a tool for improving information and communication management strategies in accordance with the principles of social inclusion and overcoming the risks of exclusion are determined. The prospects for the development of monitoring technologies for social service systems ("single



social window”) using information and communication technologies are outlined, which provide an assessment of the effectiveness of innovative solutions and their impact on social inclusion in real time. The use of components of social service marketing, innovative design in social work, based on information and communication technologies, opens up opportunities for creating adaptive service models focused on the needs of vulnerable groups of the population. Social technologies, through the activation of artificial intelligence, blockchain, cloud computing, open up new opportunities for scaling and creating a sustainable infrastructure of social inclusion. The relationship between economic priorities and moral beliefs in the formation of social policy is traced when redistributing resources for comprehensive support of persons with disabilities. It is proposed to more widely use digital platforms for remote support (telemedicine, online registries, early warning systems) and automated tools for distributing assistance for the socialization of persons with disabilities, which will contribute to both a prompt response to barrier-free communication and long-term inclusion.

Keywords: sustainable development, globalization, management, marketing, social services, financing, investments, programs, innovations, regulation, monitoring, risk, security.



Paper Code: OCMT'2025_0072

Enhancing Financial Literacy in Rural Communities through User-Centered UI/UX Design

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Abstract. This paper focuses on addressing acute needs for improving financial literacy in rural communities because their limited educational background and limited resources often curbs sufficient levels of financial decision-making. It is important for people to manage their personal finances well, and make informed economic choices. This research aims to provide effective and practical financial literacy education to the rural youth through an interactive and gamified platform, thereby improving the rural financial landscape in India. The study defines the problem, pointing at limitations in previous approaches to the promotion of financial literacy education, and it is accompanied by a comprehensive literature review and understanding of learning behaviours and financial practices. Re-search takeaways mentioned to include practical knowledge and application to make learning both fun and engaging, discussion on the youth and the digital transition, digital means of making payments, bargaining over loans, maintaining a proper budget, and ways of dealing with financial frauds and failure modes. This platform assists users in enhancing their lives by equipping them with basic financial knowledge and how to apply the same in their daily lives. It immerses the user into a relatable plot through stories, sound, and images by drawing on the inspiring, and relevant cultural values, thereby aiming to increase financial literacy and inclusion.

Keywords: Financial Literacy, The Rural Financial Landscape in India, Youth and the Digital Transition, Learning Behaviours and Financial Practices.



Paper Code: OCMT'2025_0070

Predicting start-ups Success & Failure using AI For strategic decisions

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Abstract. The ability to foresee the success or failure of start-ups is essential for investors, policymakers and stakeholders. This study attempts to evaluate the performance of Random Forest in predicting business outcomes and rule extraction. The Random Forest model integrated 66369 cases with 923 rows and 49 mixed quantitative and qualitative attributes. The study also intends to compare its findings with five recent studies (2020-2025) to measure the accuracy of Random Forests in predicting failure or success of business start-ups. It illustrates the role of non-financial operational or geographic factors and, through straightforward decision rules, challenges the conventional use of financial ratios to provide non-ambiguous decision-making statements. The results contribute to the understanding of the role of predictive analytics in financial decisions and the application of machine learning in this field.

Keywords: Predicting success /failure, start-ups , Random Forests, strategic decisions.

Paper Code: OCMT'2025_0069

Digital competences and preferences of green users

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Abstract. Digital transformation is greatly influencing contemporary society, affecting not only the way we obtain information, but also consumer behavior in different areas of life. The importance of environmental awareness is growing, which is manifested in the preference for eco-friendly products and the willingness of consumers to pay more for these products. For this reason, the study focused on exploring the relationships between respondents' digital competences, including digital confidence and digital awareness, and their eco-attitudes, including eco-orientation and eco-willingness to pay. Research conducted on a sample of 396 respondents confirmed the existence of partially significant correlations between the variables under study. Relationship between digital confidence or self-confidence in using technology and the ecological orientation of the respondents was not confirmed, as the correlation coefficients were statistically insignificant (Pearson $r = -0.036$; $p = 0.476$, Spearman $\rho = -0.034$; $p = 0.501$). However, the hypothesis of a positive relationship between digital awareness and respondents' willingness to pay more for organic products (Pearson $r = 0.207$; Spearman $\rho = 0.185$; $p < 0.001$), as well as between eco-orientation and willingness to pay higher prices for organic products (Pearson $r = 0.372$; Spearman $\rho = 0.374$; $p < 0.001$), was clearly confirmed. The results highlight the importance of digital awareness as a factor promoting eco-friendly consumer behavior and can be used in the development of environmental education programs and sustainability-oriented marketing strategies.

Keywords: digital competence, digital literacy, ecological orientation, willingness to pay, ecological products



Paper Code: OCMT'2025 0068

Adoption of AI in the Recruitment Process: Analyzing the Perspectives from Oman through the Lens of the Value-Adoption Model (VAM)

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Abstract. Technology has become part of every activity performed by an organization. Usage of technology has further increased after COVID -19. This re-search ahs been conducted in the Sultanate of Oman, a country moving into technology-driven format in all areas through its Vision 2040. This study aims to fill the gap in adoption of AI in recruitment process by adopting Value Adoption Model (VAM). Independent variables like cost efficiency, relative advantage, usefulness providing perceived benefits and variables like security and privacy concerns, innovation resistance, lack of trust contributing to perceived sacrifice. The perceived benefits and perceived sacrifice provide perceived value. The moderating factor of HR preparedness has been used to find relationship with the dependent variable AI adoption in recruitment process. Data was collected through structured questionnaire sharing it via Google forms from 57 HR professionals and executives in various industries. The data analysis shows that out of eight hypotheses, seven were accepted and one is rejected. The results show that cost-efficiency is the most contributing factor to perceived value and security and privacy concerns also contribute to perceived value through perceived sacrifices. It is understood that organizations in Oman are considering to integrate AI in the recruitment process if they get trust worth vendors. Further studies can be conducting comparing countries in the Gulf Cooperation Council (GCC) and other oragnsitional factors can be added as mediation variable along with HR preparedness.

Keywords: Recruitment process, Artificial Intelligence, Oman.



Paper Code: OCMT'2025 0067

Adopting Artificial Intelligence in HR Training: Exploring Opportunities, Risks, and Benefits in the Context of Oman

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Abstract. The discovery and invention power of humans gave us fire, wheel, machines, computers, software, Artificial Intelligence (AI), etc. There is no doubt that human beings are very powerful and creative. HR department has the role of a middleman managing the employees and satisfying the requirement of the organization. To combat with the tasks of HR department, digitalizing and using modern technologies will be very supportive to lead the human capital in the organization. With the use of AI across different programs of human resource department, the thought of employees to be replaced by technology has also been increased. At this point, this study was carried out to explore the feasibility, risks and benefits of moving into AI based training programs instead of traditional methods. This research is based on the interviews conducted with HR professionals and executives working in various organizations in Oman. The respondents in the interview were 51 and they were chosen by adopting snowball sampling technique. The respondents were approached through contact given by previous respondents. The data collected through interviews were segmented into five themes, namely perception of AI in training & development, benefits of AI-driven training, challenges in implementation, key factors for successful implementation, ethical and future considerations. This study highlights that AI should be seen as a complementary tool rather than a replacement for traditional training methods. Organizations in Oman must carefully plan and implement AI-driven training strategies to align with technological advancements and workforce needs.

Keywords: Artificial intelligence, Training and development, Oman

Paper Code: OCMT'2025_0066

Leveraging AI for Cybersecurity Training: A Comprehensive Review of Simulating Real-World Threats

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Abstract. One innovative method of preparing security professionals for the changing nature of cyberthreats is the incorporation of artificial intelligence (AI) into cybersecurity training. Traditional training techniques, such as static exercises, theoretical teachings, and signature-based detection, are unable to withstand sophisticated attacks like malware, phishing, and advanced persistent threats (APTs) as digital infrastructures become more complex. By using machine learning (ML), deep learning (DL), reinforcement learning (RL), and natural language processing (NLP) to build realistic, scalable, and adaptive learning environments, artificial intelligence (AI) improves cybersecurity training. By leveraging tools like Generative Adversarial Networks (GANs) and Deep Reinforcement Learning (DRL) to simulate various threats like ransomware and cloud breaches, these AI-driven platforms—which include cyber ranges and attack simulators—allow practitioners to safely rehearse real-world scenarios.

By providing real-time flexibility, individualized learning routes, and predictive analytics to find vulnerabilities, AI-powered training overcomes the drawbacks of conventional techniques like sandboxing and penetration testing. Businesses like IBM, PayPal, and Cisco show how successful it is at assembling strong security teams. There are still issues, though: a lot of solutions only address network-based attacks, ignoring endpoint, cloud, and IoT risks, and there are ethical questions raised by the possibility that malevolent actors could abuse AI simulations. Deployment is made more difficult by adversarial AI strategies and data protection concerns. To guarantee that AI-driven training continues to be efficient and responsible in fending off next-generation cyberthreats, future developments call for multi-vector simulations, enhanced human behavior modeling, and ethical governance in line with standards like NIST and ISO 27001.

Keywords: AI-driven cybersecurity training, Cyber range simulations, Machine learning (ML) and deep learning (DL), Threat detection and response, Adversarial AI and ethical concerns



Paper Code: OCMT'2025_0064

Advancing Human Resource Management in Public Sector Auditing: Predicting Auditor Performance Using People Analytics Approach

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Abstract. Auditor performance assessment at BPKP is essential to ensure accountability and efficiency in financial supervision. However, the competency gap between central and local auditors and the suboptimal achievement of corruption control indicators demand a data-driven approach. This study applies people analytics with predictive analytics to evaluate and improve auditor performance.

Analyzing data from 3,734 auditors (2021–2023) using Multivariate Logistic Regression and Random Forest, findings show that the Random Forest model is the most effective in predicting future performance. It provides strategic insights to guide decisions on training programs and talent development investments.

The results also reveal that past performance is more influential in predicting auditor success than work behavior, training, or employee development. Organizations need to optimize work processes to increase productivity. Integrating people analytics in HR management can strengthen decision-making and organizational performance.

Keywords: BPKP, People Analytics, Performance Management, Performance Prediction, Public Sector Auditors, Random Forest model, Training and development.



Paper Code: OCMT'2025 0063

Sustainable branding in the digital era: smart social media strategies for green branding

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Abstract. With climate change and the depletion of natural resources posing serious challenges, sustainable branding is becoming a key aspect of modern marketing. This article explores how digital tools, particularly social media, are promoting green brands and increasing sustainability awareness among consumers. With growing interest in environmental issues, consumers increasingly prefer brands that are responsible to nature and expect transparency and commitment to sustainability. The aim of this paper is to analyze how smart social media strategies such as personalized content and user-generated content (UGC) contribute to building a strong eco-brand. Through case studies of brands such as Allbirds and Natura, it is shown how these strategies help shape consumers' eco-values and create strong relationships between the brand and its community. The article also highlights the importance of transparent communication to increase trust and support consumers' green decision-making. Finally, it analyses the challenges and opportunities that digital tools bring to brands in building sustainable branding and their ability to influence consumer behaviour in the digital era.

Keywords: Sustainable Brand Building, Digital Marketing, Social Media, Personalized Content, User-Generated Content.



Paper Code: OCMT'2025_0062

The Impact of Student Gym Exercise on the Educational Development of UOB Students: Examining Student Performance, Communication Skills, Behavior, Innovation Enhancement

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Abstract. This study investigates the impact of sports and gym exercise (SGE) on university students' academic and personal development at UOB. The analysis through bootstrapping mediation assessment explored the relationship between SGE and Student Performance (SP) and Communication Skills (CS) as well as Student Behavior (SB) and Student Innovation (SINOV). Student Innovation experiences the most profound impact from SGE because statistical analysis demonstrated a positive effect ($\beta = 1.000$, $T = 20262.038$, $p = 0.000$). Through SGE the educational setting witnesses meaningful improvements in Student Behavior as its impact reaches 0.392 with $T = 10.718$ and $p = 0.000$ indicating positive student discipline and motivation levels. The research showed moderate statistical power on Student Performance while Communication Skills achieved moderate results ($\beta = 0.161$, $T = 3.916$, $p = 0.000$). The test results demonstrate that universities must build scheduled physical activities into their academic programs because this approach will improve student commitment and academic success. Educators and policymakers should adopt sports-based academic approaches according to the findings of this study for comprehensive student growth.

Keywords: Student gym exercise, Student performance, communication skills, Student behavior, innovation, UOB



Paper Code: OCMT'2025_0061

(VigilantNet) An Automated Pentester for IoT Devices

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Abstract. VigilantNet is an innovative project dedicated to addressing the emerging challenges of IoT usages and benefits and security through the development of an automated penetration testing device. This project is motivated by the increasing complexity and widespread adoption of IoT devices that are being used to facilitate human lives and their integration with AI heavily. The scope of our study includes an extensive analysis of the background and implementation of IoT technologies, their associated attack vectors, and the efficacy of automated penetration testing as a security measure. Our methodology combines a comprehensive literature review with practical testing scenarios aimed at developing robust security solutions tailored for IoT systems to function properly without hindering. The outcome of this project is a profound understanding of IoT vulnerabilities and a set of actionable recommendations, articulated through detailed sections on system architecture and implementation methods. This comprehensive approach ensures enhanced security measures and frameworks for IoT environments to better have IoT devices that allow for a safe sustainable digital environment.

Keywords: Internet of Things (IoT), Security, Penetration Testing (PT), Automation, Consistency, Efficiency.



Paper Code: OCMT'2025 0060

Evaluating Student Academic Performance During and After COVID-19: A Comparative Study in Higher Education

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Abstract:

Higher education institutions faced unprecedented challenges during the COVID-19 pandemic, impacting student academic performance and retention rates. This study examines the academic performance of 1,650 undergraduate engineering students from a well-established university in the United Arab Emirates, analyzing performance trends during and after the pandemic using RapidMiner and Power BI.

The study investigates two key research questions. First, it explores how CGPA fluctuations during and after COVID-19 affected probation rates across different majors. The findings reveal a decline in average CGPA from 2.94 during the first pandemic semester to 2.81 in the final analyzed term, highlighting the difficulties students faced in transitioning back to in-person education. Additionally, 87.6% of students who were on probation during the pandemic remained on probation post-pandemic, underscoring the long-term academic struggles and the need for targeted interventions.

The second research question examines the correlation between high school grades and CGPA across different performance categories. A clustering analysis identified three distinct groups: high performers (16.97%) with CGPAs above 3.5, medium performers (80.24%) with CGPAs between 2.0 and 3.5, and low performers (2.79%) with CGPAs below 2.0. The findings indicate that prior academic achievement does not always predict university success, emphasizing the necessity for personalized academic support to assist struggling students.

These results provide critical insights into the resilience of higher education systems and the long-term impact of the pandemic on student outcomes. The study highlights the importance of data-driven interventions, structured support programs, and hybrid learning models to enhance student performance in future disruptions.

Keywords: Academic Performance, Educational Policy, Educational Data Mining .

Paper Code: OCMT'2025 0059

A Study at the College of Business, University of Buraimi: Exploring the Impact of TikTok Usage on Student Performance, Communication Skills, Behavior, and Innovation

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Abstract. The research evaluates how Buraimi University College of Business Ad-ministration students are affected by their use of TikTok regarding their performance, communication skills, behavioral patterns, and innovative thinking abilities. The re-searchers obtained data from structured questionnaires distributed through Google Forms and analyzed it using Smart-PLS. Students who use TikTok show a substantial effect on their educational attainment (SP) ($\beta = 0.289$, $p = 0.000$, $T = 7.950$) as well as their communication skills (CS) ($\beta = 0.236$, $p = 0.000$, $T = 5.888$) along with their behavioral patterns (SB) ($\beta = 0.177$, $p = 0.000$, $T = 4.605$) and their innovative abilities (SINOV) ($\beta = 0.119$, $p = 0.001$, $T = 3$). The research demonstrates TikTok offers edu-cational value for improved learning achievements, communication methods, and in-novation abilities, and provides solutions for behavioral challenges. Education-based structured social media integration improves student development of academic and so-cial skills. Additional research must examine the long-term consequences and relate TikTok usage to specific educational disciplines to maximize its educational value.

Keywords: TikTok Usage, student performance, communication skills, Student behavior, innovation measures.



Paper Code: OCMT'2025_0058

The Impact of University Activities on the Educational Development of UOB Students: Examining Student Performance, Communication Skills, Behavior, Innovation, and Loyalty Enhancement

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Abstract. This study investigates the impact of university activities on students' educational growth at the University of Buraimi (UOB). Researchers explored student performance and communication abilities, behavioral changes, innovation measures, and loyalty improvement through a mixed quantitative and qualitative research design. Structured surveys provided the data for investigation at the University of Buraimi while SmartPLS statistics confirmed the link between student activities and academic achievement results. Student activities promote innovation ($\beta = 0.403$, $p = 0.000$) and loyalty enhancement ($\beta = 0.403$, $p = 0.000$). After this performance, ($\beta = 0.353$, $p = 0.000$), communication ($\beta = 0.273$, $p = 0.000$) and behavior ($\beta = 0.203$, $p = 0.000$) follow suit. Student extracurricular activities prove essential for developing creative practices while deepening school dedication and achieving total academic progress. This research demonstrates effective methods for activity organization, promoting UO-B's total student development objectives and producing better academic results.

Keywords: student performance, communication abilities, behavioral changes, innovation measures, loyalty improvement

Paper Code: OCMT'2025 0057

The Socioeconomic Implications of Individual Asset Possession on Lawlessness: Analyzing the Dynamics with-in Nations

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Abstract. This research looks at the relationship between asset ownership and lawlessness in a country. The idea is that private property ownership leads to lawlessness. It computes the total assets of the country by adding up the assets of its residents. It recommends that specific assets be owned by the government. Individuals should be compensated for their intellectual property or services to the nation, rather than the state transferring ownership titles. According to the study model, asset titles will gradually transfer from point C to point A over time, displaying government oversight and control. The "Nation's Trap" displays lawlessness as a linear function of national lawlessness.

The "Nation's Trap" is a critical zone in which the state loses assets, leading to anarchy, increased internal costs, groupism, strong politics, social division, and discrimination. The study shows that the Nation's Trap must be lowered or eliminated in order for law enforcement to be effective.

The paper provides a conceptual framework for understanding the relationship between individual asset ownership and lawlessness. The findings emphasize the significance of government asset control and oversight in fostering legality. The article wraps up with policy recommendations to help the nation overcoming the trap for constructing a safer and controlled society.

Keywords: Lawlessness, Asset ownership, Government control, Nation's Trap, Decentralization, Law and order



Paper Code: OCMT'2025 0056

Digital Content Marketing: A Comprehensive Overview of Small and Medium-sized Enterprises (SMEs) in Sultanate of Oman

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Abstract. Digital Content Marketing (DCM) has emerged as a pivotal strategy for businesses to foster meaningful connections with the target audience in this digitally driven world. This research delves into the theoretical and practical dimensions of content marketing, such as Brand awareness (BA), Customer Engagement (CE), Customer Retention (CR) and Customer Information (CI), which are the key areas that are expected. It focuses on key areas such as the type of content utilized, the role of social media, the metrics used to evaluate success, and the challenges businesses face. It checks on how SMEs in Oman can leverage content marketing strategies, grounded in a developed framework, to strengthen their digital presence and achieve measurable business growth. The information gathered from the respondents was analyzed using descriptive statistics via SPSS 20.0. Structural Equation Modelling [SEM] with the software AMOS 18 was used to evaluate the significance of Digital Content Marketing Dimensions of BA, CE, CR and CI. The study revealed that the most popular, reliable, and efficient content platforms used for DCM are websites, online videos, webinars, blog posts, user-generated content, podcasts, and infographics. Among social media tools, Instagram is the most popular in Oman, followed by WhatsApp, YouTube, LinkedIn, Facebook, Twitter, and Snapchat. The research paper also analyzed CM metrics in which engagement metrics are popularly used to measure DCM, which include page views, shares, comments and likes, click-through rate and bounce rate. The findings aimed to guide SMEs in transforming digital content into a strategic tool for growth, ensuring that creativity translates into measurable business success in the evolving global marketplace.

Keywords: Digital Content Marketing, Content Marketing platforms, Content Marketing metrics, Content Marketing challenges, Sultanate of Oman



Paper Code: OCMT'2025_0055

Securing Mobile Short-Range Wireless Systems a Comparative Survey of NFC and BLE Security Mechanisms, Vulnerabilities, and Mitigation Strategies

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Abstract. The widespread of mobile devices has revolutionized daily life, enabling everything from contactless payments to remote healthcare monitoring. Short-range communication technologies like Bluetooth Low Energy (**BLE**) and Near Field Communication (**NFC**) are at the heart of this transformation, powering smooth connectivity, energy-efficient data exchange, and intuitive user interactions. However, as these technologies become popular, their communication channels often emerge as prime targets for exploitation. This survey examines the vulnerabilities plaguing BLE and NFC, including eavesdropping, man-in-the-middle (**MITM**) attacks, and relay attacks, which threaten user privacy, data integrity, and system trustworthiness. We will discuss the security mechanisms embedded in these protocols, such as BLE's elliptic-curve Diffie-Hellman (**ECDH**) pairing and NFC's reliance on secure elements (**SEs**), to evaluate their effectiveness in mitigating risks. This study examines the current threat landscape and offers practical recommendations to strengthen BLE and NFC communication channels, laying the foundation for robust and attack-resilient frameworks in our increasingly interconnected world.

Keywords: Bluetooth security, Contactless tech, Secure connections, Device security, Data interception, Data encryption, Embedded security, NFC, BLE



Paper Code: OCMT'2025 0054

Women's Engagement in Distressed Investments: Unlocking High Returns Through Strategic Insights

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Abstract. Warren Buffet has said “Be fearful when the market is greedy or be greedy when the market is fearful”. The risk of putting resources into distressed organizations prevalently known as vulture investment contributed by idiosyncratic to specific innovative assets. Ladies have changed the investing scene amazingly throughout the last decade. With the ascent of female business and developing female cooperation in the labour force, there is an improvement in monetary education for ladies. According to the report of Association of mutual funds in India, ladies' cooperation in investment is expanding. Despite difficulties there is a rising female engagement in investing in inflating beating stocks like indexed fund, which reveals their strategic insight in investment. Women engage in investing through strategic insights and idiosyncratic risk (unsystematic risk) involved in investing in a specific asset, such as a distressed investment in stock with self-assurance. Women feel with strategic insight, when they execute distressed investment applying accurate technique, they will gain significant returns. Financial experts give confidence to women saying, the distressed investment will fetch good returns after exploring such organisations. This article tries to highlight the strategic insights of women engagement in distress investment choices.

Keywords: Distressed investment, idiosyncratic risk, significant returns



Paper Code: OCMT'2025 0053

Enhancing Online Privacy: Design and Evaluation of a Browser Extension Against Non-Consensual Tracking

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Abstract. This article presents a browser extension with a new approach to face advanced online tracking methods. The extension combines three main actions: blocking known trackers based on a defined list, modifying technical data on the user's device to protect against fingerprinting, and heuristic detection of unknown trackers. Users can also view and manage detected trackers via an intuitive and simple user interface offered by the extension. Several tests carried out on different websites (media, e-commerce) show the effectiveness of the extension, blocking trackers and the reduction of information recovered for the uniqueness of the fingerprint, measured with AmIUnique. Compared with other extensions such as uBlock Origin, Privacy Badger, and CanvasBlocker, this solution enables us to understand emerging threats better and identify potential areas for future improvement.

Keywords: Online tracking, Privacy protection, Browser extension, Anti-track-ing, Fingerprinting, Tracker blocking.



Paper Code: OCMT'2025_0051

Digital Marketing Tools and Their Role in the Tourism Industry: A Consumer-Centric Approach

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Abstract. With the increase in technological advancement, it is crucial for tourism businesses to implement their marketing strategy into the digital environment. The aim of this paper was to identify the most salient digital marketing tools within the decision-making process of tourism participants. The source of primary data was a questionnaire survey conducted on a sample of 153 respondents. The results of the questionnaire survey confirmed that digital marketing plays a key role in the decision-making process of tourism participants, with social media and content marketing being the most effective tools, where the most popular types of content are photos, videos, and stories on social networks. The results obtained showed that digital marketing offers tourism businesses effective tools through which they can better communicate with customers, build brand awareness, and increase sales and subsequent revenue, leading to business success, prosperity, and competitiveness.

Keywords: Digital Marketing, Internet, Tourism, Decision-making, Consumer Behavior



Paper Code: OCMT'2025 0050

NAVIGATING UNCERTAINTY: THE CONTEXTUAL ADAPTATION AND EMOTION-INFLUENCED DECISION-MAKING (CAE-IDM) THEORY

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Abstract. The current foundation paper presents the contextual adaptation and emotion-influenced decision-making theory as a new framework to underpin decision-making under uncertainty. CAE-IDM embeds contextual factors including environmental conditions, social influences, and temporal constraints within emotional states and cognitive strategies to account for limitations found within other theories: Rational Choice, Bounded Rationality, Prospect Theory, and Heuristics and Biases. It emphasizes a dynamic interaction of contexts and emotions that shape the quality and confidence in a decision. This provides a comprehensive model of adaptive cognitive strategies as a response to variation in contexts and emotional inputs. The paper discusses the theoretical underpinning, conceptual model, and practical applications of CAE-IDM; it therefore gives a strong basis for conducting further research on decision-making under uncertainty.

Keywords: CAE-IDM Theory, Decision-making, Contextual Factors, Emotional Influences, Cognitive Strategies



Paper Code: OCMT'2025 0049

Artificial Intelligence in Digital Forensics: Challenges and Future Works

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Abstract. This research explores the application of artificial intelligence (AI) to automate processes involved in analyzing digital evidence in a system under investigation. With the exponential growth of digital data and the increasing reliance on cloud-hosted data for personal and enterprise use. Cloud forensics has to deal with the distributed nature of cloud architecture, multi-tenancy, and data volatility, with various applications emerging in the landscape. Combined with the continuous expansion of IoT devices, investigators are dealing with a growing obstacle. The diversity of devices and the absence of standardization make IoT forensics difficult. The sheer volume of network traffic poses a challenge for network forensics research. AI can aid forensic investigations by minimizing much of the manual effort, diverting the experts to more primary and relevant evidence. This survey examines three critical subdomains Network Forensics, Cloud Forensics and IoT Forensics, identify the unique challenges in each of them, and explores the integrations of Machine Learning (ML) and Deep Learning (DL) applications in Digital Forensics, supported by insights into existing datasets. Lastly, the study outlines future research directions aimed at addressing challenges within these domains.

Keywords: Artificial Intelligence, Cybersecurity, Digital Forensics, State-of-art, Survey.



Paper Code: OCMT'2025 0048

Green by Design: The Evolution of HRM Towards Eco-friendly Practices

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Abstract. As global environmental challenges increase, organizations are progressively implementing sustainable practices to reduce their ecological footprint. Human Resource Management (HRM) has developed as an important driver in this evolution, developing to integrate eco-friendly practices that align organizational goals with environmental sustainability. This paper explores the concept of Green HRM, its evolution, and its role in development of sustainable organizational values. It studies important Green HRM practices, including green recruitment, training, performance management, and employee engagement, while addressing the challenges and opportunities associated with their implementation. This paper highlights the transformative potential of Green HRM in achieving environmental and organizational objectives.

Keywords: Green HRM, Employee Engagement, HRM Practices, Organizational Objectives.



Paper Code: OCMT'2025 0047

The Impact of Employing Artificial Intelligence Tech-niques in Audit Procedures

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Abstract. This study addresses the impact of employing artificial intelligence techniques in audit procedures. The continuous changes in the global economic environment, alongside the emergence and penetration of information and communication technology in various fields, including auditing, have created new responsibilities for auditors. It has become necessary for auditors to adapt to these transformations, especially with the clear impact of these technologies on traditional audit procedures, which are no longer able to achieve their objectives effectively in light of the large volume of transactions conducted by economic entities and their transition from paper-based to digital environments. Hence, the need has emerged to adopt artificial intelligence techniques to support auditors in performing their new tasks.

This study aims to identify the artificial intelligence techniques used in external auditing and measure their impact on its procedures by adopting the descriptive-analytical approach to present the most prominent of these techniques, in addition to a case study of Ernst & Young as one of the Big Four audit firms. The study concluded that the use of artificial intelligence techniques in external audit procedures positively affects the efficiency and effectiveness of the audit function, as it contributes to improving the quality of results and reducing the time and effort required to perform audit tasks. The study also recommended encouraging audit firms to adopt modern technologies, especially those related to artificial intelligence, while focusing on providing the necessary training to enable auditors to use them optimally

Keywords: Artificial Intelligence Techniques, External Audit Procedures, EY Audit Firm



Paper Code: OCMT'2025 0046

The Impact of Risk Management, Market Volatility, Compliance, and Financial Control on the Performance of Lebanese Companies

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Abstract. Internal audit practice is used to increase compliance, efficiency, and effectiveness by monitoring, assessing, and improving organizational control methods. This study covers a problem in the literature by considering the impact of internal audit risk management, financial controls, market volatility, and compliance on the enterprises of Lebanon amid inflation. Internal audits are the fundamental need for transparency, control, and accountability. This was quantitative research with a sample of 141 people. The findings indicated that internal audit practices could potentially have a significant influence on business performance, particularly in the volatile economy of Lebanon. Crucial for these businesses to grow and survive. The results enhance the understanding of internal auditing and its impacts on fragile economies. For other businesses facing similar conditions, the increasing reliance on internal audits may have implications for their reduction of inflation. The research will assist policymakers, business people, and academics in grasping how internal audit practices impact firm performance in inflationary conditions.

Keywords: Risk Management; Financial Controls; Market Volatility; Compliance; Company Performance; Lebanon.



Paper Code: OCMT'2025 0045

The Role of AI in Enhancing E-Learning: Current Trends and Future Implications

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Abstract. E-learning plays an effective role in the development of education. Recent innovations in technology have also altered the implementation of E-learning in educational institutions greatly. AI has evolved the incorporation of E-learning in various modes of educational aspects. The main aim of the research is to study the possible impacts of the implementation of AI techniques on closed and adaptive E-Learning systems. Thus, the work is focused on the supposition that future IoT workers' systems are based on powerful AI-based recommendation engines, and the work represents a preliminary step in offering actual information for specialists in education and E-Learning. The systematic review suggests that emerging trends in Artificial Intelligence (AI) and E-Learning are actively shaping and transforming the landscape of education, bringing about a significant revolution in both student learning and teacher instruction methods.

Keywords: AI, E-learning, Education, Implication.

Paper Code: OCMT'2025 0041

The Implementation of a Project Approach in Craft Production Management

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Abstract. The theoretical foundations of craft production are studied; the essence and features of craft production, factors that impact its development in Ukraine, and the importance of the project approach in the management of craft enterprises are analyzed. In particular, it was established, that craft production is a unique type of small business, based on the creation of high-quality authentic products, using manual labour, traditional methods and innovative technologies. It differs from mass production in limited volumes, an individual approach and special value for consumers. It is proven, that the development of craft business in Ukraine is a complex and multifaceted process, which is impacted by a number of factors, in particular: economic, legal, socio-cultural, technological, logistical, environmental. It is substantiated, that the project approach in the management of craft enterprises is an important tool for ensuring efficiency, flexibility and adaptability in conditions of high competition and market instability. This approach allows: to clearly define the goals and development strategy of the enterprise; to optimize the use of resources; to reduce risks and ensure control over



the implementation of tasks; to attract investments and expand opportunities for scaling the business. An algorithm for starting a craft business based on the application of a project approach is proposed. The development of craft production in Ukraine has significant potential, but requires comprehensive support from the state, in particular: simplifying the regulatory framework and certification procedures; creating special financing programs and grants for craft producers; promoting the development of infrastructure and logistics; supporting marketing initiatives and popularizing craft products. The article contains a formulation of the problem, a review of literary sources on the subject of the study, results of the investigation and conclusions.

Keywords: management, project activity, project approach, craft production, craft business.





Paper Code: OCMT'2025 0040

Analytics of Key Trends in the Development of the Sharing Economy in the Context of Sustainable Development

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Abstract. The relevance of studying the development of the sharing economy is determined by its increasing influence on global economic processes, particularly in shaping consumer behavior and business models. This necessitates a systematic scientific analysis of the new economic paradigms and mechanisms of market interaction. The sharing economy exhibits sustainable growth, contributing to the creation of new employment opportunities, fostering innovation, and transforming traditional business models. Given its rapid expansion and potential for further scalability, this sector is poised to become a fundamental driver of global economic transformation, facilitating sustainable development and the efficient allocation of resources on a global scale. The accelerated growth of the sharing economy is largely driven by shifting attitudes toward ownership. Economic instability, the high costs associated with ownership, and the intensification of urbanization have prompted consumers to prioritize access over possession, thus reinforcing the trend of “use instead of own”. This shift underscores a transition from ownership as a status symbol to access as a means of efficient consumption. The proliferation of digital platforms and technological advancements has created optimal conditions for the large-scale adoption of this economic model. Consumers increasingly value flexibility, accessibility, and sustainability, which further stimulate the growth of the global sharing economy market. This study provides a quantitative and structural analysis of the global sharing economy sector, utilizing key indices such as the Sharing Economy Index, STOXX Global Sharing Economy Index, and MSCI ACWI IMI Sharing Economy Index. The application of these metrics facilitates an objective assessment of the global development level of the sharing economy. Furthermore, the research investigates leading sharing economy enterprises based on their operational scale and market capitalization, thereby identifying key market players and strategic directions for the further evolution of this economic model.



The study identifies determinants of growth and assesses the impact of the sharing economy on sustainable development and environmental challenges. In addition, the article examines the adaptive potential of the sharing economy in the context of global socio-economic transformations, highlighting its resilience and ability to integrate into evolving economic structures. Particular attention is given to deficiencies in the current regulatory framework, emphasizing the imperative need for a comprehensive regulatory approach. This approach must integrate technological and legal dimensions to ensure the long-term stability and sustainable development of the sharing economy.

Keywords: sharing economy, sharing platforms, sharing economy market, sustainable development, analytics, digitalization, digital platforms.





Paper Code: OCMT'2025 0039

The Use of Artificial Intelligence in Predicting Criminal Behaviour

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Abstract. The integration of artificial intelligence (AI) in crime prediction offers transformative opportunities to enhance precision and efficiency, leveraging advanced data analytics to identify patterns and forecast criminal behaviour. While AI's rapid processing and predictive capabilities surpass traditional methods, its adoption raises concerns about algorithmic bias, ethical dilemmas, and data privacy. This study examines the application of AI in predicting criminal behaviour in Nigeria and India, emphasizing the challenges posed by sociocultural, infrastructural, and legal complexities. By exploring AI's comparative strengths in trend analysis versus individual behaviour prediction, the findings underscore the need for transparent, fair, and contextually adaptive systems. The research highlights the importance of integrating human judgment with AI-driven insights, fostering collaboration between policymakers, law enforcement, and technology developers to ensure ethical and effective crime prevention strategies.

Keywords: Artificial intelligence, crime prediction, algorithmic bias, ethical concerns, data privacy, predictive analytics, law enforcement, Nigeria, India, sociocultural context.



Paper Code: OCMT'2025 0037

Examining Middle Easter's E-Diplomatic Narratives on Twitter: A Social Network Analysis

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Abstract. This study analyzes the Saudi Ministry of Foreign Affairs' use of Twitter for public diplomacy through Social Network Analysis (SNA). The sample consists of tweets from the Ministry's official Twitter account (@KSAMOFA), collected on February 9, 2025, using NodeXL Pro. The data includes 11,396 nodes, covering tweets from December 25, 2024, to February 9, 2025. The findings reveal that the Ministry's communication is formal and one-way, focusing on issues such as the Palestinian cause and Saudi foreign policy, with religious and cultural values shaping the discourse. SNA identifies a fragmented network with low reciprocal engagement, indicating that the platform primarily serves as a broadcasting tool rather than fostering two-way communication. This aligns with Habermas' theory of the public sphere, highlighting the limitations of Twitter as a space for democratic discourse. The study provides insights into Saudi Arabia's digital diplomatic strategies and areas for improving public engagement.

Keywords: Public Diplomacy, Social Network Analysis, Twitter, Public Sphere, Digital Communication, Foreign Policy, Social Media Engagement.



Paper Code: OCMT'2025_0036

Exploring Student Perspectives on ChatGPT: Knowledge, Attitudes, Concerns, and Usage Patterns at Oman College of Management and Technology

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Abstract. This study explores the prevalence and perspectives of ChatGPT usage among students at Oman College of Management and Technology (OCMT), encompassing their knowledge, attitudes, concerns, perceived ethics, and usage patterns. A total of 362 students from various academic programs participated in the survey, conducted via Microsoft Forms. The findings reveal a high level of awareness and familiarity with ChatGPT, with 85.6% of respondents having heard about it and 75.7% understanding its workings. However, significant concerns were identified, including potential negative impacts on educational goals (mean = 3.87, SD = 0.91) and creative writing skills (mean = 3.45, SD = 0.88). Ethical apprehensions were also prominent, with 52.7% of students recognizing ethical or legal considerations and 69.1% expressing comfort in interacting with ChatGPT. Despite these concerns, the utility of ChatGPT in enhancing productivity and aiding academic tasks is acknowledged, evidenced by high mean scores for assistance in drafting essays (mean = 3.90, SD = 0.85) and resolving academic doubts (mean = 3.83, SD = 0.83). This study underscores the need for ethical guidelines and controlled integration of ChatGPT into educational practices to balance its benefits with the maintenance of academic integrity and critical thinking skills.

Keywords: ChatGPT, student perspectives, knowledge and attitudes, ethical concerns, educational technology

Paper Code: OCMT'2025 0035

Integrating Sustainable Nutrition Practices into Business Strategies: A Collaborative Approach Between Management and Nutrition Education for a Greener Future

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Abstract. Business and nutritional sustainability has been one of the major fields of research, emphasizing the need for cross-disciplinary collaboration between management practitioners and nutrition educators. The article analyzes business approaches to the integration of sustainable nutrition, emphasizing fundamental challenges, best practices, and policy recommendations. Through a qualitative systematic review, supported by PRISMA, and focus groups (n=20) coded in NVivo, the study investigates obstacles to and possibilities for sustainable nutrition uptake. Findings determine cost, regulatory gaps, and lack of awareness as inhibiting uptake, and environmentally friendly sourcing, corporate social responsibility, and cross-sector collaboration as viable solutions. The findings have practical use for business executives, educators, and policymakers with implications for integrating sustainability into business practice, curriculum development, and policy formation. Limitations include a small sample size and regional bias, indicating the need for larger cross-cultural studies. Future studies need to include quantitative analysis to establish impact and longitudinal studies to establish behavioral change and policy impact over time. Closing these knowledge gaps will enhance the design of sustainable business models, locking in long-term environmental and economic benefits.

Keywords: Sustainable Nutrition, Business Sustainability, Interdisciplinary Collaboration, Corporate Social Responsibility, Policy Recommendations, Curriculum Development, Cross-Sector Collaboration



Paper Code: OCMT'2025 0034

Building Smart Cities in Oman: Technology-Driven Traffic Solutions

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Abstract. This study examines the potential of smart city technologies to address traffic management issues, with a focus on identifying current practices, evaluating public awareness of available technologies, and providing actionable recommendations for policymakers and urban planners to support the shift to smarter urban environments. One of the main issues in Omani cities is traffic congestion, which lowers both urban mobility and economic output. The key findings indicate that Oman's traffic congestion is mostly caused by inadequate infrastructure, a lack of utilization of intelligent traffic technologies, and rapid urbanization. Smart city technology such as IoT-enabled traffic signals, AI-based route optimization, and integrated traffic monitoring systems are still not well known. However, locals actively support the adoption of these substitutes. For traditional cities to successfully transition into smart cities, respondents identified budgetary constraints, societal acceptance, and infrastructure readiness as barriers that must be addressed. The study concludes with helpful recommendations for lawmakers and urban planners, emphasizing the importance of strategic investments in smart technology, public education campaigns aimed at increasing awareness, and the development of robust legislative frameworks aimed at enhancing urban mobility and reducing traffic.

Keywords: Traffic, Smart City, Urban, Signals.



Paper Code: OCMT'2025_0031

Impact of Robotics in Enhancing Oman's Agricultural Sector

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Abstract. This paper thus explores how robotics might assist Oman's agriculture address such concerns as degraded soil, water rationing, and in-creasing food requirements. Robotics can certainly assist in raising the levels of production and amount of resources in areas where traditional solutions offer no results. The paper also targets to determine the impact that can be made by technologies such as automated irrigation and precision agriculture to Oman farming using data from farmers, officials, and other stakeholders. The theory prescribes that use of robotics means more production, less expenses, and more consideration for the environment. The results will provide directions on how robotic systems can best be incorporated, enhance the food supply, and complement Oman's visions for sustainability and economic robustness.

Keywords: Agriculture, Irrigation, Precision, Robotics.



Paper Code: OCMT'2025 0030

The Impact of Cloud Computing on Data Security in Small and Medium-sized Enterprises

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Abstract. This research aims to examine the effects of cloud computing on the security of data in Omani SMEs by exploring major security concerns, analyzing CSPs' contributions, reviewing measures already in place, and offering recommendations for enhanced security. This re-search employs quantitative questionnaires to obtain quantitative data on SMEs and interviews with managers, IT professionals, and CSPs to obtain qualitative data. Conclusions highlight the fact that while Oman SMEs are moving to the cloud as a part of the broader Oman information technology plan, substantial information security risks remain, with few SMEs having sufficient protection and little understanding of legal requirements. CSPs undoubtedly inhabit an important position but they are viewed as somewhat inadequate to mitigate risks threatening SMEs. Therefore, based on the study's findings, it can be recommended that there is a need to increase the cooperation between SMEs and CSPs, better training, and adequate security measures to guarantee adequate data protection. From these findings, actionable recommendations are derived to assist SMEs in dealing with the diffused issues of cloud security as well as enable them to harness the benefits of cloud solutions appropriately.

Keywords: Component, SMEs, Cloud Computing, Data Security



Paper Code: OCMT'2025_0028

Integrating Artificial Intelligence and E-Learning in Education: Examining Their Impact on Student Competency and Performance in Oman

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Abstract. The research explores how Artificial Intelligence (AI), and E-learning (EL) affect student competency (SC) and academic performance (SP) in the educational system of Oman. The study used SEM-PLS for analysis after collecting data through surveys from 277 participants. The study reveals AI as a significant multiplier of student competency by achieving a statistical significance of $\beta = 0.226$ ($p = 0.000$, $t = 9.865$). The effectiveness of student competency improvement on student performance assessment remains small ($\beta = 0.010$, $p = 0.047$, $t = 1.680$). The direct relationship between AI and student performance is greater ($\beta = 0.209$, $p = 0.000$, $t = 7.211$) than its intermediate association. SP receives the greatest impact from E-learning according to results ($\beta = 0.293$, $p = 0.000$, $t = 10.787$). The combination of AI technology with structured methods for competency development provides optimum learning results.

Keywords: Artificial Intelligence (AI) in Education, E-Learning Adoption, Student Competency Development, Academic Performance Optimization



Paper Code: OCMT'2025_0027

MathSphere: Integrating AI in Mathematics Education – A Multistage Model for Primary and Secondary Learners

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Abstract. This research presents a comprehensive approach to integrating AI into mathematics education for primary and secondary schools. The proposed framework revolves around a joint development initiative and research program, focusing on two primary areas: automation models and course outcomes. The objective is to enhance students' math skills, broaden the range of mathematical instruction, and deepen its substance, while leveraging AI to provide personalized, adaptable, and engaging learning experiences. Furthermore, this initiative aims to align with the National Education Policy's emphasis on promoting experiential learning, critical thinking, and problem-solving skills, thereby empowering students to become active participants in the learning process and preparing them for success in an increasingly complex and interconnected world.

Keywords: Mathematics, Primary Education, Secondary Education, AI-based mathematics education



Paper Code: OCMT'2025_0024

The Potential of Informal Recycling: Combating Electronic Waste

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Abstract. The driver behind electronic waste exponential growth is not limited to the expanding global economy in information and communications technologies (ICTs)- expected to reach United States Dollars (USD) 13,092.49 billion by the year 2026, population growth, ever-increasing demand for electrical and electronic products, planned obsolescence by the manufacturers, and short life spans of the equipment. This review's purpose is threefold: First, explore existing e-waste recycling processes. Secondly, identify potential health and environmental issues in recycling of e-waste. Lastly, motivate formalization of informal re-cycling. The findings show unofficial recycling exposes employees and nearby communities to health and environmental hazards compared to formal recycling. The informal recycling should be recognized and collaborate with formal recycling for better valuable metals recovery yields, health and the environment. Currently informal recycling accounts more than formal in terms of e-waste volumes collected yet lower recovery yields due to recovery processes involved. The study recommended regulation of informal recycling and cooperation between the two streams of e-waste recycling for a sustainable environment and the well-being of workers and surrounding communities.

Keywords: Electronic Waste, Environment, Health Risks, Recycling.



Paper Code: OCMT'2025_0023

Investigating Digital Marketing Optimization in Enhancing Company Performance

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Abstract. This paper explores the complexities of digital marketing optimization factors influencing the performance of Fast-Moving Consumer Goods firms in Lebanon through semi-structured interviews with fifteen specialists. This paper provides valuable information unique to this industry, which advances the strategic discourse on digital marketing. It emphasizes how crucial it is to optimize digital marketing strategically, providing user experience and engagement priority to maximize results.

Keywords: Digital Marketing; Company Performance; Fast-Moving Consumer Goods



Paper Code: OCMT'2025_0022

Transforming Customer Service with Natural Language Processing: Case Studies from Amazon and Netflix

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Abstract. This paper investigates the transformative role of Natural Language Processing (NLP) in modern customer service, with a particular focus on its application in leading companies like Amazon and Netflix. The study highlights how NLP techniques such as sentiment analysis, recommendation algorithms, and emotion detection are pivotal in enhancing customer engagement, satisfaction, and personalization. Through case studies of Amazon and Netflix, we explore how these organizations leverage NLP to optimize product recommendations, streamline customer support, and offer hyper-personalized user experiences. In addition to the case studies, this paper provides an extensive literature review of recent advancements in NLP, showcasing the evolving applications and methodologies in customer service settings. By integrating recent works on NLP models, deep learning, and reinforcement learning, we demonstrate how NLP is reshaping customer interactions and driving business success. The findings underscore the scalability and impact of NLP in processing both explicit and implicit customer feedback, enabling businesses to offer tailored solutions. This research emphasizes that NLP is a critical tool in the evolution of customer service, offering new opportunities to engage with customers more efficiently and empathetically.

Keywords: Natural Language Processing, Customer Service Automation, Customer Engagement, Amazon, Netflix



Paper Code: OCMT'2025 0019

Modified Proof of Reputation with Dynamic Scoring and Advanced Optimizations for Enhancing Blockchain Efficiency

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Abstract. Blockchain technology has revolutionized decentralized systems by offering transparency, security, and immutability. Conversely, customary consensus contrivances like Proof of Work (PoW) and Proof of Stake (PoS) face challenges related to scalability, energy consumption, and transaction throughput. This research intends a modified Proof of Reputation (mPoR) consensus mechanism designed to enhance efficiency through innovative optimizations and integrations. The core of the modified PoR mechanism lies in dynamic reputation scoring and advanced consensus protocol optimizations. Tiered reward systems incentivize participants with higher reputation scores, encouraging continued network engagement and reliability. Adaptive security measures, such as dynamic penalty systems for malicious behavior, safeguard the integrity of consensus outcomes and mitigate potential attacks. Integration with machine learning based Reputation Dynamics Optimization (ReDO) further enhances efficiency by de-centralizing consensus activities and predicting network congestion. These innovations not only streamline blockchain operations but also pave the way for broader adoption in applications requiring scalable, secure, and high-performance decentralized systems. The proposed mechanisms represent a significant advancement in blockchain research, addressing critical efficiency challenges while maintaining the core principles of decentralization and trust. The findings underscore its potential to propel blockchain technology into new domains, with high efficiency (Throughput, Latency), scalability (Network Size, Transaction Scalability), and security (Sybil Attack Resistance) decentralized systems are paramount.

Keywords: Blockchain Efficiency, Proof of Reputation (PoR), Dynamic Scoring, Consensus Optimization, Machine Learning Integration



Paper Code: OCMT'2025_0018

Digital Tools for Green Innovation: Enhancing Sustainability in Corporate Information System

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Abstract. Many companies today are looking for ways to reduce their carbon footprint and become more responsibly. Over the last few years, a handful of green innovation tools—including Digital Twins, the Internet of Things (IoT), Artificial Intelligence (AI), and Blockchain—have become important parts of Information Systems (IS) for promoting sustainability. Studies show these tools lower energy use, reduce waste, and improve efficiency. This paper brings together key ideas from recent studies to show how these technologies help businesses lower costs, follow environmental regulations, and strengthen their public image. For Sure, the challenges there like cost, experts, and complicated legal steps. But once organizations deal with these issues, the rewards can be quite large, such as better resource use, deeper trust from stakeholders, and a stronger competitive edge. By looking at both success stories and current findings, this paper explains why Digital Twins, IoT, AI, and Blockchain belong in modern IS strategies. In the end, using these tools in not only help the environment it also keeps organizations competitive in a fast-changing world.

Keywords: Green Innovation Tools, Sustainability, Information Systems.



Paper Code: OCMT'2025 0017

Challenges and Opportunities in Implementing Business Process Automation for SMEs: A System-atic Review and Qualitative Investigation

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Abstract. This study explores the challenges and opportunities that come with the adoption of BPA in SMEs. The research is based on an integrative systematic review using the PRISMA framework to synthesize existing literature and gathers qualitative insights through focus group interviews with 25 purposively sampled participants, including SME owners, managers, and automation consultants. Data were analysed using NVivo to identify key themes related to BPA adoption. These findings showed that financial constraints, lack of technical know-how, and aversion to change are some major barriers, while efficiency gains, scalability, and competitive advantage remain key enablers. Other important facilitators are government incentives and cloud-based automation solutions. From here, the study went on to proffer practical suggestions: a staged approach to automating, employee training programs, and policy intervention as support in overcoming these impediments to the implementation of BPA for SMEs. The results contribute to the growing discussion of digital transformation, while at the same time providing practical ways in which SMEs can pursue automation for their processes.

Keywords: Business process automation, SMEs, digital transformation, automation challenges, automation opportunities, technology adoption, organizational efficiency, qualitative research, systematic review, NVivo analysis, PRISMA framework.



Paper Code: OCMT'2025 0016

Assessing Midjourney performance: A face-reader study on emotional advertising images

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Abstract. Creating human faces that express emotions is something that graphic designers have done for years. When viewing faces that express positive or negative emotions, observers of these faces try to react emotionally due to the fact that certain neural patterns are related to be emphatic, so that he/she tries to produce an emotion related to the one they are seeing. By using AI, designers are creating human expressions, but the accuracy of the emotion is not necessarily the expected one, because of factors like de intensity of the emotion, the plane of the image, and the prompts arranged to create the intended images. To determine if the same expected emotion produces the same effect in observers, 5 human images created with Midjourney were tested with Face-Reader software designed by Noldus (v. 9.1). Prompts were altered so as to create different versions of the intended image, modifying instructions concerning specificities of the emotional expressions. Besides, the five images were exposed to 17 observers using the same face-reading software, in order to record their emotional reactions while viewing the images. The results allow to conclude that human emotional expressions that are intended to be created by means of prompts given to the Ai tool Midjourney (v. 5.2), where one of the key-words is the expected emotional expression, cannot be totally accurate, up to a point that different emotions are recognized. In terms of emotions elicited by the images created by Midjourney, observers react in different ways, where it is recognizable how the human faces conceived this way produce emotions of different kinds of emotional valence.

Keywords: Human emotions, Artificial Intelligence, Midjourney, Face-Reading, Advertising design.

Paper Code: OCMT'2025 0015

Unlocking Digital Potential: An Exploratory Study on Digital Marketing for Homestays and Community-Based Management

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Abstract. This study is important because of the important role of community-based homestays in local tourism development and the great potential of digital marketing in increasing the visibility and desirability of homestays. The location of Sawarna Tourism Village is relevant because of the rapid development of the tourism industry in the area and the ex-istence of homestays run by the local community. The main objective of this study is to explore and analyze the application of digital marketing in the management of community-based homestays in Sawarna Tourism Village. With information and communication technology development, digital marketing has become an important strategy in promoting homestay services. Specifically, this study aims to analyze the positive impacts caused by the application of digital marketing on the promotion and management of homestays. Identify the challenges and obstacles faced by homestay managers in implementing digital marketing. Formu-late effective strategies to optimize the benefits of implementing digital marketing in managing community-based homestays. Create a better un-derstanding of the interaction between homestay managers, guests, and the local community in the context of implementing digital marketing.

This study uses a qualitative approach with in-depth interviews with homestay managers and community members to understand the experi-ences and perceptions of homestay managers towards the use of digital marketing tools. The object of this study is the Sawarna tourist village in Lebak Regency. Qualitative research methods are obtained from inter-views and field observations to evaluate the impact of digital homestay marketing tools and community-based homestay management. This study is expected to contribute to the development of sustainable tourism in tourist villages in Indonesia.

Keywords: Homestay, digital marketing, community-based homestay management.



Paper Code: OCMT'2025_0011

Exploring the Adopting, Impact and Challenges of Smart Hotel Technologies on Guest Satisfaction

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Abstract. This research investigates smart hotel technologies with reference to adoption, effects, and challenges concerning guest satisfaction. A qualitative approach was employed. The research was a hybrid systematic review, following PRISMA guidelines and community discussions. Twenty participants from the hospitality sector shared their views. NVivo software was used for thematic analysis of focus group data. Findings have shown that IoT, AI, and smart rooms enhance personalization and convenience. However, major barriers include high costs, complexities, and data privacy concerns. Therefore, this study shows that smart tech does improve guest experiences but implementation should be cautiously planned and conducted. It offers recommendations such as training programs, scalable investments, and strict data protection. Future studies are indicated within the context of effects and potential cross-cultural differences in guest expectations. Consequently, this study provides applied insight to the field of hospitality and future academia.

Keywords: Smart Hotels, Guest Satisfaction, Hospitality Technologies, Adoption, Challenges.



Paper Code: OCMT'2025_0010

Wise Leadership: A Training Framework for Public Administration in Changing Times

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Abstract. This chapter develops evidence-based recommendations to enhance the training of Public Administration and better the competence of the workforce for emerging challenges. This chapter revisits Traditional PA-criticized for its rigidity, New PA-focused on efficiency from the private sector, and New Public Governance-focused on stakeholder engagement. The proposed framework of Wise Leadership un-derpinned by Intellectual Shrewdness, Spurring Action, Moral Conduct, and Cultivat-ing Humility will be delivered via workshops, e-learning, experience-based learning, and ongoing assessments. This quantitative approach research study will seek to eval-uate PA education and training, mainly in the areas of global trends and gaps, with a keen interest in the Middle East. It strongly stresses that curriculum development, in the amalgamation of basic theories with appropriate, culturally adapted practices, is very much coupled with the process of leadership development. But the research does suggest the confluence of strategic foresight, along with empathy for political transfor-mations and social and economic change underway in the Arab region. By revision of leadership programs to undertaking of policy reforms, such programs may develop ca-pabilities to strengthen the potential of good governance coupled with organizational effectiveness. Future research may discuss how principles of wise leadership contribute to sustainable development and stability in the Middle East.

Keywords: Public Administration, Training, Wise Leadership Framework, Leadership Public Governance.



Paper Code: OCMT'2025 0009

Management Accounting Innovations and Corporate Performance

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Abstract. The main purpose of this paper is to investigate the relationships between management accounting innovations, corporate sustainability, and National In-country Value (ICV) certification in the United Arab Emirates. This study uses a quantitative survey instrument for data collection. The findings in this paper highlight a significant positive relationship between management accounting innovations such as activity-based costing (ABC) and Balanced Scorecard (BS) and corporate sustainability. ICV acts as a vital catalyst for management accounting innovation. This paper helps understand the importance of management accounting innovation, corporate sustainability, and ICV for policy improvements.

Keywords: Management Accounting; Innovations, Corporate Performance
JEL codes - M40; M41; M48



Paper Code: OCMT'2025 0008

Recommender Systems: Combating Electronic Waste Problem

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Abstract. One of the most urgent global challenges in the twenty-first century is electronic garbage (e-waste). It is considered a fast-growing type of solid waste. Some of the reasons that make e-waste volume increase exponentially are the demand for the products, the short life span, and planned obsolescence. One of the main problems with e-waste is its toxicity. Recommender systems (RS) have the potential to help reduce e-waste and encourage more sustainable practices as e-waste issues increase and the drive for sustainable consumption grows. Given its potential to help with several over-choice issues, the use of RS cannot be emphasized enough. RS comes in a wide variety of forms with various approaches and ideas. The study is motivated by the growth rate and the harmful impact of e-waste on the environment and human health. This review aims to explore the challenges and opportunities to utilize recommender systems in combating the problem of electronic waste. The findings suggest that RS can be used to raise awareness about the dangers of electronic waste on the environment and human health. The RS can suggest nearby regulated recycling centers and give information about the e-waste types accepted. However, RS based on algorithms can induce discrimination. Algorithms frequently favour revenue above sustainability. This study suggests that people need to be educated on RS benefits on the environment. The study recommends more research on how RS can be used effectively and efficiently in combating the problem of e-waste.

Keywords: Awareness, Electronic Waste, Recommender System.



Paper Code: OCMT'2025 0006

AGRICHAIN PREVENTURE: INTEGRATION OF BLOCKCHAIN TECHNOLOGY WITH PRECISION FARMING TO AVOID WASTAGE IN COMMUNITY-SUPPORTED AGRICULTURE (CSA) NETWORK

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Abstract. This project suggests a holistic method of transforming agricultural techniques in the rural area through the use of advanced technologies such as Block-chain for the traceability of the products, AI for crop predictions and IoT for monitoring purposes. The core purpose of the integration of Patta number system is to provide as a special identification number of lands owned by farmers and assist them in accessing tailored government schemes and support programs enabling the farmers to manage resources effectively and increase productivity. The project also uses AI technology in predicting the amount of vegetables required in villages at different times, hence effective planning of farm activities to avoid over farming or under farming. Also, AI relies on historical data and environmental conditions to determine alternative crops for farming for the diversification of crops and improves the agriculture soil. With the introduction of AI driven community farming networks, farmers can work together and pool their resources increasing productivity. In addition, AI also enables agroforestry planning that integrates trees and crops in a sustainable manner to improve crop biodiversity and soil health, while genome editing crops to predict their growth is also supporting sustainable agricultural practices

Keywords: BLOCKCHAIN ,PRECISION FARMING

Paper Code: OCMT'2025_0005

Cross-Border Cybersecurity Issues: Challenges in Se-curing Transactions in Indonesia's Globalized Financial Network

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Abstract. Cross-border transactions are increasingly common in growing economies such as Indonesia. Indonesia is an emerging economy where cross-border transactions are rising as financial web house increasingly globalized make cybersecurity are increasingly complicated. This case study studies the challenges Indonesia is facing in securing its financial sector based on the problems that stem from international cyberthreats attacking financial transactions while con-centrating on the loopholes in Indonesia's digital infrastructure. Using secondary data from financial audits regulatory analyses and international cybersecurity re-ports, the study unveils critical matters such as a lack of regulatory harmoniza-tion on international cybersecurity measures, inability to efficiently enforce ex-isting restrictions and the fast-evolving nature of a cyberthreat landscape that out-paces defensive measures currently in place. Indonesia has made progress in dis-tributing the results of analysis international cyber security standards by observ-ing the findings of analytical data with the discovery of some largescale gaps in the system cross-border data sharing. It shows how threats come from ransom-ware phishing and data breaches that target financial networks also are being driven by the advances of technology. The results highlight how urgently Indo-nesia needs to modernize its cybersecurity infrastructure, particularly by invest-ing in secure encryption technologies to enable multilateral cooperation and ca-pacity building. These cross-border cyber issues illustrate how vital these issues are to providing the security and integrity needed for Indonesia's financial net-works to support the economy in a globalizing world — the central insight of the study.

Keywords: Indonesian financial networks, Cybersecurity, Cross-border transac-tions.

Paper Code: OCMT'2025 0003

Explore the Uniqueness of Bayah Dome Geopark: A Path Towards Sustainable Tourism and Conservation

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Abstract. This research is necessary because it combines two relevant concepts in developing the Bayah Geopark, one of the natural tourism destinations offering extraordinary geo-logical wealth, including unique geological dome formations. This study explores the uniqueness and potential of geological domes in the Bayah Geopark from the perspective of nature conservation and sustainable tourism development. The research methods include field surveys, geological data collection, and qualitative analysis. Research in the Bayah Geopark aims to investigate the tourism potential related to geological domes, including developing tourist routes, ecotourism activities, and improving supporting facilities to optimize economic benefits for the local community. The urgency of the research can be explained in the following terms: This research is significant in ensuring the environment of Bayah Dome Geopark. Because this area has very high geological diversity, biodiversity, and cultural diversity, environmental conservation must be carried out sustainably and oriented towards conservation. Thus, this research can help increase public awareness of the importance of ecological conservation and sustainable development. This research also promotes sustainable tourism by introducing responsible practices, such as waste management, energy conservation, and local community participation, to create continuity between tourism growth, environmental conservation, and community welfare.

Keywords: Bayah Dome Geopark, Uniqueness, Sustainable Tourism



Paper Code: OCMT'2025_0002

Green Technology Entrepreneurship in Africa

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Abstract. Entrepreneurship itself is not new to the African regions. However, green technology entrepreneurship (GTE) is a new form of entrepreneurship activity in the continent. The importance of GTE cannot be ignored for development and competitive advantage. This study aims to explore the current level of awareness about the benefits of green information technology practices for entrepreneurship. The study focuses on disposing of electronic waste generated during technology entrepreneurship transactions. This work is driven by the critical need to safeguard our deteriorating environment from the pressing challenges of the 21st century, including climate change and electronic waste. Methodology: the study uses purposive sampling to select the participants and semi-structured interviews to collect the data. Content analysis was used to analyse the data. The findings suggest that almost all of the participants are aware of the advantages of green information technology in their business transactions though they do not practice it. The factors that inhibit participants from practicing GIT are lack of funding and support, competitive advantage, and awareness to a lesser extent. The paper is not intended to criticize technology operations in GTE but to encourage proper management practices of electronic waste-generating operations. This paper suggests that awareness or education is the first step towards realizing the importance of proper electronic waste management. Neglect of proper management of electronic waste generated during technology entrepreneurship transactions has damaging effects on health and the environment. This research indicates the need for further investigations into methods for promoting and facilitating green technology entrepreneurship across Africa.

Keywords: Electronic Waste, Green Information Technology, Green Entrepreneurship, Health Risks, Environment, Africa.



Paper Code: OCMT'2025_0001

Fostering Sustainable Development: Renewable Energy and Social Entrepreneurship in the Middle East

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Abstract. This paper focusses at how social entrepreneurship and renewable energy could solve Middle Eastern social, envi-ronmental, and financial challenges. Challenges include political unrest, poor government, and cultural opposition that impede the best use of the Middle East's significant solar and wind resources. Driven by renewable energy projects, this paper inves-tigates the possibilities of social entrepreneurship to support sustainable development, economic diversification, and commu-nity empowerment. It also underlines supporting aspects, evaluates issues, and suggests laws to encourage regional social entrepreneurship and the development of renewable energy sources.

Keywords: Renewable Energy, Social Entrepreneurship, Middle East, Sustainable Development, Economic Diversification.