

Prof Dele Sanni, 53, an agricultural engineer from **Nigeria** with **3-D-3-P**, a unique industrial dryer that gives Nigerian farmers and producers an affordable, local option for drying feed, sawdust and cereal grains.



Muzalema Mwanza, 34, a civil engineer from **Zambia** with **Baby Delivery Kits**, a collection of essential tools to assist midwives in delivering babies at home or in under-resourced clinics across the country.

Collince Oluoch, 27, a self-taught software developer from **Kenya** with **Chanjoplus**, an affordable digital tool for health workers to identify, register and track vaccinations, without requiring internet connectivity.



Kenneth Guantai, 33, a mechanical engineer from **Kenya** with **Elo-Cart**, electrified handcarts that use regenerative energy to ease the load carried by vendors, hospital workers and airport staff.

Dr Lukas du Plessis, 46, a mechanical engineer from **South Africa**, with a hybrid, five-axis machine tool that gives local manufacturers an affordable option for shaping metal, wood and other materials.

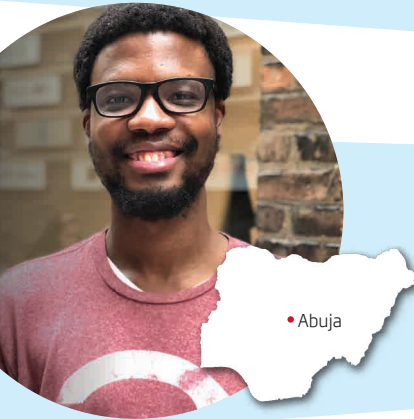


The #AfricaPrize for Engineering Innovation

2019 SHORTLIST

www.raeng.org.uk/africaprize

James Ochuka, 23, a mechanical engineer from **Kenya** with **JuaKaliSmart**, an online portal that connects *juakali* - artisans of Kenya's informal manufacturing sector - directly to customers.



Chukwunonso Arinze, 25, a mechanical engineer and physicist from **Nigeria** with **KAOSHI**, a foreign exchange market where users swap currencies, eliminating bank charges and long queues.

Beth Koigi, 27, a project planner from **Kenya** with **Majik Water**, which harvests water from the atmosphere in especially arid areas, and sells affordable and clean water to communities through unmanned ATMs.



Neo Hutiri, 30, an electrical engineer from **South Africa**, with **Pelebox Smart Lockers**, which dispense chronic medication securely, helping patients in public health systems avoid queues, and easing pressure on clinic staff.

Roy Allela, 25, an electronics engineer from **Kenya** with **Sign-IO**, a smart glove that translates sign language into speech in real time; to help children with speech and hearing impediments.



George Chege, 27, a biosystems engineer from **Kenya** with **Smart Brooder**, a system that automates gas heating on chicken farms, takes the guess-work out of the equation and reduces reliance on coal.



Anne K. Rweyora, 31, an industrial designer from **Uganda** with **Smart Havens Africa**, which builds smart, off-grid homes from affordable and sustainable materials, sold to new home owners on a rent-to-own model.

Safiatou Nana, 26, a renewable energy engineer from **Burkina Faso** with **SolarKoodo**, an off-grid solar irrigation system for farmers in semi-arid areas with a low water table, aimed at co-operatives with low equipment budgets.



Paul Matovu, 29, a forester from **Uganda** with **The Vertical Farm**, a farm-in-a-box vertical garden to grow microgreens in urban settings, custom built for users with little space for gardening.

Dr Obi Igbokwe, 46, a medical doctor from **Nigeria** with **WellNewMe**, an online assessment that identifies health risks from user data, to help prevent illnesses like cancer and diabetes.



Elizabeth Kperrun, 32, a business graduate from **Nigeria** with **Zenafri**, a series of apps that teach toddlers and young children basic numeracy and literacy skills in their native tongue, using local folklore.