

PROBLEM

Across Europe, estimates suggest that up to 2/3 of refugees are homeless. Many refugees are denied leasing simply because of an inability to prove their financial history, despite being able to pay for their rent independently.

In Rome, we met groups of refugees from Northern and Eastern Africa who had begun to rebuild their lives and save enough to afford housing, yet struggled to convince landlords to rent to them. These refugees have secured some informal employment, generated savings, and are on the cusp of becoming self-sufficient in their host country. However, they are still left homeless and reliant on others for housing.

SOLUTION: CREDIT/ABILITY

Formal financial credit histories are often inaccessible to vulnerable populations like refugees and migrants, as they cannot account for the short-term, variable nature of their employment and expenditures. Credit/Ability is a 'credibility' scoring application that is tailored to the unique contexts of refugees and migrants —it is designed to be risk-conscious, but flexible enough to accommodate for the uncertainty and unique experiences of these users' lives.

Credit/Ability is designed to collate and verify a person's history, based on any informal or short-term employment they've had, payments or expenditures they've made, or subsidies they've received. In addition to a credibility score, refugees can also build a portfolio of verified references from former employers, landlords, or even service providers like churches to further demonstrate their reliability.

If a refugee's credibility score indicates sufficient ability to pay for agreed-upon lease terms, Credit/Ability works with organizational backers to provide a lease guarantee that puts refugees on the same footing as others looking for long-term housing.

Once refugees gain access to their lease, they can continue building their credibility scores by making timely rent payments. Over time, their increased scores and their portfolio of references can help prove their credibility for accessing a wider range of services including employment and loans, building their self-reliance and ability to integrate independently into their new country.

TECHNICAL INTERFACE

Credit/Ability's interface is tailored to the needs of 3 key stakeholders:

Refugees and Migrants: The primary users of the mobile website are refugees and migrants seeking to build a credit history or access leasing support. They gain the ability to update, share, and easily revoke access to their credibility score and financial history, and apply for support in obtaining a lease. As they continue to use the application, they are enabled to build their financial literacy and learn how to improve their scores to access wider services and increase their self-reliance.

Organizational Backers: Administrators from potential lease guarantors and cosigners access an interface that shows each applicant's financial history, credibility score, and a month-by-month delinquincy prediction of lease payment ability. This provides a financing guarantee approval process that is both risk-conscious and compassionate, enabling backers to use their money more effectively and make it go further for greater impact.

Lease Providers and Landlords: Users (refugees) must authorize viewing of their private profile page containing credibility scores and basic financial information. Lease providers and landlords receive a website link via email only once a refugee has granted access. Lease providers can view details of the refugees credibility profile, along with details of the lease guarantee and organizational backers.

Computed Risk Assessment: Probability of Delinquency by

Month

This assessment takes into account:

When the applicant ends the contract, the model uses bernoulli trial with p = employment. If the outcome is 1, the applicant gets a new job and to simulate the real lifethe length/contract

for the new job is either 1 or 2 or 3 or 4 months with the equal probability

month is 0.7

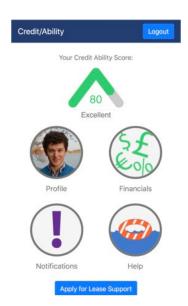
is for rent per month should ideally remain about 30% of the applicant's

ent rate is 0.7 i.e. the probability for the applicant to get a job wi

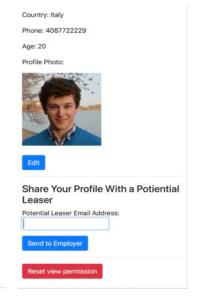
Probability of Delinquency 0.0% 0.0% 0.0%

0.0%

0.0%



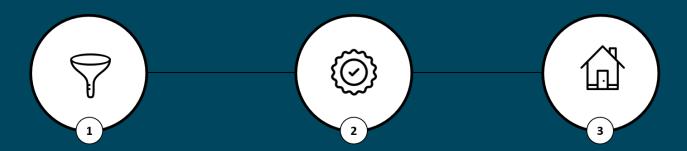
Organizational backers can view the likelihood of a refugee not being able to make rent payments, automatically calculated from their financial history



Mobile webpage where refugees can monitor their score, apply for lease support, & update personal profiles

Refugees retain control over who gains access to their profile and financial history

HOW IT WORKS



User inputs proof of informal or short-term employment held, payments or expenditures made, and subsidies received

Credit/Ability collates and verifies information, calculating a credit score and creating a credibility portfolio for user

Empowered by the user credibility portfolio, Credit/Ability works with organizational backers to act as guarantors on housing leases

OPERATIONAL MODEL

To identify initial users, Credit/Ability will partner with existing resettlement agencies and faith-based-organizations (FBOs) who are trusted service providers within the refugee community. These organizations are well-versed with the needs of the refugee community and local regulations. They can support onboarding efforts to ensure those who would benefit most from the application and lease support are identified and trained to adopt the solution.

These organizations are also devoting hundreds of resources to refugee resettlement, including direct grants and subsidies to help refugees access short-term housing. Credit/Ability will target networks of these organizations as initial guarantors to ensure their limited resources are spent as effectively as possible. Organizations can identify refugees who can independently cover their own housing and provide guarantees instead of direct grants or subsidies. If refugees do not 'default' on their lease payments, organizations can divert the guarantee funding to other refugees who are not able to support themselves.

Over time, we will continue to adapt our risk prediction model to match real lease default rates. As the model continues to strengthen, we will generate revenue through provision of risk assessment profiles to organizational backers, including our initial targeted resettlement agencies and FBOs.

WAY FORWARD

Credit/Ability won 1st place within the refugee and migrant category at VHacks with strong positive feedback from mentors and judges across the corporate, non-profit, and public sectors.

We are keen to evaluate opportunities to test, adapt and scale the platform. Key areas we are currently evaluating and looking for support include:

Building and Validating the Credit Risk Algorithm

We have begun research into existing credit scoring algorithms for other vulnerable populations and are in the process of refining our credit scoring system. A key priority is to evaluate potential partnerships with existing low-income credit experts to validate and expand our system.

Partnerships with Refugee Resettlement Agencies and Faith-Based Organizations

Our leasing and onboarding model relies on effectively partnering with existing refugee resettlement agencies. Not only will these organizations act as guarantors for leasing, but they will provide a point of entry to onboard identify target users and onboard them into the system. We have begun outreach to resettlement agencies in the United States (International Rescue Committee, Jesuit Refugee Services) and are actively looking for potential partners in Europe.

Pilot Implementation in 2 Geographies

We are discussing opportunities to implement and pilot our model this summer (June - August) and have team members committing full-time availability to run and monitor this implementation. We believe it will be critical to test this model in 2 different countries to adapt the algorithm and our partnership model to the unique regulatory environments within different markets. Through our outreach in the United States and Europe, we will identify 2 potential pilot sites for an initial implementation by June 2018.

Formalizing an Organization Structure

We have been approached to consider formally incorporating ourselves within Georgetown University. This would provide us an easy way to ensure continuity and not limit ourselves to the capacities/availability of our 5 existing team members. We are evaluating if it will be most effective to incorporate within Georgetown University's existing infrastructure or to register as an independent entity.