







Organized by Hans Stoisser, ECOTEC, Karin Krobath, identifire and Living Lab University of Nairobi

Organizers: ECOTEC, identifire, Living Lab Participants from Austria, Germany, France, Latvia and Kenya.

ORGANIZERS





ECOTEC makes collaboration in Emerging Countries work. We bring together many years of working experiences with companies and organizations at the interface with emerging countries, top management expertise and partnerships with leading European management institutions. www.ecotec.at



identifire is Austria's first internal branding agency focusing on employees as brand ambassadors. The company is specialized on Corporate Culture and Employer Branding closely linked to strategy and leadership. Innovation culture is a decisive topic when it comes to attract future talents. identifire therefore develops various kinds of mind-shifting learning experiences. www.identifire.at



The Living Lab is a co-creative space for researchers and experts who have a common interest in sustainable urban change, and take part in research for innovation processes.

www.livinglab.co.ke

The Learning Journey

The Learning Journey took place in Nairobi, the capital city of Kenya, a country in East Africa. The immersive and contextual approach of the journey was aimed at exploring the innovation, entrepreneurship and research opportunities available in Nairobi. The delegation included participants from Austria, Germany, France and Latvia who actively engaged with local innovators to foster partnerships and learn about the opportunities of the Silicon Savannah.

The four-day Learning Journey had the following themes:







Context Mapping Getting to know participants' interest areas

The journey kicked off at C4DLab, a Research, Development and Startup Incubation hub at the University of Nairobi. **Dr. Tonny Omwansa**, the Director of C4Dlab, gave a brief introduction about the lab and it's activities. The lab aims at contributing towards building the Silicon Savannah, leveraging on the large University community.

At the C4DLab, the delegates met representatives of agencies and ventures shaping the innovation landscape in Kenya.

T. Mwololo Waema, Professor of Information Systems, School of Computing & Informatics, University of Nairobi, led the participants in sharing their expectations of the learning journey. The expectations ranged from general to specific and included:

"To know all about innovation in Kenya"

- "To explore partnership opportunities"
- "To meet startup companies to learn from and share ideas with"

The participants also discussed investment opportunities in Kenya, key among them being:

- Developing solutions for urban mobility, industrialization challenges and capacity building
- Powering startups
- The opportunities that comes with a 'Digital Africa'

The context-mapping was followed by a series of lively presentations from key industry players in Kenya.

DOING BUSINESS INAFRICA

The Innovation Landscape in Kenya Dr. Salome Guchu Kenya National Innovation Agency (KENIA)

Dr. Salome gave examples of innovation programs supported by the agency, including a solar powered milk cooling system and Sign-IO, an innovative technology that translates sign language to speech using a hand glove. She emphasized the importance of skills development and the need to create synergies among different technological innovations.

Q & A:

• How do you identify the innovations to support? The agency assesses the viability of the ideas presented to it. Selection is done by experts and calls for applications are publicly made.

"Innovation is a key enabler of socio-economic development"

Learning Journey to Silicon Savannah

Private Equity for Impact Investment Winnie Ibukayo East Africa – LGT Impact Ventures

Winnie gave an overview of the focus for LGT Impact, a global impact investor focused on private equity investments in developing and emerging economies. She stressed the need to convert emerging businesses into commercially viable spaces, particularly though strategic mapping of opportunities and impact measuring.

Q & A:

• What is your time expectation to portfolio profitability? Our line of sight to profitability is 12 months

•What is the success rate? *Above 60%*

Learning Journey to Silicon Savannah

"We shift the funds towards impact because a society must help its disadvantaged populations."

C4DLab

TRIVIA

Midway through the discussion, the participants were given trivia questions.

The team from Austria was asked to name at least four countries that neighbor Kenya.

The Kenyans present were asked to name at least 4 countries that neighbor Austria.

Dr. Amollo Ambole presented the two winners with gift rewards.

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Learning Journey to Silicon Savannah

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01 Approaching

Tech Innovation for Healthcare Dr. Richard Ayah, Science and Technology Park, University of Nairobi Medical Informatics

The Technology Park, led by Dr. Richard, is a science park for rapid prototyping and business incubation center. Richard explained that the lab has a vibrant group of enthusiastic and young innovators with a passion in engineering, computing and art. His interest being in health care, Dr. Richard gave examples of transformative projects that have had huge impacts on societies, including non-pneumatic garment, a suction machine for cleaning medical facilities to improve hygiene.

Q & A:

•Do you utilize the design thinking process? Yes, the design thinking logic is generally important in problem solving.

•Do you design and produce any equipment? No. We work with partners for the production of equipment; most of our equipment are imported from China.

"Innovations need to be appropriate for the environment."

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SETTING UP SHOP IN NAIROBI Ogake Mosomi, Fashion Designer

Ogake is the founder and proprietor of Ogake Bridal, a distinct Kenyan brand creating masterfully tailored clothing using a combination of classic techniques and creative, contemporary styling. She explained her journey in business from the identification of business niche in 2011 to the present where she has an established brand, specializing in wedding gowns, evening wear, bridal party accessories and consultations.

On business financing, Ogake discussed how she got a loan from HEVA fund, which she found fair because repayment was based on revenue share. Her business principal on bridal clients is in ensuring that that "they walk out with an individualized mark of quality and style".

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Q & A:

•What was the repayment period for HEVA loan and what was the loan security? *The repayment period was two years and the security was just the business itself.*

•Where do you source your material from? At present, we import all materials from abroad, mostly China, Dubai and Turkey.

"Trial and error in the years I have run my business has been a harsh but apt teacher."



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RECEPTION AT THE AUSTRIAN EMBASSY

The delegates visited the Austrian embassy where they were welcomed by the Austrian Ambassador to Kenya, Dr. Christian Fellner.

Dr. Fellner shared with the delegates his experiences in Kenya and thereafter welcomed them for lunch. The delegates interacted more with the ambassador and the invited guests during the lunch break.



Field trip

Lynk, Digital Platform for Artisans By Jonannes Degn

Launched in 2016 by Johannes Degn and Adam Grunewald, Lynk is a digital network allowing customers to book services from over 60 categories.

Johannes explained that 83% of the working population in Kenya operates in the informal sector. Lynk is revolutionizing the way households connect with service providers.

Q & A:

• What is your business model? We connect professionals on our database to customers and charge 10% of the job value.

• How is Kenya different from other regions where you have worked?

In Kenya a huge majority works in the blue collar economy. Challenges range from mis-communication to lack of customers' profile as there are no credit ratings.

> "We recently reached the milestone of having paid out more than \$1 million to informal sector workers, and we now have just over 20,000 jobs completed through our platform."

GAME DRIVE

The day ended with a 2-hour evening game drive to the Nairobi National Park.

Day 2

02. Digital Africa

On this day, the team visited some of the leading organizations in the tech-world, including the Safaricom Kenya Limited, GearBox, and the pioneers of the digital startup movement in Kenya, iHub.

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MPesa/Mshwari Safaricom Mobile Financial Services

The delegates visited Safaricom, a company that offers mobile telephone, mobile money transfer, consumer electronics, e-commerce, cloud computing, data, music streaming, and fiber optic services. It is the largest telecommunications provider in Kenya, and one of the most profitable companies in the East and Central African region. It is popular for its M-Pesa and M-Shwari-mobile banking services that allow customers to send and borrow money.

Mr. Gichangi, senior manager in charge of regional expansion and new business, explained how safaricom is changing lives through new products and services.

Q & A:

• What is your company's market share? Our market share is currently at 66%; the figure may change however if the duo-simming index which recognizes that customers may be getting services from more than one telecommunication service providers is considered. The index stands at 1.81

"Our business slogan is 'Twaweza' which translates into 'together we can'."

Field trip

Gear Box By Kang'ethe Edwin

The team got a unique experience of meeting innovators in action at GearBox, the first makerspace and open rapid prototyping space in Nairobi. GearBox has space for different kinds of makers including electronics tinkerers, hardware enthusiasts, artists and designers. The delegates – split into two team – walked around the space while engaging with the Gearbox's technical personnel.

Q & A:

• Which kind of clients do you engage? We engage three types of clients: a) Individuals and businesses who require specialized manufacturing processes; b) Innovators who have a concept that needs design and prototyping; and c) Innovators who need prototyping services.



BUILDING THINGS THAT MATTER

"You can think of us as a factory of factories."

Digital Transformation in Africa By Dr. Bitange Ndemo

Bitange Ndemo is a visionary associate professor at the University of Nairobi's Business School and a former Permanent Secretary (PS) in the Ministry of Information and Communications. Ndemo is credited for establishing a legal framework for open data in Kenya.

In an interactive session with the delegates at iHub, Dr. Ndemo discussed his experience as the PS of the Ministry of Information and Communication, including the challenges he faced to guarantee Kenya's access to the fiber optic cable. Dr. Ndemo also gave insights into Big Data and Block chain developments.

Q & A:

• How would you explain the high unemployment rates in Kenya and Africa in general?

It has to do with the dependency syndrome. For a long time, Africa has been a recipient of donor support and this is a chain that needs to be broken completely. Only then will we see a reduction on imports, growth of industries, and fair trade.

"Africa should fully embrace Emerging technologies for a brighter future."

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The Trajectory of the Middle Class By GADO, Political Cartoonist

Kenyan Women Value Careers More than

The delegates further interacted with the cartoonist, Mr. Godfrey Mwampembwa, know as, Gado. In 2014, he was named one of the 100 most influential people in Africa.

Being an editorial cartoonist whose work has been published in the Daily Nation (Kenya), Le Monde and Courrier International (France), Deutsche Welle (Germany), and the Guardian of London among others, Gado gave an insight into the African politics, governance challenges, economic transformation in Kenya, including social class mobility. The participants had an insightful discussion attempting to understand the 'middle class' and its meaning to a transforming nation.

Q & A:

• Would you have limits in drawing controversial cartoons? Not at all; I may not subscribe to some extreme view held by some cartoonist, but I will draw all realities even when they may be uncomfortable to some.

"Kenya had made strides and has given freedom a fair space"

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Start up in Health Care Ilera Health By Hannes Eckmayr & Amaan Banwait

For the delegates to better their knowledge on start-ups in Kenya, Ilera Health shared with them their experience.

Hannes and Amaan acknowledged that 800 million rural Africans cannot access a simple blood test because they are out of reach from central labs. To solve this, they partner with companies that develop AI-based diagnostics and deploy their products directly in rural clinics.

Q & A:

• Now that you collect a lot data useful to researchers and insurance companies, do you have plans to monetize it? *It is part of a future plan, but we must address all legal issues of data sharing including privacy and confidentially agreements.*

> "We are passionate about tech start-ups finding solutions for development challenges in Africa!"

Day 3

03. Urban Africa

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On this day, the team made field trips to meet innovation leaders in their innovation spaces. Later, a walk-about Kibera, one of the largest informal settlement in East Africa, gave the delegates an insight into coping mechanisms dynamics and every day life in the informal sector.

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Video-on-demand gains a foothold in Kenvan market



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M-KOPA By Pauline Githungu

M-Kopa (M for mobile, kopa is Swahili for 'borrow') is a Kenyan solar energy company which sells home solar systems in Kenya, Tanzania, and Uganda. The participants got a chance to tour the M-Kopa facility where about 200 staff are housed, some working in shifts to ensure round-the-clock service to customers.

Pauline explained that the organization's goal is to upgrade lives by making high-quality solutions affordable to everyone, and as of January 2018, M-KOPA had connected over 600,000 homes to affordable solar power, with 500 new homes being added every day.

Q & A:

• The Kenya government is working on a 'last-mile-connectivity' project aimed at ensuring that electric power reaches every home in Kenya by 2020; how big a threat is that to your business? We do not see that as a threat at all because we are part of the government's last mile connectivity project. Therefore, the areas that we have presence are considered covered.

> "We have received recognition from various institutions including the Financial Times for Technology in Sustainable Finance."

earning Journey

The Nairobi Garage By Luna Ruffo

The participants were welcomed at the Nairobi garage by its business development manager, Ms. Luna Ruffo. The Garage, which has several offices in Nairobi, is famous for offering flexible plug-and-play co-working options designed to grow businesses. It is a plug in to Nairobi's entrepreneurial spirit and is at the heart of the innovation scene in Nairobi.

The participants took a guided tour around the three floors of the garage before taking a coffee break and later meeting more startups housed at the Garage.

Q & A:

• What is unique about the Nairobi Garage? It provides you with an office without walls, a perfect networking space, a meeting space at a very modest cost of \$25 to \$250 per month.

> "At the Garage there is an active community of innovators who learn with the help of one another."

Providing Data & Computer Literacy in Kenya By Genny May Lumen Lab - Start up housed at the Nairobi Garage

Based in Kenya, Lumen is a market survey company that enables information gathering in rural areas by providing students with computer education. The Lab helps students to collect and analyze data from their communities to gain digital skills.

Q & A:

• How many schools are already using you tool?

At present, we have 5 government schools who we reach through NGOs.

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"We have been thinking about a sustainable model for computer education in rural Kenya."

Solving Global Health Problems with Efficient Technology By Gillian Henker Sisu Global Health - Start up housed at the Nairobi Garage

Gillian gave a presentation on how to strengthen health systems through medical device commercialization. Her prime product is the Hemafuse, a mechanical device for intraoperative auto-transfusion of blood collected from an internal hemorrhage. The device is meant to augment donor blood in emergency situations.

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Q & A:

• Who invented the device and what was the motivation?

I invented the auto-transfusion machine, and my motivation was to provide medical device solutions to emerging markets.

"80% of the world's medical devices are created for 10% of the world's population – we want to change this!"



Harness the Power of Computing **Efficient Technology** Endless Solutions OS - Start up housed at the Nairobi Garage

Endless Solutions has developed 'Endless Solutions Operating System', aiming at a simplified and streamlined user experience. Their primary goal is to build a global platform for digital literacy.

Q & A:

• How many 'kid's first computer' have you sold? We have sold over 10,000 units and we have many requests being processed.

> "What if everybody in Kenya had a computer? We want people everywhere to have access to relevant information and technology."

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Kid's First Computer

A desktop computer. Connect your Endless One to any monitor HDMI & VGA port, US8 keyboard, and US8 mouse for a full desktop computer experience.

Local cuisine Mama Oliech Restaurant

At Mama Oliech Restaurant, the participants took their lunch break. The restaurant is famous for its fish dominated menu, particularly tilapia served with ugali (maize or cassava-flour staple) and Kachumbari (tomato and onion salsa).

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A Walkabout in Kibera The Informal Settlement

From the main Kibera bus stage, the delegates were guided around several villages in Kibera including Gatwekera, Makina and Mashimoni. To the amazement of some, the delegates experienced a peaceful, lively, vibrant place, characterized by a continuous buzz of activity.

The local tour guides informed the delegates that the settlement has experienced continued improvement over time. Despite the settlement visibly lacking in housing quality and support facilities, the guides informed that the government and NGOs have been supportive in the provision of basic services. Ultimately, the settlement is gradually assuming some resemblance of order, particularly due to opening up and widening of main roads.

"Each village has a different character." ~Participant

"I had a completely wrong view of Africa."

Informal Settlement Tour Hitbox Music Studio and Pamoja Radio Station

As part of the Kibera tour, the delegates visited the studios of Pamoja Radio Station. The community radio, whose slogan is 'Voice of Kibera' broadcasts to empower the youth of Kibera and its environs through education and infotainment.

At the Hitbox Music Studio, the delegates visited young musicians supporting music talent development.

Q & A:

•Does your radio broadcast on events outside Kibera? Yes, but our priority is on what happens in Kibera, and then Nairobi. For news of national and international importance, we will broadcast, nonetheless."

"At Pamoja, we unite, particularly not to see anything close a repeat of the 2007 post-election violence." ~ Pamoja Radio Co-founder

> "A radio is a tool of mass communication and can unite or disunite a country."

Informal Settlement Tour Visit and Coffee at Mama's House

After the walk-about in Kibera, delegatesvisited two local people in their houses where they got a feel of life in a shack. They discussed local people's understanding of what a better life means.

A special coffee spiced with ginger and cinnamon was served.

"My food-kiosk business failed because I was offering food on credit. It is hard to deny someone food when you know they have nothing else to take for the night" ~ Local businesswoman

"I imagined a far more unbearable life in the slums than what I saw today; I am impressed." ~ Participant

"People look happy in the informal settlement; they appear to see life differently; it's perplexing." ~ Participant Day 4

04 Cocreation

The delegates experienced Nairobi through road trips, train travel, bus-talks, mall visits, and learning from the Chinese experience in Kenya Learning Journey to Silicon Savannah 04 Cocreation

Train Ride On Madaraka Express (The Standard Gauge Railway)

For being the biggest infrastructure project in Kenya since independence, the SGR (Standard Gauge Railway) is a landmark development that is seen as an economic success as well as a national curiosity, particularly for its foreign financing.

The participants experienced the operations of the train system from checking in to a train ride, boarding at Syokimau terminus and alighting at Athi-River, a terminus outside Nairobi Country.



Nairobi's Urban Development An Exposition and Bus Tour with Daniel Githira & Enos Weswa

Githira is an urban planner and spatial planning consultant at the UN-Habitat in Nairobi. During the talk that started at Athi-river railway terminus, Githira spoke about the history of Nairobi, the city's drivers of change, and infrastructural projects that have transformed the image of the city. Githira and Enos Weswa (a lecturer at the University of Nairobi), engaged the audience in an interactive session on the opportunities and challenges of investing in Nairobi. 1 Auffithing

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04 Cocreation

Eastleigh

Nairobi's Eastleigh, nicknamed 'Little Mogadishu' for having residents with Somali origin, gives the story of the urbanizing Africa. Once a low density, inner area neighborhood, the estate is now a high density settlement with numerous malls, completed and under construction. Hassan and Ali, both businessmen at Eastleigh dealing with car tyre imports and house sales respectively, gave talks on the ingenuity of the Somali-Kenyan business persons. Hannan, Ali's sister cousin, 21 years, explained how she is balancing schooling and managing her own business. The talk was complemented by a tour around two malls buzzing with activity.

> We work as a team; if you work alone, utachoka (work will drain you).'

04 Co-Creation

A TASTE OF AFRICAN FOOD Asmara Restaurant

The delegates got a chance to taste Ethiopian food at Asmara. While dinning, the delegates reflected on their trip at Eastleigh.

THE CONFUCIUS INSTITUTE University of Nairobi

The institute is named after Confucius, a Great thinker, Educator, Philosopher, and the father of Confucianism in Chinese history. The mission of the institute is to help the people in the world to learn Chinese language and the culture of China.

Confucius Institute at the University of Nairobi was launched in 2005 as the first Confucius Institute in Africa. It is notable that the Confucius Institute at Nairobi was voted as being within the 20 Confucius Institutes with the excellent reward for five times in succession (2007- 2011). Ms Xu Jing, who teaches Chinese at the Confucius Institute welcomed the delegates and explained her mandate at the Confucius Institute.

Further, Prof. Madara Ogot held a session with the delegates on 'China in Africa', where he discussed about China's commercial and development programs in Kenya.

"While the universe keeps rolling vigorously, a superior man makes untiring endeavor for advancement." Confucius Institute in Nairobi



Synthesis Learning from Digital Africa

The environment has changed, African-European relations will have to change. To carry on with development aid? To pursue a policy favoring big shareholder–value driven companies? China has done differently. A huge macro-political deal has changed the face of Africa. And has brought more than 10,000 Chinese companies to African countries.

The inter-connected global society calls for a European response which might be labelled 'agile': delight your partners, obey joint values, create horizontal communication, go in small steps, with autonomous units, scale with digital technologies.

To European companies, NPOs and other initiatives and institutions: **"Swarm out, link-up and collaborate with local African organizations and co-create."**



The Living Lab Team

Facilitators from the Living lab	Role
Maryanne Akoth MSc in Entrepreneurship and Innovation Management; Former administrator at C4Dlab – UoN; Current: Incubation Manager at TechBridge, Mombasa, Kenya.	Project Lead: Vision and Strategy
Dr. Amollo Ambole PhD in Development and Management; Researcher at University of Nairobi (UoN), Kenya	Project lead: Implementation
Julia Kamuiru Training Lead at Living Lab Freelance Product Designer; Part-time Lecturer University of Nairobi	Lead Field Facilitator
Daniel Githira Spatial Planning Consultant and GIS Expert	Rapporteur Urban Tour Facilitator
Nelson Cheruiyot BA in Design MA UoN	Design Lead and Photographer
Enos Weswa Design Consultant at World Bank Group, Advisory Board Member at Living Lab, Product Design Part-time Lecturer at University of Nairobi.	Design Consultant
Prof. Madara Ogot PhD in Strategic Management & Mechanical Engineering; Director of Research and Extension at UoN.	Facilitator

"We believe collaboration is the key to radical innovation."





Co-creators

The Learning Journey was a means for Co-Creation, but was also in itself, a Co-Creation! Meet some of its co-creators:



Maryanne Akoth, based in Mombasa/Kenya, mentors young tech entrepreneurs. Her energies are focused on being a part of "putting the blocks in place" for that foreseeable "domino effect" of building businesses to capture the market and employ the skills of millions of energetic African youth. maryanne@livinglab.co.ke



Amollo Ambole, from Nairobi/Kenya is a passionate design researcher at the University of Nairobi. She is currently conducting collaborative research with communities in the quest for innovative, home-grown solutions. She is convinced that if we look hard enough, "we usually find out that the answers we seek are in our hearts".

amollo@livinglab.co.ke



Karin Krobath, home in Vienna/Austria, management consultant with a passion for brand positioning, innovation culture and empowerment. Her motto: "Europe's mindset about Africa is more than outdated. If we consider collaboration as a future success factor, we really have to invent new encounters like this Learning Journey."





Hans Stoisser, based in Vienna/Austria, entrepreneur, management consultant and author of "The Black Tiger – what we can learn from Africa". His long-time experience in African countries has convinced him:

"Europe's future lies in Africa. But very different from what Europe thinks."

⋈ hans.stoisser@ecotec.at

