

User Experience Map

CHALLENGE:

How might we improve the livelihoods of small-scale farmers by reducing food waste and spoilage?

Describe your idea with one concise sentence:

Local smart kiosks powered by a distributed ledger (i.e. “blockchain” technology) to sort coffee beans by grade, collect real-time data on yield, and payout to farmers.

Draw and describe the ideal user:

Title: Selling Coffee Yield in DRC

Name: Arthur

Age: 32

Profession: Farmer in Chigera on Lac Kivu in the Democratic Republic of the Congo

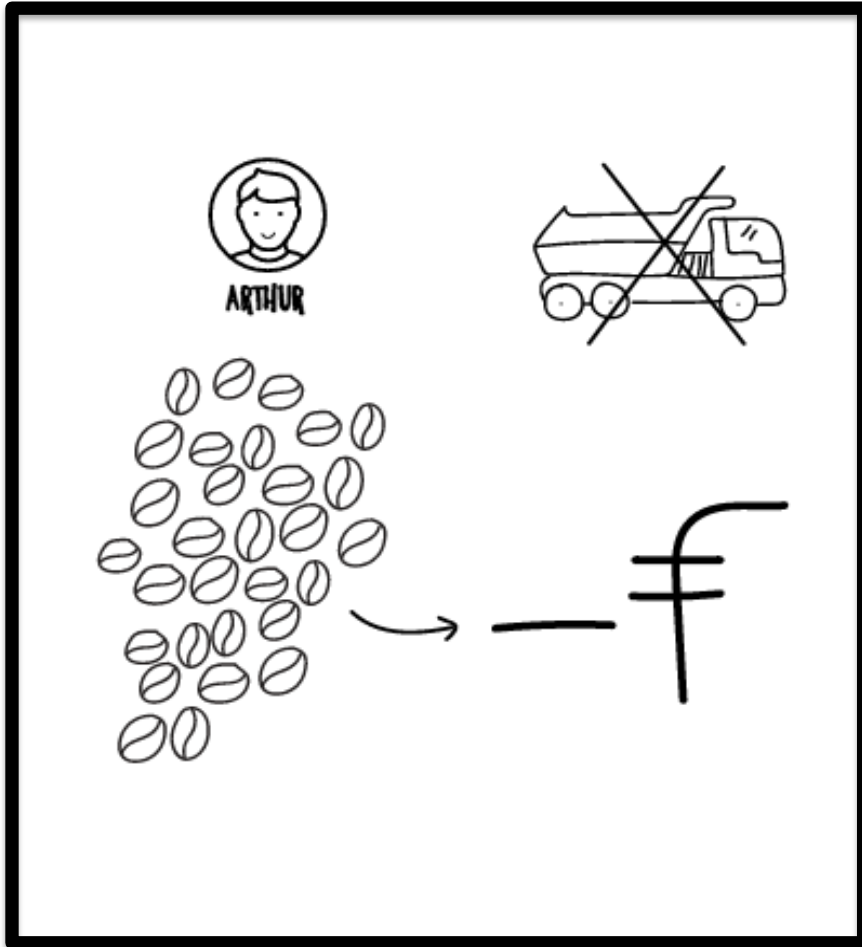
Any Other Key characteristics:

- Member of the KACCO farming COOP.
- Average income is ~\$1000 annually.
- Father of two sons who help on the farm

Concisely describe what is happening:

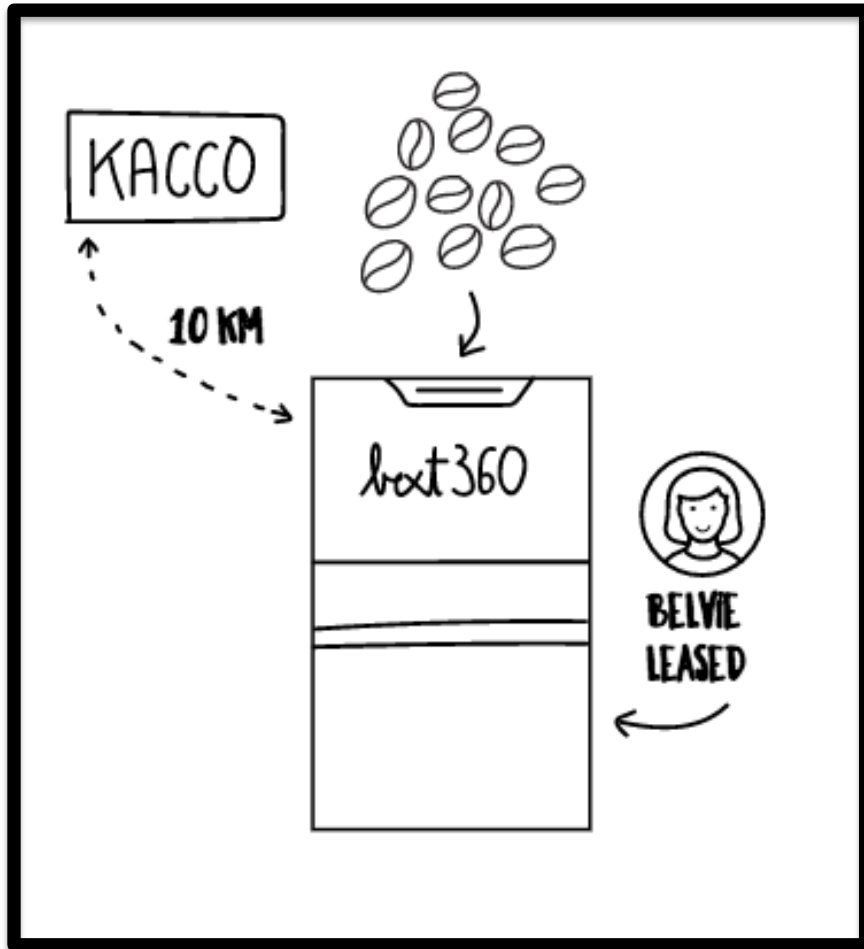
Arthur's farm is in a rural area, so his coop ends of up selling their coffee beans to an intermediary with access to transportation.

Because of the lack of access to markets, Arthur sells his beans for half of the true market price, generally around .14 cents per kilogram.



Title: Distributing Local Machines

Concisely describe what is happening:

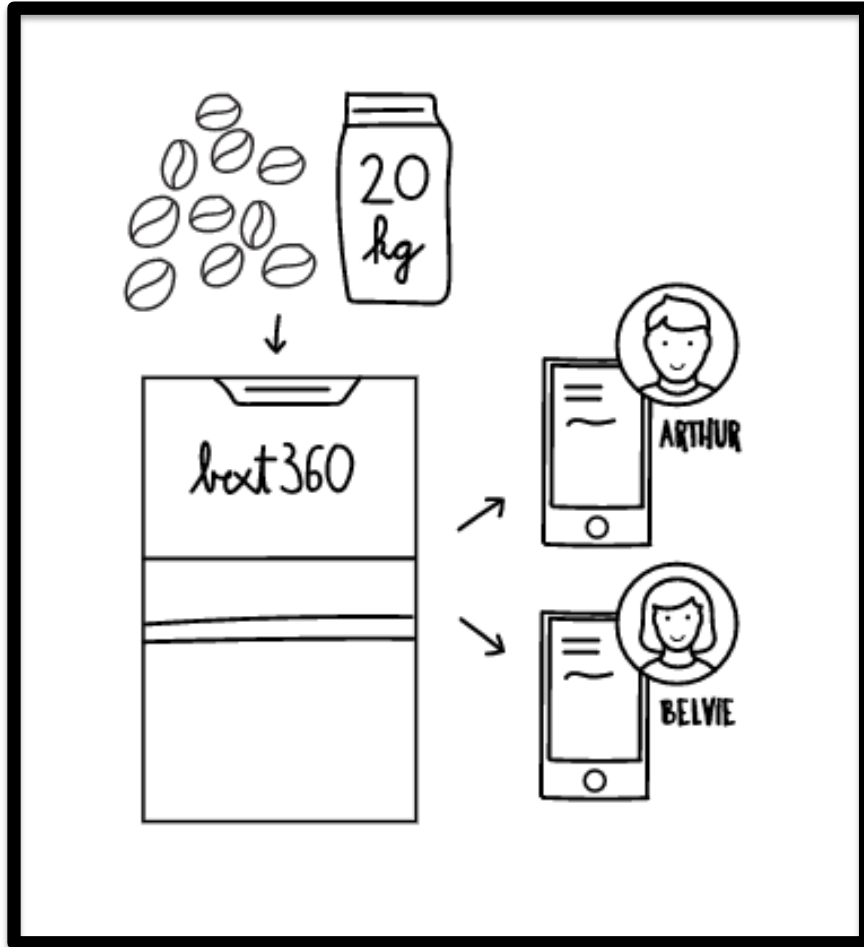


The KACCO coop, located fewer than 10 kilometers away, have acquired a bext360 machine through their partnership with the Eastern Congo Initiative.

Belvie, who has previously sold airtime near the coop location, has recently leased a bext360 machine to collect, sort and store coffee beans for the KACCO coop. Belvie is excited about the additional revenue stream.

Title: Using the Machines for the First Time

Concisely describe what is happening:

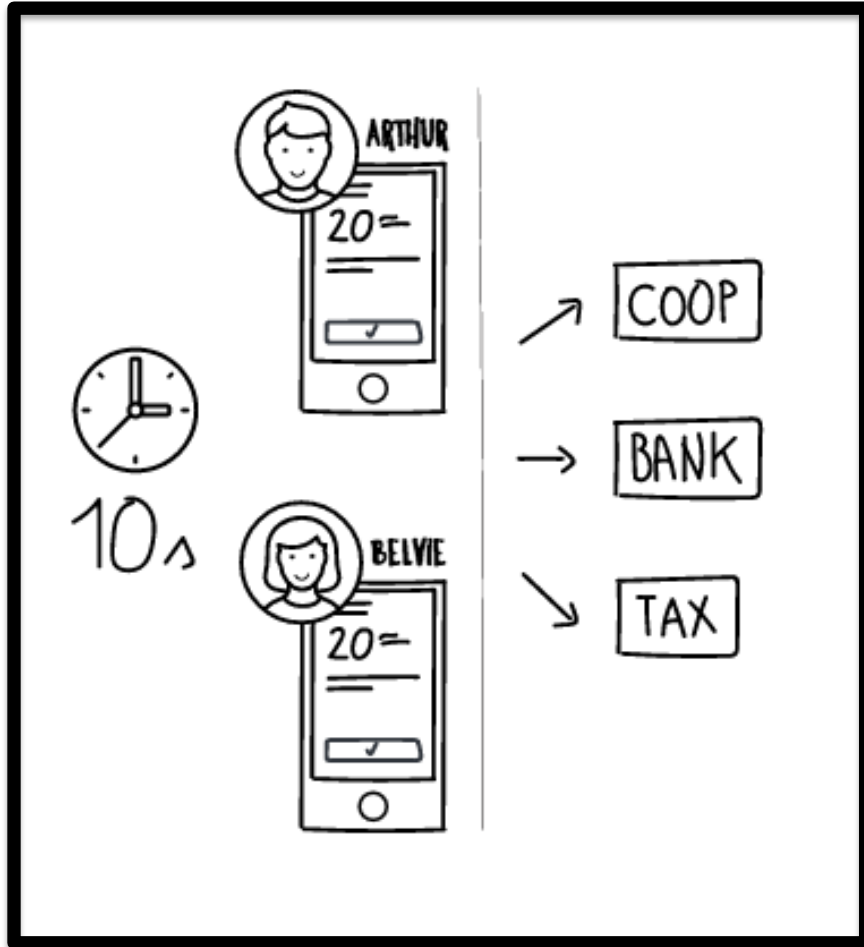


Arthur brings in 20 kilograms of coffee to the KACCO coop's collection machine. He was issued an Android device through the ECI / KACCO partnership to use with the bext360 collection machine.

Belvie watches as Arthur's beans filter through the collection machine, and the total price for all 20 Kilograms surfaces on both Belvie and Arthur's phones.

Title: Processing Payment

Concisely describe what is happening:



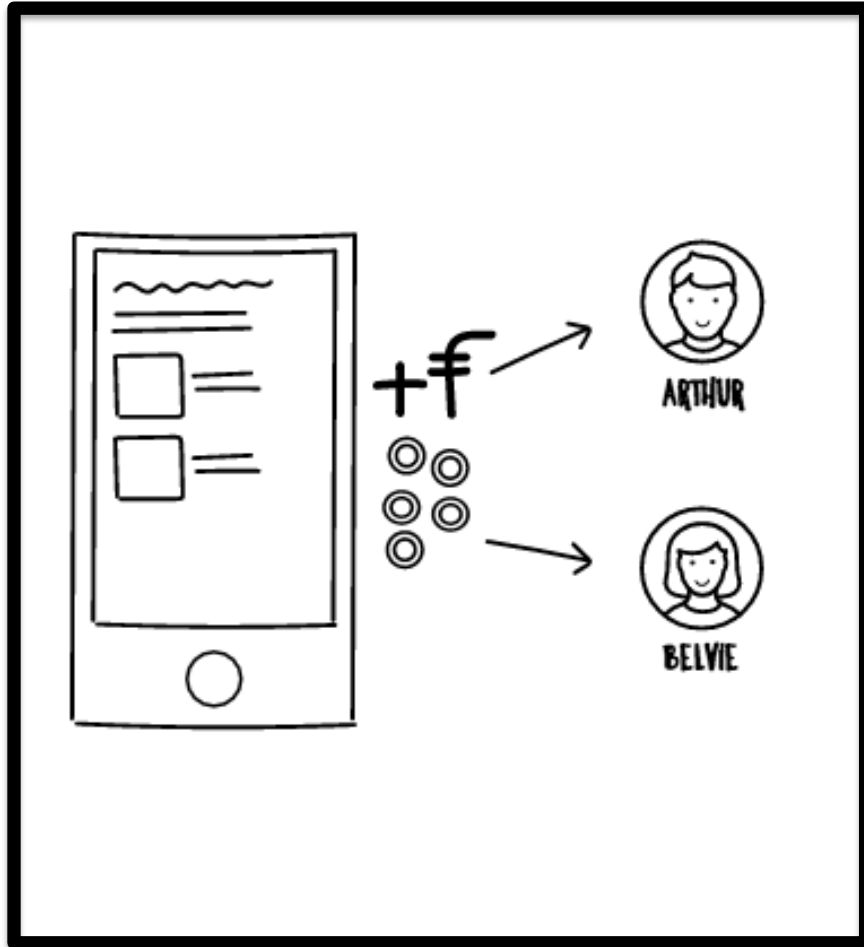
On his phone, Arthur accepts payment for his 20 kilos of coffee beans.

In under 10 seconds, the transaction resolves--Belvie is paid a portion of the profits, taxes are automatically processed, and Arthur can either cash out at his local bank or use coffee credits in his community.

Payments are distributed to the Coop, to the Bank (to pay for the principal and interest on the machine) and for any taxes due

Title: Fair Trade - Payment of a Fair Price

Concisely describe what is happening:

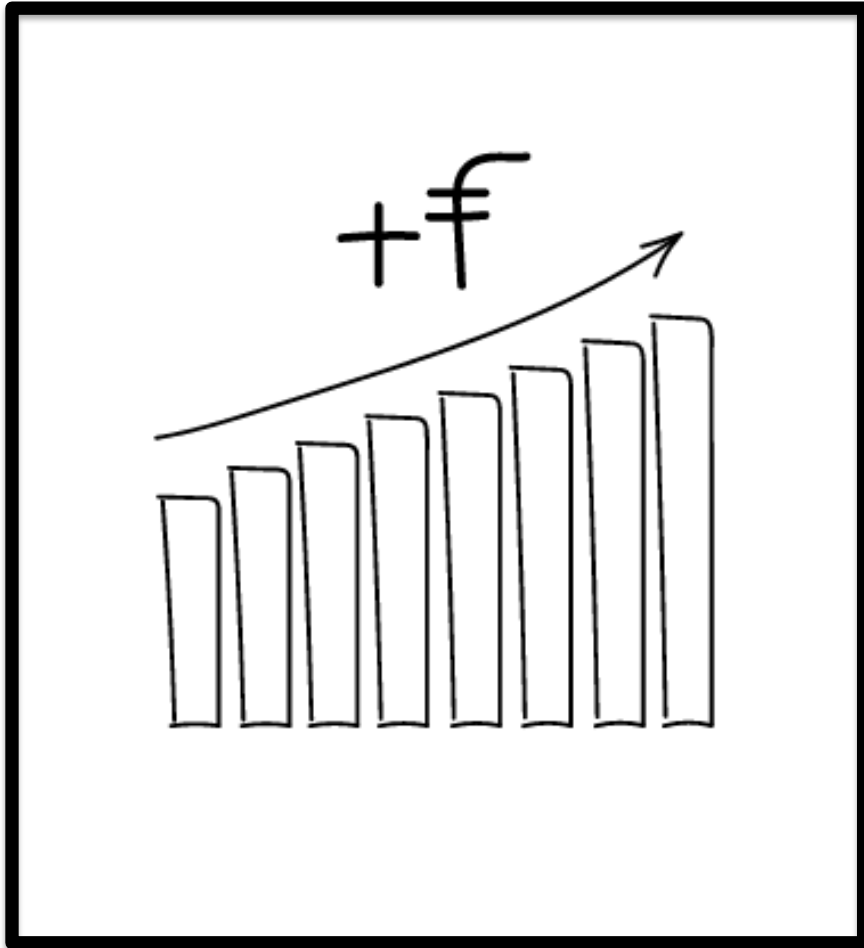


After selling his coffee at the bext360 machine Belvie and Arthur receive weekly notices of the location and processing of the products that he produced

Upon final sale to the buyer (Falcon/ Starbucks) both Belvie and Arthur receive additional payment automatically based on the final quality and market price of the product

Title: Keeping Transparent Records

Concisely describe what is happening:

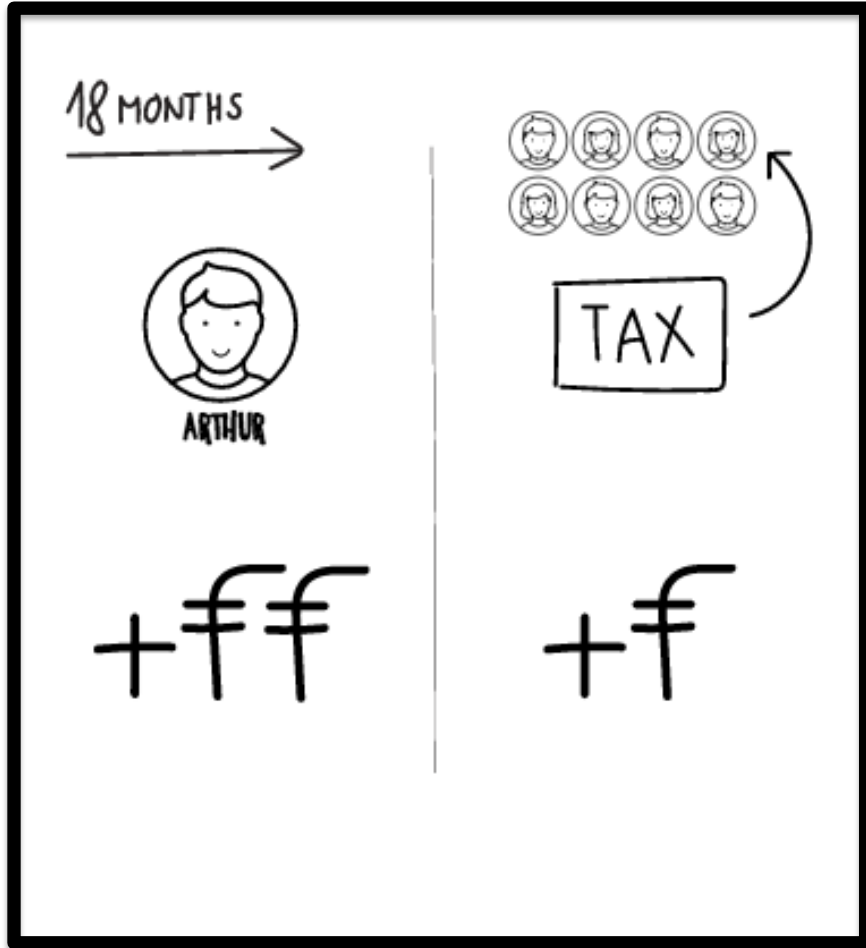


Intermediaries, middlemen and bad actors are gradually replaced by transparent record-keeping and a network of accessible kiosks.

Because of access to markets, transparency and additional processing taking place within his community, Arthur's coffee beans gradually begin to sell for higher prices.

Title: Increased Revenues per Farmer

Concisely describe what is happening:



18 months later, Arthur receives nearly double the revenue from his coffee yield.

Arthur is given statistics on other local farmers yield and quality and is provided best practices to improve operations at his farm.

At the same time, a larger tax base (supported by automatic payments) has contributed to increased infrastructure, such as schools, roads and electricity.