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Here's how Africans are using tech to combat the coronavirus pandemic

With chatbots and interactive sites, Africans are finding new ways to slow the infection rate.

Image: REUTERS/Francis Kokoroko

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- Africans are designing mobile tech solutions to help tackle the coronavirus pandemic.

- In Nigeria, one company has created the online COVID-19 Triage Tool, which allows users to self-asses their coronavirus risk category.

- South Africa's government is using WhatsApp to run an interactive chat service about coronavirus.
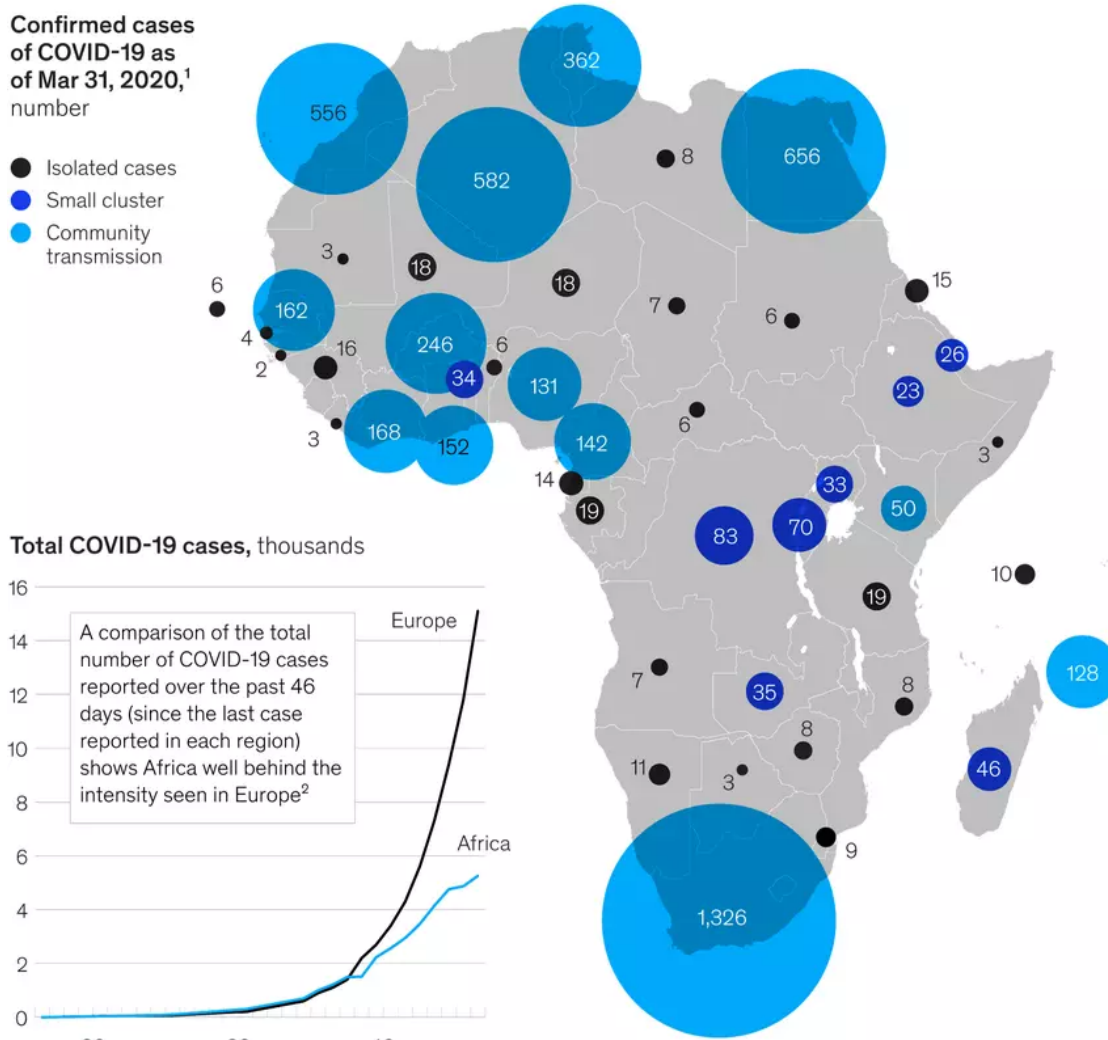
- The disease has not badly impacted the continent, but experts fear that countries lacking stable healthcare systems and widespread access to clean water are at high risk.

From a WhatsApp chatbot to a self-diagnosis tool, Africans are devising mobile tech solutions to contain the spread of the coronavirus amid fears it could have disastrous effects for the continent's most vulnerable.

Africa has not been as badly hit by coronavirus as other continents so far - with roughly 6,000 people infected, according to a Reuters tally, compared to about 500,000 in Europe.

But experts fear the respiratory disease could have a catastrophic impact on a continent with shaky healthcare systems and where soap and clean water for hand washing are out of reach for many.

The number of confirmed COVID-19 cases in Africa is growing rapidly.

The number of confirmed coronavirus cases in Africa, as of 31st March 2020.   Image: McKinsey & Company

Governments, charities and entrepreneurs are racing to tap local knowledge to spread awareness of the virus simply and swiftly, and prevent it from reaching overcrowded, under-resourced slums.

"A majority of Africa's problems require mostly African solutions, or solutions designed with Africans in mind," said Wale Adeosun, the chief executive officer of Nigeria-based Wellvis company, an online health information platform.

Which is one reason many of these new tech tools are made for mobile phones. According to the Pew Research Center, a Washington-based think-tank, smartphone use in Africa is growing at a breakneck pace.

In sub-Saharan Africa, about one-third of people had access to a smartphone in 2018 - more than double the number four years earlier. And that figure is expected to double again by 2025.

"The best solutions are those designed from the user's perspective and with their inputs," Adeosun told the Thomson Reuters Foundation.

Chatbots and self-assessments

In Nigeria, Adeosun's company Wellvis created the COVID-19 Triage Tool, a free online tool to help users self-assess their coronavirus risk category based on their symptoms and their exposure history.

Depending on their answers, users will be offered remote medical advice or redirecting to a nearby healthcare facility.

"The tool has helped to reduce the number of unnecessary and curious callers to disease control hotlines," said Adeosun, adding that it has been used by more than 380,000 people globally since March 19.

The South African government is using the popular WhatsApp chat service to run an interactive chatbot which can answer common queries about COVID-19 myths, symptoms, and treatment.

It has reached over 3.5 million users in five different languages since it was launched last month and is being rolled out globally, according to Praekelt.org, a Johannesburg-based non-profit that helped the Department of Health build the bot.

Stacey Manxoba, a domestic worker in Johannesburg, found the app quick and easy to use.

"It is straightforward, and my questions were answered immediately," said Manxoba, who wanted to test out the bot after hearing friends talk about it.

"I just hope that we are helped this quickly at the hospital if we realise we are sick," she added in a phone interview.

Stay-at-home marketplace

While many people are using apps and websites to educate themselves about coronavirus, women market sellers in Uganda are using an app to help people avoid spreading it.

The Market Garden app lets the vendors safely sell and deliver fruits and vegetables to customers as restrictions to promote social distancing come into play.

The app, which was launched in 2018, allows vendors to keep earning an income through the country's current two-week lockdown.

Developed by the Institute for Social Transformation, a Ugandan charity, it reduces bustling crowds in market areas by allowing women to sell their goods from their homes through the app, and then motorcycle taxis deliver the goods to customers.

The women are paid through the platform to limit the risk of the virus transmitting through the exchange of cash.

So far, the Market Garden has connected 30 women vendors from two markets in the capital Kampala with customers, according to the Institute for Social Transformation.

"With this coronavirus people are (staying home), so it is to our advantage that we are able to supply them the goods to their homes," said Susan Tafumba, 33, a groundnuts vendor from Kampala's Nakawa market.

She said her daily sales on the app have increased as Uganda's lockdown measures have been rolled out and more people have been staying home.

In East Africa the use of mobile money is widespread. In Kenya, for example, the mobile money platform M-Pesa, which is run by telecoms giant Safaricom, has more than 20 million active users in a population of 47 million.

President Uhuru Kenyatta has urged people to shift to cashless transactions to avoid spreading the virus when paying for goods.

Safaricom has waived fees on M-Pesa for transfers under 1,000 shillings ($10), while another provider Airtel has waived charges on all payments through its platform Airtel Money.

They have also increased transaction limits and the amount customers can hold in their mobile wallets.

Accessible solutions

While governments and health experts see mobile tech as a fast and efficient way to help a large number of people stay healthy during the outbreak, not everyone is able to go online whenever they need information about the virus.

For example, paying for data to access health sites and mobile tools is an expense many Africans can't afford.

"WhatsApp is not too expensive, but some months it is still an additional cost I can't prioritise," said Manxoba, the South African domestic worker.

And then there is the challenge of getting information out to everyone in a population whose members practice a variety of cultures and speak a vast array of languages and dialects.

"We need every medium to be made accessible in all languages during this pandemic," said Mmaki Jantjies, an information systems expert at the University of the Western Cape.

"All of these platforms are complementary approaches, but we can't lose sight of people in rural areas, who may only have access to radio, for example," she explained.

As the virus spreads across the continent, said Jantjies, ideas on how best to tackle it will spread, too.

For Adeosun, the best ideas for Africa will come from the continent's own companies, organisations and designers.

"The approaches to our own solutions cannot be gotten from individuals who do not understand our context," he said.

($1 = 105.1000 Kenyan shillings)

Written by

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