

NOUS ENSEMBLE

NOUS ENSEMBLE (we together) is a collaborative entrepreneurship project which brings accessible and affordable mobile phone charging to the villages of Burundi. Designed by a group of students at ITP, NYU for UNICEF.

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Last semester, at NYU we were presented with a very interesting — albeit challenging — project focus in our class “Design for UNICEF”: Design potential solutions for energy poverty in rural Burundi. While Burundi is a beautiful and verdant country that is full of resources, it is also one of the most energy poor countries in the world: only 4% of the population has access to the electrical grid (which is mostly concentrated in a couple of cities), and the majority of people obtain much of their energy requirements from wood or kerosene, which can be expensive and unhealthy sources of fuel.

Our design team was unable to visit these communities in person, so we started asking questions we hoped would reveal more about daily life and culture. How do children study at night? How do you run a health clinic? How are people able to move around safely once its dark? By working with the UNICEF Innovation Lab in Burundi, we were able to get some answers to these questions. Through these conversations, we got to learn about the existing state of women and their quality of life.

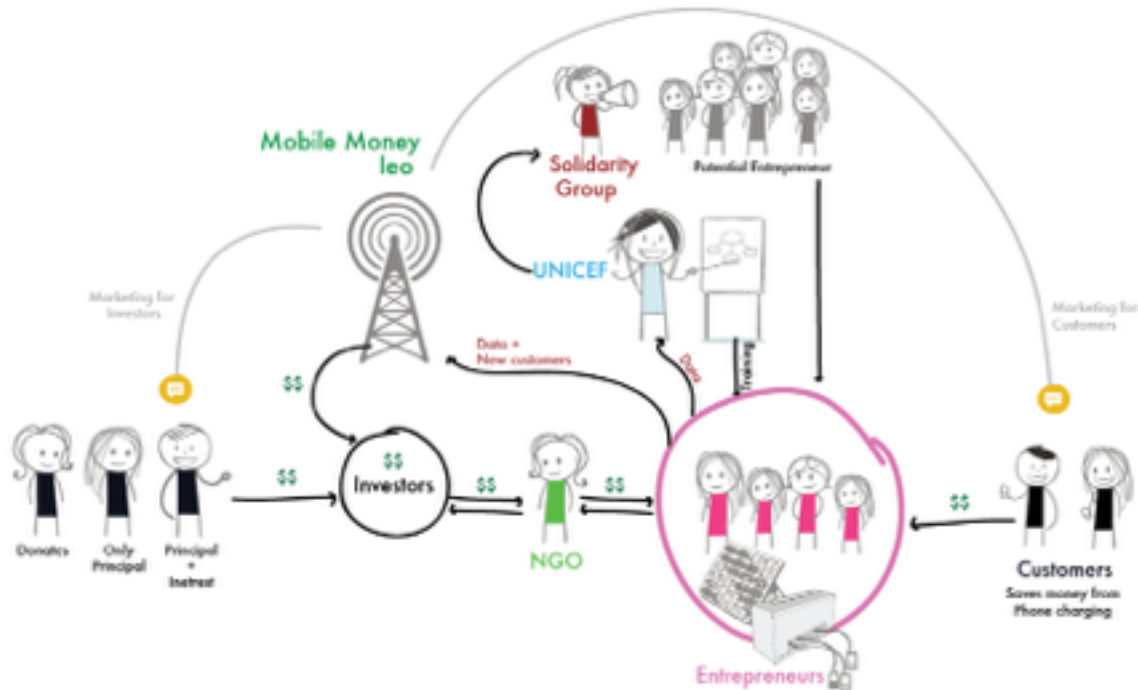
So our underlying goal became to create a system that can empower women in Burundi, by establishing women as income earners & knowledge bearers raising the value of all women in the eyes of the community, and serving as positive role models for youth.

Also, Burundians, who on average earn less than a dollar per day, spend 25% of their income to keep their mobile phones charged. Reducing this expense can have enormous personal impact in such a resource-constrained environment.

After much ideating and several project iterations, we became particularly interested in creating a solution that would lower time and monetary costs for mobile phone charging and become an income generation source for groups of women.

The Solution:

NOUS ENSEMBLE (we all) is a collaborative entrepreneurship project which brings accessible and affordable mobile phone charging to villages.



User Scenario: Marie's story.

Marie lives in Cankuzo, a very remote village, is 28 years old, and has 3 children. Marie has many domestic responsibilities. She farms a small plot of land for her family, takes care of her children, and does the cooking. Her family relies on her husband's small income to pay for things they need to buy, like fuel for the kerosene lamp and charging the mobile phone. Marie belongs to a solidarity group in her village. Through the solidarity group, she's involved in projects that improve her community and make a better life for her children. While talking to other solidarity group members, Marie learned about an opportunity to start a small business. She's interested in earning some income and providing a necessary service in her village, so she and a few other women decided to participate. Over the next few weeks, they learn how to run the business and assemble the charging kits. Now the four of them work together, they share the responsibility of the business and other responsibilities, too. They have a lot of customers; community members come to their business because of lower prices and improved security.

In addition to making money, Marie and her business partners have become important members of their community.

The first part is the pilot, and the second is where we see our project in a few years.

And this is how it works.

- At the heart of our project are the female entrepreneurs.
- Marie's opportunity came about when the UNICEF Innovation Lab approached the solidarity group about the Nous Ensemble project. Solidarity groups provide a system of common savings and loans for their members.
- Groups are present in villages throughout Burundi, and in fact most villages have 2-3 groups. According to the Burundi Innovation Lab and Burundi's child protection specialist, people see positive results in their communities from the establishment of solidarity groups.

- The solidarity groups will spread the word and help to identify participants like Marie – women who are already involved in community activity.
- The Innovation Lab leads workshops and person-to-person training for interested women, arranges for the delivery of the materials, and coordinates with a local NGO which is responsible for collecting loan repayments. The entrepreneurs receive training and the solar charging kit components necessary to start a business.
- The entrepreneurs team up to form a small business charging mobile phones from solar cells. Working together, they run the business and share domestic responsibilities.
- Establishing small local businesses benefits both the owners and the community. The owners are able to generate income, learn about solar power, and gain entrepreneurial experience. Members of the community benefit from access to cheaper energy close to home.

The business is based on a solar charging kit. It's a solar panel connected to a 12 volt battery which is then used to charge mobile phones. The kit components cost \$36 US dollars, and adding shipping to Bujumbura brings that number up to \$52 per kit. For bulk orders over 100 kits, the total cost, including shipping, falls to only \$32 per unit.

Bringing the source of mobile phone charging closer to the customers will lower the cost per charge. Current prices range from 20 to 32 cents per charge. A Nous Ensemble business can lower that price to 6 cents and still make a profit. The lower cost will save a household that has one mobile phone \$1.12 a month.

The Impact

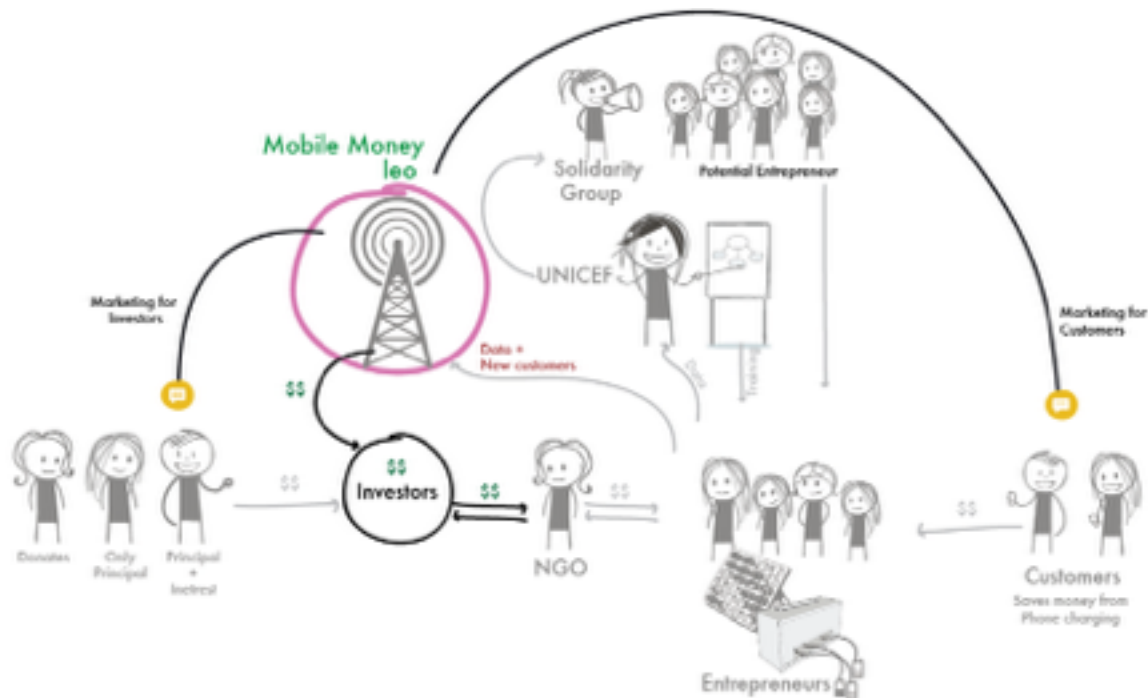
1. The money customers save through Nous Ensemble will improve the quality of life for the community. One potential impact is increased access to education. Savings can be used to lower school costs.
2. Another potential impact is extended usable time. A Nuru light costs \$2 — an affordable price for a family. With charged light sources in the home, children are able to continue their studies at night, which significantly increases their ability to learn. In addition, personal relationships in the family will benefit from simply being able to see each other during conversations.
3. A third potential impact is increased health and safety in the home. Limited or discontinued use of kerosene has short and long-term effects on child health and development.
4. Finally, female entrepreneurs empower women in the community by establishing women as income earners, raising the value of all women in the eyes of the community, and serving as positive role models for youth.

Future plan/ Next Steps:

Our first phase of expansion is to involve and negotiate with regional telecoms.

Since the effects of our system will directly result in increased phone usage, we will be able to engage telecom companies to provide simple services like SMS advertising for new Nous Ensemble businesses.

Mobile Money:



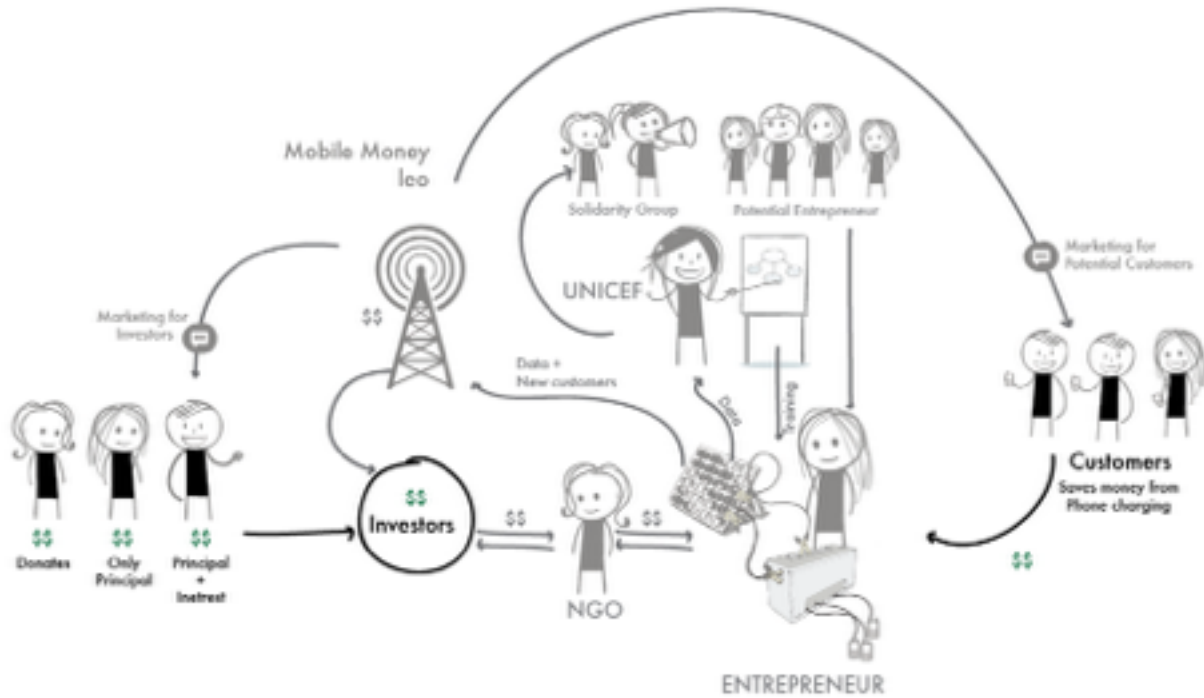
Our next phase is to incorporate a mobile money payment system. Local telecom U-Com Burundi has already deployed a mobile banking system, LEO, to a limited audience and hopes to grow its user base by the end of the year. Once we have established a business relationship with the telecoms, we can leverage this relationship to achieve lower mobile payment fees for Nous Ensemble-related transactions.

Increased availability of this system will make it easier for customers to pay business owners and for owners to repay their loans.

Individual transactions can be collected as aggregate data on phone usage patterns. Analysis of phone usage and charging data can help assess behavior and functionality of these new economic and communication systems. This information is beneficial to UNICEF and its partner NGOs.

Micro finance:

The final phase of expansion is to incorporate a system of microfinance.



With the broad implementation of a mobile money system, Nous Ensemble can then put in place a system of microfinance designed to attract local donors – Burundians helping other Burundians – and also encourage involvement and investment from foreign donors.

Loans will be offered in three modes: donation, loan to recover principal, and loan to recover principal + interest. Either way, borrowers will see no difference as to how the money was originally sourced. We aim to produce a microfinance structure that sustainably operates the system and allows Nous Ensemble to be self-supporting.

At the rural Burundi level, we address the relatively high cost of mobile phone charging and the culture around it. At a macro, historical level, we're addressing the need for data and analytics.

For the female entrepreneurs in Burundi, the Nous Ensemble project increases access to technical and business information, offers opportunity for income, and allows women to make choices about the future they create for their children.

Nous Ensemble empowers individuals and improves communities.