African Start-ups!
for Sustainable and Inclusive Development
CEBIT 2018 | Hannover, 11th -15th June
Digital Innovation Made in Africa
for Sustainable and Inclusive Development

African Start-ups at CEBIT 2018 | Hannover, 11th - 15th June
Digital innovations offer the opportunity to improve the living and working conditions of many people worldwide. Here at CEBIT 2018, Make-IT in Africa offers twenty entrepreneurs from six countries a stage to present their innovation capacity.

Founding a start-up opens ways for young people to achieve sustainable livelihoods. Moreover, the innovations created by the start-up founders reach out to people and enterprises far beyond their immediate environment. Many of the companies presented here are working on improving value chains and enabling access to goods and services for people and companies with little economic potential. This means that every start-up indirectly creates a high social impact with the possibility of influencing thousands of people who use their services.

The innovations are developed by local entrepreneurs who know the specific local challenges and solutions from their very own biographies. “Digital Innovation Made in Africa” has the capacity to raise more awareness about these entrepreneurs worldwide and convey a new image of the African continent: dynamic, modern, innovative and digital.

We would like to thank Smart Tunisia, DEG (German Investment Cooperation GmbH), the Rwanda ICT Chamber for their participation in the selection process and CEBIT as a long-term partner of our project. We would also like to express our special thanks to the technology start-ups presented, whose creativity and commitment make them role models for an entire generation of young people – worldwide.

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## Table of Contents

| Foreword | 3 |
| Tech Entrepreneurship Initiative Make-IT in Africa | 5 |
| AB3D | 7 |
| Kenya | 3D-Technology |
| AgroCenta LLC | 8 |
| Ghana | Agritech |
| Doctoora | 9 |
| Nigeria | eHealth |
| Embinix Automation | 10 |
| Nigeria | Logistic Technology |
| Gjenge Makers | 11 |
| Kenya | Recycling Technologies |
| GrassRoots Bima | 12 |
| Kenya | Fintech |
| InstaPower | 13 |
| Tunisia | Energy |
| Just Smart | 14 |
| Tunisia | IoT |
| KoloPay | 15 |
| Nigeria | Fintech |
| Kpeiz | 16 |
| Tunisia | Social Media Management |
| Micrive Infinite | 17 |
| Kenya | eHealth |
| Placements | 18 |
| Nigeria | eEducation |
| PreDiagn | 19 |
| Nigeria | eHealth |
| Sauti Africa Limited | 20 |
| Kenya | Cross-Border Trade |
| Taimba | 21 |
| Kenya | eCommerce |
| Tech Kidz Africa | 22 |
| Kenya | eEducation |
| Track your build | 23 |
| Sierra Leone | Logistics |
| WeCode | 24 |
| Rwanda | Education |
| Wheritics | 25 |
| Tunisia | IoT |
| Implementing Partners | 28 |
| Imprint | 30 |
Dynamic young entrepreneurs from the digital economy have great potential to discover new and local solutions for development challenges, and to create new opportunities for employment and social impact.

‘Make-IT in Africa’ promotes digital innovation for sustainable and inclusive development in Sub-Saharan Africa. The project is implemented by Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH on behalf of the German Federal Ministry for Economic Cooperation and Development (BMZ) as part of BMZ’s Digital Africa Initiative.

In close collaboration with more than 20 corporate and financing partners, social enterprises, hubs and networks, ‘Make-IT in Africa’ supports an enabling environment for young entrepreneurs – to enable better access to finance, markets and skills.

In its showcasing series ‘Digital Innovation Made in Africa’, the project presents good practices from African tech entrepreneurs with a high potential for social impact.

More information and contact:
https://make-it-in-africa.org/
With the potential to manufacture an object of almost any size and shape, 3D printing has caused huge excitement worldwide because it fundamentally transforms manufacturing. In Kenya, the start-up AB3D (African Born 3D Printing) aims at bringing such modern technology to African producers. In a one-stop-shop for 3D printing in Nairobi, they offer access to 3D-printers, material, workshops, and open-source designs. The team manufactures 3D printers from recycled materials, such as electronic scrap, and keep the costs for a printer low. This makes printers affordable and accessible for a wide variety of local manufacturers.
AgroCenta is an agricultural technology platform that focuses on using technology to provide market access for smallholder farmers in Ghana. Their primary objective is to promote and facilitate fair trade for smallholder farmers in sub-Saharan Africa by connecting them directly to larger and structured markets. Therefore, it connects smallholder farmers to large, medium and small businesses in order to sell to breweries, food manufacturers and processing industries without intermediaries. The different digital services the company provides in the fields are “Agro-Trade”, “Agro-Pay”, “Agro-Logistics” and “Agro-Information”. Currently, they work with over 10,000 smallholder farmers in the northern, upper east, upper West and Ashanti regions of Ghana. By improving the logistical process and removing exploitative buying from the value chain, smallholder farmers can sell at competitive prices and improve their financial livelihood.
A challenge to the Nigerian health care system is the struggle of doctors to find affordable facilities, especially in urban areas, where they can treat their patients. The founders of Doctoora, themselves health care professionals, work to address this problem through technology. The start-up provides doctors with an online marketplace for short-term health-care facility rentals, enabling medical professionals to establish private practices.

With Doctoora, they can administer their practices entirely online and can rent medical facilities as and when required. After a vetting process, professionals within the network are provided with on-demand access to rentable workspaces and a practice management platform enabling them to keep track of their work. Doctoora is also working to provide doctors and health care workers with better medical supplies and, in so doing, improve the quality of services provided to patients.
Embinix Automation is a manufacturing company that specializes in designs, integration, development and sales of smart consumer electronics focused on giving customers convenience and security. In the Nigerian market, there is still a lack of smart devices to integrate private and professional life into a connected world.

The start-up designs and manufactures innovative solutions for convenience and security. With spontaneous, receptive controls and eco-friendly features, it makes smart home and office devices easily accessible.

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Gjenge is a social enterprise with the aim of tackling the looming plastic waste problem by recycling and upcycling plastic into construction material. As a social enterprise, they address the prevalent crisis of improper waste management by developing an eco-system for recycling and upcycling waste to foster an eco-friendly lifestyle. For the collection of waste plastics, Gjenge runs a mobile application linking households to a business platform whereby they buy waste plastics from households who are the largest contributors of waste plastics by almost 61%. When picking up the waste, they weigh it and through our application, their customers get credit for the waste through an alternative payment system.
GrassRoots Bima offers insurance companies a platform on which they can offer and sell their products to potential customers. Like other African countries, the Kenyan population has little access to insurance – markets are considered underdeveloped and non-transparent. GrassRoots Bima aims to exploit this gap in the market by offering life insurance for all and specialist insurances for professional drivers and farmers. GrassRoots Bima insurance also enables companies to gain access to new customers and to save distribution costs by reducing their need for insurance agents.
Still, over one billion individuals don’t have access to electricity, which impacts different sectors like education, communication, financial systems and even healthcare. InstaPower is a company created to solve this issue by offering a device that turns fire into electricity.

The target market is central Africa in which people use fire on a daily basis to cook and warm up. The core technology InstaPower implements are stirling engines. The company already signed partnerships with NGOs and associations to build a bridge with the product end beneficiary.

The main customer are NGOs, but after conducting an in-depth market research it turns out that campers, hobbyists and schools are interested in this product as well. So InstaPower plans to create educational materials and sell this product unassembled as a kit to schools and students. Doing so, they try to provide affordable and clean energy.
The start-up Just Smart is active in the field of mobile development and IoT (Internet of Things). Its main issue is related to health, therefore it mainly targets actors in the medical field like medical specialists, medical centres and public hospitals, private clinics, and also associations and ONGs, with innovative solutions and particularly adapted to the needs of the Tunisian and African market. One of the projects conceived and realized by Just Smart is e-Scope, a solution that will be used for early diagnosis of blood-related diseases. The start-up is also working on diseases of lachmeniosis, rheumatism, autism and other mental disorders.

Besides the field of health, the start-up also works on solutions in e-government, e-education, VR and AR Apps.
Few Africans use savings accounts to meet savings targets and earn interest. KoloPay is a cashless mobile piggybank application. Designed and created to address the problem of the poor savings culture in Nigeria and the issue of impulse buying and unplanned spending. With the KoloPay mobile app, people can pay into their savings account with just one click, and its discount-deals feature creates incentives for setting money aside. KoloPay encourages users to set individual saving goals and to monitor their progress towards achieving them. This game-based approach to saving is helping to promote resilient lifestyles in Nigeria.

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Social media marketing can have its challenges. There are some common problems that marketer, brand or agency has run into and will likely come across again such as hard performance monitoring, high error rate, hard access to benchmark and high-priced tools.

Kpeiz is a Social Media Management tool that provides users with an easy-to-understand, accurate and relevant statistics and featuring social monitoring, task automation, dashboard and benchmarking. Using Kpeiz, marketers could save time, track their performance and prepare their monthly reports and benchmarks in one-click. Kpeiz aims to broaden their activities and co-operations in the MENA region and Eastern Europe. Their ultimate goal is to provide the best experience for marketers around the world.
Micrive Infinite uses high-resolution x-ray, CT (computed tomography), and MR (magnetic resonance) images to print detailed 3D models (1:1 or larger). The models help surgeons, enabling them to prepare better and orient themselves more quickly during surgery. This saves valuable time and protects patients’ health. Micrive Infinite is also able to print models of organs and ankles. The company focuses on tumour surgery and trauma. In Kenyan surgeons have used it to perform operations, achieving improvements in speed and quality.

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Placements is an online marketplace for internships. “Why do you think you are qualified for the job? Have you already worked in similar fields of work?” – These and questions exemplify a persistent problem in the Nigerian job market: usually only those who have already worked in a relevant position get the job. This leaves many young applicants stuck in a vicious circle and makes it incredibly hard for anyone to get their foot in the door. Placements is a platform that has been designed to break this vicious circle by creating a marketplace for internships. Students with or without a degree who are looking for an internship can use the platform to introduce themselves to potential companies. Conversely, employers can use the site to search for suitable interns or advertise their situations vacant.
PreDiagn creates access to mobile-based diagnostic tests from onboarded medical laboratories at a fraction of the cost for individuals. The high cost of healthcare is especially magnified in the diagnostic services segment, where laboratory services are a necessity to create good diagnostics, but they significantly drive up prices. PreDiagn uses internet technology to connect users and patients for laboratory services at a much lower cost than traditional services, by which guaranteeing affordability and accessibility of health care in general.
Cross-border trade is an important part of many African economies. International trade creates jobs and is a significant factor in ensuring food and energy security. However, getting people and goods across frontiers often implies a daunting level of bureaucracy for small traders who know little about the requirements of cross-border trade and, in particular, about the charges and the settlement procedures involved.

The Kenyan start-up Sauti Africa Ltd works to protect retailers and inform them about their rights. Using an SMS-based platform, Sauti collects data and compiles statistics on harassment, bribery and other incidents experienced at individual border crossings and then publishes this information on its website. This not only raises public awareness about border issues but also increases the pressure on politicians to tackle the problem more effectively. In addition, Sauti provides traders with information on which documents are necessary, what customs duties are due and how they must be paid, and what customs officers are entitled to require and what they are not permitted to do.
The food currently lost on the African continent could feed 300 million people. This means value-added chains in agriculture are inefficiently organised leading to a large amount of the continent’s agricultural produce being wasted. One reason this wastage occurs is the fact that much of the continent’s produce passes through the hands of numerous intermediaries. As a result, small-holders are losing income each year.

The start-up Taimba tries to tackle this problem by providing the online support needed to overcome information asymmetries and market education gaps that are creating the situation. Its aim is to create an open online market and to streamline supply chains between farmers and retailers who, armed with data intelligence, will be better equipped to avoid food waste.
Tech Kidz Africa is a programme that is set to explore and train children in technology and character development. Children are introduced to technology history, trends, software development using kids programming languages, robotics and graphic design during weekends and vocational.

The programme works with kids with curiosity in technology by directing their interests to constructive hands on and fun trainings.

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Track Your Build aims to prevent future disasters, such as landslides or forest fires affecting populated areas, through good planning. The start-up creates maps for risk assessment using data captured with drones and also provides evaluations of this digital data. Equipped with Track Your Build’s risk maps, urban planners can plan roads, power lines, fibre-optic cables and water supply and wastewater disposal systems that are, as far as is possible, future-proofed against extreme weather events. Track Your Build already works for the UN and development cooperation organisations.

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In Rwanda, digitalization has the potential to create new, well-paid jobs in the country as well as good career opportunities in international companies here and abroad. However, since the IT-sector is traditionally a masculine domain, so far mainly men have profited from this development.

With WeCode, a women-only programming and BPO (business process outsourcing) agency, GIZ’s Promotion of Economy and Employment Programme works to close this gender gap, promoting girls and women to enter the IT-sector. The first part of the programme is an 11-week-long boot camp, where all necessary coding skills and work readiness skills are taught.

The best students will go into 15 weeks of advanced training to become either a mobile- & full-stack developer or a QA (quality assurance)- & data analyst expert. The best graduates of the advanced courses are offered a contract with WeCode’s own BPO academy, which is run by a Rwandan/ North American Tech company. Through this partnership WeCode assures for all acquired BPO contracts an international quality level of 98%. By the end of 2019, estimated 900 women will have completed the course and are ready to change the Rwandan IT landscape.
Wheritics is an enterprise-grade Real-Time Location System (RTLS) built to monitor, manage, optimize and secure occupants and assets in the workplace.

The platform is based on a cloud software backend working in pairs with an IoT infrastructure deployed at the client facility, which offers: real-time proximity, location based services, indoor & outdoor mapping and machine learning. All based on the IoT data collected in real-time.

Wheritics helps monitoring, automating and optimizing procedures by:

• Tracking or securing valuable assets by monitoring their location and who’s accessing them
• Locating people in the workplace and tracking security staff patrols
• Supervising people access policies
• Pushing instant, contextual evacuation procedures in case of emergency
• Directing evacuation professionals to occupant’s location.

It can be interfaced with enterprise office systems (Exchange, Google Apps, O365), mobile fleet systems (MobileIron, BlackBerry, Airwatch, Knox) and building management systems.
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**Smart Tunisia**

Smart Tunisia is a program for tech-companies, with the ambitious goal of creating 50,000 jobs over the next five years in the areas of offshoring, nearshoring and colocation. As part of a public-private partnership, the project responds to the revitalization of offshoring through the provision of incentive mechanisms in order to converge demand and supply labour.

The project strengthens the integration of young people in the labour market by supporting employment in promising, innovative and high-tech sectors. Smart Tunisia cooperates with various national and international partners. For the five years, the Tunisian state has allocated a budget equivalent to 500 Million Euro as incentives, to support international and local operators in their growth and development strategies. The project, which was launched in 2015, is one of the components of the national strategy Tunisia Digital 2020 and is part of the export service development. Smart Tunisia works at positioning Tunisia as a knowledge and technology destination.

For more information, visit: www.smarttunisia.tn

**DEG**

DEG offers financing, advice and support to private sector enterprises operating in developing and emerging-market countries. Their customers can rely on expertise: They can benefit from DEG market knowledge, their 14 locations worldwide and their international network for entrepreneurial success and development.

For 55 years DEG, a subsidiary of KfW, has been a reliable partner to private-sector enterprises operating in developing and emerging-market countries. They provide them with long-term financing and advice tailored to individual needs. They can thus develop successfully and sustainably, while generating local added value and creating qualified jobs. As a development finance institution, DEG deliberately tap into future markets and promote the expansion of the private sector.

For more information, visit: www.deginvest.de
Rwanda ICT Chamber

The ICT Chamber is the youngest member of the Private Sector Federation (PSF). More specifically, the Rwanda ICT Chamber brings together ICT Associations, businesses, groups and individuals into a community where they can share ideas on how to promote and develop Rwanda’s ICT and ICT enabled Industries.

For more information, visit:
www.ict.rw

CEBIT

CEBIT is the largest and most internationally representative computer expo worldwide. It is considered as a barometer of current trends and a measure of the state of the art in information technology. The fair will be relaunched in 2018 with the themes: business, leads, ideas. As a triple-punch event featuring exhibits, conferences and networking, CEBIT covers the digitization of business, government and society from every angle. With its four sections – d!conomy, d!tec, d!talk and d!campus, the fair’s core focus is on generating leads and business for all concerned.

For more information, visit:
www.cebit.de/en