

Introducing *Cockereel*

A bold solution to improper plastic waste disposal in a
Cosmopolitan city



PELICOSS

...defining the next frontier

The Background

- As an illustration, Nigeria generates some 32 million tons of waste per year! 2.5 million tons of this is plastic!!
- The country's disposal, recycling and waste management system is very inefficient, with 70 per cent of plastic and non-plastic waste ending up in landfills, sewers, beaches and water bodies.



The Problem

- Plastic wastes are environmental hazards that breeds disease-transmitting agents such as Aedes mosquitoes and cause urban zoonosis, especially as rodent and canine disease reservoirs.
- They are the greatest catalyst to the flooding problems in many cosmopolitan cities of Africa because they end up in the city's drainage, gutter and canal systems clogging designed water pathways.
- Although there are recycling plants and organized private sector-driven plastic waste collectors, they have not been sufficiently effective in addressing the issue. This is simply because the recyclers do not receive enough plastic wastes.
- The reason for this is that the greatest generators of plastic wastes, namely the market women; the students; the workers; the children; indeed every man on the street are not incentivized in the existing plastic recycling value chain.

The Solution

- We came up with *Cockereel* as a solution that encompasses every stake holder in the plastic recycling chain.
- *Cockereel* is a mobile app that rewards (monetarily in real time) every plastic user that decides to properly dispose his/her plastic waste properly.
- It is simple, user-friendly, free and available for both Android and IOS smart phones.
- It requires no tedious configuration process and will work on even the lower-grade smartphones that is usually used by the lowest cadre of the society.

Cockrel

- *Cockrel* provides for 3 levels of user:

Level 1: User App

- **USERS:** The general populace, anybody and everybody in the city that has a mobile phone that can run an app. These are the actual generators of the plastic wastes.

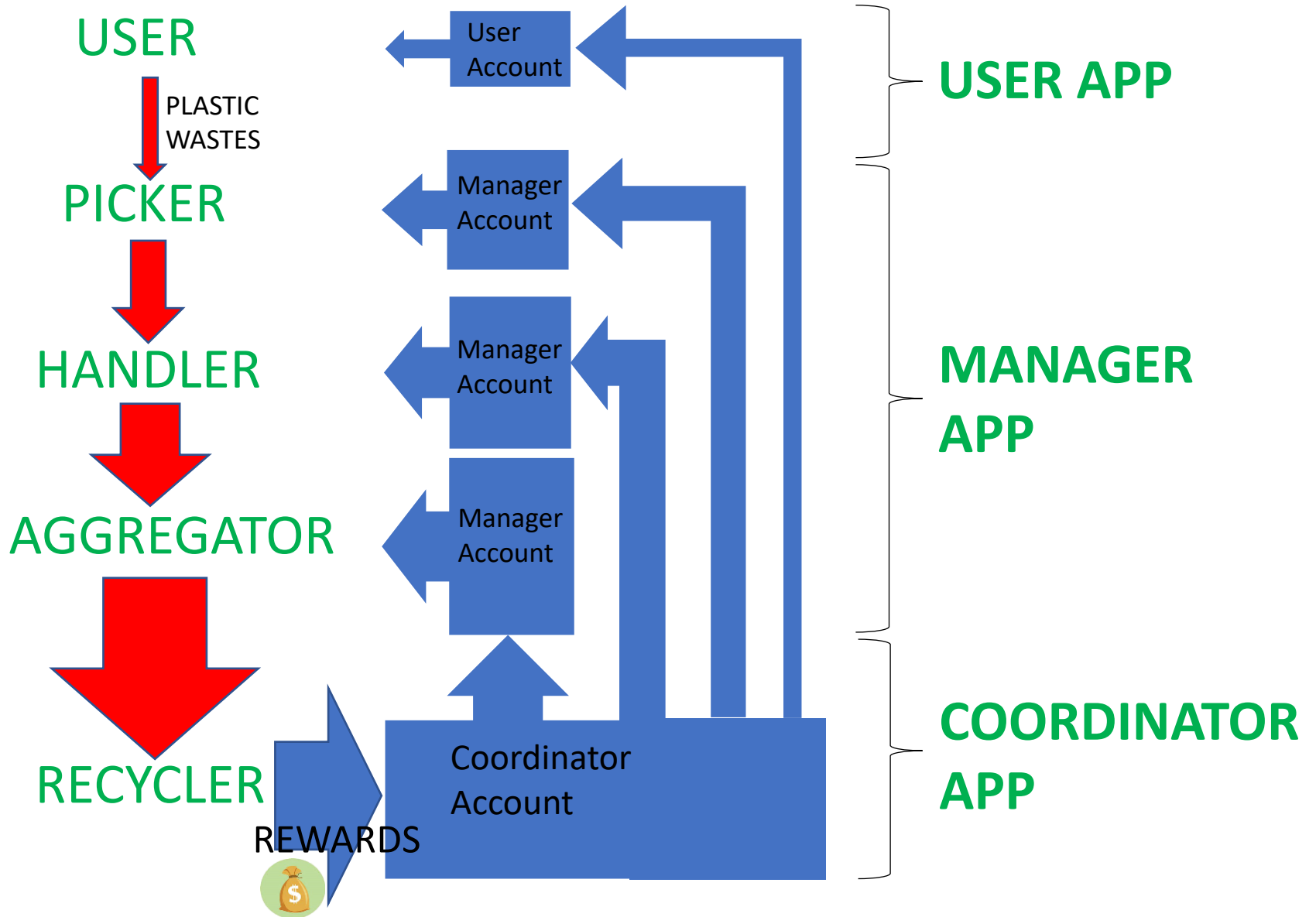
Level 2: Manager App

- **PICKERS:** The base-level plastic collectors. These usually collect plastic wastes from waste dumps and from USERS.
- **HANDLERS:** These usually interface with pickers and drive more volume of plastic wastes than the above two.
- **AGGREGATORS:** These aggregate plastic wastes from pickers and handlers and deliver to the plastic recyclers. They drive the highest volume of wastes.

Level 3: Coordinator App

- **RECYCLERS:** The recycling plant operators.

Cockerel



Cockerel Process

- **User** passes on plastic wastes to the **picker**.
- **Picker** categorizes and quantifies the wastes and records on his **manager app** for **user**.
- The record reflects in real time on **user account**, and can be confirmed on **User App**.
- **Picker** passes on plastic wastes to the **handler**.
- **Handler** categorizes and quantifies the wastes and records on his **manager app** for **picker**.
- The record reflects in real time on picker's **manager account** for confirmation.
- **Handler** passes on plastic wastes to the **aggregator**.
- **Aggregator** categorizes, quantifies and records on his **manager app** for **handler**.
- The record reflects in real time on handler's **manager account** for confirmation.
- **Aggregator** passes on plastic wastes to the **recycler**.
- **Recycler** categorizes, quantifies and **weighs** the wastes. This is recorded on the recycler's **coordinator account** for the **aggregator**.
- The record reflects in real time on aggregator's **manager account** for confirmation.
- Recycler's **coordinator app** accesses records from all the **manager accounts** and **user accounts** and automatically distributes the **rewards** for the received weighted plastic wastes accordingly across board.

Cockereel process vs Current Process

- *Cockereel* tracks the trail of plastic wastes from the users to the recyclers.
- This happens as the user hands the plastic waste to the picker/handler/aggregator. Any of these can register the waste on the USER ACCOUNT through their MANAGER APP.
- This makes it possible for the recycler that receives the plastic waste to distribute the weighted rewards accordingly down the line from aggregator, to handler, to picker, to user.
- Currently, the recycler buys the plastic wastes from the aggregator who then pays his handlers. The Handlers in turn pay their pickers and the reward stops there!

The Market and Business Model

Who are the generators of plastic wastes?

It is practically everybody in our modern society, young and old, big and small, high and low from the bank chief executive to the roadside peasant; from the kindergarten student to the university professor; the politicians; the religious leaders; the athletes in all sports; even the homeless guy in his makeshift shelter; the patients on hospital beds; in offices and homes; indeed everyone everywhere that is alive are using plastic media and generating volumes of plastic wastes everyday!

The reason for this is simple: plastic is the cheapest, most portable and safest medium of holding, transferring and using most of the materials we need in our daily lives, like foods, drinks, utensils, toys, reagents, drugs, shopping bags, etc. Apparently, plastics are here to stay with us for a long time!

The Market and Business Model

Market Segmentation:

Unfortunately, the larger segment of the plastic-using demography as stated above do not consciously take special care to properly dispose their plastic wastes. The vast majority of these fall into the middle-class and the lower-class of society that can use a little more cash that can come by way of proper plastic waste disposing.

These middle- and lower-classes demography is the target of the **Cockerel** mobile app. They are currently excluded in the plastic recycling value chain, making optimum collection of plastic wastes almost impossible. Incentivizing these large demography within the society to dispose plastics properly through **Cockerel** presents a vast market of potential downloaders of the app from first lunch.

The Market and Business Model

Profit Strategy:

Currently, there are rewards within the plastic recycling system circulating between the pickers, aggregators and recyclers.

The **Cockerel** app will extend this to users by effectively reducing what gets to the pickers and aggregators per kg of plastic wastes and sharing these for the users that contributed in the batched and recycled wastes, as well as for platform commission (per kg of wastes) to be retained by **Cockerel**. All these are programmed to happen automatically on **Cockerel**

The result is:

1. An explosion in the volume of collectible plastic wastes.
2. An over-compensation in the loss in revenue per kg for the pickers and aggregators through much higher volume transactions. These group of waste-recycling practitioners will in fact earn more revenue through **Cockerel**.
3. New streams of income to low- and middle-income earners in real time.
4. Saving the environment from non-biodegradable plastics that has come to stay in our modern society.

The *Cockereel* Team

We have a team led by the Chief Operating Officer of Pelicoss Systems Limited.

Our technical team is working to develop and continuously improve the mobile app bringing it alive in the market place and sustaining its popular relevance at all times.

We have a field team engaging stake holders like recyclers, aggregators, pickers, government environmental protection agencies; government waste disposal departments; government ministries of environment; and private sector participants.

Our teams are inspired by a deep passion for a plastic free environment and a cleaner world.

Cockereel Advantage

- The simple act of incorporating the user in the recycling value chain will increase the volume of plastic wastes captured in the recycling process exponentially from 30% to 90%!
- This will increase the value created along the line equivalently and not only make it easy to accommodate the erstwhile ignored user, but also to increase the wealth generated at every level of the waste recycling value chain.
- The real advantage of this to the society is the drastic reduction in the improper disposal of non-biodegradable plastic waste and the consequent positive effect on the environment and climate change.