

Verifying fair wages for coffee laborers in El Salvador

Kenneth Cho, Joss Duff, Hudson Pavia, Justin Venezia

Special thanks to: Eric Grill, Roberto Salaverria, Prof. Smith, Prof. Korth

Problem

The economy of El Salvador is heavily reliant on their coffee industry. Unfortunately, their coffee laborers are often underpaid or not paid at all. This problem results from the malpractice demonstrated from corrupt third parties.

Solution

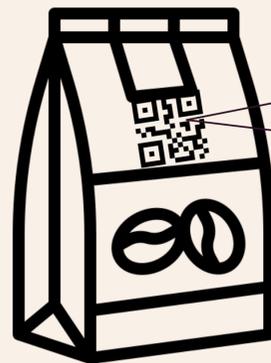
Our application tracks the payment history of workers and displays it on coffee bag packaging in the form of a scannable QR code. Conscious consumers will be empowered to support farms that pay their workers a fair wage.



Provides an irrefutable history of worker payments.



Facilitates true Fair Trade practices.



Café Justo



Café Justo

Our Smart Contract

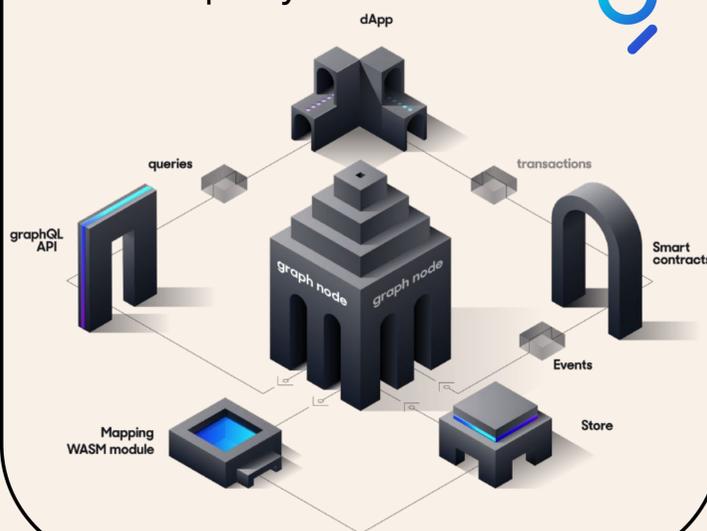
Executable code stored on the Ethereum **blockchain** (distributed *immutable* ledger)

Functions on our smart contract are called in the mobile app, logging days worked and payments on-chain.



theGraph protocol

Middleware for organizing on-chain data into easily queryable tables.



Frontends

Mobile Applications:



The Farm

- Create a Foreman
- Pay Checked-In Workers

The Foreman

- Check in Workers with a QR Scanner

The Worker

- Sign into farms
- See the days that you have Checked-in

Web Application:

View publicly accessible worker payment history for coffee bags



Pivot

Migrated from building on Bitcoin to Ethereum because of its native support for smart contracts.

Results

- A scalable, cost-efficient platform that successfully circumvents corruption

Next Steps

- On-the-ground testing in El Salvador
- Basic training & tutorials for the workers in El Salvador
- The addition of the remaining supply chain nodes in the final solution