

CASE STUDY

Coliba



Using mobile to create a formalised plastic recycling economy in Africa

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**FOUNDING YEAR**  
2017

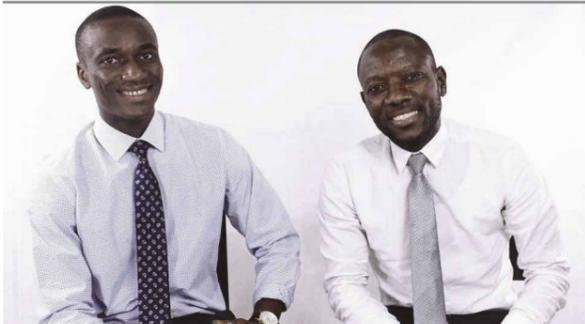
**FOUNDING TEAM**  
Yaya Kone | Co-founder and Managing Director  
Genesis Ehimegbe | Co-founder and CFO

**TWEET PITCH**  
Coliba is a web, mobile and SMS platform that connects households and businesses with Coliba-affiliated waste pickers.

**WEBSITE**  
<http://www.coliba.ci/>

**GEOGRAPHY**  
Côte d'Ivoire





According to a 2018 [report](#) by the World Bank, more than five million tonnes of waste are generated each year in Côte d'Ivoire, a number that is expected to double by 2030.<sup>6</sup> Less than half of the current waste is collected and only about three per cent is recycled, with the rest ending up primarily in open landfills or streets. The waste pollutes the environment, especially water reserves, and since plastic takes hundreds to thousands of years to decompose naturally, it is having a disastrous impact on nature. Waste and lack of waste management can lead to flooding when drains are clogged, shorter lifespans for animals that consume it, contaminated water bodies when dumped into rivers or oceans, disrupted food chains from degrading microplastics and respiration problems when burned.<sup>7</sup>

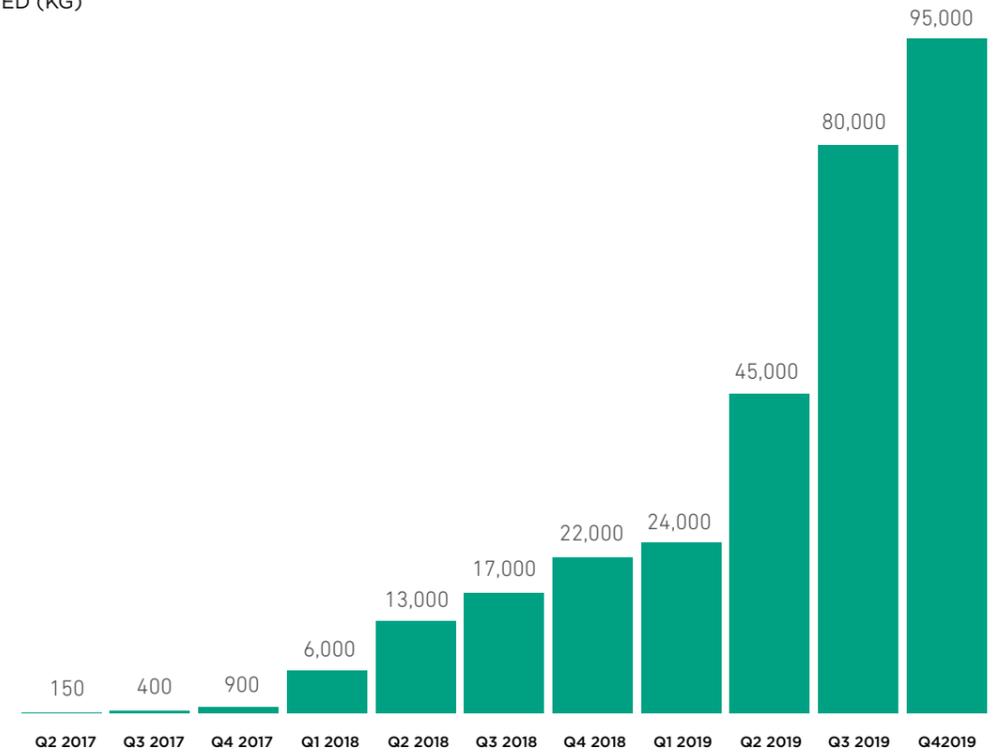
In 2017, Coliba launched a mobile-supported plastic recycling solution to address these challenges, protect

the environment, create jobs and improve public health in Côte d'Ivoire, a country of over 24 million people.<sup>8</sup> The start-up formally employs waste pickers who collect plastic bottles from businesses and households in exchange for points that they collect via SMS and convert into mobile data credit or other rewards. After being cleaned up, the plastic waste is turned into pellets in Coliba's local factory and resold to local or international companies to produce repurposed and recycled products.

As of June 2019, Coliba has processed over 300 tonnes of plastic waste and collected plastic bottles from over 4,500 monthly active users on its mobile app, recycling up to two tonnes of plastic a day. As of July 2019, over 8,000 households and 25 business partners have used the Coliba app. Coliba also formally employs 45 waste collectors and 23 full-time employees.

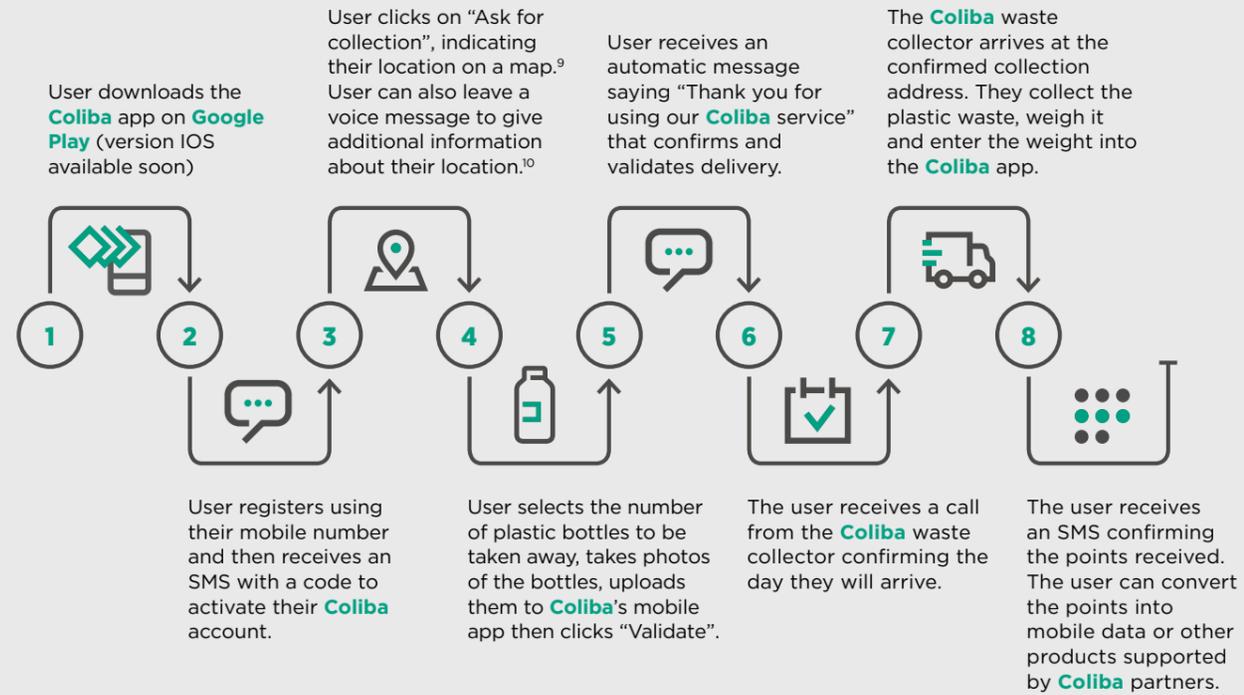
6. The World Bank, *What a Waste 2.0: A Global Snapshot of Solid Waste Management to 2050*, [http://datatopics.worldbank.org/what-a-waste/tackling\\_increasing\\_plastic\\_waste.html](http://datatopics.worldbank.org/what-a-waste/tackling_increasing_plastic_waste.html)  
 7. Ibid.  
 8. Index Mundi, *Côte d'Ivoire Demographics Profile 2018*, [https://www.indexmundi.com/cote\\_d\\_ivoire/demographics\\_profile.html](https://www.indexmundi.com/cote_d_ivoire/demographics_profile.html)

**COLIBA**  
AMOUNT OF PLASTIC WASTE COLLECTED (KG)

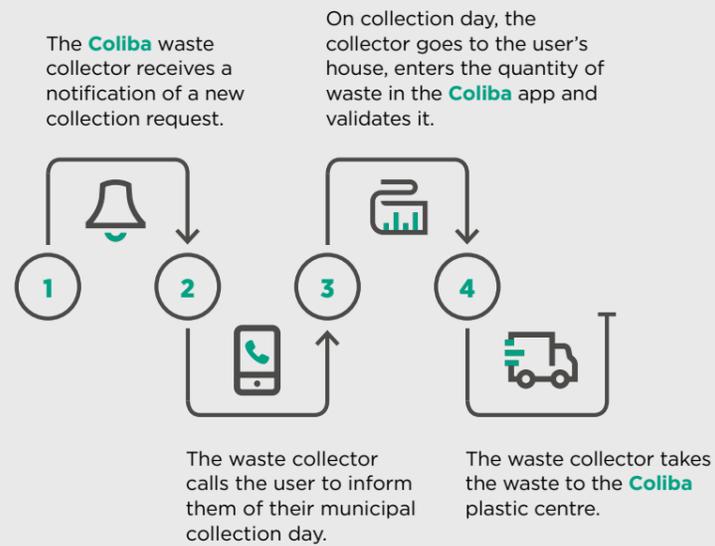


## How the service works

The Coliba platform is accessible to households and business customers that want their plastic waste collected. Requests for pick-up can be made via Coliba's website, mobile app or SMS platform.



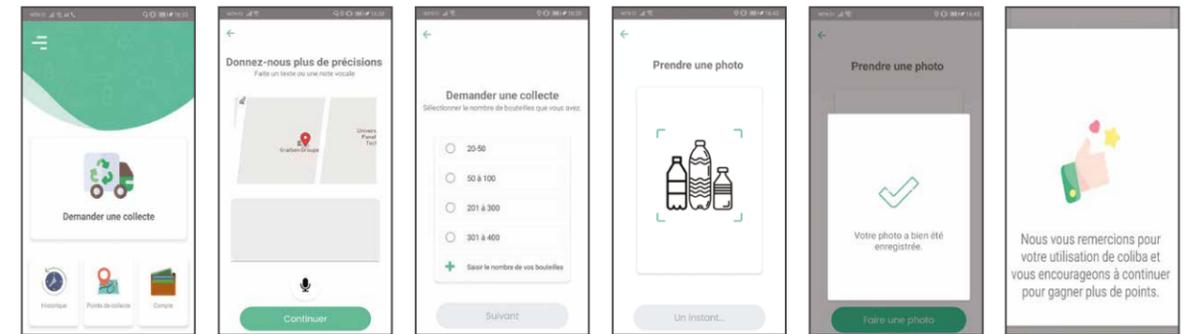
### USER SEEKING WASTE COLLECTION



### WASTE COLLECTOR

9. User clicks on "It's here" as Coliba has an inbuilt geolocation system.

10. In Côte d'Ivoire, most streets do not have names so it is always important to have more details about the location.



## Working with mobile operators

In 2017, Coliba joined mobile operator MTN's Y'ello Startup, an incubator programme that supports early-stage local tech entrepreneurs and identifies future business partners for MTN.

In addition to this initial support, Coliba and MTN have collaborated through a commercial and co-branding partnership. Households that recycle plastic bottles through Coliba's mobile app are granted MTN data credits, allowing them to access the internet on their mobile phones.



“ The benefits of this partnership with Coliba is on three levels. First, it's a business opportunity, because the idea is to be able to help Coliba with their development. Secondly, there are socio-economic issues, and thirdly, environmental issues.

Guillaume N'gouan, Deputy General Manager, MTN Business

We have opened our various APIs to Coliba — specifically our SMS and Mobile Money APIs. Today Coliba is able to pay its collectors using mobile money. We hope this collaboration will be long lasting because it is really the type of activity we look for with our Y'ello Startup incubation programme and we need long lasting solutions.

Idriss N'daho, VAS & ICT Manager, MTN Côte d'Ivoire



## Changing lives



Leveraging mobile technology, Coliba reduces plastic waste as it works through the entire plastic recycling value chain, creating jobs for informal workers and opening access to controlled waste disposal facilities. As of July 2019, 45 Coliba waste collectors had collected between 30 and 35 tonnes of plastic waste every month from private households and businesses.



Coliba is tackling a critical challenge in Côte d'Ivoire. By formalising the collection of plastic waste, it is encouraging households to recycle and turn plastic waste into pellets that can be re-used. As of July 2019, Coliba had collected plastic bottles from over 4,500 monthly active users on the mobile app and recycled up to two tonnes of plastic a day.



The start-up is protecting the environment by diverting tonnes of plastic waste from landfills, streets, rivers and the ocean. As of July 2019, Coliba had educated and raised awareness of climate change and the need to reduce plastic consumption among over 6,000 students in schools across Abidjan.



*I have been using Coliba for six months and it has completely changed the way I manage my plastic waste. Now, I can accumulate points by sorting my waste. Thanks to their collection innovation, people are equipped to better protect the environment. I am proud to be an active member of Coliba's app.*



**Diane, Coliba user**

*It has now been a year since I started working with Coliba. I did not know the importance of plastic waste, but now I know that we can give them real value. This not only helps to support my family but also contribute to the development of the country by limiting the spread of waste on the streets.*



**Moussa, Coliba waste collector**



## Working with the GSMA Ecosystem Accelerator

Coliba received a grant from the [GSMA Ecosystem Accelerator Innovation Fund](#) in November 2018 to deploy a large-scale, mobile-supported plastic recycling value chain in 10 districts in Abidjan (with a population of about three million people) to collect, recycle and resell plastic waste from households and businesses.

Through the support of the GSMA Ecosystem Accelerator programme, Coliba has developed an app to enable plastic waste collectors to work efficiently and manage the process as seamlessly as possible. Waste collectors with basic feature phones can also use a USSD interface to access Coliba services.

