

UNIVERSITE DE OUAGADOUGOU  
Office du Baccalauréat

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- Agroalimentaire
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Epreuve du 1<sup>er</sup> tour  
Durée : 2 heures  
Coefficient : 02

### EPREUVE ECRITE D'ANGLAIS

Cette épreuve comporte deux (02) pages

Innovating Mobile Technologies in Africa

Visitors to Kenya's capital are often horrified by the homicidal minibuses called matatu. They go around post-holes, seldom signal and use their uncertain brakes only at the last second. They are therefore an ideal subject for a video game, which is why Planet Rackus, a Nairobi start-up, released "Ma3Racer" last year. Each player uses his mobile phone to steer a matatu down the street. The (unrealistic) goal is to avoid pedestrians. Within a month, a quarter of a million people in 169 countries had downloaded the game.

Planet Rackus is one of hundreds of start-ups that have sprung up in Nairobi over the past couple of years. They are part of a quiet tech boom in Kenya, a country better known for coffee and safaris. In 2002 Kenya's exports of technology-related services were a surprising \$16 million. By 2010 that had exploded to \$ 360 million. To its boosters, Nairobi is the "Silicon Savannah".

However, it differs from its silicon sisters in one crucial regard. From the start, its tech firms have designed their products for mobile phones rather than computers. Kenya is still a poor country; few of its people own laptops. But there are 74 mobile phones for every 100 Kenyans, well above the African average of 65. And nearly 99% of internet subscriptions in Kenya are on mobile phones.

Investors are piling in Nailab, a working space for technology professionals, opened on Nairobi's Ngong Road in 2011. Down the street is 88mph, a seed fund and incubator that launched earlier this year. Innovation 4 Africa, a similar outfit, shares the space. Two others, Savannah Fund and Growth Hub, started operations in May. Kenya's biggest bank, Equity Bank, wants a piece of the action. It will also open an "innovation centre" by the end of the year. Most of these funds focus on mobile technology. GSMA, a global association of mobile operators, is about to open an Africa office, also on Ngong Road.

Three factors helped Nairobi to become an African tech center. The first is a supportive government which brought the first of four undersea internet cables to the Kenyan coast. Prices decreased and bandwidth exploded. Just under 12% of the country's roughly 40 million people now use the internet, a number that has trebled since 2009.

Second, Kenya has undergone a revolution since 2007, when M-PESA, a mobile-payments system operated by Safaricom, a phone company, was launched.

Many start-ups at Pivot East use it as a base for their business. One team imagined the payment of school fees through the service by helping institutions and parents keep track of upcoming and late deposits. Another offered an electronic version of Kenya's popular informal savings groups. M-PESA has also inspired others. In May Google launched Beba, a pre-paid card for commuters using Nairobi's local buses. Insiders say that this is a test run for a much larger cashless-payment system.

Third, since 2010 Nairobi has had a place, called the iHub, for local technicians to get together and exchange ideas. The iHub has expanded to include a consulting arm, a research department and an incubation space called m:lab, which supports start-ups developing mobile applications.

Investors are not the only people putting money into Nairobi's start-ups. The city is full of aid agencies, development funds and foreign NGOs eager to shell out shillings. For many young entrepreneurs, seemingly free money beats having to give up a stake in their companies to venture capitalists. But cash from grants comes with strings attached, often in the form of abstract "goals".

Will Nairobi then compete with other emerging tech hubs such as Bangalore and Tel Aviv? Not at once. But most Kenyan tech firms are coming up with solutions to local problems. A team at Pivot East has built a service to help poultry farmers, who waste hours sitting around watching their chickens, keep track of their brood with text-message alerts. "We need to solve the nitty-gritty first and then we can invent new things", says Mr. Mucheru.

Yet this may ultimately be the key to Kenya's success. "We have so many problems that can also be opportunities," says Mr. Ndemo. M-Farm, a service that gives farmers access to market prices for the cost of a text message and allows them to group together to buy and sell products, has won several supporters and awards. It is the sort of thing Kenya could export to other poor countries. "You can create mobile applications from anywhere in the world", says Chris.

Adapted from The Economist, August 2012.

A. Guided commentary

- 1) Why are visitors horrified by the minibuses called "matatu", based on the text? (3 points)
- 2) Referring to the text, explain how the video game "Ma3 Racer" is played. (3 points)
- 3) What distinguishes Kenyan technology firms from American ones, according to the text? (4 points)
- 4) Based on the text, find three (03) factors that justify the boom of mobile technology in Kenya. (4 points)

B. Essay

Make suggestions on how to make use of new technologies to solve every day's problems in your country. (6 points)