



Zetech University's 6th Research Conference & Innovations Week

9th - 12th July 2024

Technology Park Mang'u Campus

Theme

Innovate, Disrupt, Regenerate:
Unleashing the Transformative Power of Al for a Circular Economy

Sub Themes



































HOUSE KEEPING

Zetech University

The conference will take place at Zetech University Technology Park- Mangú Campus. You can refer any queries to the Reception Desk staff, Conference Assistant, or to a member of the Support Team, who will be happy to help.

Wi-Fi Access

Wi-Fi Access is available at the conference halls and the Auditorium. See wall posters for Wifi Passwords.

Mobile Phones

Please turn your mobile phones to silent mode during the presentations, but feel free to tweet at any time - our conference hash tag is #SustainableInnovationsConference.

Luggage

Coat rails are provided near the Library luggage area at ground floor. Kindly take care of your sensitive personal items.

Toilets

These are located on each floor of the university complex.

Meals

Lunch will be available for all registered participants in the university cafeteria, ground floor. Catering staff will be available to help you through the process. Please allow speakers who are presenting straight after lunch to take priority.

Support team

Feel free to contact any of the following persons for assistance:

Prof. Peter Kibas - 0727 048 528
Prof. Alice Njuguna - 0722 850 186
Ms. Esther Mwangi - 0722 575 400
AbbyChristine Murage - 0720 854 338
Geofrey Njaramba - 0719 876 936
Flora Mwanja - 0723 497 105

9TH July 2024

Day One (Pre - Conference Panels)

Venue: University Auditorium

Zetech University Technology Park Mang'u Campus

Theme: "Innovate, Disrupt, Regenerate: Unleashing the Transformative Power of AI for a Circular Economy"

Time	Activity	Presenter	Venue
8:30am - 9:00am	Registration		Auditorium
9:00am - 9:30am	Opening Prayers	Dr. Catherine Chege	Auditorium
9:30am - 9:45am	Welcome Remarks	Esther Mwangi	Auditorium
		Head of Research and	
	<u></u>	Innovation	
09:10 - 09:15am	Opening Remarks	Prof. Owen Ngumi	Auitorium
09:15am - 09:35am	Keynote Speech		Auditorium
	GROUP PHO	ото Session (Joseph Kw	ENDO)
10:35am - 11:00am	Health Break		
Time	Activity	Keynote	Faith Ngige, HSC: National Coordinator
			Kenya - Pan African Climate Justice
			Aliance (PACJA)
		Moderator	Panellists:
00		Charles Odhiambo	• Dr. Esther Munyiri: Director
00.25	Sub-Theme #2:	Rapporteur	GTRCMC
09:35am - 10:35am	Renewable Energy and	Edith Muthike	Emmanuel Gichuru: Program Officer ECO Tourism Kenya
	Climate Change		• Prof. Gitau Kamau: Renewable
\ \	Y —		Energy Innovator, Zetech University
			• Felix Omondi: Taka Taka Zero,
			Zetech University Student Innovator
	\sim		Catherine Masolia: Panellist from
			Circular Innovation Hub.
		Keynote	UNICAF
		Moderator	Panellists:
		Prof. Owen Ngumi	Prof Alice Njuguna: Zetech
		Rapporteur	University
	G 1 751 ##	Fredrick Mwaura	Caleb Ndaka: – KidsComp Camp
	Sub – Theme #5:		• Dr. Alice Kande: Director General
11:00am - 01:00pm	Transforming the Education sector		KNQA
11.00aiii - 01.00piii	through the use of AI		Dr. George W. Eshiamwata: Director UNESCO KNATCOM
	through the use of th		• Dr. JPR Ochieng' Odero: Research
			and Relationships Manager,
			Evidence Fund
			• Student Innovator: Powerlearn
			Project, Zetech University
01:00 - 02:00pm	Lunch Break / Visit to	the exhibitions	
		Keynote	Kenneth Oyola: Chief Communications
			Officer, Nation Media Group

02:00pm - 03:00pm	Media and Digital	Moderator	Panellists:
	Transformations	Dr. Benjamin Muindi Rapporteur Miriam Kaara	 Dr. Simon Chege: Lecturer Media and Journalism Studies Zetech University Paul Muniu: Journalist TV 47 Diana Olenja: Public Relations Manager, KLB Shiko Kaittany: Tv Producer/ Presenter/ Scriptwriter, K24 Tv Christine Kaku: Student Digital Media and Journalism Studies
03:00pm - 04:00pm	Leveraging AI to Embrace Future Innovations for circularity	Moderator Prof. Alice Njuguna Rapporteur Linet Chedeye	 Panellists: Dr. Wilfred Gikaru: Dean School of ICT and Engineering, Zetech University. Dr. Samuel Bosire: Chief Information Officer Nelson Mandela University Caleb Nyoiro: Site Director Zone01 Andrew Masila: Safaricom PLC Lynn Gitau: Africa-Meta Club James Okoth: Starter Up Grind

10TH July 2024

Day Two (Official Opening Ceremony) Venue: University Auditorium

Zetech University Technology Park Mang'u Campus

Theme: "Innovate, Disrupt, Regenerate: Unleashing the Transformative Power of AI for a Circular Economy"

Activity	Presenter		
Registration			
Prayers by Rev Eric Irun	gu. TBA & The Nationa	l & EAC Anthem	
*			
[Recognition of Corporat	te & Institutional Leader	·\$]	
Concept Address: Esthe	er Mwangi – Director Re	search and Innovation, Zetech University	
Welcome address: Prof. Zetech University	Alice Njuguna – DVC A	Academics, Research and Student Affairs,	
Messages of Goodwill:	Prof. Wacheke Wanjohi	- VC Kenyatta University, Dr. Bienvenu	
Comlan - Director, Gove	ernment Affairs Africa	at Intel, Joseph Murabula - CEO KCIC,	
Dr. Tonny Omwansa - CEO KeNIA, Irene Githinji - Education Engagements Lead,			
Microsoft ADC. Mumbi	Ndungu, Executive Dir	rector Power Learn Project.	
Stephen Gitagama - Man	naging Director, Nation	Media Group	
Welcome Remarks: Pro	f. Dr. Njenga Munene J.	(BVM, MSc.,PhD, Adv. Prof) – Vice	
Chancellor, Zetech Unive	ersity		
Opening Remarks: Prof	f. Susan Alfano Nkinyan	gi, PhD Chancellor, Zetech University.	
Keynote Address: CS In	ndustry Trade, Investmen	nt Hon. Rebecca Miano, EGH	
	Registration Prayers by Rev Eric Irun Introduction of Special C [Recognition of Corporal Concept Address: Esthet Welcome address: Prof. Zetech University Messages of Goodwill: Comlan - Director, Goven Dr. Tonny Omwansa - C Microsoft ADC. Mumbit Stephen Gitagama - Man Welcome Remarks: Prof. Chancellor, Zetech University	Registration Prayers by Rev Eric Irungu. TBA & The National Introduction of Special Guest by the Master of C [Recognition of Corporate & Institutional Leader Concept Address: Esther Mwangi – Director Re Welcome address: Prof. Alice Njuguna – DVC A Zetech University Messages of Goodwill: Prof. Wacheke Wanjohi Comlan - Director, Government Affairs Africa	

11.40 - 12:40pm	"Harnessing AI for Sustainable Growth: The Resilience of Africa's Tech and Social Innovations in the Circular Economy Era".	Moderator Esther Mwangi Rapporteurs Paul Kibet	 Panellists: Joseph Murabula: CEO KCIC Walter O Oyawa: Director General NACOSTI Mercy Kimalikit: CEO, Association of Kenya startup Enablers (ASSEK) Ebenezer Amadi: SIB Kenya, KEPSA Mumbi Ndungu: Power Learn Project Isaac Muendo: iZet Hub, Youth representative
12:40 - 01:00pm	Photo session and a visit	to the Exhibitions	
01:00 - 02:00pm	Lunch Break		
02:00 - 03:30pm	Session 5 Sub – Theme #5: Impact of AI Technologies in the Financial Sector	Keynote Moderator Dr. Wicliffe Anyango Rapporteurs Jenniffer Gachukia	ABSA Bank Branch Manager Thika Panellists: Barrack Ouma: AQA Manager Zetech University Panellist from ICEA Lion Panellist from Powerlearn Project Fadhil Mulinya: FinTech Student Innovator

11TH July 2024

Day Three

Venue: University Auditorium

Zetech University Technology Park Mang'u Campus

Theme: "Innovate, Disrupt, Regenerate: Unleashing the Transformative Power of AI for a Circular Economy"

Beenenry			
Time	Activity	Presenter	
08:30 - 09:00am	Registration		
08:30 - 08:40am	Opening Prayers	Dr. Catherine Chege	
08:40 - 08:50am	Welcome Remarks	Prof. Alice Njuguna	
08:50 - 09:00am	Opening Remarks	Prof. Njenga Munene	
08:50 - 09:00am		Keynote	Dr. Ehud Gachugu: Director Ajira Digital
09:20 - 10:40am	Business Entrepreneurship and Start-Ups: Disruptive Innovations and the Circular Economy:	Moderator Prof. Gitau Kamau Rapporteurs Isaac Muendo	Panellists: Kennedy Lanaya Osano: GTXN FinTech Morris Mbetsa: Numeral IOT David Ogiga: Sote Hub Prof. Peter Kibas: iZET hub Chairperson Konstantinos Maragkos: Youthmakers Hub, Greece Ludovica Ochieng – Incubation Manager; ILAB Africa
10:40 - 11:00am	Group Photo Session		

11:00 - 1.00pm 01:00 - 02:00pm	Research Conference Breakout Sessions Lunch Research Conference		 Session A: Education, Arts & Social Sciences Session B: Media, and Digital Transformation Session C: Business and Economics Session D: ICT and Engineering 		
	Breakout Sessions	کی م	Sciences • Session B: Media, and Digital Transformation • Session C: Business and Economics • Session D: ICT and Engineering		
		12 TH July 202	4		
Theme: "Innovate, Di	Zetech Universit		ditorium rk Mang'u Campus rmative Power of AI for a Circular Economy"		
Time	Activity	Presenter			
08.00am	Registration				
08:00am - 10:30am	Research Conference Breakout Sessions		 Session A: Education, Arts & Social Sciences Session B: Media, and Digital Transformation Session C: Business and Economics Session D: ICT and Engineering 		
10:30 - 11:00am	Tea Break		,		
11:00 - 1:00pm	Research Conference Breakout Sessions		 Session A: Education, Arts & Social Sciences Session B: Media, and Digital Transformation Session C: Business and Economics Session D: ICT and Engineering 		
1:00 - 2:00pm	Lunch Break				
2:00pm - 4:00pm	CLOSING CEREMONY Closing Remarks: Prof. Dr. Njenga Munene J. (BVM, MSc.,PhD, Adv. Prof) – Vice Chancellor, Zetech University. Closing Remarks: Prof. Susan Alfano Nkinyangi, PhD Chancellor, Zetech University.				
4:00pm - 4:30pm	Award Ceremony - Jo	hn Mwai, Directo	or Corporate Affairs & Marketing		
4:30pm - 4:50pm		Award Ceremony - John Mwai, Director Corporate Affairs & Marketing VOTE OF THANKS Esther Mwangi – Director Research and Innovation, Zetech University CLOSING PRAYER Prof. Gitau Kamau – Associate Professor School of Business and Economics			

4:50pm - 5:00pm

TEA BREAK & NETWORKING

Day One [Conference Opening] 11th July 2024

08:00am – 08:30am	Registration of Exhibitors
08:30am – 09:30am	Policy Discussion on Artificial Intelligence in Kenya
09.30am – 10:40 am	Business Entrepreneurship and Start-Ups: Disruptive Innovations and the Circular Economy:
10:40am – 11: 00am	Tea Break
11:00am – 11.20am	Group Photo Session
15:30pm – 17:00pm	Exhibitions

Parallel Sessions				
11:20 am-11:40am	Breakout Session A: (Media Studies) Session Chair Dr. Nyasha Mapuweyi Rapporteur: Flora Mwanja Bridging The Divide: Media Literacy Interventions for Socioeconomic Equity in Education Sheila Kirotwa Monyenye	Breakout Session B: (ICT & engineering) Session Chair Dr. Daniel Makupi Rapporteur: Nicholas Kavoi Combating education certificates fraudulence in the Kenyan Labour market through Blockchain technology Miriam Kaara	Breakout Session C: (Education Arts & Social Sciences) Session Chair Prof. Owen Ngumi Rapporteur: Doreen Mwangi New Frontiers in Conflict Prevention: Integrating Artificial Intelligence in Early Warning Systems in Kenya Solomon Kimaita, Eric J. Irungu	Breakout Session D: (Business & Economics) Session Chair Dr. Wicliffe Anyango Rapporteur: Barrack Ouma The Rise of AI-Powered Customer Service in Kenya's Finance & IT Sectors: A Case Study of Zimele Asset Management, Safaricom & KCB Bank. Anne Chege
11:40 am-12.00pm	Artificial Intelligence's Potential and Challenges In African Newsrooms: ABounded Case of Kenya's NationMedia Group Benjamin Muindi Winnie Odwar	A Systematic Literature Review on Phishing Detection Model Nicholas Muriuki Murithi	Assessment of the Impact of Multidisciplinary Education Initiatives on Climate Resilience in the Nakuru Catchment Basin, Kenya. Edith Muthike	Unlocking Kenya's Potential: The Intersection of Artificial Intelligence (AI) and Circular Economy Business and Entrepreneurship for Sustainable Development Gitau Kamau
12:00pm-12:20pm	Harnessing AI in Digital Media and Journalism for a Sustainable Circular Economy Anne Mwangi, Shikuku S, Benjamin M.	Perspectives of Librarians on Awareness and Readiness of Integration of AI for Library Operations and Services in Selected Universities in Kenya Paul Kibet Maina, Faith Masinza, Rahab Koech, Jane Matasio	Relationship Between Technology Adoption and Financial Performance in Public Universities, Kenya Richard Nganga Karigi	Effects Of Strategic Management Practices on The Performance of State-Owned Housing Corporations. A case Study of National Housing Corporation, Kenya. Josiah Mulei Kasamu
12:20pm-12:40pm	Q&A			
W		LUNCH	BREAK	

	Breakout Session A: (Media Studies) Session Chair: Roy Khaemba Rapporteur: Anne Mwangi	Breakout Session B: (ICT & engineering) Session Chair Dr. Wilfred Gikaru Rapporteur: Grace Shioki	Breakout Session C: (Education Arts & Social Sciences) Session Chair Dr. Samuel Macharia Rapporteur: Henry Kiogora	Breakout Session D: (Business & Economics) Session Chair Dr. Catherine Chege Rapporteur: Gladys Wangari
2:00pm-2:20pm	Artificial Intelligence and Journalism in Africa: Theory, Debate Trajectories and Agendas Nyasha Mapuweyi Benjamin Muindi Mary Nyamaingi	Faculty Perspectives on Integrating Technology into Teaching and Learning Practices in Post-COVID-19 Higher Education in Kenya: Implications for Continuous Professional Development. Shadrack Ngao, Gladys Wagura	Implications Of Generative Artificial Intelligence On Higher Education In Kenya. David Muchangi Mugo	The Benefits of Food Tourism to The Local Food Vendors in Marikiti Market, Mombasa. Tamia Oduor Mboya Matiku Susan M.
2:20 pm-2:40 pm	One Africa, Multinational Identities: A Print Media Construction of National Identities in Kenya and Zimbabwe. Nyasha Mapuweyi Winnie Odwar	Cybersecurity Threats to Product Lifecycle Management (PLM) Systems in a Circular Economy. Nicholas Kavoi	Leveraging On Artificial Intelligence (AI) In Environmental Diplomacy: Opportunities and Challenges Towards a Circular Economy in East Africa. Ochieng' Mark Oduor	Impact Of Expansion Strategies on Performance of Saccos in Kenya. A Survey of Kirinyaga County. Moreen Wandia Nyathama
2:40 pm-3:00 pm	Graphical Hybridisation Print Media Economics and Industrial Perspectives in Zimbabwe and Kenya. Evelyne Mwangi, Nyasha Mapuweyi Simon Chege Fortune Nyamunda	Material Solution for Cooling Hard Disk Drives with Waste Heat Recovery: A Machine Learning Approach. D. A. Oeba	Strategies for Policy and Practice Towards Promoting Integration of AI in Pedagogy in University Education in Kenya. Simon Chege Benjamin Muindi	Lessons Learnt from Empirical Review of Cost Leadership Strategic Practices on Performance of Private Universities in Kenya. Wanjiru Catherine Njeri
3:00 pm-3:20 pm	Navigating Career Crossroads In Tertiary Institutions In Kenya. Henry Kiogora Thiga, Veronicah Kamau	Effect Of Cost Control Techniques On Financial Performance Of Manufacturing Industries In Kenya: (A Case Of Bamburi Cement Limited) James Njoroge	Artificial Intelligence Integration in Food Safety and Hygiene among Street Food Vendors: Nigeria and Kenya Tabitha Atafache Yusuf.	Factors that affect the competitive advantage of fast-food restaurants in Kenya. Dennis Kariba Nugi

3:20pm-3:40pm	The Role of Technical and Vocational Education relative to Academic Schooling in the Transition of the Youth to Labour Markets in Kenya. Bonface Munene Immaculate Kathomi	Going Green Strategy as a determinant of sustainable development in hospitality establishments within Nairobi Metropolis Area. Paul N. Mwangi	Influence of Job Satisfaction on Employee Retention Among Generation Z in Deluxe Hotels- Nairobi. Mercy Mugambi	Unlocking Kenya's Potential: The Intersection of Artificial Intelligence (AI) and Circular Economy Business and Entrepreneurship for Sustainable Development. Fred Gichana Atandi
3:40 pm - 4:00 pm		Q	&A	
	/	DAY TWO:12th July, 2	024	
8:00 am - 8:30 am	Registration	_/ 22		
	Breakout Session A: (Media Studies) Session Chair: Dr. Simon Chege Rapporteur: Winnie Oduor	Breakout Session B: (ICT & Engineering) Session Chair David Kanyi Rapporteur: Daniel Njeru	Breakout Session C: (Education Arts & Social Sciences) Session Chair Veronicah Nduta Rapporteur: Linda Kinyua	Breakout Session D: (Business & Economics) Session Chair Samuel Mbugua Rapporteur: Moses Ochung
8:30 am - 8:50am	Half a century of teaching and learning French as a foreign language in Kenya: Difficulties for teachers and students <i>Mark Masembo</i>	Faculty Perspectives on Integrating Technology into Teaching and Learning Practices in Post-COVID-19 Higher Education in Kenya: Implications for Continuous Professional Development. Shadrack Ngao and Gladys Wagura	Evolutionary Trends in Kenya's Digital Diplomacy in the Emerging Technological Space of Artificial Intelligence. Eric J. Irungu, Solomon Kimaita	Effectiveness of Internal Fraud Mitigation Approaches on Financial Performance of Savings and Credit Cooperative Societies in Kisumu County, Kenya. Moses Omondi Ochung, Jeff Arodi, Peter Kibas
8:50am - 9:10am	Effect of Reverse Logistics on Procurement Performance of Small Dairy Firms In Kenya: A Case Study of Palm House Dairies Limited. Purity Wangari Wachira	The Impact Of Electronic Procurement Systems On Organisational Performance: A Case Study Of Kenya Bureau Of Standards Mercy Jemuge Kandie	Smart but inclusive cities in Africa using artificial intelligence A case study of Konza TechnoPolis City, Kenya. Cecily Wanjiku Murage	Adoption of internet of things to Mobile Banking Services using Voice Recognition, an empirical review. Yusuf Muchelule, Jacob Neyole Misiko
9:10am-9:30am	Leveraging AI for Technology Entrepreneurship in Kenya's Agricultural Sector – Challenges and Opportunities Andrew K. Kibet Peter Kibas	Determinants of Technical Efficiency In Universities: A Systematic Review Of Literature. Peter Olingo Osumba	Tugawe App:A Food Surplus Application For Corporate Social Responsibility and Food Waste Management Brian M tana, Abby Murage	Managerial Cap abilities and Performance of Private Chartered Universities in Kenya Sub Theme: Business and Entrepreneurship Mary Mbithi student Peter Kihara Clemence Niyikiza Omanwa

9:30am - 9:50am	Effect of Upskilling On Employee Performance In Community-Based Organizations In Laikipia County Benson Omondi Owino, Emily Cheposero Tumwet, Hellen Sang	Influence Of Tendering Process On Performance of County Governments In Kenya. Jackline Amoke	Applications of GIS in Planning for tourism resources. Cecily Wanjiku Murage-Mucheru AbbyChristine Njeri Murage Kelvin Mutisya	Digital Banking Among Urban Refugees In Kenya Lydia Pkaremba
9.50am - 10:30am			& A	
	Breakout Session A: (Media Studies) Session Chair: Dr. Nyasha Mapuweyi Rapporteur: Sheila Kirotwa	Health Break Breakout Session B: (ICT & Engineering) Session Chair Dr. Ing. Gikaru Rapporteur:	Breakout Session C: (Education Arts & Social Sciences) Session Chair Prof. Peter Kibas Rapporteur:	Breakout Session D: (Business & Economics) Session Chair Dr. James Karori Rapporteur:
11:00am - 11.20am	Effects of entrepreneurship skills on agricultural production: coffee smallholder farmers (On-going study) Daniel Wachira, Peter Kibas, Samuel Macharia	Jefferson Kaiga AdaptivePersonalized Insider Threat Detection using LSTM Networks: Balancing Security and Ethics. Jeff Kimanga Nthenge, Wilberforce Murikah, David Muchangi Mugo	Lydia Pkaremba Effect Of Cost Control Techniques On Financial Performance Of Manufacturing Industries In Kenya: (A Case Of Bamburi Cement Limited) James Njoroge	Evans Langat Evaluating the Effectiveness of Kenya's National Green Finance Strategy in Achieving Climate Goals. Wicliffe Anyango, Mark Waita
11:20am - 11:40am	Artificial Intelligence and Journalism in Africa: Perspectives, Research Debates, and Recommendation for Practice. Dr. Simon Chege, Dr. Nyasha Mapuweyi & Mary Nyamaingi	Effects of entrepreneurship skills on agricultural production: coffee smallholder farmers <i>Daniel Wachira</i>	Determinants Of Technical Efficiency In Universities: A systematic review of literature. Peter Olingo Osumba	Influence of Principles of Public Procurement and Performance in Kenyan Counties on Contract Management Augustine Mutinda Mwanza
11:40am-12:00	University Branding, Comparative Identity, and the brand construction procedures at MSU and Zetech University Nyasha Mapuweyi and Flora Mwanja	Leveraging On Artificial Intelligence (AI) In Environmental Diplomacy: Opportunities And Challenges Towards A Circular Economy In East Africa Ochieng' Mark Oduor		Effect Of Reverse Logistics On Procurement Performance Of Small Dairy Firms In Kenya: A Case Study Of Palm House Dairies Limited Wachira Purity Wangari, Wycliff Arani, Catherine Njoki

12: 00pm - 12:20 pm	Artificial Intelligence Role on Media Coverage of Geothermal Energy In Kenya: A Case Of The Nation And The Standard Newspapers. Elsie Ochieng and Roy Khaemba	Green Jobs in the AI Era: Can AI create and disrupt employment opportunities related to sustainability. <i>Esther Mwangi</i>	Supply Chain Practices And Public Procurement Performance In County Governments Of Kenya. Evans Langat	Impact Of Competitive Strategies On Performance Of Entertainment Joints On Thika Road, Kenya. Nyaga Margaret Wanja	
12:20pm - 12:40pm	Nutritional knowledge and dietary intake in kenyan patients living with type 2 diabetes; a case of Gatundu level V hospital, Kiambu County, Kenya. Eunice Gathoni Wamucii, Osiyel Daniel Edwin, Jacob Muthuri Mutwiri	Contributing Towards Smartphone Anti Theft In Kenya and Beyond. David Kanyi & Antony Mwendia	A phenomenological evaluation of the communication strategies and leadership styles that are most effective for select rural and secondary school heads in Zimbabwe and Kenya. Nyasha Mapuweyi, Munyi Catherine and Fungisai Mapuweyi	Effect of Budgetary Control on Financial Performance of Listed manufacturing firms in Kenya. Moses Odongo Otieno	
12:40pm - 1:00pm	Q & A				
1:00pm - 2:00pm	LUNCH BREAK				
2:00pm - 4:00pm	CLOSING CEREMONY				
4:00pm - 4:30pm	VOTE OF THANKS & CLOSING PRAYER				
4:30pm - 5:00pm	TEA BREAK & NETWORKING				



Zetech Innovation, Entreprenuership & Technology Hub