



AFRICA NAZARENE
UNIVERSITY

ABSTRACT BOOK

ANU HYBRID CONFERENCE 2024

THEME:

THEME: CREATING THE AFRICA WE NEED:
THE ROLE OF RESEARCH AND INNOVATION
IN ADVANCING AFRICA THROUGH
SUSTAINABLE DEVELOPMENT

30 TH – 31 ST OCTOBER 2024

EDITORIAL BOARD (BOOK OF ABSTRACTS)

1. Prof. Orpha K. Ongiti: Dean of Postgraduate Studies and Director, Institute of Research
2. Dr. Mwananje Mwamuye: Conference Chair, ANU Research Conference 2024
3. Dr. Beatrice Muthanga: The University Librarian
4. Ms. Sheila Jumba; Office of the Deputy Vice Chancellor, Academic, & Student Affairs

EDITORIAL TEAM (ABSTRACTS)

1. Dr. Rebecca Wambua
2. Mr. John Henry

CONFERENCE ORGANIZING COMMITTEE

1. Dr. Mwananje Mwamuye
2. Dr. Emmy Roche
3. Dr. Rebecca Wambua
4. Prof. Elijah Siringi
5. Dr. Beatrice Muthaga
6. Mr. Morris Mutwiri
7. Mr. George Athoye
8. Dr. Sharon Jones
9. Dr. Kimani Gichuhi
10. Dr. Patrick Kamau
11. Ms. Imelda Ndomo

CONFERENCE SECRETARIAT

1. Mrs. Diana Martin
2. Mr. John Henry

PREFACE

It is with great pleasure and a deep sense of purpose that we present this Book of Abstracts for the Africa Nazarene University HYBRID Conference 2024, themed “Creating the Africa We Need: The Role of Research and Innovation in Advancing Africa Through Sustainable Development.” This publication is more than a collection of academic insights. It is a bold statement of intent from scholars, researchers, innovators, and practitioners committed to Africa’s transformative journey.

As Africa confronts both enduring and emerging challenges, it is clear that sustainable development will be driven not only by political will and economic investment but also by the depth of ideas generated through collaborative research and innovation. This year’s conference brought together a diverse spectrum of thought leadership, reflecting disciplines ranging from management, science, law, health, ICT, media, education, and agriculture to religion and community development. Each abstract within these pages contributes to the critical discourse on how Africa can harness its knowledge systems, indigenous wisdom, and technological capacities for sustainable progress.

The hybrid format of this conference has allowed participation across geographical boundaries, reflecting the borderless nature of both the problems we face and the solutions we must seek. The presenters represented here share a common vision: to challenge the status quo and create actionable pathways for an Africa that is just, inclusive, innovative, and sustainable. We commend the dedication of the Conference Organizing Committee led by the Chair, Dr. Mwananje Mwamuye, the Secretariat, the Directorate of the Institute of Research, headed by Prof. Orpha Ongiti (also the Dean of the School of Postgraduate Programs), the Editorial Team, and all contributors for making this scholarly dialogue a reality. We hope that the ideas curated in this book will not only inspire academic engagement but will also inform policy, influence practice, and ignite further inquiry toward the Africa we all envision. Let this volume serve as a lasting testament to the role of research and innovation in shaping a better future—for Africa and through Africa.

By:

Dr. Simon Obwatho

Interim Deputy Vice Chancellor of Academics, Research and Student Affairs

FOREWARD

We are excited to present to you the Africa Nazarene University Research Conference (ANUREC 2024) Book of Abstracts, themed “Creating the Africa We Need: The Role of Research and Innovation in Advancing Africa through Sustainable Development.”

This collection of abstracts represents the diverse and impactful research contributions from scholars and practitioners who are committed to shaping Africa’s future through knowledge, innovation, and collaboration. The breadth of topics covered reflects the pressing challenges and opportunities within our continent, spanning fields including climate resilience, health and nutrition, governance, digital transformation, and sustainable development.

On behalf of the organising committee, I extend my sincere appreciation to all the authors for their valuable contributions, and the reviewers for their diligence in ensuring academic rigor, and the conference participants whose involvement made this conference a success.

It is our hope that the discussions and insights shared during this conference will spark meaningful collaborations and drive impactful change for a sustainable and prosperous Africa.

Thank you for being part of this journey.

By

Dr. Mwananje M. Mwamuye, PhD

ANUREC 2024 Conference Chair

Contents

Page

Editorial Board (Book Of Abstracts)	2
Editorial Team (Abstracts)	2
Conference Organizing Committee	2
Conference Secretariat	2
Preface	3
Forward	4
Management, Business And Innovation	7
Effect of Ground Handling Practices on Aviation Safety Performance in Kenya	7
Enhancing E-Commerce in Africa Through Data-Driven Decisions and Government Initiatives	8
Earnings Quality and Firm Valuation: Evidence of Non-Financial Firms Listed in the Nairobi Securities Exchange in Kenya.	8
Resources as a Driver of Innovation of Insurance Companies in Kenya	9
Digital Horizons: Unlocking Africa's Emerging Markets and Entrepreneurial Potential Through Research and Innovation.	9
Digital Transformation In Media And Journalism	10
Editorial Cartoons in the Digital Era: A Visual Analysis of Gen Z's Demonstration Against the Finance Bill 2024 in Kenya	10
Digital Transformations in Journalism Training in Africa: A Systematic Literature Review	11
Print Media Coverage of Menopause in Kenya: A Content Analysis of the Daily Nation and The Standard Newspapers	11
Transformative Digital Innovation for Rural Empowerment and Urban Inclusivity in Africa.	12
Beyond Likes and Shares: Leveraging Social Media Creativity for Destination Branding and Economic Growth	12
Science And Environment	13
Integrating Predictive Technologies for Early Warning and Climate Change Adaptation and Mitigation in Arid and Semi-Arid Areas of Kenya	13
Ocean Degradation and Its Effects on Coastal Communities: Delving into the World of Seagrass, Coral Reefs, and Mangroves	13
Africa Tour - An Integrated Smart Tourism and Conservation Platform	14
Transformative Applications of Quantum Computing in Cryptography and Material Science.	14
Exploring Quantum Tunnelling Effects in Ultra-Low Power Nano-Transistors for Next-Generation Electronics	15
Humanities And Social Sciences	15
Emotional Intelligence As A Predictor Of Mental Well-Being Of Undergraduates Of Obafemi Awolowo University, Ile Ife, Nigeria	15
Enhancing Mental Health Monitoring with a Recurrent Neural Network (RNN) with Long Short-Term Memory (LSTM) Units	16
Child Socialization Agents and Juvenile Delinquency: A Case Study of Shimo La Tewa Borstal Institution for Boys, Mombasa County, Kenya	16
Communicative-Language-Teaching Influence on Gender-based Performance of Secondary-School-Students in English Vowels in Northern Cross-River State, Nigeria	17
Influence of Parental Negligence on Students' Academic Performance Among Form Three Students in Secondary Schools in Yatta Sub-County, Machakos County, Kenya	17
Religion And Ethics	18
Grieving Together as a Gesture of Ubuntu amongst the Shona People	18

The Interplay of Spirituality, Ethics, And Environmental Sustainability: Implications for Health Practices and Human Flourishing	19
An Examination of Values Held by Secularised, Lapsed-Christian Young Adults in Nairobi	19
Church and State Relationship for the Development of Africa	20
Legal, Culture & Governance	20
A sustainable Accountability Case: Generation Z for The Kenya We Want.	20
Transformative Impact of AI-Driven Communication on Youth Engagement and Governance in Kenya	21
Health, Nutrition & Agriculture	21
Integrating Indigenous Knowledge Systems Into Modern Agricultural Practices For Climate Resilience: A Case Of South Eastern Kenya	21
Visual Threatening Diabetic Retinopathy Detection and Severity Grading Using Ensemble Learning and HBA Attention Mechanism	22
Climate Resilience in Health, Nutrition and Agriculture: Integrating Strategies for Adaptation and Mitigation	22
The Role of Technology in Enhancing Local Community Resilience in Agriculture: A Case Study of Precision Farming in Selected Best Practices in the Coastal Region of Kenya	23
Characterization of Physicochemical and Functional Properties of Selected Irish Potato Varieties Developed through Gamma Irradiation	23
Education And Technology Integration	24
Harnessing the Opportunities Presented by Artificial Intelligence in Education to Enhance STEM Education in Higher Education	24
U2u Knowledge-Based Recommender Model Using Deep Learning	24
Digital Technology in Classroom: A Paradigm Shift in Education	25
Exploring the Transformative Impact of Generative AI on Teaching and Learning in the Digital Age	25
Kenyan Universities' Preparedness in Shaping Africa We Need in 21st Century Skills Development Systems	25
Education for Sustainable Development: Integrating Sustainability into Educational Curricula to Empower Future Leaders	26
Community empowerment for sustainable development	27
Effect of Digital Innovation for Rural Development on Inclusive Urbanization, with a Focus on Gender Markers, Vulnerability Mapping and Affordable Housing in Baringo	27
Community Empowerment for Sustainable Development: Local Voices and Leadership	28
Digital Transformation and Language Preservation and Revitalization: Can Artificial Intelligence (AI) Save Endangered Languages?	28
Inhibitors of Growth of Small-Scale Women Owned Enterprises in Awendo Sub - County, Migori County, Kenya, With Focus on Effect of Knowledge and Skills of Small - Scale Women Entrepreneurs	28
Innovating Africa's Future: Strategic Research and Sustainable Development Initiatives	29
Innovating Africa's Future: Strategic Research and Sustainable Development Initiatives.	30
Cultural and Spiritual Perspectives on Land Use and Agricultural Sustainability in Kenya	31
Transmission Of Indigenous Wisdom Among The Youth In Kibera Through Oral Literature: A Case Of Proverbs	31
Appendices	32
Appendix 1: Conference Program	32

MANAGEMENT, BUSINESS AND INNOVATION

ICT4D- Embedded Social Enterprises Operating Within Resource-Scarce Contexts: The Ethical & Sustainable Development Dilemma?

[Stephen Momanyi¹](#), Michael Ntabo Mabururu¹

¹School of Arts, Social Sciences & Business, Rongo University, Kenya

ABSTRACT

The study contributes to research on social enterprises operating in the field of information and communication technology, with a focus on ethical and sustainable development. The ICT4D-embedded social enterprises aim to promote socio-economic inclusion by building the capacity of marginalized young people for decent and productive employment in the formal labour market. Using a qualitative research design, we studied Kenyan impact sourcing service providers and their beneficiaries to determine how social enterprises fulfil their social mission and contribute to ethical and sustainable development. Data triangulation, involving document analysis, semi-structured interviews, and participant observation, was employed for in-depth analysis as well as to ensure the robustness of empirical findings. The results show how the social enterprises endeavoured to develop the capabilities of the beneficiaries.

This was achieved through two empirically grounded approaches: either “individualized” or “standardized” skills development. The two approaches were closely linked to the capabilities perceived by the beneficiaries. For social enterprises that adopted the “individualized” approach, the focus was on long-term beneficiary learning, whereas the “standardized” approach focused on developing beneficiaries’ skills for immediate job opportunities.

This has implications for both the long-term and short-term benefits of the organizations and their beneficiaries. In retrospect, social enterprises need long-term support to enable marginalized young people to pursue fulfilling careers and contribute to the success of the enterprises and the local economy. Contrary to the principles of ethical and sustainable development, the results highlighted the challenges of inadequate remuneration, social insecurity, and precarious employment faced by the beneficiaries of the “standardized” approach. These findings question the effectiveness of the scalability model, as standardized, low-skilled, and low-paid jobs contradict the idealized self-help status of employment. Thus, the paper makes an empirical contribution to the much-debated ICT4D concept by expanding its deliberations to include ethical and holistic dimensions in the sustainable development of society.

Keywords: Socio economic inclusion, Sustainable development, Socio enterprise

Effect of Ground Handling Practices on Aviation Safety Performance in Kenya

Jones Bor¹, Stephen Njora Njuguna¹

¹Department of Marketing & Logistics Management, Moi University, Eldoret, Kenya

¹Department of Marketing & Logistics Management, Moi University, Eldoret, Kenya

ABSTRACT

Aviation safety is one of the paramount aspects of the aviation industry. Reducing incidents and accidents in the aviation sector has been proven to play a crucial role in promoting the sector’s growth. On the other hand, ground handling practices have been recognized as instrumental in determining the safety of the aviation sector. However, most of the available literature has not focused on Kenya’s context. Hence, this study undertakes a comprehensive examination of the impact of ground handling practices on aviation safety performance in Kenya. Specifically, the paper examined the impact of aircraft apron movement control, passenger handling processes, cargo handling processes, and aircraft fueling procedures on safety performance in the aviation sector. The paper was anchored on configuration theory and risk management theory. The study employed an explanatory research design and targeted 982 employees from five key airlines operating in Kenya, including Kenya Airways, JamboJet, Bluebird, Skyward, and Safari Link.

From this group, 285 respondents were sampled using the Yamane formula. A questionnaire was used to collect primary data, and the data obtained was analyzed quantitatively using descriptive and inferential statistics. The results revealed that aircraft apron movement control had a significant impact on aviation safety performance ($\beta = 0.417$; $P=0.000<0.05$). Furthermore, it was revealed that the passenger handling process has a significant impact on aviation safety performance ($\beta = 0.522$; $P=0.000<0.05$). The cargo handling process was also found to have a significant impact on aviation safety performance ($\beta = 0.398$; $P=0.000<0.05$). The findings further revealed that aircraft fueling procedures had a significant effect on aviation safety performance ($\beta = 0.506$; $P=0.000<0.05$). Based on the findings, it was concluded that ground handling practices played a crucial role in driving safety performance in the aviation sector in Kenya. It was therefore recommended that there is a need for the management of key airlines as well as the Kenya aviation sector to uphold ground handling practices as fundamental determinants of airline safety, which is core to the success of the aviation sector. The findings from this study would be instrumental to the aviation sector practitioners including the airline companies, regulators and investors who would benefit from gaining more knowledge on how to enhance the sector’s safety and strengthen its success.

Keywords: Ground handling, Apron movement control, Aviation safety, Passenger handling, Cargo handling, Aviation sector in Kenya

Enhancing E-Commerce in Africa Through Data-Driven Decisions and Government Initiatives

[Natariana Kilonzo](#)
University of Nairobi

ABSTRACT

The digital transformation in Africa has undergone steady growth, presenting the business realm with a distinct opportunity to leverage the expansion of e-commerce for enhanced market access and consumer outreach. The projected number of e-commerce platform users in the African market is anticipated to rise steadily from 2024 to 2029, with an estimated increase of 57 million users, amounting to a 60 percent growth. Following a decade of consecutive growth, the projections indicate that the figure is set to reach 152.45 million users, making a new peak in 2029. But how will this occur in different economies in Africa considering that they are unique, and consumers tend to be more cautious with real-time reviews? Despite the significant potential, various challenges, including infrastructural shortcomings, skill gaps, regulatory measures, and cybersecurity concerns, inhibit the effective operation of digital platforms, thereby limiting the advantages of e-commerce for local businesses and consumers.

This study aims to assess how enhancing e-commerce in Africa through data-driven decisions and government initiatives can facilitate access to markets and consumer outreach in Africa. This will involve examining the current status of e-commerce, identifying impediments to its expansion, and evaluating strategies to optimise its potential to generate revenue and local capital for development. To achieve this, the study will be guided by different specific objectives, including (a) to analyse the role of data-driven decision-making in enhancing market penetration and consumer outreach in African e-commerce, (b) to assess the challenges encountered by local businesses and consumers in adopting e-commerce, and (c) to evaluate the impact of existing government initiatives on the digital infrastructure and policy frameworks that support e-commerce in Africa.

This study will utilise a mixed-methods research design that integrates quantitative and qualitative approaches. Quantitative data will be obtained through surveys and secondary data analysis of e-commerce trends, market access statistics, and consumer behaviour patterns. Qualitative data

will be acquired through interviews with key stakeholders, such as government officials, business leaders, and industry experts. The study will be supported by the Technology Acceptance Model (TAM), an information system theory positing that perceived ease of use and usefulness are important considerations influencing the adoption of new technologies. By applying TAM, this study will examine how the two primary factors influence the acceptance of and use of e-commerce platforms by

African businesses and consumers, as well as how government initiatives and data-driven decision-making can enhance these perceptions. Therefore, the findings and conclusions drawn from this study will be reliable and trustworthy enough to contribute to the broader discourse on emerging markets and business development in Africa.

Keywords: Digital transformation, E-commerce growth, Market access, Consumer outreach, Data-driven decisions, Government initiatives, Cybersecurity, Infrastructural shortcomings, Local capital, Development, Technology acceptance Model (TAM)

Earnings Quality and Firm Valuation: Evidence of Non-Financial Firms Listed in the Nairobi Securities Exchange in Kenya.

[Edwin Sitienei¹](#), [Dominic Ochoi¹](#), [Linet Kemunto¹](#)
[Steve Lucky Ogwe¹](#)

¹Department of Business and Management,
Pioneer International University, Nairobi Kenya

ABSTRACT

This study primarily seeks to address the perceived effects of earnings quality on the firm value of non-financial firms listed on the Nairobi Securities Exchange. This study will be guided by four specific objectives: earnings predictability, earnings persistence, earnings feedback value, and timeliness, and their effects on firm value. The research is motivated by the general decline in stock returns and the subsequent delisting of some firms from the securities exchange market, leading to a loss of investors' confidence. Therefore, this study aims to investigate how quality financial reporting reflects the economic reality of companies, thereby facilitating investors' decision-making. The study will employ a panel data research design, utilizing longitudinal data from 2010 to 2019. The data will be extracted from the published annual reports of listed firms, as provided by the Capital Market Authority, the Nairobi Securities Exchange, and the company websites. The data will be analyzed using Stata 17 and presented in tables and figures.

The findings of the research will enable regulators, investors, and company management to make informed decisions regarding firm valuation and quality financial reporting practices. Moreover, the results will provide important evidence for understanding the roles of earnings quality and firm value in emerging markets like Kenya.

Keywords: Earnings quality, Earnings predictability, Earnings persistence, Earnings feedback value, Timeliness.

Resources as a Driver of Innovation of Insurance Companies in Kenya

[Beatrice Ombaka](#)
[Karatina University](#)

ABSTRACT

The study investigated the effect of organizational resources on the innovation of insurance companies in Kenya. This study proposes that if the resources owned by a firm are deployed effectively, they can lead to the firm's innovativeness. Despite a growing body of literature on Innovation, explaining why firms in the same industry differ in innovation remains a fundamental question among researchers. Researchers have attributed differences in innovation to resources owned by a firm. This study contributes to knowledge by establishing the effect of resources on the firm's propensity to innovate. The study was anchored on the resource-based theory and dynamic capabilities theory.

The study's main objective was to establish the effect of resources on the innovation of Insurance Companies in Kenya. The study employed a cross-sectional survey design. Both primary and secondary data were collected from 46 insurance companies using a 5-point Likert-type structured questionnaire. The respondents were the CEOs of these firms, and in their absence, senior managers were the respondents. Correlation analysis was used to analyze data. The findings revealed that intangible resources had a statistically significant positive moderate correlation with innovation ($r = 0.522$, $p\text{-value} = 0.002$) and process improvements ($r = 0.484$, $p\text{-value} = 0.005$). Tangible resources evidenced a weak positive correlation with innovation that was not statistically significant. Further, results indicated that innovation has a moderate positive correlation with organizational resources that was statistically significant ($r = 0.485$, $p\text{-value} = 0.005$). This was an indicator

that there was a significant relationship between organizational resources and innovation. The results imply that managers of insurance companies should focus on attracting intangible resources if innovation has to improve. Managers will use the findings of this study to help identify performance drivers in their organizations. Policymakers should encourage research and development of new products that will enhance insurance penetration and the performance of insurance companies in Kenya.

Key Words: Resources, Innovation, Insurance companies.

Digital Horizons: Unlocking Africa's Emerging Markets and Entrepreneurial Potential Through Research and Innovation.

[Birir Kipchirchir Sospeter¹](#), [Vincent Mwanja¹](#),
[Wilfred Onyango Odoyo¹](#)

¹Department of Research and Innovations, Pioneer International University, Nairobi, Kenya.

ABSTRACT

This research delves into the digital transformation and emerging business opportunities in Africa, highlighting the key structures that are driving technological evolution on the continent. It examines various aspects such as internet penetration, mobile phone adoption, fintech growth, e-commerce expansion, tech startup ecosystems, digital payment solutions, infrastructure investments, data centres, cybersecurity measures, and AI adoption. Through this comprehensive analysis, the study paints a clear picture of the current landscape and future prospects for technology in Africa. Drawing on data from credible sources such as the ITU, World Bank, GSMA, and various industry reports, the research identifies key trends, challenges, and opportunities that are shaping Africa's digital economy. It reveals significant growth potential across multiple sectors, spurred by innovative solutions and increasing investments in technology infrastructure. The study's findings emphasize the promising growth potential within Africa's digital landscape. It highlights how these advancements are driven by innovative solutions and increasing investments in technology infrastructure. Entrepreneurs, investors, and policymakers can glean strategic insights from this research to capitalize on the growing digital economy and contribute to sustainable development across the continent.

Looking ahead, the research projects substantial growth, suggesting that Africa has the potential to

become a major player in the global digital economy by 2030. This comprehensive overview not only highlights the continent's current advancements but also its future potential, providing a roadmap for stakeholders to navigate and capitalize on the burgeoning opportunities within Africa's digital transformation.

Keywords: Digital innovation, Emerging markets, Entrepreneurial growth, Africa's potential, Market expansion, Tech transformation.

DIGITAL TRANSFORMATION IN MEDIA AND JOURNALISM

RANET (Radio-Internet) Stations in Rural Kenya: Embracing Digital Communication Technologies

Nancy W. Kungu

Pan Africa Christian University, Kenya

ABSTRACT

This paper explores the role of the RANET (Radio-Internet) station in reporting for farmers and pastoralist communities. RANET radio stations have been established in various parts of the world, including Africa. These radios are typically small-scale non-profit media initiatives owned, managed, and controlled by local communities. In Kenya, for instance, these radios collaborate with the Kenya Meteorological Department (KMD) and primarily air their content in indigenous languages. The radios leverage the Internet and digital technologies for their routine broadcasts. Among other programs, they interpret and broadcast meteorological and agro-climatological reports, including weather forecasts, bulletins, and advisories such as early alerts on any looming disaster.

The radio stations are considered suitable for rural communication, given the nature of the social, cultural, economic, and geographical settings in which the communities dwell. RANET radios, therefore, provide a crucial platform and address the communication gap among these communities by meeting the unique developmental needs of the rural communities and contributing to sustainable economic advancements. This would be significant in responding to community issues, such as the Sub-Saharan region's food security crises, as reported by the International Authority on Development (IGAD) Global Report on Food Crises (GRFC), 2024. In Kenya, such radio stations include the Nganyi (RANET) FM in Vihiga, Kangema (RANET) FM, Kwale RANET FM based in Kwale, Garbatulla (RANET) FM in Isiolo, Bulala

(RANET) FM in Budalangi area and Oltoilo LeMaa (RANET) FM at Suswa.

Keywords: RANET Radio, Agro-climatological, Meteorological, Food crises, Farmers, Pastoralists

Editorial Cartoons in the Digital Era: A Visual Analysis of Gen Z's Demonstration Against the Finance Bill 2024 in Kenya

Raphael Nakhumbi Ogutu¹, Anne Eboi Anjao²

¹Department of Media and Film Studies, Daystar University, Nairobi, Kenya

² Department of Strategic and Organizational Communication, Daystar University, Kenya

ABSTRACT

This paper analyses the evolving role of editorial cartoons in the digital era, focusing on their impact and significance during the Gen Z-led demonstrations against Kenya's Finance Bill 2024. Editorial cartoons are graphic expressions of their creator's ideas and opinions. The editorial cartoon usually, but not always, reflects the publication's viewpoint. As digital platforms increasingly become the battleground for political discourse, editorial cartoons have become powerful visual tools for commentary and activism. This study employs textual analysis methodology to examine a selection of editorial cartoons circulated on social media such as Facebook, The X, formerly Twitter, and online newspapers in Kenya during the Gen Z's protests.

Textual analysis is the method communication researchers use to describe and interpret the characteristics of a recorded or visual message. By analysing these cartoons' themes, symbols, and narratives, the paper aims to uncover how they reflect and shape public opinion, mobilize support, and critique governmental policies. The research highlights the unique characteristics of editorial cartoons that resonate with Gen Z, including their use of humour, satire, and accessible visual language. It also considers the role of digital platforms in amplifying these cartoons' reach and engagement, thus enhancing their influence on the political landscape. The findings suggest that editorial cartoons mirror societal sentiments and act as catalysts for political mobilization and change. This research study contributes to the broader understanding of visual communication in the digital age, demonstrating editorial cartoons' enduring relevance and transformative potential in shaping contemporary political narratives. The study underscores the need for further research

into the intersection of digital media, visual art, and political activism, particularly among younger demographics.

Keywords: Editorial Cartoons, Digital Media, Gen Z, Political Activism, Finance Bill 2024, Visual Analysis, Social Media.

Digital Transformations in Journalism Training in Africa: A Systematic Literature Review

[Anne Anjao Eboi](#)¹, [Lydia Ouma Radoli](#)², [Raphael Oguttu](#)²

¹Department of Strategic and Organizational Communication, Daystar University, Kenya

²Department of Media and Film Studies, Daystar University, Nairobi, Kenya

ABSTRACT

In the 21st century, digital literacy is a crucial component of educational and economic advancement. However, rural Africa faces significant challenges in achieving widespread digital literacy due to infrastructural, socio-economic, and educational barriers. Bridging this digital divide is essential for nurturing sustainable development and ensuring everyone gets an opportunity to participate in the global digital economy. One of the primary obstacles to digital literacy in rural Africa is the lack of infrastructure. Many rural areas lack reliable electricity and internet connectivity, making it difficult for residents to access digital devices and online resources. Addressing this requires significant investment in infrastructure, such as the expansion of mobile networks and the provision of affordable internet access. Initiatives like solar-powered community hubs and mobile internet units are promising solutions that can provide rural communities with the necessary technological infrastructure. Educational barriers also play a significant role in the digital literacy gap. Many schools in rural Africa lack the resources and trained personnel to teach digital skills. Integrating digital literacy into the school curriculum and providing teachers with the necessary training and resources is crucial to overcome this. Additionally, community-based education programs can complement formal education, ensuring all age groups can access digital literacy training. This paper will argue that bridging the digital literacy gap in

rural Africa requires a multidimensional approach that addresses infrastructural, socio-economic, and educational challenges. The study will further explore the techniques needed to address African digital literacy concerns, particularly in Botswana.

Keywords: Digital literacy, Rural Africa, Technology infrastructure, Educational barriers, Socio-economic challenges.

Print Media Coverage of Menopause in Kenya: A Content Analysis of the Daily Nation and The Standard Newspapers

[Cherotich Mung'ou](#)

Department of Communication Studies,
University of Eldoret

ABSTRACT

The role of the media in providing health communication cannot be underestimated. Consequently, health experts are utilizing the media to create public awareness of health issues, including menopause. This paper used content analysis to assess the content of menopause coverage in the leading Kenyan newspapers, The Standard and The Daily Nation, between 2021 and 2023. The paper also examined the prominent menopause issues in the two dailies. The study relied on agenda-setting and framing theories. The findings indicate that the dominant discourses in the two dailies were menopause, perimenopause, and post-menopause. The study also reveals that the dailies covered the significant symptoms associated with menopause and management of the related symptoms. The study contributes to media agenda-setting knowledge that Kenyan newspapers are embracing.

Keywords: Menopause, Content analysis, Print media, Kenyan newspapers

Transformative Digital Innovation for Rural Empowerment and Urban Inclusivity in Africa.

[Birir Kipchirchir Sospeter](#)¹, Vincent Mwanja¹

¹Department of Research and Innovations, Pioneer International University, Nairobi, Kenya

ABSTRACT

Digital innovation is transforming the rural development landscape, empowering local communities to overcome challenges and unlock new opportunities. This paper delves into the pivotal role of digital innovation in enhancing rural development, with a particular emphasis on incorporating local voices and leadership in designing and implementing technological solutions. By examining case studies from regions such as Sub-Saharan Africa, Southeast Asia, and Latin America, we illustrate how community-led initiatives have effectively utilized digital tools to address unique challenges, such as improving access to education, healthcare, and economic resources.

The analysis draws on diverse data sources, including reports from the World Bank, the United Nations Development Programme (UNDP), and the International Telecommunication Union (ITU). These sources provide comprehensive insights into the impact of digital innovation on rural communities, highlighting success stories and identifying areas for further improvement.

Additionally, qualitative data from interviews with local leaders and community members offers a refined understanding of the on-the-ground realities and the transformative potential of digital technologies. Inclusive urbanization is another critical focus of this paper, advocating for urban growth that benefits all residents, particularly marginalized groups. We explore strategies for leveraging digital technologies to foster inclusivity in urban planning, ensuring equitable access to resources and services. Case studies from cities in India, Brazil, and Kenya are examined to demonstrate how digital platforms can promote participatory governance and enhance the quality of urban life. The interplay between rural development and inclusive urbanization is also analysed, highlighting how digital innovation can create synergies between urban and rural areas, fostering holistic and sustainable development. In conclusion, the paper calls for a collaborative approach that involves local communities, policymakers, and technology providers. By working together, we can

harness the power of digital innovation to build an inclusive and equitable future for both rural and urban populations, ensuring that no one is left behind in the digital revolution.

Keywords: Digital innovation, Rural development, Community-led initiatives, Inclusive urbanization, Participatory governance, Technological solutions.

Beyond Likes and Shares: Leveraging Social Media Creativity for Destination Branding and Economic Growth

[Wilfred O. Odoyo](#)¹, Vincent Mwanja¹, [Laura Akinyi](#)¹

¹Research and Innovation Hub, Pioneer International University, Nairobi, Kenya

ABSTRACT

Creative content plays a crucial role in social media marketing, influencing customer engagement and brand success. Content creators, especially during the Covid-19 pandemic, and indeed among the Millennials and the Generation -Z, have become significant in providing informative, educative, revolutionary, and entertaining content to audiences.

Social media platforms like TikTok, Instagram, etc., are actively used for marketing, emphasizing the importance of creative content to attract and engage with audiences. Despite the drawbacks of social media, such as data mining and algorithm bias, the original purpose remains connecting individuals with shared interests. Content creators can shape perceptions and influence audiences, as seen in the case of renowned Youtubers, TikTokers, and X users who have impacted public opinion and government interactions through their content.

By leveraging creative content to showcase the unique sites, traditions, and attractions of Kenya, the country can establish itself as a prominent tourist destination, both local and international, potentially boosting its economy and joining the ranks of established tourist hotspots like Italy, France, and Spain.

Keywords: Social media, Tourism, Content marketing, Influencer marketing, User-generated content, Sustainable tourism, Creative content.

Integrating Predictive Technologies for Early Warning and Climate Change Adaptation and Mitigation in Arid and Semi-Arid Areas of Kenya

[Anne Lily Wanjiru Kamau](#)¹, Emily Nyawira Mugo², Dorothy Kathambi Mutua²

¹ Department of Development and Strategic Studies, Pioneer International University, Nairobi, Kenya

² Department of Information Technology, Pioneer International University, Nairobi, Kenya

ABSTRACT

Climate change poses a significant threat to global ecosystems, economies, and societies, particularly affecting developing countries, which often lack the necessary resources and technologies to combat its impacts effectively. Changes in climate indicators characterize climate change; for example, an estimated 5% increase in global temperatures leads to a 10% decline in agriculture productivity.

These changes require the adoption of adaptation and mitigation strategies among inhabitants of the arid areas. However, there is insufficient knowledge of the Indigenous knowledge-based early warning systems and indicators that have guided the local community in resource use and management as well as the adaptation and mitigation strategies adopted by communities in arid areas in Kenya. The gap in technological capabilities further exacerbates the vulnerability of these communities to climate change, undermining global efforts to mitigate its effects. This paper will, therefore, explore how we can apply predictive technology to create early warning systems for climate change adaptation and mitigation in arid and semi-arid areas in

Kenya. The research methodology will include a review of existing literature, case studies, and field surveys to gather data on the current application and impact of predictive technologies in these regions. The findings will highlight the critical role of predictive technologies in improving resilience, reducing vulnerability, and promoting sustainable development in arid and semi-arid areas of Kenya. The research will give policy recommendations for integrating predictive technologies into national climate strategies to ensure effect.

Keywords: Climate change, Predictive technology, Sustainable development

Ocean Degradation and Its Effects on Coastal Communities: Delving into the World of Seagrass, Coral Reefs, and Mangroves

[Penelope Nozithelo Moyo](#)¹

¹Department of Environment and Natural Resources, Africa Nazarene University, Nairobi, Kenya.

Approximately 70% of the earth is covered by oceans, which are undoubtedly one of the most precious resources (Denchak, 2022). Oceans are important in controlling weather patterns, regulating climate, providing oxygen, capturing carbon, providing food security, providing job security, promoting economic growth, and most importantly, oceans are the largest habitat on the planet, bombing with life from microscopic organisms to the largest mammal on earth (Costanza, 1999; Bigg et al., 2003; Schmitt, 2018; NOAA, 2024). Despite their importance in supporting life on earth, oceans are being degraded at an alarming rate mainly due to anthropogenic activities such as pollution (noise, thermal, plastics, agricultural run-off, industrial effluent), ocean acidification, coastal development, coastal erosion, aquaculture, harmful fishing practices, and overfishing, etc. (Verma et al., 2020;

Kumar, 2024). The effects of ocean degradation are felt more in coastal areas, as they are home to approximately 60% of the world's population and are a habitat to vulnerable yet vital ecosystems such as seagrass meadows, coral reefs, and mangrove forests (Hasim, 2021). These ecosystems store and sequester carbon, are a habitat for commercially important fish species, and protect the coastline from erosion and storm surges, etc. (Jackson et al., 2001;

Terradas & Borum, 2004; Unsworth et al., 2014; McKenzie et al., 2021). Ocean degradation is a pressing global matter that needs to be addressed urgently, as the loss of these ecosystems would change coastal environments and the lives of coastal communities. Thus, this paper explores the critical roles of seagrass meadows, coral reefs, and mangrove forests in supporting marine biodiversity, protecting shorelines, and sustaining livelihoods. It delves into the diverse effects of ocean degradation on these ecosystems, examining the socio-economic and environmental repercussions for coastal communities. This paper will also highlight adaptation and mitigation strategies to preserve and restore these vital marine habitats.

Keywords: Ocean degradation, Coastal development, Ecosystems, Coastal communities

Africa Tour - An Integrated Smart Tourism and Conservation Platform

Vincent N. Mwanja¹, Birir Sospeter¹

¹Research and Innovation Hub, Pioneer International University, Nairobi, Kenya

ABSTRACT

Africa Tour is proposed as an innovative tourism application designed to revolutionize travel experiences across Africa by integrating wildlife conservation, cultural heritage immersion, eco-tourism, health and safety, and personalized travel itineraries. Leveraging cutting-edge technologies such as IoT, AI, AR, VR, block chain, and advanced materials, Africa Tour aims to provide tourists with a unique, immersive, and responsible journey through Africa's diverse landscapes and rich cultural history. The proposed key features include real-time wildlife tracking and adoption programs, VR-based historical and cultural time travel, a carbon footprint tracker with eco-friendly recommendations, and a comprehensive travel health and safety companion.

The application also envisions innovative itinerary customization based on real-time data and user preferences, coupled with real-time language translation services for seamless communication. Africa Tour intends to foster a deep connection between tourists and local conservation efforts by offering interactive AR experiences, conservation volunteering opportunities, and transparent impact reports.

The platform seeks to promote sustainable travel practices through personalized eco-friendly itineraries and rewards for reducing carbon footprints. The research will involve initial pilot testing in selected national parks and cultural sites, followed by gradual expansion, strategic partnerships, and extensive marketing. By integrating diverse features and advanced technologies into a single platform, Africa Tour aims to enhance tourism while supporting wildlife conservation, cultural preservation, and sustainable development across Africa. This study will explore the feasibility, user acceptance, and impact of such an application, contributing critical insights to tourism and conservation technology.

Keywords: Smart tourism, Wildlife conservation, Cultural heritage, Eco-tourism, Personalized itineraries, Real-time tracking, Augmented Reality (AR), Sustainable travel.

Transformative Applications of Quantum Computing in Cryptography and Material Science.

Laura Akinyi¹, Wilfred O. Odoyo¹, Joshua Nyaberi¹

¹Research and Innovation Hub, Pioneer International University, Nairobi, Kenya

ABSTRACT

Quantum computing, leveraging principles like superposition and entanglement, holds transformative potential in cryptography and material science. This paper explores how quantum advancements can address current challenges and enhance capabilities in these fields. Traditional cryptographic methods face increasing vulnerability to quantum attacks, while classical simulations of complex materials remain computationally prohibitive.

Through a comprehensive literature review and analysis of case studies, this research examines practical applications of quantum computing. There is significant progress in quantum cryptography, with quantum key distribution (QKD) providing unbreakable encryption and quantum random number generators (QRNG) ensuring secure key generation. Concurrently, post-quantum cryptographic algorithms are emerging to resist quantum attacks. In material science, quantum simulations facilitate the discovery of high-temperature superconductors and optimized catalysts, promising energy efficiency and sustainability advancements. The findings underscore quantum computing's potential to revolutionize secure communication and expedite material discoveries. The study advocates ongoing interdisciplinary research and development to overcome existing challenges and fully harness the benefits of quantum technologies. This paper contributes to understanding practical quantum computing applications, offering a roadmap for advancing cryptography and material science in the quantum era.

Keywords: Quantum computing, Cryptography, Material science, Quantum key distribution (QKD), Quantum Random Number Generator (QRNG), Post-quantum Cryptography, Quantum simulations, High-temperature superconductor, Catalyst optimization.

Exploring Quantum Tunnelling Effects in Ultra-Low Power Nano-Transistors for Next-Generation Electronics

Vincent N. Mwanja¹, Birir Sospeter¹, Wilfred O. Odoyo¹

¹Research and Innovation Hub, Pioneer International University, Nairobi, Kenya

ABSTRACT

As electronic devices miniaturize, the significance of quantum mechanical effects, particularly quantum tunneling, becomes increasingly prominent. This project investigates the potential of quantum tunneling to enhance the performance and efficiency of ultra-low power nano-transistors, essential for portable and wearable technologies.

We will employ machine learning algorithms to optimize transistor design parameters for maximal efficiency through AI-driven design automation. Multi-barrier tunneling structures will be explored to analyze their impact on tunneling current and device performance. Dynamic voltage control will be investigated to modulate tunneling effects in real time, proposing adaptive circuit designs for enhanced power management. Integrating quantum dots within the transistor architecture, we will study their influence on tunneling behavior, aiming to improve switching speeds and reduce leakage currents. A hybrid classical-quantum simulation approach will be developed to provide more accurate predictions of tunneling effects, complemented by an advanced simulation tool. Furthermore, we will conduct a comprehensive environmental impact study, evaluating the sustainability of quantum tunneling-based nano-transistors compared to traditional technologies. Innovative thermal management strategies tailored to tunneling effects will be proposed, exploring methods to regulate temperature for improved device reliability.

Extending the application of quantum tunneling to flexible and wearable electronics, we will develop prototypes demonstrating the practical potential of these transistors in bendable and stretchable substrates. Our research aims to push the boundaries of current understanding and application of quantum tunneling in nano-transistors, offering fresh insights and practical advancements for next-generation electronics, contributing to more efficient and sustainable electronic devices.

Keywords: Quantum tunneling, Nano-transistors, Electronic devices

HUMANITIES AND SOCIAL SCIENCES

Emotional Intelligence As A Predictor Of Mental Well-Being Of Undergraduates Of Obafemi Awolowo University, Ile Ife, Nigeria

Muraina Olugbenga Omiyefa¹, Johnson Oludele Okewole¹, Abiodun Moses Adesola¹

¹Institute of Education, Obafemi Awolowo University Ile-Ife, Nigeria

ABSTRACT

The study examined the relationship between emotional intelligence and mental well-being of undergraduates of Obafemi Awolowo University, Ile Ife, Nigeria. The study employed the descriptive research survey design. The targeted population for this study was undergraduates of Obafemi Awolowo University, Ile-Ife, Nigeria. One hundred and eighty undergraduates were selected from the university's humanity-based faculties (Arts, Education, and Social Sciences) as a sample.

Simple random sampling technique was used to select a sample of 180. A well-constructed and research-developed research instrument titled "Emotional Intelligence as a Predictor of Mental Well-Being of Undergraduates Questionnaire (EIPMWBUQ)" was the main instrument used for data collection. Data collected was analysed using descriptive statistics of frequency and percentage while inferential statistics of Pearson Product Moment Correlation (PPMC) statistical Analysis was used to test the hypothesis. The result showed that 61.1% of students had high mental well-being, 31.7 % reported to have had moderate mental well-being, and 7.2% had low mental well-being. The result also showed a significant relationship between emotional intelligence and mental well-being of undergraduates of Obafemi Awolowo University Ile-Ife at ($r = 0.801$; $p < 0.05$) significance level. The study concluded that the majority of undergraduates of Obafemi Awolowo University, Ile Ife, Nigeria, had high mental well-being. This affirmed that mental well-being can best be predicted by emotional intelligence. Based on the findings, the study recommended, among others, that learning institutions should create supportive environments that can promote a culture of psychological safety where individuals feel comfortable expressing their emotions and seeking support.

Keywords: Emotional intelligence, Mental well-being, Supportive environment, psychological safety

Enhancing Mental Health Monitoring with a Recurrent Neural Network (RNN) with Long Short-Term Memory (LSTM) Units

Patience Wangui¹, Laura Akinyi¹, Vincent Mwanial, Wilfred Oduyo¹

¹Department of Research Innovation Hub Pioneer International University Nairobi Kenya

ABSTRACT

Mental health conditions such as anxiety, depression, and stress are complex and multifaceted, often going undiagnosed until they become severe. Traditional diagnostic methods rely heavily on subjective assessments and self-reporting, which can be inaccurate and delayed. This study investigates the application of Long Short-Term Memory (LSTM) networks for processing neural signals to enhance mental health diagnostics and interventions. To develop and evaluate a Recurrent Neural Network (RNN) with LSTM units to analyse complex neural data patterns indicative of mental health conditions. Neural signals reflect cognitive and emotional states and are processed through a synthetic dataset simulating real-world mental health scenarios. The LSTM-based RNN model is designed to capture temporal dependencies and sequential patterns in these signals, offering insights into the dynamics of mental health conditions such as anxiety, depression, and stress. Our approach demonstrates the potential of LSTM networks in distinguishing between different mental health states by accurately decoding neural patterns. The model is trained and validated on synthetic data, with results showing promising accuracy in signal classification and predictive capabilities. This study underscores the potential of advanced neural processing technologies in providing objective, real-time monitoring and early detection of mental health conditions, paving the way for timely and personalized therapeutic interventions.

Keywords: Recurrent Neural Network (RNN), Long Short-Term Memory (LSTM), Neural signals, Neural data set

Child Socialization Agents and Juvenile Delinquency: A Case Study of Shimo La Tewa Borstal Institution for Boys, Mombasa County, Kenya

Josphine Wambui Ngugi

Department of Counselling Psychology, Africa Nazarene University, Nairobi, Kenya

ABSTRACT

Globally and in Kenya, the prevalence of delinquent behaviour among minors has increased considerably over the past several decades. This research examined the relationship between various socialization factors, including family-related factors, school-related factors, drug use and socioeconomic factors, and juvenile delinquency among boys at Shimo La Tewa Borstal Institution. The study population comprised 240 young offenders, 48 wardens, and one counsellor. This population used a sample of 60 inmates, 18 wardens, and one counsellor to collect data. A mixed research methodology was utilized to collect data. From the findings, this research found out that the most critical family-related factors revolved around parents.

Alcoholism among parents was quoted as a high contributor to juvenile delinquency at 33.9%. Regarding school-related factors, it was discovered that 30% of the respondents were not motivated to excel in their studies and do well in them. The study also found out that 85% of the respondents at the Borstal Institution had a history of using drugs. Finally, the study found that only a minority of respondents, 11.75%, had parents who held permanent employment. The study also found that a high number of the inmates at the Borstal Institution (35%) lacked basic needs. In its conclusion, this study observed that juvenile delinquency was caused by an interplay of various risk factors, including familial aspects encompassing parenting styles and parent-child relationships.

Other risk factors identified included low academic motivation, difficulties in learning, peer pressure, poverty, and drug use by the minors as well as their parents. The study made several recommendations considering the research findings. It is crucial for parents and guardians to cultivate good relationships with their children. Parents and guardians also need to be involved in their children's school programs and find ways of motivating them to

work towards set goals and aspirations. In addition, the Government should enforce laws regulating the sale of drugs like miraa, alcohol, and tobacco to limit access and use among minors. In the case of illegal drugs, the Government should crack down on distributors of the drugs to restrict their accessibility. Finally, the Government, NGOs, and religious organizations must implement policies and strategies to assist children from low-income families in remaining in school.

Keywords: Juvenile delinquency, Delinquent behaviours, Socialization factors, Socio-economic factors

Communicative-Language-Teaching Influence on Gender-based Performance of Secondary-School-Students in English Vowels in Northern Cross-River State, Nigeria

[ILIYAS, Rasaq Ayodeji¹](#), OGBOR, Sunday Abua¹

¹Department of Arts Education, University of Abuja, PMB 177, Abuja, Nigeria

ABSTRACT

Communicative language teaching approach describes a need-based communication by learners in the target language to make them attain competence. This study examines the gender-based influence of Communicative Language Teaching on the mean gain score performance of secondary school students in Cross River State Northern Senatorial District, Nigeria. The study answers the research question regarding the mean gain score of male and female students taught English vowel sounds using communicative language teaching in Cross River Northern Senatorial District and tested the null hypothesis no significant difference exists in the mean gain score of male and female students taught English vowel sounds using Communicative Language Teaching in Cross River State Northern Senatorial district, Nigeria.

The study deployed communicative language teaching approach in a pre-test, post-test quasi-experimental study on thirty-nine males and females in Cross-River North Senatorial district to address challenges faced by penultimate secondary school students in mastering the English vowel sounds. With eighteen distinctive local languages in the study area, the prevailing inability of these students to articulate the vowel sounds continues to detract them from making intelligible conversation in English. The study used the standard West African Examination Council (WAEC) items on English vowels as an instrument to gather data in tests before and after treatment with communicative teaching

instructions for six weeks. The collated data was analyzed using the mean score, standard deviation and t-test. The study found that the communicative language teaching approach improved both male and female students' performance in vowel sounds and that males recorded higher performance at the post-test, which could not reach a significance level. The study, therefore, recommends that English teachers be interested in updating their knowledge and skills of varied communicative strategies to teach the students, and proprietors of schools should always fund avenues for teachers of the English language to experience refresher training in their area of specialization.

Keywords: Differences, Interference, Intelligibility, Practice, Speech

Influence of Parental Negligence on Students' Academic Performance Among Form Three Students in Secondary Schools in Yatta Sub-County, Machakos County, Kenya

[Rebecca Nthenya Mutie¹](#), Orpha Ongiti²

¹ Department of Psychology, Africa Nazarene University.

² Institute of Research, Africa Nazarene University

ABSTRACT

Education is fundamental for human development and economic growth. All children have a right to education. However, parental neglect poses challenges to academic performance, hence affecting their future. This study aimed to investigate the effect of parental negligence on the academic performance of form three students in secondary schools in Yatta Sub-County, Machakos County, Kenya. This study aims to determine the influence of physical, educational, and emotional negligence on students' academic performance.

The study applied The Ecological theory. The research design was a descriptive survey. The study targeted all form three students attending secondary schools in Yatta Sub-County, Machakos County, Kenya, totalling 3121 students from sixty-one secondary schools. Simple random technique was used to select a sample of 355 students from twenty-one secondary schools, with one Children's Rights Officer and 21 Form three class teachers, yielding a total sample of 377 respondents. Questionnaires and interview schedules were administered to collect both qualitative and quantitative data. The validity and reliability of the questionnaire were assessed. Quantitative data were analysed using descriptive statistics. A multiple regression model was used to

determine the influence of parental negligence on students' academic performance.

Qualitative data were analysed thematically based on the study objectives. The study findings revealed that emotional negligence has the most significant adverse effect (24.1%) on students' academic performance in secondary schools, followed by physical negligence (20.5%), with educational negligence (13.9%) exhibiting the least negative impact. The study concludes that physical, educational, and emotional parental negligence lowers students' academic performance and future aspirations. Hence recommends increased parental training and engagement in their children's education to enhance positive parent-child relationships. The study contributes to new knowledge by providing empirical evidence of a complex relationship between neglectful behaviours and student's academic performance.

Keywords: Parental negligence, Academic performance, Secondary school performance

RELIGION AND ETHICS

Dona Beatrice Kimpa Vita, the African Deborah

[Agnes Uwimana Ibanda](#)

School of Religion, Africa Nazarene University,
Nairobi, Kenya

ABSTRACT

This paper's overall topic for the conference is willing to be presented is "Creating the Africa We Need: The Role of Research and Innovation in Advancing Africa through Sustainable Development." The subtitle under which this research is willing to align is Sustainability and Human Flourishing in Africa: The Place of Spirituality and Ethics. This paper explores the possible areas in which Dona Beatrice/ Kimpa Vita can be compared to the biblical Deborah. It will survey the life and work done by Deborah as well as Kimpa Vita's situation. This study aims to awaken African women, calling them to step out of their comfort zones and carry out various leadership roles, even the toughest ones. The Africa we need is that in which God fearing women are bold enough to take public leadership roles. This paper is willing to present and compare two women in history who brought significant change in their societies. It is already known from various research on women in the Bible that God uses women the same way He does use men. It

appears necessary in this paper to focus on one woman in the Bible, Deborah, and another after the biblical time, Dona Beatrice Kimpa Vita.

Both Deborah and Dona Beatrice/Kimpa Vita intervened when their nations were going through political decline. Africa is going through various issues, including political and religious unrest. Those problems are generally fragilizing the African continent, particularly my country, DRC. Dona Beatrice/Kimpa Vita and Deborah are the kind of women who need to step out of their comfort zones to contribute to human flourishing. As a married woman, Deborah was a prophetess, a general in the army, and a judge. Beatrice, in her time, was single and fulfilled the role of a prophetess, a resistant group founder and leader, and a church leader; she is the precursor of African independent churches as well. It is, therefore, vital that women in whatever state, age, race group, and religious affiliations are conscious that they can bring change wherever they are placed and beyond for the sake of human flourishing and ethics.

Keywords: Human flourishing, Leadership roles, Kimpa Vita,

Grieving Together as a Gesture of Ubuntu Amongst the Shona People

[B.K. Chikwaiwa¹](#), [Chido P. Matavire¹](#)

¹College of Social Sciences, Theology, Humanities and Education, Africa University

ABSTRACT

Ubuntu can be regarded as an African philosophical concept that reflects humanness and expresses the deeply held African ideals of one's personhood being rooted in one's interconnectedness with others. This philosophy is discussed within its three main components: huhu/ubuntu metaphysics, hunhu/ubuntu ethics, and huhu/ubuntu epistemology. Our ancestors and African elders applied this philosophy in good and bad times. In good times, for instance, during Christmas and other special occasions, it is tradition to call and welcome neighbors or strangers passing by and offer them something to eat or drink. In bad times, following traumatic events such as the loss of a beloved one, communities would join and grieve together. The Ubuntu philosophy places significant emphasis on cementing the social work theory and practice, which upholds important values such as respect, human dignity, compassion, solidarity, and consensus, which require conformity and loyalty to the group. From a social work perspective,

this paper discusses how grieving together can be regarded as a gesture of Ubuntu amongst the Shona people. This paper aims to expand and deepen the Ubuntu concept to enhance its potential as a theory informing social work practice by integrating other African ideas with Ubuntu in two domains: ethics and eco-spirituality.

Keywords: Ubuntu, Ethics, Social work, Ethics, Eco-spirituality

The Interplay of Spirituality, Ethics, and Environmental Sustainability: Implications for Health Practices and Human Flourishing

[Joshua Nyaberi](#)¹, [Laura Akinyi](#)¹, [Wilfred Onyango Odoyo](#)¹

¹Department of Research and Innovation, Pioneer International University, Nairobi, Kenya

ABSTRACT

This proposal investigates how spirituality, moral convictions, and environmental sustainability are intertwined and how they affect human health and well-being. Spirituality, encompassing diverse beliefs and practices, serves as a vital source of meaning, purpose, and connectedness for individuals and communities. Ethical principles guide actions toward justice, equity, and respect for all forms of life, while environmental sustainability emphasizes the stewardship of natural resources and the health of ecosystems. The integration of these domains promotes a comprehensive approach to health, promoting physical, mental, and social well-being. This paper examines how spiritual and ethical frameworks can drive sustainable practices, enhance environmental consciousness, and support health practices that contribute to human flourishing. Through a multidisciplinary lens, this study highlights the need for a balanced and integrated approach that respects ecological boundaries, promotes ethical responsibility, and nurtures spiritual well-being. The findings underscore the potential for a synergistic relationship between spirituality, ethics, and environmental sustainability, offering a pathway to a more harmonious, just, and sustainable world.

Keywords: Mixed-method, Environment, Spiritual, Ethical beliefs, Sustainability.

An Examination of Values Held by Secularised, Lapsed-Christian Young Adults in Nairobi

[Sahaya G. Selvam](#)¹, [Ngure Githinji](#)¹

¹Don Bosco Youth Educational Services, Nairobi.

ABSTRACT

This paper examines the values upheld by secularized, lapsed Christian young adults in Nairobi, exploring how they navigate moral and ethical landscapes without reliance on religious frameworks. Drawing on a qualitative research method, this study identifies the key norms of morality and the way these are shaped by cultural, socio-economic, and educational influences. The findings contribute to understanding the complex interplay between secularization and value formation among young adults in urban African contexts. Is religion necessary for human morality? While in the global scene, this question is a point of debate among philosophers and theologians engaged in ethical theories, in African traditional societies, it was given that religion and morality are enmeshed.

Life enhancement is the norm of morality fenced by cultural and religious traditions. In practice, morality is maintained by religious taboos, and moral infringements are repaired using religious sacrifice. Is the enmeshment between religion and moral practice still meaningful among Africa's second generation of urbanized young adults? How does the increasing number of non-religious young adults, especially lapsed Christians, in urban Africa evolve their norms of morality and judge moral practice outside of religion? These were the general research questions of the empirical study that chose Nairobi as a case and involved 36 young adults (27 males and nine females) recruited through snowball sampling and via advertisements on social media.

Data was collected for a larger study, of which ethics and moral practice were the key questions, using in-depth semi structured interviews that lasted from 25 to 80 minutes. The interviews were audio recorded, transcribed verbatim, and analyzed by two researchers, employing thematic analysis. The emerging themes around ethical principles included the golden rule, innate morality, social morality, and humanistic reasoning.

Keywords: Values, Norms of morality, Religious morality, African morality, Golden rule, Consumerism

Church and State Relationship for the Development of Africa

[Halisson Nefitala](#)

Department of Religion, Africa Nazarene
University, Nairobi, Kenya

ABSTRACT

Without careful analysis, it might be argued that church and state are distinct entities with separate agendas. Conversely, when these two entities are conflated and seen as identical, it becomes difficult to recognize their interdependence. There is a common perception that the church should focus exclusively on spiritual matters related to the afterlife, neglecting concerns about the present physical life.

However, the church must be understood as a dual entity that addresses both spiritual and physical aspects—caring for both the present physical life and the spiritual life thereafter. It is within the context of the present physical life that the church intersects with the state. These two entities are fundamentally interdependent because both focus on human beings as their subjects of concern and aim for their well-being. They both promote virtue and condemn vice, albeit through different approaches. Therefore, the relationship between church and state merits thorough investigation.

Accordingly, this study delves into the profound implications of the church-state relationship on the development of African nations. It examines how church-state relations impact various dimensions of Africa's development. By considering church-state relations as the independent variable and Africa's development as the dependent variable, this research aims to explore how the interactions, influences, and boundaries between religious institutions and government entities shape economic growth, social progress, political stability, and human rights across African countries. Through a comprehensive analysis of historical data, policy reviews, and case studies, this study seeks to uncover patterns and correlations that elucidate the role of religious institutions in Africa's governance and development trajectory. The anticipated findings aim to deepen understanding of how harmonious or contentious church-state dynamics can either promote or hinder development, providing valuable insights for policymakers, religious leaders, and development practitioners to cultivate environments conducive to sustainable growth and prosperity in Africa.

Keywords: Spiritual life, Physical life, Church-state, Africa's development

LEGAL, CULTURE & GOVERNANCE

A Sustainable Accountability Case: Generation Z for The Kenya We Want.

[George Okumu Achar](#)

The Institute of Theology and Religious Studies,
Africa University in Zimbabwe

ABSTRACT

In both traditional and modern African judicial systems, accountability and integrity are integral components of peace. Lately, Kenyan Generation Z (Gen Z) is striving for accountability, a principle that both leaders in authority and ordinary citizens must uphold. Accountability is the foundation of peace and development, and it must be the focus of all citizens. This paper posits that the role of Gen Z in overseeing accountability could guide current and future generations towards a society characterized by peace and integrity. The belief that Gen Z will serve as the future leaders explains the existence of corruption and lack of integrity in today's society. In this paper, I will use a theory of moral accountability. This paper posits that the monitoring and supervision of accountability by both African traditional justice systems and modern judicial systems could effectively address the issue of accountability in Kenya, with Gen Z playing a pivotal role in bringing these values to life, starting with their generation. Using the passion for learning, free-thinking, creativity, use of technology, and the values of teamwork blended with the social interactions in both societies will champion the necessity of experiencing peace rooted in accountability and integrity in Kenya. Key Words: accountability, peace, integrity, Gen Z, African traditional judicial systems, modern judicial systems.

Keywords: Accountability, Traditional systems, Modern judicial systems

Transformative Impact of AI-Driven Communication on Youth Engagement and Governance in Kenya

[Alex Kimotho Kanyi](#)

Department of Information Technology, Pioneer International University, Nairobi, Kenya

ABSTRACT

In recent years, Kenya has faced persistent challenges related to governance, including corruption, inefficiency, and inadequate citizen engagement. This paper investigates the transformative role of youth-led communication empowered by artificial intelligence (AI), particularly through platforms like ChatGPT and X (Twitter), in addressing governance deficits. Kenya's youth have increasingly utilized AI-driven communication tools to amplify their voices and advocate for transparency and accountability in governance. Through qualitative analysis and case studies, this study explores how AI technologies facilitate access to information and enable meaningful dialogue among youth, thereby challenging and reforming traditional governance practices. The research examines specific instances where AI, such as ChatGPT, has played a crucial role in providing citizens with accurate information, fostering civic engagement, and creating platforms for collective action. By leveraging AI, Kenyan youth have transcended barriers of access to information and communication, becoming pivotal actors in demanding responsive and participatory governance. Furthermore, the study underscores the evolving dynamics of political communication in Kenya, where AI technologies empower youth and reshape the landscape of civic discourse.

Through empirical evidence and theoretical insights, this paper contributes to understanding how technological advancements can enhance democratic processes by bridging gaps between citizens and government institutions. Ultimately, the findings suggest that AI-driven communication tools have the potential to strengthen democratic governance by promoting transparency, fostering inclusive participation, and holding institutions accountable to the public. This research advocates for continued exploration and integration of AI technologies in governance frameworks to sustainably empower youth and enhance democratic resilience in Kenya and beyond.

Keywords: Governance, Youth led communication, AI technologies

HEALTH, NUTRITION & AGRICULTURE

Integrating Indigenous Knowledge Systems into Modern Agricultural Practices for Climate Resilience: A Case of South Eastern Kenya

[Philip K. Mwendwa](#)

School of Education, Humanities and Social Sciences, Kabarak University

ABSTRACT

Climate change poses significant challenges to agricultural productivity, particularly in regions heavily reliant on rain-fed agriculture, like Southeastern Kenya. This study examined the integration of Indigenous Knowledge Systems (IKS) into modern agricultural practices to enhance climate resilience in Southeastern Kenya.

The research aimed to understand how traditional farming methods, developed over generations, can complement contemporary agricultural techniques in mitigating the impacts of climate change. A total of 100 respondents were selected using a combination of stratified and simple random sampling to ensure representation across different demographic and geographic groups. Data were collected through a structured questionnaire survey and in-depth interviews with local farmers, agricultural experts, and community leaders. The data were analyzed using logit regression analysis to determine the factors influencing the adoption of IKS and its integration with modern practices.

The key findings reveal that traditional practices such as drought-resistant crop varieties, indigenous water conservation methods, and organic soil fertility management significantly improve climate resilience. However, the study also identified barriers to integration, including limited access to modern agricultural inputs, lack of formal recognition of IKS, and insufficient extension services. The paper recommends enhancing farmer education programs to bridge the gap between traditional and modern knowledge, incorporating IKS into national agricultural policies, and fostering collaboration between local communities and agricultural researchers. These measures can promote sustainable farming practices that are better adapted to the changing climate, ultimately supporting food security and farmers' livelihoods in Southeastern Kenya.

Keywords: Indigenous Knowledge Systems (IKS), Southeastern Kenya, Climate change, Resilience, Modern knowledge.

Visual Threatening Diabetic Retinopathy Detection and Severity Grading Using Ensemble Learning and HBA Attention Mechanism

Geoffrey Mutiso Mwinzi,
Department of Information Technology, Muranga
University of Technology, Muranga, Kenya

ABSTRACT

There is a high risk of developing Diabetic Retinopathy (DR) in people suffering from Diabetes Mellitus (DM); if there is no early treatment, then it may result in irreversible blindness. It is one of the diseases that damage the retina, circulates it, and can lead to blindness; it can be fatal in some severe cases. Timely action and regular screening by fundus photography are essential in subjects with diabetes. In aid of this, computer-aided diagnosis systems have been developed to assist the ophthalmologist.

Deep learning and transfer learning are two popular approaches for DR severity detection and grading methods. Many of the current prevailing systems, however, have shortcomings; thus, there is a need for VTDR diagnosis that is accurate and efficient. This paper proposes attention-based deep learning models for VTDR detection and grading. This could improve accuracy by taking advantage of ignored features within the color fundus images through Hierarchical Block Attention (HBA) networks integrating traditional CNN backbones such as ResNet, DenseNet, and GoogLeNet.

Attention mechanisms have improved the feature extraction and classification steps in typical CNN structures, thus enhancing diagnostic accuracy. These ensemble learning techniques combine model predictions, increasing their accuracy and, therefore, their robustness. This approach was found quite effective on the IDRiD dataset with its own five severity tiers: accuracy of 99.6%, sensitivity of 98%, with 100% specificity in VTDR detection, outperforming the standalone CNNs. It advocates for the adoption of attention-enhanced ensemble learning models for VTDR diagnosis and proposes very significant improvements over state-of-the-art methods. Clinical settings could be integrated to improve early detection and intervention, and as such, may help alleviate the different devastating effects that diabetic retinopathy can cause worldwide.

Keywords: Diabetic retinopathy, Hierarchical block attention, Ensemble learning, Convolutional Neural Networks, Visual threatening diabetic retinopathy.

Climate Resilience in Health, Nutrition and Agriculture: Integrating Strategies for Adaptation and Mitigation

Sammy Mukonyi
Department of Law, Africa Nazarene University,
Nairobi, Kenya.

ABSTRACT

The United Nations Environment Programme (UNEP) describes bees as the Greatest of All Times in pollination. They are a cardinal facet of the biodiversity upon which all humans depend for survival. Quick Info byte, a publication of the Kenya Yearbook Editorial Board, under issue 032, 2023, records that if bees disappear from the earth's surface, man will only have four years to live. Kenya is a net importer of honey. Overall, the country produces an estimated 28,000-30,000 Metric Tons of honey from apiculture every year. The underlying full potential remains untapped. This clearly indicates that little effort and/or intentionality has been directed into beekeeping.

Through literature review, with a collection of data from both hard and electronic form as well as a limited use of field interviews as a primary source, the study explores the scope of bee-keeping in Africa - the case of Kenya whereas problematizing the status quo thereof through various limbs;

i) The Crème de la Crème in climate action: bee-keeping as the ultimate game-changer; the nexus between apiculture and environmental conservation. ii) The untapped great oasis in Sub-Saharan Africa: contribution of bee-keeping in advancing sustainable development goals; agriculture, nutrition, and health. iii) Kill or save mother nature: dangers and threats facing beekeeping; pests and diseases, existential threats, human activities, the urgent need to embrace renewable energy solutions, i.e., solar energy, hydrogen, biomass energy, geothermal energy, etc. iv)

The new order: Technology and innovative mechanized bee-keeping practices. Subsequently, the study advances key findings on how to improve the status quo of beekeeping through the church and religious institutions, individual and community-based actions, funding partnership models and policy, government, non-governmental organizations, civil societies, companies, and other philanthropic actors-global citizens of goodwill. The study concludes under the mantra, You Reap What You Sow, the general impact of these efforts thereof.

Keywords: Bee-keeping, Biodiversity, Climate action, Climate resilience

The Role of Technology in Enhancing Local Community Resilience in Agriculture: A Case Study of Precision Farming in Selected Best Practices in the Coastal Region of Kenya

Bertha Othoche, Pwani University – Kenya
Department of Environmental Sciences, Pwani University, Kenya

ABSTRACT

Agriculture is the backbone of Kenya's economy. The sector provides food and raw materials, thereby enhancing the nutritional level of the populace and, at the same time, contributing significantly towards intersectoral growth and development. Agriculture faces many environmental challenges that affect production, resulting in food insecurity and hunger.

For Agriculture to continue playing key roles, the sector must remain resilient to internal and external forces, such as adverse environmental conditions and, specifically, climate change. This paper presents an exhaustive literature survey of precision farming in enhancing agricultural productivity and resilience. The paper seeks to establish the vulnerability of small-scale farmers to climate change in Kenya's coastal region. The paper further looks at key precision farming technologies that could enhance resilience amidst adverse climate change impacts in small-scale farming structures.

The paper further documents the associated challenges in the adoption of precision farming technologies. Desktop survey method generates information on precision farming best practices and resilience to climate change. Thematic approach is used in data mining, organization and presentation. The results confirm the significance of technology in precision farming for climate change resilience and sustainable livelihoods. The paper recommends community empowerment through education, skills enhancement, and awareness creation regarding existing opportunities in precision farming.

Key Words: Precision farming, Remote sensing; Geographic Information System; Vulnerability; Sustainable livelihoods

Characterization of Physicochemical and Functional Properties of Selected Irish Potato Varieties Developed Through Gamma Irradiation

Victor Musitia¹, Emmanuel Ayua¹, Miriam Kinyua², Heka Kamau¹

¹ Department of Consumer Sciences, University of Eldoret, Eldoret, Kenya.

² Department of Biotechnology, University of Eldoret, Eldoret, Kenya.

ABSTRACT

Over time, gamma irradiation has been adopted to enhance production and post-harvest quality and modify Irish potatoes' nutrient composition. However, few studies have focused on establishing how gamma irradiation affects Irish potatoes' physicochemical and functional properties and their applicability in the development of food products.

This study investigated the physicochemical, functional properties, and processing quality of three improved Irish potato varieties (IP1, IP2, and IP3) irradiated at 15 Gy, 30 Gy, and 20 Gy, respectively, relative to their parent tubers. The tubers and their parents were analyzed in a completely random design, and data was analyzed using R-software version 4.3.2. Results showed significant differences ($p < 0.05$) in shape index, specific gravity, proteins, fiber, carbohydrates, ash, water absorption capacity, peak, and final viscosity of the tubers relative to their parent tubers. Gamma irradiation was noted to improve the qualities of the tubers, including geometric properties, proximate composition, sugars, and pasting properties. No significant differences were recorded in the tubers' dry matter, moisture, and bulk density, indicating that irradiation did not affect these properties.

Findings from this study suggest that irradiation has significant effects ($p < 0.05$) on the tubers' physical and chemical composition with a positive impact on their processing characteristics and end products. Results indicate that IP1 is suitable for producing French fries, while IP2 and IP3 are suitable for processing into crisps or mashed products. Gamma irradiation can, therefore, be used to select desired changes and make new commercial tuber varieties.

Keywords: Physicochemical, Gamma irradiation, Functional properties, Irish potatoes, Proximate composition

EDUCATION AND TECHNOLOGY INTEGRATION

Harnessing the Opportunities Presented by Artificial Intelligence in Education to Enhance STEM Education in Higher Education

Prof. Orpha Ongiti

Institute of Research, Africa Nazarene University

ABSTRACT

Science, Technology, Engineering, and Mathematics (STEM) in higher education is fundamental for steering innovation, economic growth, and societal progress in the technologically oriented 21st century. Thus, equipping university graduates with relevant scientific and technological skills and knowledge will enable them to address global challenges, meet workforce demands, and contribute to a sustainable and prosperous future economy. Yet, the global percentage of university students in STEM education varies significantly across countries, with the majority having around 20% of graduates obtaining STEM degrees. This study will focus on the opportunities presented by Artificial Intelligence (AI) in education to improve STEM education in higher education in Kenya. The primary objectives are to assess the current state of STEM education in higher education, identify AI education strategies employed in higher education, evaluate the opportunities presented by AI in higher education, and determine how AI opportunities can be leveraged to enhance STEM education in higher education. Random sampling will be applied to select public and private universities. The study will apply exploratory and literature research to identify the opportunities presented by AI education. Qualitative data will be collected and analyzed thematically based on the research objectives. The findings will inform higher education management on how to harness and implement the opportunities presented by AI to improve STEM education in higher education. This is an ongoing study.

Keywords: STEM Education, Artificial Intelligence, Higher education, Online learning, Digital learning

U2u Knowledge-Based Recommender Model Using Deep Learning

Dorothy Kathambi Mutua¹, Ann Lily Wanjiru Kamau², Emily Nyawira Mugo²

¹Department of Information Technology, Pioneer International University, Nairobi, Kenya

²Department of Development and Strategic Studies, Pioneer International University, Nairobi, Kenya

ABSTRACT

Digital innovation is transforming the landscape of rural development, empowering local communities to overcome challenges and unlock new opportunities. This paper delves into the pivotal role of digital innovation in enhancing rural development, with a particular emphasis on incorporating local voices and leadership in the design and implementation of technological solutions. By examining case studies from regions such as Sub-Saharan Africa, Southeast Asia, and Latin America, we demonstrate how community-led initiatives have effectively utilized digital tools to address specific challenges, including improving access to education, healthcare, and economic resources. The analysis draws on diverse data sources, including reports from the World Bank, the United Nations Development Programme (UNDP), and the International Telecommunication Union (ITU). These sources provide comprehensive insights into the impact of digital innovation on rural communities, highlighting success stories and identifying areas for further improvement.

Additionally, qualitative data from interviews with local leaders and community members offers a nuanced understanding of the on-the-ground realities and the transformative potential of digital technologies. Inclusive urbanization is another critical focus of this paper, advocating for urban growth that benefits all residents, particularly marginalized groups. We explore strategies for leveraging digital technologies to foster inclusivity in urban planning, ensuring equitable access to resources and services. Case studies from cities in India, Brazil, and Kenya are examined to demonstrate how digital platforms can promote participatory governance and enhance the quality of urban life. The interplay between rural development

and inclusive urbanization is also analyzed, highlighting how digital innovation can create synergies between urban and rural areas, fostering holistic and sustainable development. In conclusion, the paper calls for a collaborative approach that involves local communities, policymakers, and technology providers. By working together, we can harness the power of digital innovation to build an inclusive and equitable future for both rural and urban populations, ensuring that no one is left behind in the digital revolution.

Keywords: Digital innovation, Digital technologies, Rural development, Digital revolution

Digital Technology in Classroom: A Paradigm Shift in Education

[Obondo Gaudence](#)
[Egerton University](#)

ABSTRACT

One component of competency based curriculum (CBC) is digital learning. It aims to ensure a sustainable development agenda in quality education. This technology has shown a powerful impact on the CBC education system. Digital technology has brought about a paradigm shift in the entire education system. They provide self-paced learning and have made life easier for students. Students and teachers use software and tools to create presentations instead of using pen and paper, a shift from textbooks to the internet as a dispenser of knowledge to the creation of knowledge.

This enables an individual to participate, contribute and fully function in the society. Teachers and learners have no choice but to transform the education system. The objectives of this study are to investigate the role of digital technology in the classroom, to establish the importance and significance of digital classrooms, and to identify the challenges associated with digital technology in the classroom. This study is informed by the connectivism theory which holds that students should learn how to combine thoughts, theory and information in a useful way.

Keywords: Digital technology, Digital learning, Competence Based Curriculum, Paradigm shift

Exploring the Transformative Impact of Generative AI on Teaching and Learning in the Digital Age

[Wilfred O. Odoyo¹](#), [Alex Gitahi¹](#), [Teddy Okatch¹](#)

¹Research and Innovation Hub, Pioneer International University, Nairobi, Kenya

ABSTRACT

The rise of Generative AI (GenAI) in education blurs the lines between student work and AI-generated content. This research examines the responsible integration of GenAI to promote learning and address ethical concerns. Using a mixed-methods approach, this analysis examines the impact of AI on teaching and learning, with a focus on the educator's role in promoting critical thinking and responsible use of AI. This study aims to inform curricular design, assessment strategies, and ethical guidelines, paving the way for a balanced educational landscape that leverages GenAI while upholding authentic learning and ethical responsibility.

Keywords: Generative AI, Digital learning, Augmented Intelligence, Digital age

Kenyan Universities' Preparedness in Shaping Africa We Need in 21st Century Skills Development Systems

[Elijah Siringi](#)
[Africa Nazarene University](#)

ABSTRACT

There is growing knowledge that transforming education systems to shape and meet 21st century skills set need is imperative. Many employers in Kenya feel that the university education skills set do not equip graduates with the relevant competencies for the job market and needs of the 21st century. One of the main objectives of university education is the acquisition of relevant practical skills for gainful employment, and to identify and provide solutions to societal problems. This article is intended to unveil knowledge on transformation of Higher Education (HE) and skills development systems that meets Kenya's 21st century needs and beyond. The study is anchored on the human-capital theory which offers the theoretical framework to study the impact of education and training on workers' performance in the labour market. The present study adopts content analysis approach which allows the qualitative data collected in research to be analysed systematically

and reliably to address the phenomenon. The study analytical database indicates that there is existing mismatch between the current Higher Education (HE) and skills development systems and the needs and aspirations of university graduates which requires new investment paradigms to maximize university graduates' acquisition of work-ready skills, knowledge and attitudes to enable graduates to contribute effectively to the workforce for sustainable development of the Kenyan Economy and beyond. The paper recommends redesigning the education system to make it more relevant, inclusive, innovative, and responsive to the needs and aspirations of university graduates; implementing university policies and programs that ensure access and equity for girls, refugees, persons with disabilities, and other marginalized groups; investing in supportive training of early career young researchers and other incentive human capital development programs to attract and retain qualified and motivated faculty members at university; design and developing curricula that enhances creativity, critical thinking, problem-solving, and collaboration skills among learners; digitizing learning materials and expanding access to digital devices and connectivity for learners and faculty members at the universities in Kenya.

Keywords: 21st Century skills, Higher education, Education system, Skills development systems

Education for Sustainable Development: Integrating Sustainability into Educational Curricula to Empower Future Leaders

[Devarakonda Harish Kumar¹](#), [Jai Inder Preet Singh²](#), [Devarakonda Shiva Sai³](#), [Devarakonda Sri Laxmi Durga⁴](#)

¹ Mechanical Engineering Department, Wollega university, Nekemte Ethiopia

² School of Mechanical Engineering, Lovely Professional University, Jalandhar, India.

³ Amrita University, Kollam, Kerala, India.

⁴ Mechanical Engineering Department, Vishnu Institute of Technology, Bhimavaram, Andhra Pradesh, India.

ABSTRACT

Education for Sustainable Development (ESD) is crucial in cultivating future leaders capable of addressing global sustainability challenges. This paper examines the integration of sustainability into educational curricula as a means to equip students with the knowledge, skills, and values necessary to promote sustainable development. By embedding

sustainability principles across all levels of education, from primary schools to higher education institutions, ESD aims to create a generation of informed and proactive individuals committed to sustainable practices. The paper examines various strategies for integrating sustainability into curricula, including interdisciplinary approaches, thematic units, and project-based learning. It underscores the importance of teacher training, institutional support, and community engagement in effectively implementing ESD. The benefits of integrating sustainability into education are numerous, ranging from enhanced student engagement and skill development to positive behavioral changes and informed decision-making.

Despite these benefits, challenges such as lack of resources, inadequate teacher training, resistance to change, and policy barriers can impede the successful implementation of ESD. To address these challenges, the paper highlights successful case studies from various regions, identifies best practices, and offers practical recommendations for educators, policymakers, and institutions seeking to integrate sustainability into their educational frameworks. Additionally, a mathematical model is presented to analyze the impact of ESD on student outcomes. The model considers key parameters such as educational content effectiveness, teacher training levels, institutional support, and community engagement.

It demonstrates that improving each parameter individually enhances student outcomes, but the synergistic effect of improving all parameters simultaneously leads to the most significant improvements. In conclusion, integrating sustainability into educational curricula is essential for empowering future leaders and achieving sustainable development. A holistic approach, combining innovative teaching strategies, comprehensive support systems, and active community involvement, is necessary to equip students with the knowledge and skills required to tackle global challenges. As the demand for sustainable solutions grows, education must evolve to prepare the next generation of leaders to build a more sustainable and equitable world. This paper presents a comprehensive framework and offers practical insights for integrating sustainability into education, highlighting the crucial role of ESD in shaping a sustainable future.



Figure: The VbESD 'iceberg model' showing its levels of impact.

Figure: Integrating Sustainability into Educational Curricula illustrates the process of embedding sustainability principles into educational curricula across different levels of education, from primary schools to higher education institutions. It visually depicts the various strategies and components involved in integrating sustainability into teaching, including interdisciplinary approaches, thematic units, project-based learning, teacher training, institutional support, and community engagement.

COMMUNITY EMPOWERMENT FOR SUSTAINABLE DEVELOPMENT

Effect of Digital Innovation for Rural Development on Inclusive Urbanization, with a Focus on Gender Markers, Vulnerability Mapping and Affordable Housing in Baringo

Benard Nyataya¹, Lucy Karimi Kirima¹, Olivia Otieno¹

ABSTRACT

Digital innovation is emerging as a pivotal catalyst for rural development, significantly influencing inclusive urbanization, particularly in regions like Baringo County. The study aimed to establish the extent to which the transformative impact of digital technologies on rural communities contributes to inclusive urban growth. By integrating digital tools, rural areas in Baringo County have experienced enhanced productivity, improved service delivery, and increased access to information. These advancements have not only benefited the local community but also helped bridge the rural-urban divide by creating new economic opportunities and reducing migration pressures to urban centers.

The study's primary objective was to investigate the impact of digital innovation on rural development and inclusive urbanization, with a focus on gender markers, vulnerability mapping, and affordable housing in Baringo County. The study adopted descriptive research design. The target population consisted of 44 Members of the County Assembly in Baringo County. The researcher employed random sampling techniques with 40 respondents, achieving a 95% confidence level and a 5% margin error. Data collection was the primary focus, and the researcher administered online questionnaires. The data were analyzed using SPSS version 24.

The study's findings showed that the response rate was 95%, meaning that out of 40 questionnaires administered to the respondents, 38 were completed and analyzed. Demographic results showed that the majority of the respondents were between the age of 31 – 40 years, which was 24(63.2%); on gender, the majority were male at 39(76.3%); in line with level of education, majority had university qualification at 22(57.9%); and finally, occupation level showed that majority were elected by the people at 38(100%). A composite mean of 4.0 showed that the majority of the respondents agreed with the statements associated with digital innovation for rural development; a composite mean of 4.24 showed that the majority of the respondents agreed with the statements related to local voices and leadership output; and finally, a composite mean of 4.2 showed that majority of the respondents agreed with the statement associated with urbanization inclusivity level.

Inferential statistics showed that there is a moderately significant correlation between digital innovation for rural development in Baringo County ; the second objective of the study, local voices and leadership , the findings indicate a positive and moderate significant correlation between local voices and leadership on inclusive urbanization in Baringo County ; finally, the study demonstrated a perfect positive and strong significant correlation of inclusive urbanization In conclusion, the study effect of digital innovation for rural development on inclusive urbanization in Baringo has yielded several significant insights. The integration of digital technologies into rural development has the potential to transform socio-economic landscapes, enhancing inclusive urbanization.

Key words: Digital innovation, Rural development, local voices, Leadership, inclusive urbanization.

Community Empowerment for Sustainable Development: Local Voices and Leadership

[Wanjiru Nderitu¹](#), [Dora Cherotich¹](#)

¹Africa Nazarene University

ABSTRACT

This paper is a theoretical review constructed through meta-analysis study on African ways of knowing (ontology), relational ways of knowing (epistemology), and relational values (axiology). The elements of the argument critique the cultural conquest mentality by mainstreaming sustainable development within the context of community development. The study demonstrates the need to empower communities to move beyond conforming to colonized culture and adopt transformed cultural imperatives and language. The argument is embedded in Ubuntu as a philosophical foundation to discuss relational reality, knowledge, and values informed by Ubuntu. Community empowerment in this study context is, therefore, dependent on African Philosophical epistemologies characterized by Ethnophilosophy and Ubuntu Principles. The study focuses on community ethnophilosophical engagement to empower their voices, thus transforming them through decolonized community-based philosophies that inform collective well-being, collective responsibility, and a platform for decolonization.

Key words: Community, Empowerment, African Philosophies

Digital Transformation and Language Preservation and Revitalization: Can Artificial Intelligence (AI) Save Endangered Languages?

[Chege, S. N¹](#), [Githaiga N.M.¹](#)

Murang'a University of Technology, Kenya

ABSTRACT

This study examines the role of artificial intelligence (AI) in preserving and revitalizing endangered languages, as well as integrating them into contemporary digital environments. It explores how AI technologies can be leveraged to preserve and revitalize these languages, thereby addressing a critical issue in language conservation. This research is grounded in Crystal's theory of language revitalization. Methodologically, it employs a qualitative analysis of AI applications in language conservation, supported by case studies and data from linguistic projects that utilize AI tools. This study reviewed various AI technologies

that facilitate the digitization of linguistic data—texts, recordings, and cultural artefacts—into extensive digital archives, overcoming spatial and temporal limitations. Machine learning algorithms have been highlighted for their ability to automate the transcription and translation of texts, thus enhancing access to previously overlooked linguistic resources.

This research also examines AI-powered language learning platforms that customize educational experiences based on learners' proficiency and cultural contexts, fostering language acquisition and revitalization. Key findings demonstrate that AI applications make a significant contribution to documenting linguistic structures and distinctions, thereby deepening our understanding of language evolution and informing preservation strategies. Additionally, AI translation technologies promote cross-cultural communication and global collaboration while preserving linguistic integrity.

This study argues that AI's potential in language preservation is transformative, offering new avenues for revitalizing endangered languages and enhancing cultural heritage. By addressing ethical concerns and biases in AI models and ensuring sustainable funding, AI can facilitate inclusive and equitable language conservation efforts. The findings underscore the importance of collaborative efforts in leveraging AI to restore and integrate endangered languages, thus enriching global cultural heritage and nurturing mutual understanding in an interconnected society

Keywords: Artificial Intelligence (AI), Language conservation, endangered languages, Cultural heritage, Machine learning, Digital archives.

Inhibitors of Growth of Small-Scale Women Owned Enterprises in Awendo Sub - County, Migori County, Kenya, With Focus on Effect of Knowledge and Skills of Small - Scale Women Entrepreneurs

[Beatrice Atieno Omollo¹](#), [Lucy Karimi Kirima¹](#)

ABSTRACT

There has been an increase in the number of businesses owned by women; however, most women's enterprises are stuck at the micro and small levels, failing to develop into medium-sized

or large enterprises. The objective of the study was to determine the Effects of knowledge and skills on the growth of small-scale women-owned enterprises in the Awendo sub-county, Migori County, Kenya.

The study was supported by Marxist and socialist feminism theory by Karl Marx and human capital theory. The study employed a cross-sectional survey and was purely qualitative study. The study targeted 364 registered women's businesses at Awendo Municipality. The sampling frame was created by employing purposive sampling techniques. This study utilized an interview guide enhanced by direct observation to collect the required qualitative data. The focus group discussions were used in the study and comprised a minimum of 4 groups.

This study adopted the content analysis approach to analyses data. The raw data collected from the interview guides and notes from direct observation were scrutinized and edited for accuracy. The study sought to collect data from 110 respondents. From the samples, 92 participants took part in the study. This represented a response rate of 83.63%. Bryman and Bell (2014) contend that a response rate of at least 50% to a research instrument is satisfactory for proceeding with statistical analyses; a rate of 60% is considered good enough, and 70% is considered excellent. According to these recommended thresholds, the final response rate yielded by this study's data collection exercise can be regarded as excellent for the generalizability of the statistical findings. The majority of respondents, 73%, revealed that they had resided in the region for more than five years, while only 27% had lived in the area for less than five years. Most of the women in the study reported that they had lived in Awendo sub-county their entire lives, from childhood. This implies that the women were able to offer answers to the research questions about the Awendo sub-county.

The researcher enquired from the respondents to indicate the number of years they had owned their businesses. The majority of respondents (67.9%) revealed that they had owned their businesses for less than 2 years, while the rest indicated that they had owned their businesses for 2-5 years. This implies that the women understood how entrepreneurship works in the region and, hence, would be credible participants in the study. The success of any business is contingent on the skills and knowledge acquired by the business owner or business operator. From the focus group discussions, it was revealed that most respondents had not attended higher education. Most participants reported having only acquired a primary or secondary level of education.

The Focus Group Discussion (FGD) participants indicated that they are dropouts from Primary school; hence, their knowledge in business was only acquired by taking a risk to start a small business to sustain their livelihoods. The FGD respondents stated that most women in the sub-county had not taken any courses to learn how to operate their own businesses. The respondents indicated that their business endeavours were on a trial-and-error basis. Moreover, the respondents admitted that they wished they possessed the necessary skills and knowledge to run their businesses; however, the high cost associated with learning new skills hinders them from making the change. From the data collected, the lack of knowledge among women entrepreneurs impeded the growth and expansion of their businesses. The study recommended that policymakers at both the county and national levels need to institute proper policies that support small-scale businesses, especially those operated by women. The study also recommends that the government facilitate and encourage training and awareness campaigns on entrepreneurship and digital innovation for rural development in Awendo sub-county and other Counties.

Keywords: Inhibitors of growth, Small-scale women owned enterprises, Knowledge, Skills, Empowerment.

Innovating Africa's Future: Strategic Research and Sustainable Development Initiatives

[Birir Kipchirchir Sospeter¹](#), Vincent Mwanja¹

¹Department of Research and Innovations, Pioneer International University, Nairobi, Kenya

ABSTRACT

Digital innovation is transforming the landscape of rural development, empowering local communities to overcome challenges and unlock new opportunities. This paper delves into the pivotal role of digital innovation in enhancing rural development, with a particular emphasis on incorporating local voices and leadership in the design and implementation of technological solutions. By examining case studies from regions such as Sub-Saharan Africa, Southeast Asia, and Latin America, we illustrate how community-led initiatives have effectively utilized digital tools to address unique challenges, such as improving access to education, healthcare, and economic resources.

The analysis draws on diverse data sources, including reports from the World Bank, the United Nations Development Programme (UNDP), and the International Telecommunication Union (ITU). These sources provide comprehensive insights into the impact of digital innovation on rural communities, highlighting success stories and identifying areas for further improvement. Additionally, qualitative data from interviews with local leaders and community members offers a nuanced understanding of the on-the-ground realities and the transformative potential of digital technologies. Inclusive urbanization is another critical focus of this paper, advocating for urban growth that benefits all residents, particularly marginalized groups.

We explore strategies for leveraging digital technologies to foster inclusivity in urban planning, ensuring equitable access to resources and services. Case studies from cities in India, Brazil, and Kenya are examined to demonstrate how digital platforms can promote participatory governance and enhance the quality of urban life. The interplay between rural development and inclusive urbanization is also analysed, highlighting how digital innovation can create synergies between urban and rural areas, fostering holistic and sustainable development. In conclusion, the paper calls for a collaborative approach that involves local communities, policymakers, and technology providers. By working together, we can harness the power of digital innovation to build an inclusive and equitable future for both rural and urban populations, ensuring that no one is left behind in the digital revolution.

Keywords: Digital innovation, Rural development, Community-led initiatives, Inclusive Urbanization, Participatory governance, Technological solutions.

Innovating Africa's Future: Strategic Research and Sustainable Development Initiatives.

[Birir Kipchirchir Sospeter¹](#), [Teddy Okatch¹](#)

¹Department of Research and Innovations, Pioneer International University, Nairobi, Kenya

ABSTRACT

This study delves into the strategic research and innovation initiatives that are instrumental in shaping Africa's sustainable future. To achieve this objective, we conducted an in-depth analysis of various successful projects across the continent,

focusing on their impacts and the factors that contributed to their success. We drew data from a wide array of authoritative sources, including the World Bank, African Development Bank, United Nations Development Programme (UNDP), and numerous peer-reviewed journals and industry reports. This research methodology involved a comprehensive review of these projects, encompassing areas such as renewable energy, agricultural innovation, water management, education, healthcare, and digital technology. We employed qualitative and quantitative analysis techniques to evaluate the outcomes and identify the critical factors driving sustainable development.

Interviews with project leaders, policymakers, and stakeholders provided additional insights, allowing us to understand the on-the-ground realities and challenges. The findings of this study highlight the pivotal role of strategic planning and innovation in achieving developmental goals. Key factors identified include robust policy frameworks, community engagement, public-private partnerships, capacity building, and the integration of local knowledge with modern technology. These elements have proven essential in driving projects that not only meet immediate needs but also ensure long-term sustainability. This research offers practical recommendations for policymakers and stakeholders. We suggest prioritizing investment in innovative solutions, fostering collaboration between government and private sectors, and enhancing education and training programs to build local expertise. By adopting these strategies, African nations can effectively leverage research and innovation to address pressing developmental challenges and achieve sustainable progress. This study underscores the importance of strategic planning and innovation in shaping Africa's future. The insights and recommendations provided can guide policymakers and stakeholders in fostering sustainable development, ensuring that Africa can meet its developmental goals and contribute to a more sustainable global future.

Keywords: Strategic research, Innovation initiatives, Sustainable development, Renewable Energy, Agricultural innovation, Public-Private Partnerships, Capacity building.

Cultural and Spiritual Perspectives on Land Use and Agricultural Sustainability in Kenya

[Teddy Okatch¹](#), [Wilfred Odoyo²](#), [Alex Gitahi³](#)

¹Department of Research and Innovation, Pioneer International University, Nairobi, Kenya

ABSTRACT

This study investigates the influence of cultural and spiritual ideologies on sustainable agricultural practices and land use in Kenya. As agriculture bides as a cornerstone of the continent's economy and food security, comprehending the interplay between spiritual traditions, cultural values, and sustainability is profound for developing effective land management strategies. This research delves into various Kenyan communities to sift through how indigenous knowledge systems, cultural practices, and spiritual beliefs delineates approaches to land use and agricultural sustainability. Through ethnographic studies, interviews, and literature review, the paper highlights the role of rituals, taboos, and traditional land superintendence practices in promoting ecological balance and biodiversity conservation.

The research also considers the reverberations of modernization and external agricultural interventions on the particular cultural practices, venturing to the tensions and synergies between traditional beliefs and new-fangled sustainability efforts. Questions delved upon is whether culturally and spiritually informed practices often contribute to resilient and sustainable agricultural systems, and whether emphasizing the need for integrating these perspectives into broader agricultural policies would be crucial. This research will thereafter provide valuable insights for policymakers, development practitioners, and scholars, advocating for the recognition and incorporation of cultural and spiritual dimensions in the pursuit of sustainable agriculture and land use in the Republic of Kenya.

Keywords: Cultural practices, Spiritual ideologies, Agricultural systems, Agricultural sustainability

Transmission Of Indigenous Wisdom Among The Youth In Kibera Through Oral Literature: A Case Of Proverbs

[Rev. Sr. Lucy Loice Nabukonde: PhD](#)

Department of Languages and Literature
Africa Nazarene University
nabukonde@anu.ac.ke

ABSTRACT

In a world where proper communication skills and critical thinking skills are being replaced by the AI, employing proverbs to grow and retain indigenous wisdom among youths is crucial to get ahead in life. It becomes even more important for youths to learn how to reason and relate with others in a befitting manner using indigenous wisdom. This study sought how to drill and transmit indigenous wisdom among the youth through oral literature, sampling proverbs. The study was guided by three research objectives namely: to examine what proverbs mean among youths in Kibera Nairobi Country ; to classify the proverbs among youths in Kibera Nairobi Country ;to describe the functions of proverbs among youths in Kibera Nairobi Country and finally, to employ proverbs to drill critical thinking skills among youths in Kibera. The methodology of the study was purely qualitative in that the researcher employed critical observation of the performances of the respondents to tabulate the major findings of the study. It was found out that youths in Kibera have an idea gained from the classroom concerning what proverbs mean, but they think proverbs are meant for elders specifically. Most of the youth respondents think that proverbs are just proverbs and not synthesized into classes.

Moreover respondents argued that proverbs have a function related to elders to retain their wisdom because they need it in the society. Objective number four yielded mixed feelings whereby some of the youth said that they do not need proverbs to reason since they have an assistive machine(AI), yet some said that they still need proverbs to provoke their thoughts into becoming critical thinkers. Upon which the study concluded that proverbs could be used to teach youths in Kibera acquire critical thinking skills, so that they might learn how to reason appropriately and how to interact better with the other members in the community (or help them in obtaining a mind of their own).

Key Word: Proverb, Indigenous, Wisdom, Youths, critical thinking and Oral Literature.

APPENDIX 1: CONFERENCE PROGRAM



AFRICA NAZARENE
UNIVERSITY

ANU HYBRID RESEARCH CONFERENCE PROGRAM

WEDNESDAY 30TH AND THURSDAY 31ST OCTOBER 2024

Theme of the Conference:

**“Creating the Africa we Need: The Role of Research and Innovation in
Advancing Africa Through Sustainable Development”**

DAY 1: Wednesday 30th October 2024

Time: 09:00 – 16:00 hours (East Africa Time)

Session 1: Opening of Conference		
□ Moderator: Dr. Simon Muthomi		
	Activity	Responsible
08.15-08.30	Registration of conference participants & Refreshments	Ms. Diana Martin Mr. Josiah Malala
08.30-08.50	Devotion	Rev Charles Onyango
08.50-09.00	Welcome Address, and Introductions by the chair of the conference	Dr. Mwananje Mwamuye
09.00-09.10	Deputy Vice Chancellor's Welcome address	Dr. Simon Obwatho
09.10-09.30	Vice Chancellor's Speech	Dr. Stanley Bhebhe
09.30-09.40	Introduction of Guests	Prof. Orpha Ongiti
09.40-10.25	Keynote Address: Role of Research for Africa's Sustainable Development	Prof. Ratemo Michieka
10.25-10.45	Q & A in the plenary	Dr. Kimani Gichuhi-
Presentations at the Plenary:		
10.45-11.00	ICT4d-Embedded Social Enterprises Operating within Resource-scarce Contexts: The Ethical & Sustainable Development Dilemma?	Dr. Stephen Momanyi
11.00-11.15	Digital Transformation and Language Preservation and Revitalization: Can Artificial Intelligence (AI) Save Endangered Languages?	Chege Samuel Nganga
11.15-11.30	RANET (Radio-internet) Stations in Rural Kenya: Embracing Digital Communication Technologies	Dr. Nancy W. Kungu
11.30-11.45	Q & A in the plenary	Prof. Elijah Siringi

HEALTH BREAK 11:45-12:30

Breakout Sessions 12:30 - 15:30

Session 2: Break Out Rooms (Main Room)

- Moderator: Mr. George Athoye
- Rapporteur: Ms. Imelda Ndomo

Break Out Room 1

Sub-Themes: Management, Business and Innovation

Chairperson – Mr. Stephen Githii

Rapporteur - Mr. John Ngila

Discussants: Dr. Lucy Kirima, Dr. Owino

Presenters:

Effect of Ground Handling Practices on Aviation Safety Performance in Kenya:

Jones Bor

Enhancing E-Commerce in Africa Through Data-Driven Decisions and Government Initiatives:

Natariana Syombwii Kilonzo

Earnings Quality and Firm Valuation: Evidence of Non-Financial Firms Listed in The Nairobi Securities Exchange in Kenya: *Edwin Sitienei*

Balancing Efficiency and Fairness: A Framework for A Digital Welfare Fund System:

Dr. Wilfred Odoyo

Resources as a Driver of Innovation of Insurance Companies in Kenya:

Dr. Beatrice Ombaka

Break Out Room 2

Sub-Theme: Digital Transformations in Media and Journalism

Chairperson: Dr. Nancy Kungu

Rapporteur: Ms. Jane Gatwiri

Discussants: Dr. Kariuki Ngare, Dr. Raphael Ogutu

Presenters:

Editorial Cartoons in The Digital Era: A Visual Analysis of Gen Z's Demonstration Against the Finance Bill 2024 In Kenya: *Dr. Raphael Nakbumbi Ogutu*

Digital Transformations in Journalism Training in Africa: A Systematic Literature Review: *Anne Anjao Eboi*

Print Media Coverage of Menopause in Kenya: A Content Analysis of The Daily Nation and The Standard Newspapers: *Dr. Cherotich Mung'ou*

Transformative Digital Innovation for Rural Empowerment and Urban Inclusivity in Africa.: *Birir Kipchirchir Sospeter*

Break Out Room 3

Sub-Theme: Science & Environment

- Chairperson: Dr. Sharon Jones
- Rapporteur: John Henry
- Discussants: Dr. Rufus Gikera, Dr. David Mugendi

Presenters:

Ocean Degradation and Its Effects on Coastal Communities: Delving into The World of Seagrass, Coral Reefs, And Mangroves: *Penelope Nozithelo Moyo*

Integrating Predictive Technologies for Early Warning and Climate Change Adaptation and Mitigation in Arid and Semi-Arid Areas of Kenya: *Anne Lily Wanjiru Kamau*.

AFRICATOUR - An Integrated Smart Tourism and Conservation Platform: *Vincent Mwanja*

Transformative Applications of Quantum Computing in Cryptography and Material Science: *Laura Akinyi*

Break Out Room 4

Sub-Theme: Humanities and Social Sciences

- Chairperson: Dr. Rebecca Wambua
- Rapporteur: Mr. Charles Nyaranga
- Discussants: Sr. Dr. Lucy Nabukonde, Dr. Priscilla Mugambi

Presenters:

Emotional Intelligence as a Predictor of Mental Well-Being of Undergraduates of Obafemi Awolowo University, Ile Ife, Nigeria: *Dr. Omitfa Muraina Olugbenga*

Enhancing Mental Health Monitoring with A Recurrent Neural Network (RNN) With Long Short-Term Memory (LSTM) Algorithm Ngara Units: *Patience Gichuhi*

Child Socialization Agents and Juvenile Delinquency: A Case Study of Shimo La Tewa Borstal Institution for Boys, Mombasa County, Kenya: *Josphine Wambui Ngugi*

Communicative-Language-Teaching Influence on Gender-Based Performance of Secondary-School-Students in English Vowels in Northern Cross-River State, Nigeria: *Dr. Iliyas, Rasaq Ayodeji*

Education For Sustainable Development: Integrating Sustainability into Educational Curricula to Empower Future Leaders: *Dr. Devarakonda Harish Kumar*

Influence of Parental Negligence on Student's Academic Performance among Form Three Students in Secondary Schools in Yatta Sub-County, Machakos, Kenya: *Rebecca N. Mutie and Prof. Orpha Ongiti*

Break Out Room 5

Sub-Theme: Legal, Cultural and Governance

- Chairperson: Dr. Charles Khamala
- Rapporteur: Ms. Juliana Njiriri
- Discussants: Dr. Boniface Muthomi, Dr. Rodgers

Presenters:

A sustainable accountability case: Generation Z for the Kenya we want: *Dr. George Okumu Achar*

The Role of Wall Art on Sustainable Peace in Kenya's Informal Settlement Areas in Nairobi County During Electioneering Period: *Vincent Omurwa Okangi*

Creating Peaceful People Through Peaceful Teachers: *Dr. Richard Makoni*

Inclusive approaches to sustainable peace and security in Africans vulnerable population: Harnessing technology innovative governance model and environmental resilience: *Joseph Nabende*

Transformative Impact of AI-Driven Communication on Youth Engagement and Governance in Kenya: *Alex Kimotho Kanyi*

16:00 – 16:10

Closing Session for Day 1

DAY 2: Thursday 31st, October 2024

Time: 09:00 - 16:10 hours (East Africa Time)

	Session 3: Recap and Review □ Moderator: Dr. Lucy Kirima □ Rapporteur: Dr. David Mugendi	
08:15 - 08:30	Registration of conference participants & Refreshments	Ms. Concepta Bwire Ms. Ann Kikuvi
08:30 – 08.45	Recap and Review Introduction of Guest Speaker	Dr. Mwananje Mwamuye
08.45-09.15	Keynote Address	Dr Beatrice Kiage
09.45-10.00	Q & A session	Dr. Sharon Jones
Presentations at the Plenary:		
10.00-10.30	Integrating Indigenous knowledge systems into modern Agricultural practices for climate resilience: A case of Southeastern Kenya	Dr. Philip K. Mwendwa
10.30-10.45	Characterization of Physiochemical and functional properties of selected Irish potato varieties developed through Gamma Irradiation.	Victor M. Musitia
10.40-10.45	Visual Threatening Diabetic Retinopathy Detection and Severity Grading Using Ensemble Learning and Hba Attention Mechanism.	Geoffry Mutiso Mwinzi
10.45-11.00	Climate Resilience in Health, Nutrition and Agriculture: Integrating Strategies for Adaptation and Mitigation	Sammy Mukonyi
11.00-11.20	Q & A at the Plenary	Dr. David Mugendi
HEALTH BREAK/ CHAPEL 11:20 - 12:30		
	Breakout Sessions 13:30 - 15:30	
	Session 2: Break Out Rooms (Main Room) □ Moderator: Mr. George Athoye □ Rapporteur: Ms. Imelda Ndomo	
Break Out Room 1 Sub-Theme: Management, Business and Innovation □ Chairperson – Dr. Emily Roche □ Rapporteur - Mr. John Ngila □ Discussants: Dr. John Kamau; Dr. Wanjiru Nderitu Presenters: Digital Transformation Strategy and Competitive Advantage of Financial Institutions in Kenya: Trends, Challenges and Opportunities for African Businesses: <i>Olivia Otieno</i> Digital Horizons: Unlocking Africa’s Emerging Markets and Entrepreneurial Potential Through Research and Innovation: <i>Birir Kipchirchir Sospeter</i> Project Management Practices and Project Implementation in Public TVET Institutions in Nairobi County, Kenya: <i>David Gatimu Gatibiri</i> Beyond Likes and Shares: Leveraging Social Media Creativity for Destination Branding and Economic Growth: <i>Laura Akinyi</i> Exploring Quantum Tunnelling Effects in Ultra-Low Power Nano-Transistors for Next-Generation Electronics: <i>Vincent Mwanja</i>		

Break Out Room 3

Sub-Theme: Education and Technology Integration

- Chairperson: Dr. Rebecca Wambua
- Rapporteur: Mr. Charles Nyaranga
- Discussants: Dr. Samuel Nyabera, Dr. Alice Nzangi

Presenters:

Harnessing the opportunities presented by Artificial Intelligence in Education to Enhance STEM education in Higher Education: *Prof Orpha Ongiti*

U2u Knowledge-Based Recommender Model Using Deep Learning: *Dorothy Kathambi Mutua*

Exploring The Transformative Impact of Generative AI on Teaching and Learning in the Digital Age: *Dr. Wilfred Oduyo*

Putting Skills First: Analysis of Kenyan Universities' Preparedness in Shaping Graduates Skills Knowledge for Employability: *Prof. Siringi Elijah*

Digital Technology in Classroom: A Paradigm Shift in Education: *Obondo Gaudence*

Break Out Room 4

Sub-Theme: Community Empowerment for sustainable development

- Chairperson: Dr. Joseph Kivukho
- Rapporteur: Mr. Stephen Sanya
- Discussants: Prof. Mwanika, Mr. Stephen Githii

Presenters:

Community Empowerment for Sustainable Development: Local Voices and Leadership: *W. Nderitu, D, Cherotich*

Inhibitors of growth of small-scale women owned enterprises in Awendo sub - county, Migori county, Kenya, with focus on Effect of Knowledge and Skills of Small - Scale Women Entrepreneurs: *Beatrice Atieno Omollo*

Innovating Africa's Future: Strategic Research and Sustainable Development Initiatives.: *Birir Kipchirchir Sospeter.*

Cultural And Spiritual Perspectives on Land Use and Agricultural Sustainability in Kenya: *Teddy Okatch*

Session 6: Conference Closing in Plenary Room: (15:30 - 16:10) □ Moderator: Dr. Simon Obwatho (DVC – ASA) □ Rapporteur: Dr. Nyambura Muthanga		
15.30-15.40	Closing remarks	Prof. Elijah Siringi
15.40-16.00	Presentation of Certificates and Awards	Dr. Sharon Jones Dr. Jane Njuguna
16.00-16.05	Vote of thanks	Dr. Kimani Gichuhi



AFRICA NAZARENE
U N I V E R S I T Y