

# What does it mean for technology to be innately African?

By [Amrote Abdella](#)

23 Jan 2017

Mobile and cloud may be global technologies, but African startups have explored their functionalities, shaped their applications and used them to build differentiated business models suited to their markets.



Image by 123RF

They have created new and uniquely African technologies that speak to their lifestyles and complexities, using the infrastructure as a base to deliver key services in ways the rest of the world would never have thought to.

To us, this is what it means for technology to be innately African.

## Innovation ecosystem

No one has ever doubted that Africa has a thriving entrepreneurial spirit. Despite Sub-Saharan Africa being one of the [most challenging regions to launch a business in](#), the [2017 Global Entrepreneurship Index](#) ranks it highest in 'Opportunity Perception'. What this means is that a large percentage of the population can (and are) identifying and starting good businesses, despite regulatory, environment and infrastructural burdens.

This is what makes innovation in Africa so unique and so thrilling.

Challenges, such as limited internet connectivity or access to a reliable power supply, only add fuel to Africa's innovative energy and creativity. Startups continue to develop clever solutions around these obstacles, bringing essential services to their markets. And technology is playing a vital role.

Think of mobile payments as a solution to Africa's largely unbanked population. Africa now has one of the largest mobile money markets in the world, where 34% of African adults have mobile money accounts compared to only two percent worldwide. Financial technology has thrived in markets such as Kenya and Uganda where the formal banking sector has yet to reach every corner of these countries.

Or think of startups, such as [M-KOPA Solar](#), which have combined the power of mobile payments with the need for electricity. According to a recent [World Bank study](#), only one in three Africans has access to electricity. M-KOPA is the first company in Africa to launch a SIM-enabled pay-as-you-go solar system, allowing people to access affordable solar power in their homes. They currently facilitate over 10 million mobile payments every year and hope to connect one million homes by the end of 2017.

## Importance of the mobile phone

The mobile phone has played a significant role in shaping African technology. Because it is so accessible, it gives start-ups an appropriate tool to create and deliver locally relevant solutions. Solutions like mHealth, where mobile applications can run remote diagnoses in last-mile areas, helping to detect malaria, sickle cell disease or [pregnancy complications](#) early.

On a continent where an estimated [17 million out of 128 million](#) school-age children will never attend school, mobile technology is also facilitating eLearning. The recent winners of Seedstars in Ghana, [Chalkboard Education](#), developed a form of plug-and-play mobile learning that doesn't even require an internet connection to work. As long as you have a mobile device – even a feature phone with SMS and USSD – you can earn a certified degree from a real university. The solution is ideal for the Ghanaian market, where internet penetration is only 12.3%, but mobile phone penetration sits at 128%.

[Africa118](#) is another startup, who used the mobile platform to develop a mobile directory. Over 100,000 users in East Africa can now, for the first time, access an accurate database of over 250,000 services – either online or, for those with connectivity issues, via a cheap call and SMS service.

## Rise of the cloud

The cloud is also proving to be another relevant tool in shaping African technology, with its ability to enhance the power of mobility and allow mobile solutions to shine.

Using the cloud, startups like [access.mobile](#) have been able to digitise health records, share outbreak alerts and improve the way patients and doctors engage on a large scale, enhancing the quality of healthcare in emerging markets. [Mustard Seed](#) has been able to capture school, teacher and student information, providing high-level analysis dashboards to key policy and decision makers. [AGIN](#) helps smallholder farmers capture important information, establish credit profiles and access loans without ever visiting a bank. All of these are solving prominent local challenges around healthcare, education and agriculture.

## Accelerating innovation

We are seeing first-hand how mobile and cloud technology is accelerating growth for Africa. At the same time, we are seeing how our local innovators are using these platforms to accelerate technology for the world. As the ICT sector, we need to continue supporting these innovators and the locally relevant technologies that change people's lives, embrace underserved markets and trigger market growth.

If we hope to support them in a meaningful way, it is up to us to really listen, engage and collaborate with our developers

and entrepreneurs on the ground. At Microsoft, this is something we are personally committed to, through initiatives like [4Afrika](#) and [NexTech Africa](#). We need to hear the challenges of innovators, their ideas and their insights. And we need to work together, so that we can better create the tools and infrastructure that, in turn, help them better serve their markets and grow sustainable businesses.

## ABOUT THE AUTHOR

Arrote Abdella is regional director of Microsoft 4Afrika.

For more, visit: <https://www.bizcommunity.com>