



International Center for Ethics in the Sciences and Humanities (IZEW)

Conference report

"Digitalization in Africa: Interdisciplinary Perspectives on Technology, Development, and Justice"



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Project: Bridging the digital divide with value-laden technology? Ethical implications of IT-export to sub-Saharan Africa (ELISA), funded by the Explorations Fund Platform 4 "Education - Society - Norms - Ethical Reflection" of the University of Tübingen

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The IZEW is an interdisciplinary research center at the Eberhard Karls University of Tübingen that raises ethical questions about science and its results. Here, a strategy of "ethics in the sciences and humanities" is pursued which by its very nature addresses the question of responsibility in science itself. With scientific discoveries, technological innovation, global transformation, and changing norms in societies, new questions arise in moral philosophy, the theory of science, and anthropology. For this reason, theoretical research on the foundations of ethics as well as specific case studies form an integral part of "ethics in the sciences and humanities" are conducted.

The project "Bridging the digital divide with value-laden technology? Ethical implications of IT-export to sub-Saharan Africa (ELISA)" explores the practice of digitalization in sub-Saharan Africa and its ethical implications.



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Foreword

Dear participants, dear readers,

We are pleased to present the following report of the conference "Digitalization in Africa: Interdisciplinary Perspectives on Technology, Development, and Justice," held at the University of Tübingen, Germany, from 26 to 27 September 2018. The event was organized by members of the research project "Ethical implications of IT-export to sub-Saharan Africa (ELISA)". The aim of the conference was to offer a platform for exchange on topics related to the export and use of information and communication technologies (ICT) on the African continent.

Academic scholars from more than 20 international universities and research centers, representatives of NGOs such as Brot für die Welt/Bread for the World, foundations (DiploFoundation), practitioners (ICT4D consultants), activists, and social entrepreneurs (Mobile Web Ghana and GetINNOtized) shared their perspectives and learned from each other.

Against the background of growing activity in the fields of digitalization and ICT for development (ICT4D) in Africa, the participants discussed ethical questions concerning access to and use of ICT, questions of sustainable development, and government strategies and digitalization agendas. Recurring issues in these debates were human rights, privacy, affordability, ICT literacy, the gender digital divide, and the importance of local content.

Exemplary questions raised and discussed include the following: What are the motivations behind ICT export and digitalization programs? How are technologies used; who is excluded from ICT use and why? Who is responsible for providing access and content? Which roles do transnational companies and governments play? Does the export of ICT by Western companies and development programs have neo-colonial effects? Those questions and topics were at the center of the conference's talks and discussions and our speakers provided valuable input for future engagement and discussion.

Our thanks and appreciation go to all participants for contributing to the conference's success, sharing their perspectives, and their openness and collegiality. We immensely enjoyed this conference – from a scientific and personal point of view.

Sincerely,

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Prof. Dr. Regina Ammicht Quinn

Laura Schelenz

). Heisen

PD Dr. Jessica Heesen

Kerstin Schopp

Conference Program

	CEDTEMO		
	SEPTEMBE	-R 26	
9:00	Arrival and Reg	_	
	(Building Wilhelmstraße 1	9, 72074 Tubingen)	
9:30	Welcome and Introductory Remarks (Room 0.02)		
	Why an Ethics Centre? The IZEW and the University of Tübingen Technology, Development, and Justice: What Are We Talking About?	Prof. Dr. Regina Ammicht Quinn, Speaker of the IZEW (Germany) Laura Schelenz, Organizer of the conference, IZEW (Germany)	
10:00	Opening Address 1 (Room 0.02) Chair: Laura Schelenz, IZEW		
	Ethical Questions about Digitalisation in Africa	PD Dr. Jessica Heesen, Head of the section "Media Ethics and Information Technology" at the IZEW (Germany)	
10:30	Opening Address 2 Chair: Laura Sche		
	Critical Questions at the Intersection of Digitalisation, Development, and Justice	Dr. Kutoma Wakunuma, De Montfort University (United Kingdom)	
11:00	Session 1 "ICT for Development: Examples from Sub-Saharan Africa" (Room 0.02) Chair: Sylvia Erben, IZEW		
	Innovative Approaches Through Mobile Apps to Improve Tenure Security in Sub- Saharan Africa	Dr. Paul van Asperen (The	
12:00	Lunch (Roor	n 0.01)	
13:00	Session 2 "Digitalisation of the City" (Room 0.02)		
	Chair: Andreas B Beyond the Boundaries: Addressing Social and Spatial Inequality with Digitally Based Mobility? The Case of Cape Town, South Africa	Prof. Dr. Karin Pfeffer, University of Twente, and Dr. Hebe Verrest, University of Amsterdam (Netherlands)	
	Digitizing the Urban Landscape: Citizen Science for Open, Spatial Data.	Geraldine Quénéhervé, University of Tübingen (Germany)	
14:00	Session 3 "Gender and	ICT" (Room 0.02)	
	Chair: Solange Martinez Building a Digitally Skilled Generation for	z Demarco, IZEW Florence Toffa, CEO Mobile Web	
	Sustainable, Impactful Development in Africa	Ghana (Ghana)	
15:00	Coffee Break (R	oom 0.01)	

15:30	Social Programme: Walk to the river Neckar and traditional punting on the river; we will meet at 15:30 in front of the building Wilhelmstraße 19.
18:00	Keynote Lecture (Old University, Münzgasse 30, 72070 Tübingen)

 Keynote Lecture (Old University, Münzgasse 30, 72070 Tübingen) Chair: Prof. Dr. Regina Ammicht Quinn, IZEW
 Exploring Africa's Digitalisation Agenda in the Context of Promoting Civil Liberties
 Koliwe Majama, ICT consultant (Zimbabwe)

20:00	Conference Dinner at the restaurant "Bootshaus"	
	(Address: Wöhrdstraße 25, 72072 Tübingen)	

SEPTEMBER 27

9:00	Welcome Back and Organisational Aspects (Room 0.02)			
9:15	Keynote Lecture (Room 0.02) Chair: Sylvia Erben, IZEW			
	Culture, Digitalization, and the Digital Divide: Existential and Virtue Ethics Approaches	Prof. Dr. Charles Ess, Department of Media and Communication, University of Oslo (Norway)		
10:30	Short Lecture (Room 0.02) Chair: Sylvia Erben, IZEW			
	Out of Africa – A New Perspective on Digitalisation in Africa	Prof Dr. Ute Rademacher, International School of Management (Germany) and Prof. Dr. Terri Grant, University of Cape Town (South Africa)		
11:00	Session 4 "African Governmental Approaches to Digitalisation" (Room 0.02) Chair: Dr. Thomas Grote, IZEW			
	Concepts of Development and Justice Behind Tunisia's Digital Strategy	Kerstin Fritzsche, Institute for Advanced Sustainability Studies (Germany)		
	A Trojan Horse? E-Commerce and Its Potential Risks for Africa	Africa Kiiza, Southern and Eastern African Trade Information and Negotiations Institute (Uganda)		
12:00	Lunch (Roon	n 0.01)		
10.00				
13:00	Lightning Talks and Discussion "German-African Cooperation on ICT in Business and Development" (Room 0.02) Chair: Sylvia Erben, IZEW			
	Building a Digital Business in Ghana – the Challenges to Overcome, the Opportunities Beyond	Ulrich Busch, CEO getINNOtized		
14:00	Networking Session (please refreshments in the hallway and join			

15:30	Session 5 "Local Use and Appropriation of ICT" (Room 0.02) Chair: Anna Tilling, IZEW		
	Digitalisation in Kenya: Status, Concerns and Opportunities	Prof. Dr. Tom Kwanya, Technical University of Kenya (Kenya)	
	Alternative Mobile Telephone Concepts and Web Information Infrastructure and Digital Tools by Illiterate Yoruba Peoples in Benin Republic	Dr. Dafon Aimé Sègla, Université d'Abomey-Calavi (Benin)	
	#FeesMustFall: Students, Smartphones and Social Media: Digital Agency and the Rise of a New Generation on South Africa's Post-Apartheid Campuses	Matthias Schulze, University of Tübingen (Germany)	
	Coffee Break (Room 0.01)		
17:00	Coffee Break (Ro	oom 0.01)	
17:00 17:30	Coffee Break (Ro Panel Discussion "Digitalisation in for Human Rights and Devel Chair: Marco Krüg	Africa – Chances and Risks opment" (Room 0.02)	
	Panel Discussion "Digitalisation in for Human Rights and Devel	Africa – Chances and Risks opment" (Room 0.02) ger, IZEW University (Ethiopia) abwe)	
	 Panel Discussion "Digitalisation in for Human Rights and Devel Chair: Marco Krüg Dr. Workineh Kelbessa, Addis Ababa Koliwe Majama, ICT consultant (Zimb 	Africa – Chances and Risks opment" (Room 0.02) ger, IZEW University (Ethiopia) abwe) Economics and Business (Austria)	

Opening Addresses



PD Dr. Jessica Heesen is the head of the section "Media Ethics and Information Technology" at the International Center for Ethics in The Sciences and Humanities (IZEW) at the University of Tübingen. Heesen heads several projects, e.g. on privacy, YouTube or Ambient Intelligence. In 2016, she published the first comprehensive German handbook on Media and Information Ethics. Her research interests include Practical Philosophy, Information Ethics, Media Ethics, Security Ethics, the Philosophy of Technology, Social Philosophy, and Epistemology.

PD Dr. Jessica Heesen:

Ethical Questions about Digitalization in Africa

In her Opening Address, PD Dr. Jessica Heesen presented her work in several IZEW projects such as the Forum Privatheit (Forum Privacy), focusing on the ambivalence of privacy, and ELISA, which addresses ethical implications of IT export to sub-Saharan Africa. Further, Heesen raised the question of how to define privacy in different cultural and regional contexts: What are the historical conditions? Is privacy an end in itself? The speaker also touched upon the fact that, in a context where technology is omnipresent and neutral information does not exist, technology shapes societies and vice versa. She ended her talk with the important question of how an equal and fair global digital society can look like and how it can be put into practice.



Jessica Heesen during her opening address.

Dr. Kutoma Wakunuma: Critical Questions at the Intersection of Digitalization, Development, and Justice

In her talk, Dr. Kutoma Wakunuma argued that Africa has made 'good' strides in becoming a digital continent with the use of ICT in different areas like banking, government, education, health, and entertainment. Digital initiatives in the past contributed to Africa's digitalization process, Harnessing ranging from the UN's Information Technology for Development (HITD) over the UN's World Summit for the Information Society (WSIS) 2003 and 2005 to Africa's Information Society Initiative (AISI). The goal of these initiatives is closing Africa's information gap. The governments of Kenya and Rwanda even declared ICT as a pillar of development and priority for their countries' vision for 2030. Investments by technology service providers such as Airtel, MTN, Zamtel, Vodacom, Orange, and Safaricom have been made mainly in mobile phone



Dr. Kutoma Wakunuma is a Senior Lecturer and Researcher at De Montfort University where she works within the Centre for Computing and Social Responsibility (CCSR). Her main interest is in understanding the social aspects of information and communication technologies for development and the aspect of gender. Wakunuma is also a programme leader for MSc Computing, MSc Business Intelligence Systems & Data Mining and Data Analytics.

service provision. Moreover, tech giants like Google, Facebook, and Microsoft have started to invest in Africa's digitalization process. Google for example announced to open an Artificial Intelligence (AI) research center in Accra, Ghana, in 2018; Facebook launched its Internet.org initiative in 2013; and Microsoft has founded the 4Afrika Academy. Furthermore, China has heavily invested in Africa's telecommunications infrastructure. Therefore, ethical concerns and implications have to be considered. For example, as technology is not neutral but value-laden, who participates in the design of technologies and which or whose values are being considered? What happens and who is responsible in the case of data misuse? Also other ethical concerns have to be taken into account referring to gender relations, data protection, and global digital power differentials.

Session 1 "ICT for Development: Examples from sub-Saharan Africa"

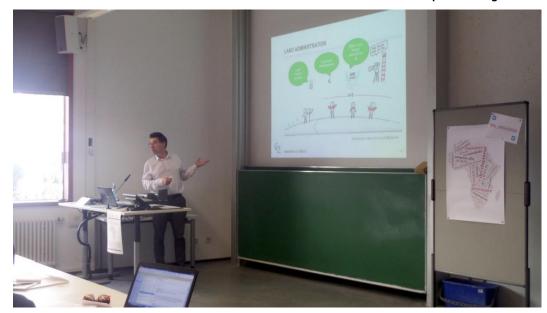


Paul van Asperen) graduated from Delft University of Technology (DUT) with a MSc in Geodesy in 1989 and worked consecutively for the University of Zambia, the University of Twente, the national mapping agency in the Netherlands and Rijkswaterstaat. He completed his PhD at DUT on the evaluation of innovative land tools in sub-Saharan Africa in 2014. Since 2017, he joined the University of Twente as an assistant professor in Land Administration Systems.

Dr. Paul van Asperen:

Innovative Approaches through Mobile Apps to Improve Tenure Security in Sub-Saharan Africa

Dr. Paul van Asperen contributed to the conference with a presentation on ICT, land administration, and tenure security in Africa. An array of technologies is used and applied to improve land administration initiatives, and to foster development (e.g. mobile phones, tablets, drones, GPS, apps, desktop-systems, and cloud storage). In this context, ethical questions of legitimacy, gender relations, (lack of) legal frameworks, and privacy protection arise. While these ethical implications have been studied from the development and information perspective, there is need for further research on evaluation and monitoring.



Paul van Asperen during his talk.

Session 2 "Digitalization of the City"



Prof. Dr. Karin Pfeffer is Full Professor in Infrastructuring Urban Futures at the University of Twente in the Netherlands. Her research interests are the generation of information from different spatial data sources in urban areas using geotechnologies, and how spatial and digital information is used in urban planning and governance. She also focuses on socio-spatial inequalities.



Dr. Hebe Verrest is a Human Geographer, working at the intersections of Geography and International Development Studies. Her research focuses on cities, originally on small and medium-sized cities in the Caribbean, and increasingly on coastal cities in South Asia. Leading in her work is a focus on exclusion and inequality.

Prof. Dr. Karin Pfeffer and Dr. Hebe Verrest: Beyond the Boundaries: Addressing Social and Spatial Inequality with Digitally Based Mobility? The Case of Cape Town, South Africa

In their presentation, Prof. Karin Pfeffer and Dr. Hebe Verrest focused on the issue of (in)equality in the context of the Smart City concept. According to the presenters, Smart City approaches have become a popular urban planning policy approach of cities across the globe. How Smart City policies operate in contemporary cities is being examined in the emerging, but still underdeveloped, academic field of 'smart urbanism'. Pfeffer and Verrest discussed the case of Cape Town, South Africa, where the bus rapid transit system MyCiTi has recently been implemented. Cape Town is characterized by a socioeconomically highly unequal society with a fragmented and highly segregated urban form and structure. The implementation of MyCiTi aimed at reducing inequality by creating a sustainable transport system, which provides access to urban resources and economic opportunities across social groups. However, the presenters stressed that increased significance of digitalization in realizing urban mobility in Cape Town as well as the opportunities it offers, raise ethical questions in the context of social and spatial (in)equality.

Geraldine Quénéhervé: Digitizing the Urban Landscape: Citizen Science for Open, Spatial Data

Geraldine Quénéhervé gave an introduction to the use of spatial data and open data in the city. She described the process of producing spatial data with geographic information systems and the way this information can be used in practice. The Energy Lab Tübingen was introduced as a case study. In light of the energy transition as a key challenge for society, the "Energy Lab" project aims at identifying potentials for the reduction of energy consumption and increased usage of renewable energies in the city of Tübingen, Germany. The project follows a participatory approach, where researchers, local actors, and citizens jointly shape the local energy transition, turning Tübingen into an energy laboratory.



Geraldine Quénéhervé studied Geography, Sociology, Urban Planning, Geoinformatics and Geology in Tübingen, Stuttgart, and Adelaide (Australia). She is currently a researcher at the University of Tübingen, where she analyzes neighborhood development, multifunctional use of space and renewable energies with statistical and geospatial methods.

The presenter further explained the importance of

geographic information systems for future mega-cities and urban planning (waste, water, energy, agriculture) more generally.



Geraldine Quénéhervé during her talk.

Session 3 "Gender and ICT"

Florence Toffa:

Building a Digitally Skilled Generation for Sustainable, Impactful Development in Africa

In her presentation, Florence Toffa stressed the need to empower women by offering ICT training and mentorship in order to break the cycle of poverty, to bridge the tech skills gap, to invest in future workforce and to advance development in Africa. To build a digitally skilled generation of women in Africa, three factors are crucial: first, socialization; parents should break with existing gender stereotypes when raising children. Second, strategic education policies are needed, and a change in pedagogy is required. Third, role models play a great role for empowering young girls. In addition to women being mentors and passing on their skills, girls have to believe in themselves. Mobile Web Ghana is a company that tries to achieve the aforementioned with its bottom-up approach (e.g. providing workshops for girls and speaking in front of students).



Florence Toffa is the CEO of Mobile Web Ghana, a technology hub offering training, incubation, mentorship and support in mobile, web, and data application development and entrepreneurship. Toffa has over eight years of work experience in Information and Communication Technology for Development (ICT4D) projects. She is passionate about empowering the youth and women to use technology and solve local problems in various communities.



Florence Toffa during her talk.

Session 4 "African Governmental Approaches to Digitalization"



Kerstin Fritzsche studied Political Science, Middle Eastern Studies and Journalism in Leipzig and Stockholm, focusing on International Relations and Development Theory. Her research at the Institute for Advanced Sustainability Studies in Potsdam, Germany, concentrates on the implications of digital transformation processes for societies and economies in the Global South, in particular in Arab countries.

Kerstin Fritzsche:

Concepts of Development and Justice Behind Tunisia's Digital Strategy

Kerstin Fritzsche's presentation focused on Tunisia's digital strategy, its aims, current state of implementation, as well as key stakeholders. Seven years after the revolution, the national strategy "Tunisia Digital 2020" is one central approach in overcoming the country's economic crisis, high rates of unemployment, and weak infrastructure. It aims at making Tunisia an international point of reference for digitalization and using ICT as an important lever for socio-economic development. In this context, Fritzsche explored the concepts of development and justice that underlie Tunisia's digital strategy as well as the role of technology in these concepts. Her research was based on two pillars: first, the analysis of discourses and debates that concern the Ministry for Communication

Technologies and Digital Economy and the Ennahda party; second, interviews with different stakeholders from political parties, civil society, and the economy. The presenter came to the conclusion that, in the context of Tunisia's digital strategy, development is understood as modernization of both infrastructure and society. Moreover, creating spaces and framework conditions for opportunities is considered just. The implementation of those conditions is based on a participatory framework; however, its inclusiveness remains debatable.

Africa Kiiza:

A Trojan Horse? E-Commerce and Its Potential Risks for Africa

In his talk, Africa Kiiza gave an overview of e-commerce within the system of the World Trade Organization (WTO) and its implications for the African continent. According to Kiiza, the digital revolution is profoundly changing the economic and social fabrics of societies around the world. Electronic commerce or Industry 4.0 is unstoppable. This development is also reflected within the WTO, where discussions focusing on e-commerce have intensified. For the African continent, e-commerce is linked to the following challenges: internet access, affordability, and availability. Kiiza argued that binding WTO rules on ecommerce are pushed for by tech giants like Google, Alibaba, Amazon, Facebook, and Apple. They interest seems to be setting the rules that will consolidate their power. This global regulation of e-commerce poses three major challenges for countries in the Global South and



Africa Kiiza is a researcher, activist, and development anthropologist. He holds a Bachelor's degree in **Development Studies from** Makerere University and a MSc in Governance and Regional Integration from the Pan African University. He has worked with SEATINI-Uganda as a Program Officer on Multilateral and Bilateral Trade Negotiations and has participated in numerous meetings and conferences on trade negotiations at the regional and WTO level.

African countries in particular: First, these binding rules on e-commerce will put African countries' power and economies in the hands of largely unregulated private oligopoly. Second, national authorities will be unable to monitor or effectively enforce national laws and standards. Third, it will result in a loss of jobs and higher unemployment due to automatization in the fourth industrial revolution.

The presenter concluded that, although the purpose of the WTO is to raise the standard of living around the world, its focus has increasingly shifted to guaranteeing free trade. In other words, trade per se is at the center of the WTO's agenda and negotiations. Moreover, trade has become the lens through which development is perceived, rather than the other way around. The role of African countries remains unclear, being not yet at the stage to sign trade rules in this area.

Session 5 "Local Use and Appropriation of ICT"



Director of the School of Information and Communication Studies at the Technical University of Kenya. He is an information scientist with several years of practical experience. His current research interests include Information Ethics, Infodemiology and Infoveillance, Web Technologies, and Library Innovations.

Prof. Tom Kwanya:

Digitalisation in Kenya: Status, Concerns and Opportunities

In his presentation, Prof. Kwanya gave an overview of the digitalization process in Kenya, which is next to Nigeria, South Africa, and Egypt one of the African countries standing out with respect to the use of ICT. According to Kwanya, Kenya's digital story is a story of resilience. ICT are introduced in many sectors like public administration (e-government), education, commerce, and government/ election. Furthermore, it is a means for social mobilization (cf. Ushahidi, an online platform that was originally developed to map reports of violence in Kenya after the post-election violence in 2008). However, according to Kwanya, though Kenya has made good progress in digitalization, the country is still at an "infancy" stage. Most ICT systems are imported and there is limited research on

ICT in Kenya. In addition, Kenya only has a low national budget for ICT and limited legislation; infrastructure is needed. Kwanya emphasizes that the government plays a big role with regard to these factors; leadership is needed. Moreover, a public discourse around ethics and the use of ICT, for example in the case of biometric signing-in at schools, is missing.



Tom Kwanya during his talk.

Dr. Dafon Aimé Sègla:

Alternative Mobile Telephone Concepts and Web Information Infrastructure and Digital Tools by Illiterate Yoruba Peoples in Benin Republic

In his presentation, Dr. Dafon Aimé Sègla addressed the use of ICT in the context of illiteracy. On the African continent, about fifty million people (including those living in diaspora) speak Yoruba. The illiteracy of most of these people is a barrier to the use of ICT, which is often based on the written languages (e.g. SMS). In other words, ICT can function as a mechanism of exclusion. However, local strategies of appropriation have been identified: Yoruba people make use of images, signs, and symbols to create their own codes for contacts and image storage, although this semiology can vary from person to person. With regard to the use of apps (e.g. WhatsApp), voicemail is used instead of writing. Following these observations, one idea is to create mobile applications in Yoruba mother tongue and to add new language support mechanisms to mobile phones, hence "Africanizing ICT," as Sègla called it. For example, the mobile app, 'MOBILE - JE M'EDUQUE,' is intended to facilitate selflearning for those who are non-literate in foreign languages, and to teach reading and writing in the mother tongue.



Dr. Dafon Aimé Sègla has research experience in France and Germany, and is currently working at the Université d'Abomey-Calavi in Benin Republic. His interests in nonwestern oral culture include concepts, belief, logic and knowledge production in language and cognition, scientific theory, technologies and embodied tacit/implicit knowledge in mathematics, biology, traditional food industry, medicine, and innovation studies, linking Africa's past and future.

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Matthias Schulze is a cultural anthropologist and historian. He is a PhD student at the Department of Cultural Anthropology at the Tübingen University of and associated with the University of the Witwatersrand in Johannesburg. He works on heritage and memory in Southern Africa and his thesis focuses on the role of the born free generation in Namibia and South Africa.

Matthias Schulze:

#FeesMustFall: Students, Smartphones and Social Media: Digital Agency and the Rise of a New Generation on South Africa's Post-Apartheid Campuses

Matthias Schulze presented the development of a nationwide youth-led movement against the economic exclusion in South Africa's inherited system of tertiary education. According to Schulze, digital media played a key role in the rise of the movement; the Twitter Hashtag *#FeesMustFall* turned into a political slogan and finally mobilized tens of thousands of students. In addition, the media started reporting on the latest developments on South Africa's campuses and thus further contributed to the movement's success. According to Schulze, in this case, digital media served as a tool of broad-based

empowerment. However, empowerment through ICT-based activism is not self-evident but relies on (economic) resources and privileges. Finally, Schulze raised the question whether social media contributed to fostering reconciliation in post-Apartheid South Africa.



Matthias Schulze during his talk.

Keynote Lecture 1: Koliwe Majama



Koliwe Majama is a Zimbabwean media, information, communications and technologies consultant with over 15 years of experience working in civil society lobbying and advocacy. As a trained journalist, Majama has practiced as both a print and broadcast journalist in Zimbabwe. Most recently, Majama was a Programme Officer at the Media Institute of Southern Africa -Zimbabwe Chapter. She was prominently involved in internet governance processes in her country through research and multi-stakeholder engagement.

Koliwe Majama started her keynote speech "Exploring Africa's Digitalisation Agenda in the Context of **Promoting Civil Liberties**" with a simple, but often neglected fact: Africa is a very diverse continent. She then raised the point of an African digitalization agenda, which needs to be developed - a strategy which shows that Africans have their own understanding and own contexts; this should be a strategy which responds to the global challenge of digitalization. According to Majama, African civil society has started to frame digitalization and internet access as a human right. Private companies, however, focus more on economic growth and market potential, largely ignoring that they have a role to play in the protection of end users. The users of ICT and the internet lack awareness that they have rights online since the offline human rights situation is precarious. Also, many African people are more concerned about fulfilling their basic needs instead of adopting ICT or campaigning for human rights, according to Majama. In this context,

the question is: how can we start a conversation about digital rights when people are worried about their children's educations or their livelihood?

With regard to the process of digitalization on the African continent, the following issues require particular attention: (I.) the promotion of affordable internet and the enhancement of broadband access; (II.) bridging the gender gap; (III.) the creation of local knowledge and the promotion of a more diverse media; (IV.) cyber security in the sense of public protection; and (V.) the respect for human rights.

Concerning existing human rights frameworks for digitalization, Koliwe Majama pointed to the African Declaration on Internet Rights and Freedoms, which is a Pan-African initiative aimed at promoting human rights standards and principles of openness in internet policy formulation and implementation on the continent. It builds on a number of well-established African human rights documents including the African Charter on Human and Peoples' Rights of 1981, the Windhoek Declaration on Promoting an Independent and Pluralistic African Press of 1991, the African Charter on Broadcasting of 2001, the Declaration of Principles on Freedom of

Expression in Africa of 2002, and the African Platform on Access to Information Declaration of 2011. However, as Majama stated, in practice, ICT policies and regulations on the continent contradict the commitment governments have made to protect human rights. On the bright side, civil society organizations increasingly stand up and form coalitions that monitor daily violations of digital rights, as for example the African Declaration Coalition. Some coalitions brought cases of violations of digital rights before national courts.

Koliwe Majama continued stressing that the digital face of Africa is mobile with mobile phones being the primary digital resource. With regard to the internet, the presenter argued that there are some factors hindering internet access in Africa: First, in most countries broadband connection does not come at a fixed price; second, the network coverage in vast rural areas is poor; and third, for many Africans, even subsidized packages are not affordable. Another major issue relating to access is that the digital divide is highly gendered. While women form 52 percent of the African population, only 25 percent are connected. Patriarchal and cultural practices hinder women to fully exercise their right to privacy, free expression, and access to information, says Koliwe Majama.

The presenter also looked at the role of the private sector in providing (equal) internet access. In recent years, service providers have been observed to raise prices for internet access to maximize profits at the cost of people's access. The practice of data bundling for specific use (e.g. data for WhatsApp only, data for email only) further complicates the issue. In the view of Majama, the right to affordable internet is a social responsibility for both private and public stakeholders.

Finally, the keynote lecturer addressed internet-shutdowns as a form of online censorship. Africa has witnessed a number of shutdowns, largely before and after elections or during protests. In addition to the violation of human rights, there is also an economic side to it as internet shutdown have cost the continent over 200 million dollars since 2015.

Koliwe Majama arrived at the following conclusion: While the internet has accelerated economic development in countries of the Global North, this does not hold true for the African continent. Accessibility is not only limited due to infrastructural challenges and prohibitive costs, but also due to a lack of political will. Many governments consider the internet a threat to national security and fear universal access. Internet access in Africa needs to be recognized as a development issue and should be firmly rooted in a developmental agenda. However, at this point, the continent lacks a clearly defined digital agenda that can be monitored and evaluated. Hence, Africa will continue to lack behind other continents as long as governments view digitalization as a peripheral issue or as a threat to stability.

You can watch Koliwe Majama's talk online at: http://timms.unituebingen.de/tp/UT_2018 0926_001_daethics2018_0001



Koliwe Majama (above) and Charles Ess (below) during their talks.



Keynote Lecture 2: Prof. Dr. Charles Ess



Prof. Dr. Charles Ess is Professor of Media Studies at the Department of Media and Communication at the University of Oslo, Norway. He works at the intersections of Philosophy, Computing, Applied Ethics, Comparative Philosophy, and Media Studies, with emphases on Research Ethics, Digital Religion, and Virtue Ethics. Ess has researched, taught, and lectured across the Anglophone world, Europe, Scandinavia, multiple countries in Asia, South America, and Africa.

Prof. Dr. Charles Ess:

Culture, Digitalization, and the Digital Divide: Existential and Virtue Ethics Approaches

Prof. Charles Ess started his talk with a little history lesson on the rise of the internet: In the early years of the internet, dark predictions like "Big Brother scenarios" and the "McDonaldization" of local cultures stood side by side with more optimist views like Marshall McLuhan's idea of an electronic global village. Many early arguments about the internet rested on the hope for a democratizing effect based on Jürgen Habermas' conception of the ideal speech situation. The internet also promised to evolve a "secondary orality": In contrast to literate cultures, in which technologies of reading and writing are initially used only by elites, oral cultures distribute "authority" among the members of the community. Considering these optimistic thoughts, Prof. Ess raised the provocative question: What could possibly go wrong?

The digital divide between the Global North and the Global South is one prominent example of what went wrong. The process of global digitalization can be characterized as one from a computer-mediated communication to computer-mediated colonization with the Global North being dominant in the development and use of digital technologies.

Prof. Ess raised the point of "platform imperialism." *Platform* here refers to the entire range of communication, including Social Networking Sites, search engines, and smartphones, which are predominantly designed, implemented, and controlled by especially four transnational corporations (TNCs): Apple, Google, Facebook, and Microsoft. These corporations are supported through the politics of the United States as their host country, especially through its regimes and enforcement of copyright law. As a results, these platforms have specific commercial and ideological values embedded in them – values that derive from and extend the dominance of U.S.-based TNCs and thereby the United States. With respect to this, it is argued that these platforms are enhancing the corporate sphere instead of developing a public sphere, which goes against the promise of greater democracy and equality. The primary effect of platform imperialism then is the intensification of asymmetrical power relations.

However, Prof. Ess showed that there is not only darkness but also light, i.e. new opportunities for human beings and for being human. For instance, in conjunction with the emergence and diffusion of computer-mediated communication, the rise of "the relational" self is observable. Understood as relational autonomy standing in between hyper individualism and relational selves, it increasingly forms a middle ground between Western thought and Confucian tradition and can also be found in Buddhist and African philosophy. The relational self is best expressed as: "I am my relationships". In other words, a person is defined through his or her relationships with other persons. This stands in contrast to the conception of the "rational individual" commonly used in the Global North, where individualism is considered the foundation for democratic processes and norms. Privacy, for example, is considered a positive good in the Global North stressing the role of the individual, whereas in oral societies, it is viewed as something negative and shameful, putting a greater emphasis on community and inclusive property rights.

Finally, Prof. Ess introduced the approach of "virtue ethics" as a starting point for conduct in the digital era. At its center is the (simple) question "What must I do – what abilities, excellences, practices, capabilities must I acquire – in order to live a life of contentment?" In this context, it is important to stress that contentment has two sides: individual contentment, or individual flourishing on the one hand, and social contentment, or social flourishing, on the other.

The last issue Prof. Ess addressed was the process of digitalization in Africa and "ethical leapfrogging." As the Global North struggles to achieve a better balance between online and offline existence, perhaps new approaches can be found in the African context, where virtue ethics is already widely used.

Lightning Talk and Discussion "German-African Cooperation on ICT in Business and Development"



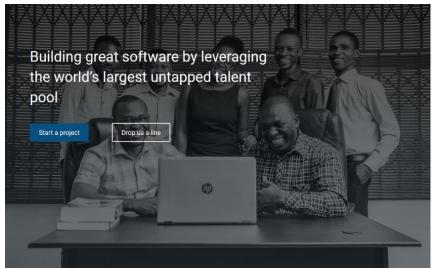
Ulrich Busch is CEO and founder of getINNOtized, a tech company based in Ghana. Until 2015, Ulrich Busch advised corporate institutions on their digital transformation agenda at Stern Stewart and was responsible for building up an incubator in Ghana for the Stern Stewart Institute. Previously, he studied **Business Administration at** Ludwig Maximilians University Munich and graduated with a Master's in Science.

Ulrich Busch:

Building a Digital Business in Ghana – the Challenges to Overcome, the Opportunities Beyond

Ulrich Busch presented his work and experience as CEO and founder of getINNOtized as well as founder of the German Institute of Business and Technology (GIBT). getINNOTized is a tech company working for top-tier German corporates from their offices in Ghana's capital Accra; the German Institute of Business and Technology (GIBT) is an innovation hub focusing on bringing together business innovation, academia, and entrepreneurial talent to contribute to the Ghanaian economy. The aim of getINNOtized and GIBT is to overcome the digital transformation dilemma in Africa, or more specifically Ghana. According to Busch, one major problem of African countries is the so-called "brain drain," i.e. the emigration of academics, scientists, and other soughtafter professionals due to missing career perspectives in their home countries. By empowering African young leaders and building bridges between the economies of the Global

North and the African continent, getINNOtized works against this problem.



Web presence of getINNOtized: https://www.getinnotized.com/

Short Lecture



Prof. Dr. Ute Rademacher is Professor of Business Psychology at the International School of Management and local program director "Psychology & Management" in Hamburg, Germany. She worked as research manager in global research corporations (e.g. RI, Ipsos) for 20 years. When based in Cape Town, she conducted social and marketing research across South Africa, Kenya, Botswana, and Ghana.

Prof. Dr. Ute Rademacher:

Out of Africa – A New Perspective on Digitalisation in Africa

In her lecture, Prof. Rademacher argued that the "digital revolution" is taking place successfully because it is based on important values that originate in indigenous cultures, including African societies, rather than Western philosophy and principles. Furthermore, the presenter argued that digitalization would be driven "out of Africa" rather than "implemented in Africa." According to Rademacher, African ICT experts will not only locally amend global ICT services and products, but will offer new and innovative ICT products resulting from "out of the box" thinking. The African philosophy of Ubuntu, for example, encompasses values such as equality, sharing, humanity, and community-orientation. Prof. Rademacher proposed that the success of many digital offers is built on these

egalitarian values of connectivity and community spirit, which go beyond traditional business models. They are enriching Western Platonic-Aristotelian and Asian Confucian traditions. Moreover, learning, knowledge, and wisdom are deeply embedded in oral and visual storytelling tradition in African cultures. In the view of the presenter, ICT offers such as Instagram or Snapchat can be seen as the modern, digital version of storytelling culture.

Prof. Rademacher strengthened her argument by pointing to African management, which can be characterized as agile by nature. Whereas flexibility in business has been criticized in the past as being chaotic, today flexible workhours and work processes are championed. Design Thinking in innovation consultancy and R&D departments is gaining importance. On the other hand, information ownership and protection are issues of concern in the African context. Many African cultures do not have a legal or ethical tradition of information ownership and protection. Due to the notion that knowledge is beneficial to all and must therefore be shared freely with one another, indigenous knowledge has been abused in the past. The question of copyright and data protection then remains a challenge for African societies.

The presenter concluded that values mentioned, which originate in indigenous cultures, including African cultures, rather than Western philosophy and principles will enable and

SHORT LECTURE

nurture the digital revolution. In line with this, digitalization would be driven "out of Africa". Research should reflect this perspective more strongly, but also investigate the ethical, economic, political, and legal consequences of future ICT expansion out of Africa.



Ute Rademacher during her talk.

Panel Discussion "Digitalization in Africa – Chances and Risks for Human Rights and Development"



Prof. Dr. Workineh Kelbessa is Professor of Philosophy at Addis Ababa University, Ethiopia. His research interests include Environmental Philosophy, African Philosophy, Comparative Philosophy, Development Ethics, Climate Ethics, globalization, philosophy of love and sex, and indigenous knowledge. He is a member of UNESCO's World Commission on the Ethics of Scientific Knowledge and Technology, and the International Panel on Social Progress, a group of about 250 authors from around the world, designed to outline the basic principles and values on the basis of which social progress ought to be assessed.

During our panel discussion, chaired by Marco Krüger (IZEW Tübingen), the panelists Koliwe Majama, Prof. Workineh Kelbessa, and Dr. Ben Wagner discussed the chances and risks of digitalization in Africa for human rights and development. Each panelist gave a short introductory speech pointing to important issues for discussion. Prof. Kelbessa stated that, although Africa is still lagging behind in digitalization processes, Africa is not a stranger to technology. According to him, on the one hand, digitalization can have a positive impact on people's lives and development; for example, it can help improve tax collection, fight corruption, and contribute to good governance. Democratization can be spurred through the documentation of human rights violations. Moreover, the diffusion of mobile phones can foster development. On the other hand, digitalization also poses challenges, for example with regard to cultural issues in case of Western values being given priority over African values in the design of ICT systems. In addition, Kelbessa argued that the natural world could be further endangered through the export of e-waste to African countries. He concluded that technology alone cannot solve all social and environmental problems. Kelbessa considered

philosophy and the questioning of values important for the process of understanding and evaluating the impact of technology; information ethics has to keep up pace with technological innovations.

In his opening statement, Dr. Ben Wagner weighted the challenges and opportunities of digitalization in Africa. On the one hand, he described Africa as a potential "ICT4D wasteland" because costly digitalization attempts have failed in the past, resulting in the waste of efforts, financial resources, and potential. Instead of "giving" technology to people in Africa (in terms of international aid), local programmers and students should be enabled to create their devices

PANEL DISCUSSION

and apps. Although some ethical frameworks of multinational companies exist, they do not serve to protect rights and cater to locals' needs. Wagner further proposed to understand "development" as a process of knowledge production and education, which can be promoted through collaborations at the university level. Wagner also showed where there are potentials for Africa's digitalization. Innovations such as e-government have been developed and promoted massively on the African continent, in part in response to African challenges such as remote settlements and lack of proximity to administrations. When these innovations are developed in Africa, they can also be debated and decided in Africa (especially in terms of policy).

In her statement, Koliwe Majama asserted that development issues and the digitalization agenda go hand in hand and one cannot be discussed without the other. African governments, as members of the African Union, should hold each other accountable, for example in the case of internet shutdowns. Furthermore, data protection laws should also be improved as only seven African countries offer legal remedies in case of misuse. Koliwe Majama sees great potential of digitalization for human rights protection, commerce, and trade. However, she criticizes the false perception that technology will automatically foster democratization.

The discussion centered around the following questions: 1) How to provide structures for participatory processes? 2) Does virtue ethics offer a framework for discussion in the context of digitalization in Africa? 3) Who is/can/should be the agent with regard to ethics in technology and digitalization? Participatory processes were identified as important aspects in Africa's digitalization. The role of international (mediating) institutions and the role of private corporations should not



Dr. Ben Wagner is Assistant Professor and Director of the Privacy & Sustainable Computing Lab at Vienna University of Economics and Business. In 2014, he founded the Centre for the Internet and Human Rights (CIHR) at European University Viadrina and served as CIHR Director from 2014 to 2016. His research focuses on communications technology at the intersection between rights, ethics and governance.



Koliwe Majama is a Zimbabwean media, information, communications and technologies consultant with over 15 years of experience working in civil society lobbying and advocacy. As a trained journalist, Majama has practiced as both a print and broadcast journalist in Zimbabwe. Most recently. Majama was a Programme Officer at the Media Institute of Southern Africa - Zimbabwe Chapter. She was prominently involved in internet governance processes in her country through research and multi-stakeholder engagement.

be underestimated, yet these players should take on more responsibility to protect the end user. The interests of African people should be at the heart of digitalization processes.



From left to right: Workineh Kelbessa, Koliwe Majama, Marco Krüger, and Ben Wagner during the Panel



Workineh Kelbessa (above) and Ben Wagner (below) during their input presentations for the Panel Discussion.



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