

# International Conference

Universities, Entrepreneurship and

Enterprise Development in Africa

28 – 29 November 2024



## INTERNATIONAL CONFERENCE: UNIVERSITIES, ENTREPRENEURSHIP AND ENTERPRISE DEVELOPMENT IN AFRICA



as part of



APPLIED RESEARCH AND TEACHING FOR  
SUSTAINABLE DEVELOPMENT IN AFRICA

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# Conference Theme: Sustainable Pathways:

## Driving sustainable innovation in Africa

### Introduction

Several countries have adopted the 17 Sustainable Development Goals (SDG) as part of global commitments to promote development. Adopting the SDGs means being more inclusive and advocating for environmentally sensitive economic development. Improving the quality and relevance of higher education, promoting self-employment, and producing a skilled labor force is pivotal in achieving the development goals of the African continent. Therefore, it has become evident that improving the quality of education in many African higher education institutions must emphasize the human relationship with the planet. Students undergoing training and young graduates need a collective awareness of the implications of their beliefs and values on the earth. They need to be equipped with the right tools and productive skills to enable and sustain economic development.

The Universities, Entrepreneurship, and Enterprise Development in Africa (UEED Africa) conference aims to showcase and promote sustainable innovations that address Africa's most pressing challenges. The conference addresses cross-cutting issues such as gender equality, social inclusion, and digital innovation, recognizing their integral role in advancing sustainable development in Africa. It encourages holistic approaches considering the interconnectedness of social, economic, and environmental dimensions. The conference aims to foster collaboration and facilitate partnerships and networking opportunities among diverse stakeholders, including government agencies, private sector entities, civil society organizations, and academia, towards achieving shared sustainability goals.

The conference theme embodies the imperative of sustainability in driving innovation and progress in Africa. By emphasizing sustainable practices, technologies, and policies, the conference seeks to unlock opportunities for economic growth, social equity, and environmental stewardship across the continent. It serves as a dialogue, collaboration, and knowledge exchange platform, empowering participants to contribute to Africa's sustainable development agenda.

Within the framework of the project "ART4Dev—Applied Research and Teaching for Sustainable Development in Africa," the Hochschule Bonn-Rhein-Sieg University of Applied Sciences (H-BRS) organizes, together with the University of Cape Coast in Ghana, Mouth Kenya University, MOI University, Kenya, and the Institute of Finance Management, Tanzania, the 12th UEED Africa online conference.

### Target participants

This conference aims to bring together academia, business, and other stakeholders interested in the interplay between education, research, and economic development. It is a forum for researchers and practitioners alike. Thus, the event responds to the popular request to build bridges of communication between the worlds of education and business.

### Format of contributions

The conference attempts to be entrepreneurial and innovative. Traditional presentations will still play their role, but participants are encouraged to contribute actively and let their voices be heard in interactive formats. Emphasis will be given to networking possibilities and partner search.

We encourage you to propose a contribution in one of the following alternative formats:

**Presentations (e.g., MS PowerPoint): 20 minutes, plus discussion; to be presented at topical sessions**

**Panel Discussion: 75 minutes**

## Subthemes

1. Sustainable Business and Entrepreneurship in
2. Entrepreneurial Education: Entrepreneurial Learning for Sustainable Development in Africa
3. Bridging Academia and Industry: Driving Sustainable Innovation in Africa
4. Responsible Business Practices in Africa
5. Tourism as a Catalyst for Sustainable Development in Africa
6. Health, Social Protection, and Productivity: Challenges for the entrepreneur
7. Applied Research and Teaching for Sustainable Development in Africa: models, success factors, challenges.

*Submission of papers is required by 30 January 2025.*

*The maximum length of the paper is 7500 words*

*Submission email address: [ueed.conference@h-brs.de](mailto:ueed.conference@h-brs.de)*

*Abstracts and presentation slides will be published on the conference website. Final papers will be published in an electronic conference proceedings volume with DOI number.*

# Conference committee and session chairs for presentations and discussions

We would like to thank our conference committee for the interesting collection of conference sessions.

## Conference Committee & Session Chairs

- **Prof. Dr. Jürgen Bode**, Hochschule Bonn-Rhein-Sieg University of Applied Sciences, Germany
- **Prof. Dr. Rosemund Boohene**, University of Cape Coast, Ghana
- **Prof. Dr. Daniel Agyapong**, University of Cape Coast, Ghana
- **Prof. Dr. Gloria Agyapong**, University of Cape Coast, Ghana
- **Dr. Edward Amatiefio**, University of Cape Coast, Ghana
- **Dr. Peterson Owusu**, University of Cape Coast, Ghana
- **Dr. Osman Light**, University of Cape Coast, Ghana
- **Dr. John Kamau**, Mount Kenya University, Kenya
- **Dr. Evans Mwititi**, Mount Kenya University, Kenya
- **Dr. Diane Uyoga**, Moi University, Kenya
- **Dr. Michael Noel Sam**, Institute of Finance Management, Tanzania
- **Zubeda Mpinga**, Institute of Finance Management, Tanzania
- **Prof. Dr. Muhammad Ashfaq**, IU International University of Applied Sciences, Germany
- **Dr. Shaban Mayanja**, Hochschule Niederrhein University of Applied Sciences, Germany
- **Prof. Dr. Masauso Chirwa**, Hochschule Bonn-Rhein-Sieg University of Applied Sciences, Germany and University of Zambia
- **Prof. Dr. Wiltrud Terlau**, Hochschule Bonn-Rhein-Sieg University of Applied Sciences, Germany
- **Prof. Dr. Ralf Meyer**, Hochschule Bonn-Rhein-Sieg University of Applied Sciences, Germany
- **Prof. Dr. Kerstin Rosenow-Williams**, Hochschule Bonn-Rhein-Sieg University of Applied Sciences, Germany
- **Prof. Dr. Christian Tode**, Hochschule Bonn-Rhein-Sieg University of Applied Sciences, Germany
- **Oghenekome Umuerrri**, Hochschule Bonn-Rhein-Sieg University of Applied Sciences, Germany
- **Nhac Tran**, Hochschule Bonn-Rhein-Sieg University of Applied Sciences, Germany
- **Dufie Afia Ntiamoah**, Hochschule Bonn-Rhein-Sieg University of Applied Sciences, Germany and University of Cape Coast, Ghana

Thursday, 28 November

Time: 09:15 – 10:15 (Main Room)

**Session Chair: Prof. Dr. Daniel Agyapong**, University of Cape Coast, Ghana

*Panel Discussion:*

**Teachers' Acceptance of AI for Developing Digital Skills Globally**

**Prof. Dr. Ralf Meyer**, Hochschule Bonn-Rhein-Sieg University of Applied Sciences, Germany

**Prof. Dr. Daniel Agyapong**, University of Cape Coast, Ghana

**Prof. Dr. Prince Ellis**, University of Cape Coast, Ghana

In the contemporary digital age, equipping students with digital skills is essential for fostering sustainable development. The paper explores the role of generative artificial intelligence (AI) in enhancing teaching and learning processes, focusing on teachers' acceptance and integration of AI-driven tools. The study investigates the factors influencing educators' willingness to adopt generative AI, examine both the benefits and challenges associated with its implementation in educational settings. Utilizing a mixed-methods approach, the research includes surveys and interviews with teachers from diverse educational backgrounds to assess their

perceptions, readiness, and the impact of generative AI on their pedagogical practices. The findings reveal critical insights into how generative AI can support personalized learning, improve student engagement, and develop digital competencies essential for sustainable development. This paper also provides recommendations for policy makers and educational institutions to facilitate the effective integration of AI technologies, aiming to bridge the digital skills gap and promote a sustainable future through innovative education.

Thursday, 28 November

Time: 11:00 – 12:15 (Room 1)

**Session Chair: Prof. Dr. Daniel Agyapong**, University of Cape Coast, Ghana

*Presentation:*

**Entrepreneurship in Africa Amid the Educational and Traditional System: Motivation and Challenges**

**Mrs. Rita Aku-Shika Diabah**, Yesli Ice, Ghana

**Dr. Dominic Owusu**, University of Cape Coast, Ghana

Entrepreneurship in Africa continues to attract a lot of interest among the youth. This has contributed to the number of youths engaged in several businesses for various reasons. However, the current educational system that does not allow creativity and ingenuity makes it difficult for these businesses to strive and grow. The challenges are further exacerbated by our traditional system which does not encourage the youth to start their businesses. The system sees such people as inexperienced and the banks are unwilling to support such companies and a host of challenges. This paper reviews the curriculum used at the three levels of the educational system in Ghana to determine how the curriculum supports the youth to engage in business. It further analyses the challenges such youth encounter in starting and growing their businesses. The paper uses the case study approach and identifies three local businesses with owners who were locally bred through the current and traditional educational systems. Interviews are used as the main data collection instrument and analysed along three thematic areas: how the current educational system encourages or motivates the youth to venture into start-up businesses, the challenges

encountered and the motivation for the youth to engage in entrepreneurship. The study's findings indicate that though the current educational system is new and incorporates a lot of innovative ways of encouraging practical learning, it fails to cater for instilling entrepreneurship among the students at the early stages. It found that it is only at the university or the tertiary level that the curriculum incorporates the subject of entrepreneurship. However, it is only taught and does not provide an avenue and support for students to start or venture into businesses. The rising unemployment is the only motivation for the youth to start a business of their own. However, that motivation is also hampered by stringent measures that such businesses have to meet before receiving assistance to support their businesses. Based on the findings, the study recommends for the incorporation of entrepreneurship at the basic level through to the university level to build the skills and mindset of students to venture into entrepreneurship and grow their interest in the area. Details of the outcome are discussed in the main paper.

Thursday, 28 November

Time: 11:00 – 12:15 (Room 1)

**Session Chair: Prof.Dr. Daniel Agayapong**, University of Cape Coast, Ghana

*Presentation:*

**Overcoming Barriers to Corporate Entrepreneurship: Nurturing Supportive Environment in Small to Medium Tourism Enterprises in Zimbabwe**

**Cathrine Paada Kwinje**, Zimbabwe Open University, Zimbabwe

**Molline Chiedza Mwando**, Chinhoyi University of Technology, Zimbabwe

**Lloyd Chingwaro**, Zimbabwe Open University, Zimbabwe

Small to Medium Tourism Enterprises (SMTEs) in developing nations specifically Zimbabwe, are facing barriers in implementing Corporate Entrepreneurship (CE) emanating from resistance and an environment that is not supportive for CE. This calls for action in developing an environment that nurture support for implementation of CE. Thus, the purpose of this paper is to examine barriers to CE and develop strategies to address barriers to CE. The study used a quantitative research methodology. A sample size of 150 respondents was used. Descriptive statistics were used to analyze barriers which SMTEs are facing in implementing CE as well as strategies to create an environment that nurture CE in SMTEs. The results indicate that, despites efforts by SMTEs in adopting CE, they still face barriers in adopting the strategy. The barriers encompass a shortage of business management expertise, limited managerial training and experience, inadequate education and skills, a lack of awareness of corporate entrepreneurship among management, deficient entrepreneurial capabilities among staff, understaffing, insufficient capital and resources, absence of necessary hardware and software, challenges in recruiting qualified and dependable employees, unfavorable exchange rates, investment insecurity, market information gaps, limited access to credit, aversion to risk-taking in initiating new ventures, fierce competition from rivals, rapid technological advancements, market

dynamism, unfavorable national policies and regulatory frameworks, lack of employee interest and motivation in entrepreneurship, inadequate infrastructure to support entrepreneurial activities, reluctance of financial institutions to collaborate with entrepreneurial entities, and legal shortcomings in facilitating the entrepreneurship process. Findings indicates that, SMTEs can overcome barriers to Corporate Entrepreneurship through addressing resistance and nurturing a supportive environment. This goal can be reached by allocating sufficient financial resources, allocating human resources for the development of corporate entrepreneurship (CE), ongoing research and development efforts, implementation of CE training initiatives, fostering a robust CE and innovation ethos, establishing a clear vision, obtaining support from management and owners, nurturing employee development through training, implementing reward structures to reinforce CE accomplishments, and empowering individuals and teams to unleash their creativity. In addition, other ways to achieve this objective include promoting collaboration and cross-functional teamwork, embracing diversity and inclusion within the organization, fostering a culture of learning and experimentation, and staying attuned to market trends and customer needs.



Thursday, 28 November 11:00 – 12:15

Time: 11:00 – 12:15 (Room 2)

**Session Chair: Dr. Evans Mwiti**, Mount Kenya University, Kenya

*Presentation:*

**Catalyzing Business Intentions through Entrepreneurship-Oriented Training on University Students in Kenya.**

**Bencorance Wambua**, Mount Kenya University, Kenya

**Evans Mwiti**, Mount Kenya University, Kenya

This study examined the challenge of transitioning university graduates' mindsets from seeking formal employment to venturing into entrepreneurship. Faced with burgeoning youth population, the growth in job market in most developing countries like Kenya are not able to absorb increasing number of graduates every year. This has created a major challenge of youth unemployment. Entrepreneurship education has been identified to play a critical role in mitigating this challenge by fostering an entrepreneurial mindset among the youth. This study employs a descriptive research design grounded in a hypothetical framework to test the impact of entrepreneurship training programs, andragogy, university learning environments, and capital availability on developing an entrepreneurial mindset. The study targeted final year business students in Kenyan public universities, using a randomly selected sample. A randomly selected sample of 322 students was chosen to participate in the survey. Data was collected using a semi structure questionnaire. The findings indicate that entrepreneurship-oriented training play crucial roles in fostering business motives among students, though their impact varies. Training

programs had the highest influence, while university surroundings had the lowest. The study also highlighted the significant influence of attitude factors on developing business motives and the importance of capital availability. Andragogy was found to significantly affect business motives, and university learning environments were essential in creating an entrepreneurial training climate and linking students with potential capital providers. The study recommends developing entrepreneurship training programs that emphasize experiential and practical learning. Additionally, the study recommends that practice-oriented teaching and frequent engagement with industry be used to catalyze the shift of students' mindsets towards entrepreneurship. The study underscores the importance of comprehensive entrepreneurship training, practical learning approaches, and supportive environments in cultivating entrepreneurial intentions among university students.

Thursday, 28 November

Time: 11:00 – 12:15 (Room 2)

**Session Chair: Dr. Evans Mwit**, Mount Kenya University, Kenya

*Presentation:*

**PACmen—Professional Apprenticeships for Craftsmen**

**Florian Strakosch**, Leipzig University of Applied Sciences (HTWK Leipzig)

Improvements in higher education lectures towards the practice-relevant integration of industrial needs is heavily supported and funded by the governments especially in North African countries. In turn, the universities are producing loads of very well-trained engineers with extremely creative ideas. However, since skilled craftsmen in these areas is rare, most engineers cannot realize their ideas in their home countries and therefore move to Europe or America. To counteract this so-called “brain train”, the Professional Apprenticeships for Craftsmen “PACmen” program, e.g. for electricians, programmers and IoT installers, is meant to be established in Tunisia and Egypt for example. It

will contain specialized, yet adaptable courses accompanied by coordinated training environments to gain practical experiences. The respective contents will be designed based on existing knowledge available in Germany in addition to the local demands. Once successful tested, the program can and will be extended to other African countries.

Thus, PACmen will ensure an equal quality of all installations which will lead to an increase in accuracy, efficiency, maintainability and durability of industrial plants. Therefore, products and ideas made in Africa will be widely accepted in a variety of markets and ultimately strengthen the position of the effected regions.

Thursday, 28 November

Time: 11:00 – 12:15 (Room 3)

**Session Chair: Prof. Dr. Masauso Chirwa**, Hochschule Bonn-Rhein-Sieg University of Applied Sciences, Germany and University of Zambia

*Presentation:*

**Improving Employability: Case of the University of Rwanda**

**Michael Agyekum Bremang**, University of Koblenz, Germany

**Prof.Dr. Harald F.O.von Korflesh**, University of Koblenz, Germany

**Materne Mateso Lumiere**, University of Koblenz, Germany

**Elizabeth Grün**, University of Koblenz, Germany

In spite of the labor market transformation, the unemployment problem for university graduates is still persistent because of the mismatch between competencies and industry needs. This paper aims at the possibilities of improving graduate employability by exploring three major factors: competency-based training, knowledge transfer and promotion of sustainable entrepreneurship with the University of Rwanda as a case study. The research is concentrated on assessing the theoretical foundations of these concepts, their integration and the impact they have on job prospects. Concepts are evaluated with the use of models such as ADDIE, SECI, Kirkpatrick's Four Levels of Training Evaluation, Bloom's Taxonomy, Kolb's Experiential Learning Theory, Triple Bottom Line, Natural Resource-

Based View, Circular Economy, Community of Practice, Social Entrepreneurship Theory. It integrates literature review with survey-based, and focus group discussion analysis in a purposive way. According to the findings of this paper, models based on competencies, transfer of knowledge and sustainability promotion initiatives improved the skills, satisfaction level and employability of graduates. It further reveals the importance of matching the educational curriculum with employer needs and planning a curriculum robust in these models. The key steps to be taken include ongoing assessments leading to feedback-based interventions, and setup of an analysis tool to track the process of evaluation.

Thursday, 28 November

Time: 11:00 – 12:15 (Room 3)

**Session Chair: Prof. Dr. Masauso Chirwa**, Hochschule Bonn-Rhein-Sieg University of Applied Sciences, Germany and University of Zambia

***Presentation:***

**The Role of Universities in Ensuring Inclusive AI adoption amongst SMEs**

**Heindri A. Bailey**, Managing Director (Managing for Excellence PTY LTD) South Africa

In recent years much emphasis has been placed on the transformative role that Artificial Intelligence (AI) can play in enterprise development, especially Small and Medium Enterprises (SMEs). The successful adoption of AI are dependent on various stakeholders, including governments that provide the legislative frameworks and technological infrastructure, industry, that plays a role in fostering innovation and off course the individual entrepreneurs' who needs to be open to AI adoption. In this paper we investigate the role universities can play in

collaboration with various stakeholders in stimulating innovation, providing the needed training and education for entrepreneurs, conducting research, and actively partnering with SMEs in product and process innovation towards AI adoption. This paper is presented in the context of the specific challenges faced by SMEs in South Africa and is focused on ensuring an inclusive growth outcome for enterprise development.

Thursday, 28 November

Time: 11:00 – 12:15 (Room 4)

**Session Chair: Prof. Dr. Ralf Meyer**, Hochschule Bonn-Rhein-Sieg University of Applied Sciences, Germany

**Presentation:**

**Global Inflation: Assessing the Impact on International NPO Project Portfolios**

**Prof. Ralf Meyer**, Hochschule Bonn-Rhein-Sieg University of Applied Sciences, Germany

Global inflation, driven by events such as the COVID-19 pandemic and the war in Ukraine, has had profound socio-economic impacts worldwide. This study examines the effects of inflation on the project portfolios of international non-profit organizations (NPOs). Utilizing data from the International Aid Transparency Initiative (IATI), the study focuses on the project portfolios and regional distributions of ten major NPOs. The findings reveal that inflation significantly increases financial expenditures for NPOs, hindering project implementation, particularly in Africa. Additionally, the study explores the impact of US dollar exchange rate fluctuations on the inflation rates in project countries, providing a comprehensive view of the economic

challenges faced by NPOs. By addressing both direct inflation impacts and currency fluctuations, this research offers a nuanced understanding of the financial dynamics involved. The study underscores the necessity for NPOs to adopt robust financial strategies to mitigate economic pressures. It concludes with practical recommendations, including flexible budgeting practices, strategic financial reserves, and dynamic project planning, to better protect project portfolios from inflation's adverse effects. Implementing these measures will enhance NPO resilience, ensuring the continued effectiveness of their humanitarian and development initiatives in a volatile economic environment.



Thursday, 28 November

Time: 11:00 – 12:15 (Room 4)

**Session Chair: Prof. Dr. Ralf Meyer**, Hochschule Bonn-Rhein-Sieg University of Applied Sciences, Germany

*Presentation:*

**Supply Chain Disruption, Risk Management Capabilities and Sustainable Competitive Advantage of Manufacturing Firms in Free Zones Area in Ghana**

**Owusu Kwame Dankwa**, University of Cape Coast, Ghana

**Gloria K.Q. Agyapong**, University of Cape Coast, Ghana

**Daniel Agyapong**, University of Cape Coast, Ghana

**Osman Light**, University of Cape Coast, Ghana

The paper examined the role of risk management capabilities in the relationship between supply chain disruption and sustainable competitive advantage of manufacturing firms in the Free Zones Areas in Ghana. Specifically, the paper assessed the effect of supply chain disruption on firm's sustainable competitive advantage, examined the effect of risk management capabilities on firm's sustainable competitive advantage, and finally examined the moderating role of risk management capabilities in the relationship between supply chain disruption and firm's sustainable competitive advantage. The paper employed the quantitative approach and explanatory design. The paper collected data from 135 manufacturing firms actively operating under the Free Zones Area in Greater Accra and Ashanti Regions using questionnaires. Data was analysed using the Partial Least Squares

Structural Equation Modeling (PLS-SEM). The paper found that supply chain disruption had a negative effect on firm's sustainable competitive advantage, however, the effect was not significant. In addition, the paper found that risk management capabilities had a positive and significant effect on firm's sustainable competitive. Finally, the paper found that risk management capabilities played a positive and significant moderating role in the relationship between supply chain disruption and firm's sustainable competitive advantage. It was therefore recommended that manufacturing firms should invest in robust risk management capabilities to enhance their sustainable competitive advantage.

Thursday, 28 November

Time: 11:00 – 12:15 (Room 5)

**Session Chair: Prof. Dr. Gloria Agyapong**, University of Cape Coast, Ghana

*Presentation:*

**“HERMES”**: A hybrid recommendation system for Ghana-based tourism

**M.G. Asante-Mensah**, University of Cape Coast, Ghana

**Charles R. Haruna**, University of Cape Coast, Ghana

**Abdul- Lateef Yussif**, University of Cape Coast, Ghana

**Gideon J. Aidoo**, University of Cape Coast, Ghana

**Tudzi K. Kafui**, University of Cape Coast, Ghana

**Joshua A. Simpson**, University of Cape Coast, Ghana

Obtaining valuable and accurate tourism information can become an overwhelming task to tackle given the vast pool of options available to the consumer. Having a plethora of options with no clear guidelines on how to manage and narrow down choices presents a challenge that can be unwanted for many looking to plan trips and activities in the future. Creating a streamlined option to eliminate these issues is, therefore a worthwhile endeavor. Recommendation systems, or recommender systems, are a class of artificial intelligence and big data designed to suggest items to users based on prior opinions and preferences, product engagement, and interactions. The successful use of recommender systems in consumer purchase, search history, and demographic information has propelled its use in other areas such as e-learning, tourism, management, and computer vision.

Recommendation engines create a customized user experience by assisting each consumer in identifying and discovering their favorite television programs, films, digital products, books, services, and more. In this work, we develop a recommender system for Ghanaian tourism websites to provide personalized recommendations to users based on their travel preferences, behavior, and tastes. A combination of collaborative filtering and content-based filtering algorithms have been utilized for this work. This hybrid approach combines the advantages of both methods to create an improved recommendation system. The results obtained ascertain the efficiency of our proposed method.

Thursday, 28 November

Time: 11:00 – 12:15 (Room 5)

**Session Chair: Prof. Dr. Gloria Agyapong**, University of Cape Coast, Ghana

*Presentation:*

**Improving Hotel Guest Experience Through Sentiment Analysis Web Based System**

**Emmanuel Dorte Tetteh**, University of Cape Coast, Ghana

**Charles Roland Haruna**, University of Cape Coast, Ghana

**Aikins Amponsah Darkwah**, University of Cape Coast, Ghana

**Maame Gyamfua Asante-Mensah**, University of Cape Coast, Ghana

Sentiment analysis has become essential for improving customer experiences, especially in the hotel industry. This paper aims to enhance the guest experience in hotels in Takoradi, Ghana, using a web-based feedback system incorporating sentiment analysis. To improve service quality, satisfaction, and loyalty, it is crucial for the hotel business to have a thorough awareness of guest opinions and to respond quickly due to the competitive nature of the market. This proposed work examines the practical consequences for the hotel business in Takoradi by providing a structure for incorporating sophisticated data analytics into hospitality management procedures.

The work focuses on filling a notable deficiency in the use of sentiment analysis in the hospitality industries of developing countries. The paper showcases the economic influence on the tourist sector in Takoradi, emphasizing how improved visitor experiences can stimulate economic growth. This study utilizes sentiment analysis models such as Word2Vec, BERT, and ERNIE to gain a detailed knowledge of guest comments. The aim is to help hoteliers make well-informed decisions that enhance the quality of service.

The main goals are to create a sentiment analysis system that operates on the internet, assess several methods for sentiment analysis, determine the aspects that impact visitor happiness, and utilize this knowledge to enhance hotel management. The work highlights the significance of providing immediate feedback and tailored services to ensure client happiness and loyalty.

The literature study, thoroughly examines previous research on sentiment analysis and its implementation in the hotel sector. This study establishes a theoretical framework for analyzing hotel guests' experiences in Takoradi and evaluates the effectiveness of sentiment analysis approaches. The theoretical basis is underpinned by service quality theory and customer input management theory, which highlight the crucial significance of guest input in improving service provision.

This work provides substantial contributions to both the academic realm and practical implementations in the hotel business. The utilization of sentiment analysis technologies in Takoradi enables hotel management to obtain practical and implementable insights, leading to enhanced guest experiences and a distinct advantage over competitors. The results also promote additional investigation into the incorporation of technology in the field of hospitality management, specifically in underdeveloped areas, thereby preparing the industry for future advancements.

Overall, this proposed work highlights the capacity of sentiment analysis to revolutionize the hotel visitor experiences in Takoradi, thereby contributing to the greater objectives of economic growth and exceptional service in the hospitality sector. The potential for enhanced guest experiences is significant, and this research paves the way for a brighter future in the hospitality industry in Takoradi and Ghana as a whole.

Thursday, 28 November

Time: 11:00 – 12:15 (Room 6)

**Session Chair: Oghenekome Umuerrri**, Hochschule Bonn-Rhein-Sieg University of Applied Sciences, Germany

**Presentation:**

**Emotional Intelligence, Innovation, and Resilience on Youth Entrepreneurial Success: A Mixed-Methods Study**

**Isaac Kosi**, University of Cape Coast, Ghana

**Edward N A Amarteifo**, University of Cape Coast, Ghana

**Charles H K Essel**, University of Cape Coast, Ghana

Youth entrepreneurship programmes foster the next generation of innovators and business leaders. This study examines the nexus between emotional intelligence, innovation, student resilience, and entrepreneurial success in youth entrepreneurship business enterprises. By examining these constructs, this study promotes literature on the spirit of young entrepreneurs by assessing the emotional intelligence and resilience of these young entrepreneurs, which affects innovation and entrepreneurial success. We will use a mixed methods approach- surveys and in-depth interviews to collect data on program participants' emotional intelligence, innovative tendencies, resilience and business outcomes. Our findings will cover emotional intelligence and resilience levels and how they

predict innovation and entrepreneurial success. And moderating role of resilience in the emotional intelligence-entrepreneurial success model. The results will play an important role in theory and management or practical use and will support these effects, especially in developing regions of the world. These discoveries will provide valuable insights to academics, policy-makers, and practitioners in developing strong business ecosystems for young people.

**Keywords:** Emotional Intelligence, Entrepreneurship, Innovation, Resilience, Entrepreneurial Success, Youth Entrepreneurship Program

Thursday, 28 November

Time: 11:00 – 12:15 (Room 6)

**Session Chair: Oghenekome Umuerrri**, Hochschule Bonn-Rhein-Sieg University of Applied Sciences, Germany

*Presentation:*

*Business and Entrepreneurship Practices in Kenya: A Farmer's Perspective*

**Diane Uyoga**, Moi University, Kenya

**Kimeli Korir**, Moi University, Kenya

The farming landscape in Kenya is vibrant, robust and diverse in terms of trade and service provision. Home grown businesses are well established and ascribe to the nature of doing business in the region. Trading of produce is majorly based on the availability within the local area. Much attention has been paid to the large scale farmer with resources to enhance and sustain their agricultural operations. The small scale farmer has devised and adapted ways for sustainability and household sustenance that meet the required needs. This study focuses on the farmer who has found indigenous enterprising ways to sustain their small-scale operations, support household set up, and generally improve their standards of living. The ways and methods employed may be sufficient to

bring them out of the poverty line while having the perspective of their farming activities to be entrepreneurial and hence business as opposed to being limited to providing for their households and communities. The farmer's perspective comes from indigeneity of their common practices based on their cultural and economic beliefs. The study is grounded on Indigenous Wholistic Theory and Social Practice Theory that help in shedding light towards the culture and behaviour that surround farming practices as a way of a holistic approach to wellbeing and social life. Quantitative method of data collection will be employed where enterprising small scale farmers give their views on their farming practices.



Thursday, 28 November

Time: 13:30 – 14:45 (Room 1)

**Session Chair: Dr. Diane Uyoga**, Moi University, Kenya

*Presentation:*

**Integrated Network and Simulation Model for SMEs**

**Dr. Christiana Odumah Hood**, University of Cape Coast, Ghana

**Michael Agyekum Bremang**, Universität Koblenz, Germany

**David Dickson Owusu-Acheampong**, Universität Koblenz, Germany

Small and Medium-sized Enterprises (SMEs) are the core engines behind advancing quicker economic expansion and innovation in developing countries and they usually encounter obstacles in knowledge transfer and inadequate technology access. This research paper presents a new integrated network and simulation model which is aimed at improving knowledge and technology transfer as well as promoting sustainable entrepreneurship across small medium-sized enterprises in developing countries. It involves a combination of Watts-Strogatz model, Barabási-Albert model and Agent-based simulation to determine the vital indicators required for academia-industry collaborations that will work best, develop optimal entrepreneurship curricula, and forecast everlasting economic growth.

The methodology is to create a robust, scale-free, small-world network for capturing processes of a university-industry partnership. Using this model the research identifies key hubs by growing the network and running agent-based simulations to

forecast outcomes. The model is enhanced with analytics, data variations, detailed simulations with the help of agents, sociocultural aspects, and rigorous validation criteria.

Recommendations include stronger university-industry linkages, improvement of entrepreneurial education, and supporting SMEs growth by focusing on specific policies. This research aims to fill some missing gaps within the literature by merging agent-based simulations with network theory to enable the transfer of knowledge and technology for SMEs. Existing studies only focused on creating collaborations between universities and industries while others were concerned more about entrepreneurship without considering integrating these elements. The model findings predict numerous benefits for SMEs in the green entrepreneurship sector. Green entrepreneurship can be adopted by these SMEs because the model optimises educational programs and creates focused university-industry linkages that promote such adoption.

Thursday, 28 November

Time: 13:30 – 14:45 (Room 1)

**Session Chair: Dr. Diane Uyoga**, Moi University, Kenya

*Presentation:*

**Green marketing Impact on Manufacturing Industries' CSR Performance in Kenya**

**Betty Chirchir**, Moi University School of Business & Economics, Kenya

**Dr. Yusuf Kibet**, Moi University School of Business & Economics, Kenya

**Dr. Razia Mbaraka**, Moi University School of Business & Economics, Kenya

Going green means to pursue knowledge and practices that can lead to more environmentally friendly and ecological responsible decisions and life styles thus strengthening healthy industries and building the economy through their existence.

This study is anchored on sustainable development and the United Nations Development goals number 9 & 13, thus helping in minimizing the risk of environmental catastrophes.

The contemporary business landscape is increasingly characterized by the imperative issues for manufacturing industries to integrate sustainable practices into their operations while simultaneously enhancing their performance.

Thursday, 28 November

Time: 13:30 – 14:45 (Room 2)

**Session Chair: Prof. Dr. Daniel Agyapong**, University of Cape Coast, Ghana

*Presentation:*

**Universities, Entrepreneurship, and Enterprise Development for Sustainable Development: Policies, Practices, Trends, and Experiences in Ghana**

**Daniel Agyapong**, University of Cape Coast, Ghana

**Rosemond Boohene**, University of Cape Coast, Ghana

**Gloria K.Q Agyapong**, University of Cape Coast, Ghana

This paper explores the nexus between universities, entrepreneurship, and enterprise development, emphasizing their collective role in fostering sustainable development in Ghana. The focus spans from start-ups to corporate entrepreneurship, highlighting the significance of research commercialization and the establishment of university enterprises. Entrepreneurial university is central, reflecting institutions that not only impart knowledge but also actively engage in creating economic value through innovation and enterprise development. Such universities address sustainable development goals working within the framework of environmental stewardship, social responsibility, governance, economic viability summarized as people, profit, and planet.

Current trends illustrate a shift towards digital business models, public sector entrepreneurship, and the incorporation of entrepreneurial training into curricula. Digital transformation, artificial intelligence, and related technological advancements are reshaping enterprise landscapes, offering new opportunities and challenges. Entrepreneurial practices in Ghana are diverse, encompassing training, mentorship, incubation, acceleration, establishment of entrepreneurship centers and simulation laboratories. These practices facilitate the transition from learning about entrepreneurship to learning through entrepreneurship, fostering practical skills and real-world applications. The impact of universities extends beyond degree conferral, contributing to start-ups, intellectual property registrations, spin-offs, employment

rates, CSR engagements, and resource-efficient solutions.

Policy frameworks at the university and national levels are instrumental. Key policies and programs include the AU Agenda, Agenda 2030, the National Entrepreneurship and Innovation Programme (NEIP), and the Ghana Enterprise Agency (GEA). Despite SME absence of reliable data and informality, business registration bottlenecks, finance, and high default rates among SMEs, influx of cheap imports and low IP protection, initiatives like the Ghana Alternative Market and sustainable development projects highlight ongoing efforts to enhance enterprise development.

There is the need for policy re-examinations, including fiscal incentives and enhanced IP protection. We require pedagogical shifts towards employability-focused teaching methods and the integration of AI and VR. Enhanced partnerships and collaborations, both local and international, are crucial for grants, exchange programs, and joint curricula development. Future research should focus on culturally adaptive business models. There is the need for infrastructure support including improved internet access. Formalizing businesses through credit information improvements, like the Ghana Card and TIN, is also vital. By examining these facets, the paper uses a synthesis of literature approach to provide insight of the interplay between universities, entrepreneurship, and enterprise development in promoting sustainable development in Ghana.

Thursday, 28 November

Time: 13:30 – 14:45 (Room 2)

**Session Chair: Prof. Dr. Daniel Agyapong**, University of Cape Coast, Ghana

*Presentation:*

**Competencies and Individual Marketability for Employment in the 21<sup>st</sup> Century**

**Bernard Nassiuma**, Moi University, Kenya

**Diane Uyoga**, Moi University, Kenya

In today's competitive world of employment, competencies become an added advantage to people seeking employment. A competence is a set of demonstrable characteristics that improve the efficiency or performance of a job. Although competencies are necessary they are not skills, but inherent qualities that an individual possesses in form of collaboration, knowledge and ability to motivate, and guide others required for strategic thinking, and decision making. Competencies are useful for both employees and employers, as they provide a common framework for selecting, developing, and evaluating talent. Competencies can also help to align the goals and actions of an organization with its vision and mission. This study is from the perspective of students who require specific characteristics to increase their chances of employability. Specific objectives are the behaviours of the students on how they interact with others to build on communication, teamwork, and problem-solving. Employability is the ability and suitability of a person to find and keep a job. Having the right skills, qualifications, personal attributes and attitudes that make one a marketable employee. This study examines the concept of competencies in the context of learner perspective on employment. Competencies are demonstrable characteristics and inherent qualities that enhance job efficiency and performance,

distinguishing them from learned skills. The research explores three primary classifications of competencies: behavioural, technical, and leadership. Behavioural competencies encompass soft skills such as communication and teamwork, while technical competencies involve specific hard skills related to tools and systems. Leadership competencies focus on an individual's ability to influence others. The study also investigates the relationship between competencies and employability, defined as an individual's capacity to secure and maintain employment. This study uses quantitative data from university students. The research highlights the importance of competencies as a framework for talent selection, development, and evaluation, emphasizing their role in aligning organizational actions with overarching vision and mission of employees. This study contributes to the existing literature by providing a comprehensive analysis of competencies, their classifications, and their impact on individual marketability. The findings suggest that a nuanced understanding of competencies can significantly enhance human resource management practices and organizational performance.

Thursday, 28 November

Time: 13:30 – 14:45 (Room 3)

**Session Chair: Dr. Edward Amatiefio**, University of Cape Coast, Ghana

*Panel Discussion:*

*The Travel and Tour Business in Ghana: Perspectives, Prospects, Barriers*

**Comme V.**, Kumasi Technical University

**Akrofi-Ansah H.**, Kumasi Technical University

**Osae Akonnor, P.**, Kumasi Technical University

**Impraim C.E.**, Kumasi Technical University

**Frimpong M.**, Kumasi Technical University

**Boateng R.**, Kumasi Technical University

**Ashley R.**, Kumasi Technical University

The purpose of this paper is to assess the Travel and Tourism Business in Ghana to identify its perspectives, prospects, barriers and success factors. This will reveal the viability of the business for entrepreneurial decisions. The qualitative approach focused on 20 travel agencies selected purposively and conveniently

from two largest across the country. Data collected would be put into themes and content analysis would be conducted to address the issues. Results would be discussed descriptively and results will be used to draw conclusions and recommendations for improvement.



Thursday, 28 November

Time: 13:30 – 14:45 (Room 4)

**Session Chair: Oghenekome Umuerrri**, Hochschule Bonn-Rhein-Sieg University of Applied Sciences, Germany

**Presentation:**

**Understanding the Concept of Sustainability by Fashion Designers in Rwanda**

**Manou van Dijk**, Hochschule Koblenz University of Applied Sciences, Germany

**Mareike Heinzen**, Hochschule Koblenz University of Applied Sciences, Germany

**Harald von Korflesch**, Hochschule Koblenz University of Applied Sciences, Germany

The fashion industry has come under increasing pressure to become more sustainable, as the awareness of the environmental and social impact of clothing production has grown. Although the concept of sustainability seems intuitive, to date there is no universally accepted definition (Henninger et al., 2016; Shi et al., 2019). However, the triple bottom line (TBL) framework (Elkington, 1997) is widely accepted in the literature, suggesting that companies should strive to achieve a balance between environmental, economic, and social aspects to enhance sustainability.

A closer look at the literature indicates that the discourse on sustainable fashion seems to be mainly centered in the Global North, particularly in the US and Europe (Mukendi et al., 2020). There are fewer publications from the Global South, where most of the raw materials for clothing are sourced and where manufacturing often takes place. Research on sustainability in fashion in the Global South is often limited to second-hand clothing (Monyaki & Cilliers, 2023).

Given Africa's position as the second-fastest-growing region globally, with projected GDP growth rates of 3.7 percent in 2024 and 4.3 percent in 2025 (African Development Bank Group, 2024), there is an urgent need for research on the understanding of sustainability within this dynamic context. Rwanda, recognized as the third-fastest-growing economy in Africa (ibid.), presents a unique case for study due to its significant economic advancements and proactive governmental policies promoting local textile production. This makes Rwanda an ideal setting for investigating the interpretation and implementation of sustainability practices. This study aims to examine the understanding of sustainability in Rwanda to explore how a

seemingly global discourse on sustainability can be interpreted in a certain context (Berglund et al., 2020; Purvis et al., 2019). To this end, the study addresses the following research question: *How do Rwandan fashion designers understand sustainability in the context of their business?*

To gain insight into the perceptions of business owners of small and medium-sized fashion businesses, semi-structured interviews were conducted with 15 fashion designers. The data collected was analyzed using an abductive approach based on Mayring's qualitative content analysis (Mayring, 2021).

The findings indicate that Rwandan fashion designers predominantly associate sustainability with socio-economic aspects. They place significant emphasis on social responsibilities towards employees and local communities, as well as economic practices that foster continuous growth. Additionally, they highlight efficient resource use both for economic reasons and for environmental purposes. Environmental considerations were generally underrepresented, primarily mentioned in the context of local production and waste minimization. In contrast, literature from the Global North displays a stronger emphasis on environmental sustainability, with social aspects being somewhat underrepresented (Monyaki & Cilliers, 2023).

This study suggests that sustainability is understood differently by fashion designers in Rwanda, with a stronger emphasis on socio-economic factors compared to countries in the Global North. Given the diversity of contexts around the world, different understandings of sustainability should be addressed. Further research on the understanding of sustainability in Africa is crucial, as the literature currently primarily represents a Western world perspective of sustainability

Thursday, 28 November

Time: 13:30 – 14:45 (Room 4)

**Session Chair: Oghenekome Umuerrri**, Hochschule Bonn-Rhein-Sieg University of Applied Sciences, Germany

*Presentation:*

**Sustainable Logistics Initiatives on Kenya's Oil and Gas Sector**

**Jones Bor**, Moi University, Kenya

**Rael Kosgei**, Moi University, Kenya

**Gloria Muthoni**, Moi University, Kenya

**Purpose:** This study investigates the effect of sustainable logistics initiatives on the sustainability performance of oil and gas industry in Kenya. There are scanty empirical studies in this area, especially when it comes to oil and gas industry in developing countries.

**Contribution to the Literature:** This paper communicates meaningful sustainable logistics initiatives for the oil and gas marketers to embrace environmentally responsible operations and practices.

**Design/Methodology:** The study employed a cross-sectional survey methodology and implemented a systematic random sampling strategy. Based on survey data from 226 respondents, data collected using structured questionnaire. Data was analyzed using descriptive statistics and inferential statistical methods with the aid of Analysis of Moment Structures (AMOS) Version 26 and Statistical Package for Social Sciences (SPSS) Version 26.

**Findings:** Controlling for firm age & Size the outcomes of the study revealed that sustainable distribution ( $\beta = 0.559$ , CR = 4.642,  $p < 0.05$ ) and reverse logistics ( $\beta = 0.678$ , CR = 3.426,  $p < 0.05$ ) had positive and significant effect on the sustainability performance of Kenya's Oil and Gas industry.

**Limitations:** Despite its contributions to the literature, this research has some limitations. The first is that the dataset only covers oil and gas firms operating in Kenya. Generalization of findings of this study should be done with caution as this may limit the generalizability of the findings of this study.

**Practical Implications:** The results of this study can provide useful guidance for the management of firms in the oil and gas industry. Research sustainable logistics initiatives can provide valuable insights for managers, particularly in nations with dynamic business environments that are typical of the oil and gas industry. Industry professionals may find the study's results beneficial in the formulation of strategies pertaining to sustainability performance. It will assist them in implementing novel strategies to enhance the responsiveness and proactivity of sustainable logistics initiatives in response to consumer demands.

**Originality/value:** The present study adds to the growing corpus of research by examining whether sustainable logistics initiatives affect sustainability performance of firms in the oil and gas industry in Kenya's context.

Thursday, 28 November

Time: 13:30 – 14:45 (Room 5)

**Session Chair: Dr. Michael Noel Sam**, Institute of Finance Management, Tanzania

*Presentation:*

**Innovative Policies to Transform Tanzanian Tourism and Accomplish Sustainable Development**

**Dr. Sylvia Karen Rutagumirwa**, Institute of Finance Management, Tanzania

The role of tourism in development cannot be under-estimated. One of the world's largest and fastest-growing industries is tourism. Tourism is widely regarded by many countries as a key catalyst for national progress, as it fosters the emergence of new economic sectors. Therefore, it is imperative for all nations aspiring to combat poverty, a significant impediment to sustainable economic development to dedicate substantial resources towards ensuring the success of the tourism sector. Tanzania is one of the poor countries in the world and very rich in natural resources and abundant of scarce minerals in the world. Tanzania has enormous untapped tourism potential, including vast wildlife, cultural heritage, forest resources, and unexploited beaches. In light of the future

significance of tourism as a strategic industry, particularly within the context of regional autonomy, it is imperative to establish a comprehensive policy for the development of tourist attractions that takes into account innovation. Innovative policies in Tanzania have the potential to transform the tourism industry, spur economic growth, mitigate poverty, and achieve sustainable development. This paper analyzes and proposes innovative policies and strategies to transform Tanzanian tourism and achieve sustainable development. The methodology involves a comprehensive review of existing literature, case studies of successful tourist policies from other countries, and interviews with key stakeholders in Tanzania's tourism industry.

Thursday, 28 November

Time: 13:30 – 14:45 (Room 5)

**Session Chair: Dr. Michael Noel Sam**, Institute of Finance Management, Tanzania

*Presentation:*

**Sustainable Business Practice in Ghana: Obstructive Factors**

**Dinah Serwaa Amankwah**, Takoradi Technical University, Ghana

The Technical Vocational Education and Training system is expected to produce competent human resources for sustainable businesses and employment. The final consumer is key to the success of any sustainable business, so consumer interest and welfare are equally prime in business endeavours. Entrepreneurship education is pivotal in creating sophisticated businesses that prioritize service and interests to match consumer needs. The qualitative study also explored the descriptive method to compare local and international products to determine ease of use in the targeted products and implications for human-centred service among the targeted manufacturers. Products were purposively sampled from the observation activity. One research question guided the investigation: What might ease of use or user-unfriendliness in a commodity imply for the human factor in a business and sustainability? The objective was to explore the quality of service from the targeted business through the final product and the effect on the final consumer. The specific objective was to investigate the impact of entrepreneurship courses on service. Data

collections tools were dialogue, observation and product comparison. Data were compared for similarities or differences in quality and potential for sustainability. The study revealed poor finishing in about a third of the Ghanaian products, which lapse detracted from the consumer's ease of use. User-challenges also revealed poor quality of products, just as ease of use indicated quality and attention to consumer welfare and convenience. The study raised questions about shoddiness in some African products and services with regards to entrepreneurship training and skills. It was concluded that shoddy products and services obstructed sustainable business. The study recommended among others that ethics should constitute a key aspect of business orientation. The concept of finishing should be handled autonomously in vocational and entrepreneurship training programmes. The targeted Ghanaian businesses should pay better attention to finishing for consumer ease of use. African businesses should target quality production and finishing for consumer dignity, international standards and sustainability.

Thursday, 28 November

Time: 13:30 – 14:45 (Room 6)

**Session Chair: Dr. John Kamau**, Mount Kenya University, Kenya

*Presentation:*

**INTERFACES: Supporting Pathways to Sustainable Land Management in Africa**

**Sylvia Berenice Fischer**, Hochschule Bonn-Rhein-Sieg University of Applied Sciences, Germany

**Prof. Dr. Wiltrud Terlau**, Hochschule Bonn-Rhein-Sieg University of Applied Sciences, Germany

INTERFACES is an accompanying project supporting four regional projects funded by the BMBF to promote sustainable land management (SLM) in sub-Saharan Africa. The project focuses on impact-oriented service activities, networking, science communication, societal learning processes, capacity development, and transfer analyses to facilitate the implementation and enhance the dissemination of research-based results. At IZNE, research activities focus on funding transdisciplinary research for

sustainable development in Africa and SLM's framework conditions and incentive systems. Activities also include the design and implementation of an E-Learning certificate on research and innovation in SLM in Africa.



Thursday, 28 November

Time: 13:30 – 14:45 (Room 6)

**Session Chair: Dr. John Kamau**, Mount Kenya University, Kenya

*Presentation:*

**Supply Chain Collaboration and Market Access of Small and Medium Size Enterprises: Mediating Role of Network Intensity**

**Gregory Kaku**, University of Cape Coast, Ghana

**Gloria K.Q. Agyapong**, University of Cape Coast, Ghana

**Daniel Ofori**, University of Cape Coast, Ghana

**Osman Light**, University of Cape Coast, Ghana

The paper examined the mediating role of network intensity in the relationship between supply chain collaboration and market access of small and medium size enterprises in the Cape Coast metropolis. Specifically, the paper analysed the effect of partner complementarity on the market access of SMEs, assessed the effect of transaction specific investment on the market access of SMEs, examined the mediating role of network intensity in the relationship between partner complementarity and market access of SMEs, and finally, assessed the mediating role of network intensity in the relationship between transaction specific investment and market access of SMEs. The paper employed the quantitative approach and the causal design under the post-positivist paradigm. Data was collected from 463 SMEs using structured

questionnaires. The data processing mode was SMART PLS and the analytical tool was the partial least square structural equation modelling. It is expected as an outcome that partner complementarity and transaction specific investment will have a positive and significant effect on SMEs market access. Also, it is expected that network intensity will play a positive and significant mediating role in the relationship between the supply chain collaboration dimensions (partner complementarity and transaction specific investments) and SMEs market access. Based on these outcomes it will be recommended that SMEs promote network intensity by creating digital networking platforms, developing industry clusters, and organizing regular networking events.

Friday, 29 November

Time: 09:45 – 10:45 (Main Room)

**Session Chair: Oghenekome Umuerrri**, Hochschule Bonn-Rhein-Sieg University of Applied Sciences, Germany

**Panel Discussion:**

**How can academia and industry co-create African entrepreneurial universities?**

**Sehen Naidoo**, Technological Higher Education Network South Africa, South Africa

**Elizabeth Colucci**, OBREAL, Spain

**Henk der Jager**, Technological Higher Education Network South Africa, South Africa

**Charmaine Benita Villet**, University of Namibia

**Vohnani Olive Netshandama**, University of Venda

**Thabeng Rapiiso**, Lestho Ministry of Education and Training

**Ratakane B Maime**, National University of Lesotho

**Mboni Dlamini**, Swaziland Ministry of Education and Training

**Lalini Reddy**, Cape Peninsula University of Technology

**Shiba Diketane**, Department of Higher Education and Training (South Africa)

**Erna Blancquaert**, Stellenbosch University

**Tfobile Gumedede**, Limkokwing University of Creative Technology

In many African countries slow economic growth has led to job creation challenges such as the absence of job guarantees, in particular, for university graduates. In the Southern African Development Community (SADC), the lack of job opportunities for graduates is coupled with the rising cost of university education, which is necessary given that many institutions are heavily reliant on state funding owing to limited third stream income, i.e. income generated by the university through business ventures. There are, therefore, urgent calls for universities in the SADC, and Africa at large, to move the higher education sector into an entrepreneurial mindset. This is the motivation behind a project involving 9 HEIs in South Africa, Eswatini, Namibia and Lesotho, Ministries of Education in each of these countries and EU partners in Ireland, France and Finland, namely, University-industry co-creation to build Entrepreneurial Universities in the Southern African Development Community (UNIICo-create). UNIICo-create aims to contribute to the economic development of the SADC region through building entrepreneurial universities that foster university-industry and civil society co-creation of curricula, capacity, systems, processes and policy. As a way of initiating the project we want to catalyze an African dialogue around the pros and cons of creating Entrepreneurial Universities, starting with a panel discussion (roundtable format) involving panelists from HEIs and Ministries of Education in South Africa, Eswatini, Namibia and Lesotho, and the SADC secretariat. The roundtable will be co-chaired by two higher

education experts (one from Africa and one from Europe) that have a deep understanding of the curriculum deficiencies, lack of political will and poor (or entirely absent) university-industry linkages that challenge the creation of African Entrepreneurial Universities. Through a structured discussion, the chairs will invite the panelists to unpack (1) how training and supporting academic leaders to co-create curricula with industry and societal partners can develop a university-wide culture of entrepreneurship and innovation?; (2) how embedding co-creation units within university Technology Transfer Offices can facilitate co-creation between students, staff and industry partners?; (3) how to create an ecosystem of agents of change African countries that can systematically shape/inform policies related to university-industry cooperation, curriculum design and joint qualifications that will help build Entrepreneurial Universities? The discussion will end with inviting the panelists and the audience to comment on the importance of considering how these activities can conflict with Higher Education's social mission, if the university becomes too focused on the income generating aspect and less so on their pedagogical and social goals. We believe that the discussion will trigger a regional (SADC) and inter-regional (EU-SADC) discussion on transferable good practices and build partnerships around this topic to address the lack of people, policies, curricula and private sector partnerships needed to foster entrepreneurial mindsets and behaviours in students and staff.

Friday, 29 November

Time: 11:00 – 12:15 (Room 1)

**Session Chair: Prof. Dr. Kerstin Rosenow-Williams**, Hochschule Bonn-Rhein-Sieg University of Applied Sciences, Germany

*Panel Discussion:*

**High Illiteracy Rate in Ghana and Impact on Sustainable Businesses**

**Dinah Serwaa Amankwah**, Takoradi Technical University, Ghana

The key factors of the discussion will revolve – but not limited to –

- I. operating dynamic business amidst the 21<sup>st</sup> Century Knowledge Economy: The role of literacy
- II. the drawbacks of business operations in a high illiterate environment
- III. navigating Information Communication Technology for sustainable business: The challenges of the illiterate entrepreneur
- IV. targeting literacy/working around illiteracy: A challenge for African governments, educational systems, indigenous groups and determined spirits.

Duration: 2 hours – question and answer time included

Note: Discussion can occur on zoom for convenience and reach.

Panellists will include language experts, entrepreneurship experts, entrepreneurs, educationists, policy makers, indigenous groups representatives for a broad discussion of the problem in struggling African educational systems, effective business models for emulation, pragmatic efforts yielding results in indigenous literacy efforts. To save time, some of the comments will be pre-recorded and played during the discussion.

The proposal is open for addition or other modification to suit the conference theme.

Friday, 29 November

Time: 11:00 – 12:15 (Room 2)

**Session Chair: Prof. Dr. Masauso Chirwa**, Hochschule Bonn-Rhein-Sieg university of Applied Sciences

*Presentation:*

### Practice-Oriented and Industry-Integrated Study Programs in Sub-Saharan Africa

**Charlotte Newiadomsky**, Hochschule Niederrhein University of Applied Sciences, Germany

**Lisa Schmitt**, Hochschule Niederrhein University of Applied Sciences, Germany

**Axel Emmanuel Yohan Sombo**, Hochschule Niederrhein University of Applied Sciences, Germany

This abstract provides insights into the distinctive study programs of two influential projects: GREATER ("Growing Rwanda Energy Awareness Through highER Education") in Rwanda and IIDES-NSC ("Industry-Integrated Dual Engineering Studies in a North South Collaboration") in Côte d'Ivoire.

GREATER project aims to promote the energy transformation in Rwanda towards renewable energies, by transforming sustainability education through innovative and practice-oriented curricula. The project's milestones include the development as well as the revision of curricula in the field of renewable energy, increased hands-on experiences and lab equipment for students, and extensive dissemination activities to ensure widespread adoption of sustainable practices through so-called 'Living Labs'. GREATER Living Labs will be real-life locations, accessible to local communities and hosting different activities, which will be equipped with smart, renewable-energy power stations. They will allow students to experience in a realistic environment and will provide a strategic hub for community engagement, allowing local population to get in touch and familiarize with green technologies.

By collaborating closely with local universities and industry partners, GREATER offers a comprehensive range of courses designed to equip students with the knowledge and skills needed to address Rwanda's energy challenges sustainably. Emphasizing renewable energy technologies, energy efficiency, and environmental stewardship, GREATER aims to cultivate a new generation of energy professionals committed to driving sustainable development in Rwanda and equal access to electricity.

In parallel, the project IIDES-NSC established a unique industry-integrated dual engineering study program in Côte d'Ivoire. By forging partnerships between academic institutions in Europe and Africa, IIDES-NSC offers students in

Côte d'Ivoire the opportunity to gain practical experience through internships with leading engineering local companies. This innovative approach ensures that students receive hands-on training and exposure to real-world engineering challenges, preparing them for successful careers in the industry upon graduation. Additionally, IIDES-NSC places a strong emphasis on sustainable engineering practices, instilling principles of environmental responsibility and ethical leadership in future engineers.

One subproject to IIDES-NSC is the project 'Sustainable Efficiency Council Office' (SECO), which aims to establish a council office that will provide companies with guidelines and support to enhance their sustainability practices. SECO identifies key risks such as bureaucratic hurdles, limited resources, and insufficient lecturer education, and proposes mitigation strategies including increased administrative management costs and high-quality training programs. The project also focuses on training industry partners in resource efficiency, circular economy and sustainable development by basic teaching courses, developing hands-on measures to be implemented in the company and revision of the results.

Both projects underscore the importance of sustainability in education and the need for practice-oriented, industry-relevant training. By integrating sustainability principles and renewable energy technologies into engineering education and fostering strong industry-academia partnerships, GREATER, IIDES-NSC and SECO aim to prepare students to tackle environmental challenges and promote sustainable development in their respective regions.

Through the innovative study programs, these projects are empowering students in Rwanda and Côte d'Ivoire in the fields of energy and engineering, driving progress towards a more sustainable future.

Friday, 29 November

Time: 11:00 – 12:15 (Room 2)

**Session Chair: Prof. Dr. Masauso Chirwa**, Hochschule Bonn-Rhein-Sieg university of Applied Sciences, Germany

*Presentation:*

**Assessment of Academia Industry Relationship Towards Sustainable Businesses in Kenya**

**Pamela Mbae**, School of Humanities and Social Sciences Kenyatta University, Kenya

**Beatrice Karitu**, School of Business, Economics & Tourism Kenyatta University, Kenya

The fourth industrial revolution (4.0) currently referred to as industry 4.0 has brought a significant change and advancement in the world of business and trade through various inventions, and data facilitated exploring machines that are adaptable, faster, and more cost-effective to allow industrial associations to produce greater quality products at lower costs. Industry 4.0 manifests a set of modern technology transformations including large data analytics, internet, cloud computing, artificial intelligence, nanotechnology and 3D printing among others.

The academia has largely focused on research with minimal digitalization while transition of organizations into the digital platforms has been associated with numerous changes not just in manufacturing sector but also with the rapid changes in the nature of the needs of the customer.

The gap between university curriculum and industry needs has increased over the years leading to graduate less market ready for industry in Kenya. Academia has been associated with the lack of skills gap, slow uptake of the digitalization process, marred by bureaucratic processes.

The main objective of the study will be to assess the readiness of the academia towards producing graduates ready for industry in the job market in Nairobi, Kenya. The goal is to assist both the academia and industry towards building lasting relationship in order to understand the perspective of the current graduates (Gen-Z) in the wake digitalization in readiness for the job market for sustainable business in Kenya. This study will help both the academicians, industry and the youths in preparation for job absorption in the wake of the fourth industrial revolution.

The study will be anchored on theory of entrepreneurial competence, Resource based view and Schumpeter theory, Dynamic capability view theory and Schumpeter theory.

Desktop review will be used in this study to gather and examine information from the Internet, government publications and online repository.

Friday, 29 November

Time: 11:00 – 12:15 (Room 3)

**Session Chair: Prof. Dr. Christian Tode**, Hochschule Bonn-Rhein-Sieg university of Applied Sciences, Germany

*Panel Discussion:*

**AI and the Future of Education: Tools for Sustainable Development**

**Israel Agaku, PhD**, Chisquares Inc.

The integration of artificial intelligence (AI) into educational settings presents both opportunities for transformative advancements and significant risks. This discussion will explore how educators can effectively leverage AI to enhance learning outcomes while mitigating potential adverse effects. Emphasis will be placed on equipping students and scholars with ethical AI skills, guided by standards such as those from the Committee on Publication Ethics (COPE).

We will delve into the misuse of AI, including issues like student plagiarism and unethical academic behaviors, underscoring the need to embed AI ethics into educational curricula. Additionally, we will advocate for re-evaluating educational frameworks and refining quality measures in academic outputs to align with ethical AI practices.

Central to the discussion will be the introduction of the Chisquares Research Platform, an advanced AI-powered tool designed to streamline the research process. Known for its robust survey capabilities—including offline functionality, scalability for large datasets, multilingual support, and collaborative features—the Chisquares platform facilitates global sample generation, detailed analysis, and supports both cross-sectional and longitudinal studies. Its application extends beyond data collection to include educational tools that teach students research processes and allow educators

to monitor real-time progress and provide timely feedback.

Furthermore, the platform's built-in timer feature enables fair and standardized assessments through timed surveys and quizzes, assessing students' understanding across various academic subjects and skills, beyond research methodologies.

The discussion will also address the critical issue of equitable access to AI tools. While AI has the potential to enhance global research quality, its high costs may exacerbate disparities between affluent and less affluent regions. Strategies to ensure fair AI access will be explored, aiming to prevent AI advancements from disproportionately benefiting wealthier regions.

Aligned with the conference theme of "Artificial Intelligence and the Future of Education," this session will engage participants in discussing best practices for ethical AI integration in education and research. Attendees will gain insights and tools to ethically incorporate AI, fostering a comprehensive understanding of its transformative potential in shaping the future of education. This discussion aims to highlight success factors and address challenges in this rapidly evolving field, empowering educators to leverage AI for sustainable educational development.

Friday, 29 November

Time: 11:00 – 12:15 (Room 4)

**Session Chair: Dr. Shaban Mayanja**, Hochschule Niederrhein University of Applied Sciences, Germany

*Presentation:*

**E-Commerce Capabilities and Digital Entrepreneurship in Small Business: An Exploratory Study**

**Charles Hackman K. Essel**, University of Cape Coast, Ghana

**Agnes Nyamenaose Essuman**, Yanshan University, China

Ghana's digital landscape has transformed the business environment, making e-commerce capabilities crucial for entrepreneurs' success. Ghana's digital transformation requires e-commerce capabilities for business success. This study examines the key skills and challenges faced by digital entrepreneurs in Ghana and addresses the knowledge gap to understand the interaction between e-commerce capabilities and firm performance, that is small businesses. Specifically, it examines the relationship between e-commerce opportunities and business success and identifies the most important skills required for success in Ghana's digital marketplace. The mixed methods approach combines a survey of 200 digital entrepreneurs with interviews and

focus groups, using thematic analysis and multiple regression analysis. These findings will contribute to existing literature, provide information on policies, educational plans and support services to improve the ability of digital entrepreneurs and promote Ghana's digital economy. By dealing with the specific challenges facing Ghana digital entrepreneurs, including limited training resources, technical Problems and financial restrictions, the research aims to provide feasible insight for stakeholders and scholars.

**Keywords:** E-commerce capabilities, digital entrepreneurship, small business, Ghana, digital economy



Friday, 29 November

Time: 11:00 – 12:15 (Room 4)

**Session Chair: Dr. Shaban Mayanja**, Hochschule Niederrhein University of Applied Sciences, Germany

*Presentation:*

**Green Supply Chain Management Strategies, Organization Culture and Performance of Sugar Companies in Western Kenya**

**Judith Ziporah Mwalati**, Moi University, Kenya

**Dr. Peter Githaiga**, Moi University, Kenya

**Dr. Zurah Mohammed**, Moi University, Kenya

Although the drive to enhance overall sustainability in organization performance has resulted to focus on pollution prevention and minimization of environmental impacts at all stages of the product lifecycle from sourcing of raw materials, through manufacturing, transport, use and disposal, this has not been embraced by all companies in the sugar industry in Kenya. While those that have embraced the Green Supply Chain Management Strategies are still under-utilizing them. Culture may have a big influence on the performance of all organizations worldwide. The key to good performance is a strong culture. The general objective of the study was to investigate the moderating effect of organization culture on green supply chain management strategies on performance of sugar companies in western Kenya. The specific research objectives was to determine the effect green manufacturing and eco-design on performance of sugar companies in western Kenya and to establish the moderating role of organization culture on green supply chain management strategies and performance of sugar companies in western Kenya. The study was underpinned under three theories which were; complexity Theory, transaction cost Theory and Organization culture Theory. The study adopted explanatory research design in studying the targeted population. The population under study comprised of 10 sugar firms with 500 employees from procurement, production and

operation departments and a final sample size of 272 employees was arrived at. The data was collected using questionnaires. The study's findings revealed that green manufacturing ( $\beta= 0.182, p<0.05$ ) and eco design ( $\beta= 0.295, p<0.05$ ) had a positive and significant effect on performance of sugar companies in western Kenya. Further, the findings revealed that organization culture had a staggering moderation effect on the relationship between green manufacturing ( $\beta= -0.227, p<0.05$ ) and eco design ( $\beta= -0.285, p<0.05$ ) on performance. These findings highlight the important interconnection between green supply chain management strategies in explaining performance. In light of these findings, the study offered targeted recommendations for policy and practice. Company managers should actively cultivate and promote an organizational culture that supports sustainability and green initiatives. Managers should also prioritize eco-design principles to minimize waste and promote product recyclability. Managers should foster a collaborative culture that encourages employee participation in sustainability initiatives, as this can enhance the overall effectiveness of green supply chain management practices strategies. Similar study could employ longitudinal research designs that would unravel the causal dynamics underlying the relationships identified. Future studies could also consider other jurisdictions as well as other potential moderators.

Friday, 29 November

Time: 11:00 – 12:15 (Room 5)

**Session Chair: Prof. Dr. Ralf Meyer**, Hochschule Bonn-Rhein-Sieg University of Applied Sciences, Germany

*Presentation:*

**Commercialization of Indigenous Cuisines for Sustainable Food Heritage Tourism in Zimbabwe**

**Kazembe, C.**, Chinhoyi University of Technology Department of Hospitality and Tourism

**Madzikatire, E.**, Chinhoyi University of Technology Department of Hospitality and Tourism

**Mtanga, D.**, Chinhoyi University of Technology Department of Hospitality and Tourism

Indigenous cuisines are not prominent in Zimbabwe's tourism industry yet there are significant elements to the nation's cultural heritage. Many studies have tried to illuminate the abundance of locally available foods at the expense of indigenous cuisines that are key in sustaining Zimbabwe's food heritage that drive tourism. Therefore, this study explored mechanisms to commercialize indigenous cuisines for sustainable food heritage tourism in Zimbabwe. Guided by interpretive philosophical underpinnings and the exploratory multiple case study design, the researchers used qualitative methods to explore the mechanisms. Purposive sampling was used to isolate the respondents from the tourism and food industry. A sample of twenty (20) respondents was chosen. The respondent's accounts were narratively analyzed to derive themes and structures from stories told

to describe related events, their past and present experiences with indigenous cuisines as well as their views on commercializing them for heritage tourism in Zimbabwe. Findings from this study have implications to all the stakeholders including the involvement of the communities; implementation of policies and frameworks for commercializing indigenous food; education and training; inclusion of agriculturalists; cookbooks and menu repositories; indigenous retail shops amongst other mechanism. Therefore, further research can be done to explore initiatives to mainstream the existing indigenous cuisines in Zimbabwe.

**Key words:** *indigenous cuisines, food tourism, heritage tourism, sustainability, commercialization*

Friday, 29 November

Time: 11:00 – 12:15 (Room 5)

**Session Chair: Prof. Dr. Ralf Meyer**, Hochschule Bonn-Rhein-Sieg University of Applied Sciences, Germany

*Presentation:*

**Productive Use of Renewable Energy: A Driver for a Sustainable Business**

**Jad Mhanna**, Asantys Systems GmbH

The Asantys Systems GmbH is a 360° service provider specializing in solar projects across Africa. With 15 years of experience in solar EPC (Engineering, Procurement, and Construction), we offer our clients expert engineering, competitive pricing from high-quality suppliers, and a range of additional services including project management, training, and financing. We offer a variety of tailored energy solutions including mini-grids, telecom, pumping, commercial and industrial (C&I) projects, and diesel-PV hybrid systems.

Having successfully implemented more than 7,600 solar energy projects in over 50 countries over the past decade, we possess a deep understanding of the diverse energy markets. We recognize that each project is unique and requires an individualized approach. As a social entrepreneur, we pursue not only commercial goals but also aim to achieve a renewable energy revolution by providing clean, secure, and affordable energy for all. Expanding across Africa and transferring our knowledge to the continent will ensure a better dissemination of transformative technologies. As an example, we are involved in GIZ Invest for Jobs initiative in Senegal, demonstrating our commitment to deep partnerships and entrepreneurship. Besides the implementation of projects, Asantys is involved in various R&D activities aimed at improving our

services, advancing technology, and staying on the cutting edge of the market.

The productive use of renewable energy (PURE) is one of the key focuses of our R&D efforts. We have explored various applications of PURE, such as cold storage, food processing, water purification, and e-mobility, demonstrating their potential as sustainable business cases that improve livelihoods.

We provide business development solutions for this concept, ensuring that these innovative applications are effectively implemented and deliver maximum impact. Notable projects include an e-boat initiative in Senegal and a large walk-in cooling container.

Moreover, Asantys is actively involved in international collaborations, such as the International Energy Agency IEA Task 18: Off-Grid and Edge-of-Grid Photovoltaic Systems, where reports are being published. Through innovative projects and capacity-building programs, we gain and transfer valuable knowledge to our clients, fostering their growth and sustainability.

We are committed to sustainable and responsible business practices in Africa. Our holistic approach to the solar energy sector, combining technical expertise, innovative R&D, and strategic collaborations, positions us as a leader in the sector.

Friday, 29 November

Time: 11:00 – 12:15 (Room 6)

**Session Chair: Oghenekome Umuerrri**, Hochschule Bonn-Rhein-Sieg University of Applied Sciences, Germany

*Presentation:*

**Resource Bundling and Leveraging: The Role of Entrepreneurial Orientation and Gender on Business Resilience in Turbulent, Resource-Scarce Business Environments**

**Gaad M.H.**, Wageningen University, Netherlands

**Hagelaar, G.**, Wageningen University, Netherlands

**Vander Velde, G.**, Wageningen University, Netherlands

**Omta, S.W.**, Wageningen University, Netherlands

If resources and capabilities are not changed or orchestrated into activities, routines, or Business processes, companies are not able to become resilient, which is crucial in turbulent Environments (Akgun & Keskin, 2014). Two such orchestration processes are bundling and leveraging. This dynamic view of resource deployment highlights the role of entrepreneurs (Helfat, 2007; Sirmon metal, 2007). In this study, Entrepreneurial Orientation (EO) which reflects the entrepreneur's managerial acumen and volitional act, is proposed as a driver for bundling and leveraging resources into Business resilience. "Gender" is seen to reflect the possibilities and constraints of entrepreneurs to enact their volition about female entrepreneur's due to their social and cultural position. This resource orchestration study is conducted in Ethiopia, a developing country with typical resource constraints and the continuous threat of disruptive events, on the bases of a sample of 408 small and medium enterprises (SMEs) . Our

results indicate that EO is related to mobilizing resources and boosting Business resilience, although hampered by disruptive conditions. Generally, the findings suggest that EO is vital to fill the gap between available resources and business resilience for companies in resource scarce environments by bundling and leveraging resources. Gender moderates the relationship between EO and resources, and between resources and Business resilience. These results show that female entrepreneurs are better than male entrepreneurs in bundling resources, and outperform male counterparts in boosting Business resilience even though the business environment for females is harsher than male entrepreneurs in the study context.

**Key words**

Resource Orchestration, bundling, leveraging, entrepreneurial Orientation, turbulent environment, resource scarce business environments

Friday, 29 November

Time: 11:00 – 12:15 (Room 6)

**Session Chair: Oghenekome Umuerrri**, Hochschule Bonn-Rhein-Sieg University of Applied Sciences, Germany

**Presentation:**

**The Opportunities and Challenges of Women's Empowerment and Market Access in Agricultural Cooperatives: in the case of Ethiopia, Senegal and Tunisia**

**Helen Gebrekirstose**, Weihenstephan Triesdorf University of Applied Sciences

**Dr. Bernd Muller**, Weihenstephan Triesdorf University of Applied Sciences

African food systems are characterized by their complexity, involving diverse stakeholders and numerous challenges such as climate change, land use conflicts, and insufficient cooling chains. Agriculture is crucial in regions like Ethiopia, Senegal, and Tunisia, significantly contributing to employment, exports, and GDP. However, women in these regions face significant barriers in agricultural processes, including limited mobility, access to training, market information, and control over resources.

In Ethiopia, agriculture employs 83% of the labor force and contributes 45% of GDP, with women playing vital roles in various agricultural activities. Despite its importance, the agro-processing sector struggles with inadequate infrastructure, insufficient quality raw materials, and lack of quality standards. In Senegal, agriculture employs over 60% of the active population, focusing on diversification and export crops. However, challenges like underdeveloped food safety infrastructure and fragmented regulatory systems hinder progress. Tunisia, the second-largest exporter of organic products in Africa, faces vulnerabilities to climatic hazards and dependency on food imports despite advancements in organic agriculture and adherence to international food safety standards. Empowering women in agriculture is essential for reducing global poverty and hunger through inclusive growth. Cooperatives provide critical mechanisms for women's empowerment by offering access to capital, resources, and decision-making processes. Yet, women often lack the necessary skills, training, and continuous support to maximize the benefits of cooperative membership.

The research aims to enhance market access for women in food and agriculture cooperatives in

Ethiopia, Senegal, and Tunisia. This research seeks to address gaps by focusing on the specific challenges and support needs of women entrepreneurs, providing actionable insights for policy and development initiatives. The study's objectives include identifying the challenges faced by entrepreneurs in these regions, understanding the necessary skills and support systems for success, and evaluating the effectiveness of incubation centers.

In Tunisia, the study areas include Gabes, Djerba, and Medenine, with a sample size of 11, including 9 Key Informant Interviews (KII) and 1 Focus Group Discussion (FGD). The difficulties in finding women-only cooperatives led to conducting interviews with individual women entrepreneurs. In Senegal, the study areas are Kaolack, Niore du Rip, and Guinguineo, with a sample size of 100 KIIs and 9 FGDs. In Ethiopia, the study areas are Tiyo, Digalu Tijo, and Lemmu Bilbilo/Bekoji, with a sample size of 25 KIIs and 5 FGDs.

The research methodology is qualitative, involving KIIs, FGDs, and participant observation to gather in-depth insights. Data will be collected using tablet-based tools and analyzed through Content Analysis using software like MAXQDA. The study areas in Ethiopia, Senegal, and Tunisia were selected based on criteria such as product diversity, presence of cooperatives, and relevance to agrifood production.

This study aims to contribute to sustainable economic growth, gender equality, and the empowerment of women in Ethiopia, Senegal, and Tunisia, aligning with broader development goals such as the Sustainable Development Goals (SDGs). By focusing on women's empowerment in food and agriculture, the research seeks to provide valuable insights and inform policy and development initiatives in these regions.

Friday, 29 November

Time: 11:00 – 12:15 (Room 1)

**Session Chair: Dr. Edward Amatiefio**, University of Cape Coast, Ghana

*Presentation:*

**Business Incubator Services and New Venture Creation in Kenya**

**Beatrice Karitu**, Kenyatta University, Kenya

**Stephen Muathe**, Kenyatta University, Kenya

New ventures are as a result of innovation and change, but despite numerous success stories, many new ventures fail before they reach their full potential. Business incubators are critical in nurturing and developing new ventures hence reducing business failure in early stages. Incubators are most valuable when they can respond to and adapt to the needs of new companies by providing wide range of services that supports start-ups. Despite the growing number of business incubation facilities, the field of business incubators services and new venture creation is understudied. The general objective of this study will be to analyse the impact of business incubators services on new venture creation focusing on selected Universities in Kenya. The specific objectives will include; to investigate the effect of network services, ICT Infrastructure, training and access to financial resources on new venture creation in selected universities in Kenya. This study will be anchored by the Economic theory of Mark Casson, Schumpeter's theory, Resource Based View and Dynamic Capability View. The philosophical foundation of the research will be positivist. To achieve the objectives of the study both descriptive and explanatory research designs will be used. The target population will be 8 business incubators drawn from eight selected universities

which are located in Nairobi metropolitan in Kenya. Census method will be used focusing on 8 business incubators. Semi-structured questionnaire will be employed to collect primary data and drop-and-pick approach will be used to administer the survey. Secondary data will be collected using document review. Descriptive statistics will be summarized using frequencies, percentage, mean and standard deviations, while multiple linear regression analysis will be used for inferential statistics to test hypotheses. Results from quantitative data will presented using figures and tables. Qualitative data will be analysed on the basis of themes and presented in narrative form. The goal of this study will be to help academics and policy makers gain a better understanding of how business incubator services affect new venture creation. The findings will serve as a future research reference for academics on the effect of business incubators services and new venture creation. It will also benefit the entrepreneurs to learn the important of business incubators services and how they can help them to develop their businesses.

Friday, 29 November

Time: 13:30 – 14:45 (Room 1)

**Session Chair: Dr. Edward Amatiefio**, University of Cape Coast, Ghana

*Presentation:*

**Adoption of Technology in Rural Banks in Ghana**

**Richard Nubeng**, Hochschule Bonn-Rhein-Sieg University of Applied Sciences, Germany

**Oghenekome Umuerrri**, Hochschule Bonn-Rhein-Sieg University of Applied Sciences, Germany

Rural community banks in Ghana face a significant challenge due to competition from commercial banks and other financial institutions, credit risks, and operational inefficiencies, notwithstanding the acknowledged advantages of technological solutions in tackling these obstacles. Therefore, this research investigated the novel technologies implemented in rural community banks and the factors that affect the adoption of and intention to utilize technologies in rural banking institutions.

Using a quantitative approach, data was collected from 123 bank employees in Ghana. The study revealed that the predominant technologies utilized in rural banks are mobile/telephone

banking and automated teller machines, with computerized loan documentation systems emerging as the most prevalent form of process innovation within rural banks. An influential factor in adopting technologies within rural banks in Ghana is the degree to which the technology contributes to deposit mobilization and credit generation. Generally, rural banks in Ghana prioritize the advantages presented by technology over the associated risks and its ease of use. The risk aversion of the bank employees is a contributing factor. The paper makes pragmatic policy recommendations to policymakers and emphasizes the role of technology in shaping the intention of rural banks.



Friday, 29 November

Time: 13:30 – 14:45 (Room 2)

**Session Chair: Dr. Evans Mwitwi**, Mount Kenya University, Kenya

*Presentation:*

**Evaluation of Entrepreneurial Challenges in the Context of Rwanda**

**Hendrik Friesenhahn**, Institute for Management, University of Koblenz, Germany

**Purpose** This research examines the challenges faced by entrepreneurs, self-employed individuals and startups in Rwanda, and analyses the qualifications and skills required for successful business establishment.

**Design/methodology/approach** This study examines the challenges faced by entrepreneurs, the self-employed and start-ups in Rwanda and analyses the qualifications and skills required to successfully set up a business.

**Findings** Some of the most important topics were identified. These include access to finance, infrastructural challenges, the importance of networks and specific entrepreneurial skills. One of the most significant findings is that access to finance is a major hurdle for startups in Rwanda. Entrepreneurs reported great difficulty in raising capital, compounded by high-interest rates and stringent lending criteria, which can impede the creation and growth of startups. Other critical barriers include lack of access to affordable, reliable energy and limited infrastructure capacity, which can be detrimental at the early stages of a startup's development. Regulatory and bureaucratic obstacles also pose significant challenges. However, the Rwandan government has implemented several programs and efforts to enhance the business climate. Entrepreneurs, such as the CEO of Lighthouse Hotels, noted improvements in the ease of starting a business and the adoption of a business-friendly atmosphere, including the digitalisation of administrative processes and support centres for founders. The physical and digital infrastructure in Rwanda varies significantly. While government support and the security situation are generally positive, infrastructure deficiencies are notable in remote areas. Poor internet connections and transport routes hinder business activities and limit growth potential. Developing transport, energy and communication infrastructure is crucial for enhancing business operations.

Besides these infrastructural and financial constraints, specific qualifications and skills are essential for entrepreneurial success. Key competencies include strategic planning, financial acumen, marketing, leadership and language skills in English and French. Good communication, negotiation and relationship-building skills are also vital for the success of startups. Another significant finding is the importance of networks in addressing difficulties and supporting the startup process. Networks can facilitate resource acquisition, knowledge exchange and innovation, with friends and business partners playing crucial roles in avoiding financial bottlenecks.

**Research limitations/implications** The study contributes to the literature on entrepreneurial challenges in LDCs by providing empirical insights specific to Rwanda. However, the findings are based on a limited sample size and further research could expand the sample to include more diverse industries and regions within Rwanda.

**Practical implications** The results have practical implications for policymakers and development agencies aiming to support entrepreneurial growth in Rwanda. Addressing the identified challenges and enhancing the entrepreneurial ecosystem through targeted interventions can foster a more conducive environment for startups. **Originality/value** This study offers an introductory understanding of the startup landscape in Rwanda, highlighting that entrepreneurial success is influenced by overcoming structural challenges and developing essential skills. It underscores the importance of a supportive regulatory environment and access to training and resources for entrepreneurs in an LDC context, an area that remains underexplored in current research.

Friday, 29 November

Time: 13:30 – 14:45 (Room 2)

**Session Chair: Dr. Evans Mwit**, Mount Kenya University, Kenya

*Presentation:*

**Entrepreneurial Competencies Towards Successful Startups**

**Pamela Mbae**, Kenyatta University, Kenya

**Beatrice Karitu**, Kenyatta University, Kenya

A startup in Kenya is any creative company that can grow and has been in operation for three to five years. The primary obstacles that a start-up must overcome are financial, human resource, support system, and environmental factors. Many startups have been registered and started in Kenya. However, only 1 in 5 start-ups make it to 5 years of operation and a further 1 in 3 businesses make it past 10 years. The high failure rate can be attributed to several variables, including inadequate institutional framework and a lack of resources. The success of startup in Kenya indicates that certain entrepreneurial competences are at play. The foundational components of an entrepreneur's entrepreneurial competences are these intangible resources, which include characteristics, behaviors, attitudes, abilities, and knowledge. The main objectives of the study will be to analyse the effect of entrepreneurial competencies towards successful startups in

Nairobi County focusing on education level, professional experience and personality and family business background. The study will be anchored on theory of entrepreneurial competence, Resource based view and Schumpeter theory. Desktop review will be used in this study to gather and examine information from online repositories, the Internet, and government publications on the effect of entrepreneurial competences towards startup success. Therefore, the goal of this study will be to help academics and industry professionals gain a better understanding of how entrepreneurial competencies affect a successful startup, which will in turn help entrepreneurs understand how crucial these competencies are to the success of their enterprises.

*Key words: Entrepreneurial, competencies, entrepreneurs, education, success, startups*

Friday, 29 November

Time: 13:30 – 14:45 (Room 3)

**Session Chair: Prof. Dr. Daniel Agyapong**, University of Cape Coast, Ghana

*Presentation:*

**German Opportunity Card: Streamlining Skilled Migration Using Network Model**

**Dr. Christiana Odumah Hood**, University of Cape Coast, Ghana

**Jessie Jackine Quarm**, Ghana Institute of Management and Public Administration, Ghana

**Michael Agyekum Bremang**, University of Koblenz, Germany

**Derrick Seyram Vormawor**, University of Koblenz, Germany

The German Opportunity card (Chancenkarte) initiated on June 1, 2024 aims at attracting skilled labor from non-EU member states to deal with labor shortage in Germany and allows holders to search for a job in Germany even without having a job offer stay for a maximum period of one year (BMI, 2024). This policy harmonises with the general movement of talent acquisition all over the world and particularly meets the objectives of the United Nations concerning sustainable development such as SDG 8 (Decent Work and Economic Growth) and SDG 10 (Reduced Inequalities).

This paper investigates how the Network Model of Knowledge and Technology Transfer (KTT) can be applied in the context of the Opportunity Card of Germany. The research uses a qualitative

methodology to analyse the existing KTT models. The data is analyzed by comparing themes and differences in order to generate meaning.

According to the findings, the network model enhances stakeholder collaboration and leads to effective knowledge exchange although it has challenges that include complexity and being resource intensive. Some recommendations are to develop a centrally controlled digital platform that is data-driven, and to improve stakeholder coordination mechanisms in order to improve the effectiveness of the model.

**Keywords:** Network Model, Knowledge Transfer, Technology Transfer, German Opportunity Card, Skilled Migration, Innovation, Sustainable development

Friday, 29 November

Time: 13:30 – 14:45 (Room 3)

**Session Chair: Prof. Dr. Daniel Agyapong**, University of Cape Coast, Ghana

*Presentation:*

**University—Industry Linkages: A Case Study of Mount Kenya**

**Dr. Nancy Cheseto**, Mount Kenya University, Kenya

Collaborative research between Universities and industry is very important. Sustainable Research and Development funding is key. Professional management and Proactive communication strategy add to technology transfer strategies. International cooperation strengthens Research and Development. It increases domestic demand, therefore reducing Brain drain. Restructuring Research and Development systems will have to follow national needs, but within perspective of international competitiveness. The political system therefore has to offer long term stability with regard to strategies and public funding. There has to be an understanding of Research and Development needs that goes beyond electoral agenda for example, in Kenya, electoral violence is experienced after every five years. Strategies only become more relevant when they are linked to objective based funding. Regional approaches to Research and Development and to technology transfer are vital since every region and each economic sector are facing specific challenges and opportunities. Successful Research and Development and technology transfer strategies have to be developed as joint efforts of authorities, universities and the

business sector. Mount Kenya University has a very successful partnership with the United Nations (UN) offering our students internships. Other collaborations include Nottingham University in the U.K, Texas University in the USA, Bonn Reign Siege, Leipzig & Luneburg Universities in Germany. Other partnerships include, Equity & KCB Banks, UNESCO, British council among many others. Funding of institutions should also be objective based. Hiring Entrepreneurs and Start-ups initiated by university graduates are more important for the economy. Entrepreneurship has to be part of curricula. Universities and research institutes should develop explicit technology transfer strategies. Moreover, technology transfer has to be part of an overall Research and Development management. Special attention therefore, has to be given to integrating SME in Research. The research used Document Analysis methodology. Conclusion was that, intergration of employability skills and competencies, leads to successful on job performance of graduates. It requires strong collaboration between Universities and employers throughout the curriculum implementation process.

Friday, 29 November

Time: 13:30 – 14:45 (Room 4)

**Session Chair: Dr. Peterson Owusu**, University of Cape Coast, Ghana

*Presentation:*

**Mediation Effect of Organization Culture on Sustainable Supply Chain Practices and Performances of Manufacturing Firms in Kenya**

**Zurah ChepKoech Mohammed**, Moi University, Kenya

**Charles Lagat**, Moi University, Kenya

Sustainability is increasingly becoming a strategic business initiative as both large and small companies are realizing that sustainable practices can be economical and may create new revenue streams as well as increase customer and employee satisfaction. Despite this, sustainability and performance of firms have received little research attention and is still a paradox. It has also been argued in the literature that the three-pillar model of social, economic and environmental dimensions of sustainability is fundamentally flawed by the culture. This study, therefore, investigated the effect of sustainable supply chain practices on the performance of manufacturing firms mediated by organization culture. The study was guided by the following specific objectives; to analyse the effect of environmental, social and economic sustainable supply chain practices on performance of manufacturing firms and also assess the mediation effect of organisation culture on supply chain sustainable practices on performance of manufacturing firms in Kenya. The theoretical underpinning of this research study was Natural Resource-Based View, Resource-Based View, and Stakeholder Theory. The researcher employed the explanatory research design. The target population was supply chain managers of manufacturing companies in Kenya. The study used stratified and simple random sampling to select the sample size. Data were collected using structured questionnaires and it was analysed using descriptive statistics, Pearson product-moment correlation, and Structural Equation Modeling (SEM). From the SEM model, results showed that environmentally sustainable supply chain practice ( $\beta_1 = 0.303$ ,  $p < 0.05$ ), socially sustainable supply chain practice ( $\beta_2 = 0.492$ ,  $p < 0.05$ ) and economically sustainable supply chain practice ( $\beta_3 = 0.626$ ,  $p < 0.05$ ), had a positive and significant effect on the performance of manufacturing

firms. More findings showed that organization culture variable fully mediates the relationship between environmentally sustainable supply chain practices on performance of manufacturing firms ( $\beta = 0.692$ ,  $p < 0.05$ ) while organization culture partially mediates the relationship between socially sustainable supply chain practices on performance of manufacturing firms ( $\beta = 0.728$ ,  $p < 0.05$ ). On economically sustainable supply chain practices, the study disclosed that organization culture has a full mediation effect on the relationship between economically sustainable supply chain practices on performance of manufacturing firms ( $\beta = 0.745$ ,  $p < 0.05$ ) Thus, the study infers that a strong organization culture in the organization leads to enhanced implementation of environmental and economically sustainable supply chain practices in the organization which in turn increases performance of firms. The study also concluded that for socially sustainable practices there are other underlying factors affecting the performance of manufacturing firms apart from the organisation culture. Therefore this study consequently has added knowledge on the specific contribution of sustainable supply chain practices on firm's performance by showing that these practices contribute to improved performance of manufacturing firms. These results also show that manufacturing firms in Kenya are adopting sustainable supply chain practices if a strong organisation culture in that firm is in effect. Without organisation culture, these practices may go unheeded. The study recommended a further study on the same with the inclusion of service sectors and organizational culture as a moderator. Additional dimensions of sustainability apart from economic, social and environmental practices should also be considered by other researchers.

Friday, 29 November

Time: 13:30 – 14:45 (Room 4)

**Session Chair: Dr. Peterson Owusu**, University of Cape Coast, Ghana

**Presentation:**

**The Sustainability Puzzle: Analyzing Barriers Confronting Manufacturing Supply Chains in Ghana**

**Evelyn Lamisi Asuah**, University of Professional Studies, Ghana

**Daniel Agyapong**, University of Cape Coast, Ghana

**Daniel Ofori**, University of Cape Coast, Ghana

Increasing global concern about environmental and social sustainability has made sustainable supply chain management a critical responsibility for many businesses. Yet, hurdles to implementing environmentally and socially friendly business practices still abound. This paper explores the challenges encountered by manufacturing organizations while striving to integrate sustainable practices into their supply chains. Manufacturing firms in developing countries like Ghana have been noted to face several barriers that affect the effective implementation of sustainable supply chain management (SSCM) practices (Silvestre, 2015a; Weldemichael *et al.*, 2023). Baig *et al.* (2020) contended that the low adoption of SSCPs in developing countries can be attributed to the nature of these countries, which presents greater challenges for supply chains in achieving sustainability compared to developed nations. As an emerging economy where sustainability is still in its nascent stages, understanding and addressing these challenges is crucial for organizations to effectively navigate the complexities of sustainability and drive positive change.

Utilizing a structured questionnaire, the study surveyed 320 medium and large manufacturing firms, and a descriptive design was adopted. First, the paper utilized descriptive statistics (mean and standard deviation) to assess the barriers and then Decision Making Trial and Evaluation Laboratory (DEMATEL) was employed to analyze interrelationships among the barriers to uncover the intertwined nature of the barriers and identify critical barriers.

The findings of the study revealed that all nine barriers analyzed were considered key as they all obtained average ratings ranging from 5.11 to 5.31 on a scale of 1 to 7. The cause-and-effect analysis also revealed that lack of guidance and support from government regulatory authorities stood out as the key barrier that gives rise to or intensifies the presence of other barriers to SSCM. Other causal barriers include lack of standard metrics for assessing social and environmental performance, lack of technological capacity to support green processes, inadequate financial capability, and uncertainty about the economic and operational benefits of sustainable business practices. The presence of the above barriers causes or intensifies other barriers such as lack of collaboration among supply chain partners, lack of top management commitment to sustainability initiatives, organizational culture resistance to change, and low level of awareness of local customers in green products.

The study recommends that addressing the absence of guidance and support from regulatory authorities should be the initial focus to facilitate the adoption of SSCM. Other key recommendations include establishing standardized sustainability reporting frameworks, providing financial incentives, tax breaks, and sustainable financing to firms committed to SSCM, offering technical assistance and training, improving access to information about sustainable technologies, investing in R&D for sustainable technologies, and recognizing firms publicly through award schemes.

Friday, 29 November

Time: 13:30 – 14:45 (Room 5)

**Session Chair: Dr. John Kamau**, Mount Kenya University, Kenya

*Presentation:*

**Drivers of E-Learning Satisfaction and Performance of Distance Learning Students in Ghana**

**Ramatu Issifu**, University of Cape Coast, Ghana

**Daniel Agyapong**, University of Cape Coast, Ghana

**Richard Kofi Opoku**, University of Cape Coast, Ghana

The study sought to examine the drivers of e-learning satisfaction and its effect on performance among distance learners in Ghana. It employed the quantitative approach using an explanatory research design. An online questionnaire was administered to respondents through Google forms. Descriptive statistics and structural equation modeling were used to analyze the response. The findings showed that, perceived usefulness of e-learning has no significant impact on distance students' performance. The study also found that perceived ease of use of e-learning did not have any significant effect on distance students' performance. However, the study revealed that tutor quality of e-learning have a 31% significant positive effect on students performance. Finally, the results revealed that attitude towards e-learning have a 51% significant positive effect on

performance of distance students. The study concluded that students on distance learning programmes perceived that tutor quality and attitude towards e-learning are the main factors influencing e-learning satisfaction as well as impacting on students' performance with perceived usefulness and perceived ease of use not playing any significant role. The study recommended that though perceived usefulness of e-learning and perceived ease of use of e-learning did not have any significant effect on students' performance, management need to put measures in place to monitor them in case of any change. The study further recommends that management should emphasise on improving the quality of their course tutors as well as provide training to educate students on the importance of e-learning in order to eliminate any negative mind-set about the system.



Friday, 29 November

Time: 13:30 – 14:45 (Room 5)

**Session Chair: Dr. John Kamau**, Mount Kenya University, Kenya

*Presentation:*

**Mitigating Market Volatility in High End Property Valuation with Multivariate M-Learning**

**Charles Roland Haruna**, University of Cape Coast, Ghana

**Linda Otto**, University of Cape Coast, Ghana

**Emmanuel Asili Asamoah**, University of Cape Coast, Ghana

This study investigates the application of machine learning to mitigate market volatility in high-end property valuation. Traditional valuation methods, like income approaches and comparable transactions, are susceptible to subjectivity and time-consuming processes. Machine learning offers an alternative approach for automating property appraisals and improving accuracy. We evaluate five machine learning algorithms for predicting future property values in a specific city: linear regression, ridge regression, random forest, gradient boosting, and support vector regression. The model incorporates various factors that influence property value, including land area, floor area, special features, proximity to amenities (rail lines, ocean, water bodies, central business district, highways), age, quality, and major landmarks. Real estate prices from

subsequent quarters serve as the output variable. Data from Kaggle.com comprising details of 13,932 sold single-family homes in Miami is used to train and evaluate the algorithms. We employ five performance metrics: Coefficient of Determination (R-squared), Root-Mean-Squared Error (RMSE), Mean Absolute Error (MAE), Mean Absolute Percentage Error (MAPE), and Median Absolute Error (MdAE). Gradient boosting outperforms other algorithms, achieving the highest R-squared values and lowest errors. We discuss the advantages and limitations of each algorithm and propose directions for future research.

**Key Terms**—machine learning, high-end property valuation, market volatility, gradient boosting, automated valuation models

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