



Global Center for
Youth Employment



**Initial Research Paper on the Feasibility of
Providing Digital Economic Identities to Youth**





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INTRODUCTION

Making Cents International (Making Cents) has been supporting the delivery of financial services by microfinance institutions (MFIs) to Syrian refugees in Jordan and Lebanon through market research and technical assistance. However, flight risk remains a major concern and is limiting the degree to which microfinance institutions are willing to serve the Syrian market. To respond to this issue, Making Cents is currently implementing a proof-of-concept initiative to develop a “digital identity” for 500 Syrian refugees living in Jordan that could be used to communicate their credit history to financial institutions. Since refugees’ credit histories would remain with them when relocating within Jordan, returning home to Syria, or moving elsewhere, the digital identity would provide an incentive to repay loans. At the same time, the digital identity could facilitate access to credit in Jordan and upon their return to Syria, as the information included on the digital identity could demonstrate their creditworthiness to MFIs. This concept has been successfully used in other refugee situations, but the overall effectiveness was hampered by the use of paper certificates and unstable databases. In response, this initiative is creating the digital identities on a distributed ledger platform that promises greater security and utility.

At RTI’s Global Center for Youth Employment June 2017 “Ideathon” event, Making Cents was selected to extend this proof-of-concept to 250 economically active *youth* refugees, ages 18-25, living in Jordan. The resulting research project will assess the digital economic identity’s influence on youth’s access to and repayment of credit and youth’s hope for the future over the course of one year.

As the first phase of the project, Making Cents conducted a short feasibility study in early November 2017 in order to assess the potential and verify demand for BanQu’s digital economic identity platform in Jordan among potential clients and stakeholders of the microfinance sector. Findings from this field research and an accompanying desk review are found in this report.

BACKGROUND

After six years of conflict in their home country, roughly 6.5 million Syrian refugees are displaced in Turkey, Lebanon, and Jordan, among other countries. Jordan hosts over 650,000 Syrians, and an estimated 14.5% of these are youth between the ages of 18 and 25.ⁱ These refugee youth, especially those living outside of refugee camps, face a host of challenges in establishing their lives in Jordan, including limited educational and economic opportunities, discrimination (especially when pursuing formal education),ⁱⁱ and lack of access to basic services. Furthermore, Syrian youth refugees typically fall outside of the focus of programs targeting children and adolescents; as a result, they are considered part of the adult population and do not receive the specific services they need. This is especially true for young women, many of whom are already marriedⁱⁱⁱ with children by the age of 18.^{iv}

More than half of Syrian young people and children living in Jordan are out of school.^v Though the Jordanian government and various NGOs provide Syrian youth with some educational opportunities

Child Marriage in Jordan

Child marriage is a growing phenomenon among Syrian refugees. As of 2015, 44% of Syrian females married in Jordan during the year were between the ages of 13 and 17. This rate has been growing since 2012, when refugees first began fleeing to Jordan as the Syrian crisis began.

(ranging from nonformal training programs to public education through Jordanian schools), a mix of cultural, social, legal, and economic factors, such as transportation costs, lack of capacity in Jordanian schools, and bullying from local students, block Syrian youth from fully capitalizing upon these opportunities.^{vi} Young Syrian women generally prefer to stay within the formal education system but tend to drop out because of costs, family and household obligations, or travel restrictions.^{vii} In contrast, young men — who also face barriers in the pursuit of education and are under pressure to provide financial support to their families — often seek opportunities to earn money instead. This is especially pertinent for those with their own families.^{viii} The same holds true for young men living in refugee camps — REACH and the Norwegian Refugee Council (NRC) found in a recent youth assessment that older male youth prioritize employment opportunities over education, noting their need to support family members.^{ix}

Unfortunately, there are few consistent opportunities for young Syrian men and women to secure a decent livelihood. Jordan was already grappling with high youth unemployment, stagnant wages, and a lack of jobs prior to the Syrian war, and the refugee crisis has only placed a larger strain on Jordan's economy.^x In response, as the number of Syrians arriving in Jordan increased rapidly, the Jordanian government began restricting their access to formal employment opportunities by requiring Syrians to obtain work permits to work legally in Jordan.^{xi} Work permits were, and continue to be, issued for jobs in government-mandated economic sectors only; the sectors in which the most work permits have been issued include agriculture, manufacturing, construction, trade, and hospitality/food services.^{xii} However, the Jordan Compact, agreed to by the international community in February 2016 in London, placed a strong emphasis on job creation for Syrians, and as a result, the Government of Jordan streamlined the process for Syrians to secure one-year or short-term working permits, authorizing their employment with a specific employer.^{xiii} To obtain a work permit according to the new process, Syrians must submit their Ministry of Interior (MOI) service card, while the employer is required to submit a number of documents, including business registry, licenses, social security subscription for the employee, a signed employment contract, bank statement, and more.^{xiv} Fees associated with the process are minimal, but other related costs, such as those associated with obtaining documentation, are passed on from employer to employee.^{xv} Receipt of a work permit authorizes the Syrian refugee to work in the approved employment position only.^{xvi}

Despite this commitment, as of November 2017, the Government of Jordan has only issued 77,464 work permits to Syrian refugees (well below a goal of 200,000), of which 96% have gone to Syrian men, the highest share of whom are working in the agriculture sector.^{xvii} This increase in work permits has not been sufficient to secure employment for youth. As of early 2014, more than 60% of out-of-camp Syrian youth ages 15-24 were unemployed.^{xviii} Those Syrian youth that can find work are often restricted to low-paying and inconsistent daily wage employment. For example, 89% of Syrian refugee youth workers (ages 15-24) only earn between 1-299 JD (\$1-\$420 USD) per month;^{xix} given that the minimum wage in Jordan is 190 JD, many Syrian youth are earning below the poverty line. Furthermore, Syrian youth exert a disproportionate amount of effort to generate income — research shows that 48% of Syrian youth work 60 or more hours a week.^{xx}

Self-employment is one alternative for young Syrians. According to recent research, 21% of surveyed youth ages 18-29 earned their primary source of income 'from own/family business or self-

employment.^{xxi} For young men and women, common means of generating income might include working in construction, manufacturing clothes/shoes, doing farming activities, or selling groceries/food. However, Syrian youth face a number of constraints in pursuing self-employment. For example, young women's employment is constrained by gender and social norms. According to a recent study, the primary reasons given by surveyed women for not working (39% of whom were young women ages 18-30) included childcare, housework, and objections from the family.^{xxii}

Accessing finance is another challenge for Syrian youth who are, or who seek to be, self-employed. In general, few financial institutions in Jordan are offering credit products to Syrians, believing that they are too poor to repay or fearing that they will leave the country before repaying. Of those that are (Microfund for Women, Vitas), their focus is on adults who they consider to be more experienced, more interested in borrowing, and more likely to invest loans in a business. This perception is contradicted by recent research conducted by Making Cents that indicates that many younger Syrian refugees were slightly better off than older adults, mostly likely due to their greater flexibility and fewer dependents.^{xxiii} In addition, Syrian youth expressed interest in formal finance and when asked the primary reason they would take a loan if given access, 57% of men and 63% of women stated they would use it to start their own business, suggesting that they would make good clients. In the absence of formal credit, and with few loanable funds available from friends or family, many Syrian youth are unable to launch small businesses.^{xxiv}

UN agencies, international donors, and NGOs are responding to this challenge by supporting Syrian youth refugees in Jordan to secure decent livelihoods, despite a weak economic climate in Jordan and limited legal working opportunities. A number of entities, such as the United Nations Industrial Development Organization (UNIDO)^{xxv}, International Rescue Committee (IRC)^{xxvi}, NRC^{xxvii}, UNDP^{xxviii}, and the Near East Foundation, are beginning to offer business skills and/or vocational skills training to Syrian youth, often accompanied by a small grant to support them to start an income-generating activity. However, these programs serve only a small number of refugees. In addition, lacking access to ongoing credit, youth graduates from these programs struggle to scale up or expand their business activity after the support from these entities has ceased.

Digital Economic Identities: A Possible Solution

To respond to Syrian refugees' challenge in securing financing for self-employment, Making Cents, in conjunction with BanQu, MicroFund for Women (MFW), and the IRC, is currently beginning a pilot to determine the effectiveness of a *digital economic identity* as a tool to help **adult** refugees gain access to financial services in Jordan. In this proof-of-concept initiative, the identity will serve as a digital "personal locker" for storing authenticated information about individual refugees, such as their business, training record, and trust network; additional data, such as loan repayment information, can also be recorded on the identity. When recorded using distributed ledger technology, these identities become verifiable, immutable, and most importantly, portable. This proof-of-concept, testing the digital economic identity concept with 500 out-of-camp Syrian refugees living outside of camps, will begin in early 2018 and run for one year.

Digital economic identities can be mutually beneficial to the refugee and the MFIs. Information stored on the identity can help MFIs to more easily assess the creditworthiness of potential Syrian clients, reducing

the institution's credit risk and ideally resulting in more credit approvals. Since their repayment performance will be recorded on the identity and thus can help (or hinder) their ability to access finance upon their return to Syria (or resettlement elsewhere), the economic identity can also encourage repayment by refugee clients who are approved for loans, allaying MFIs' concerns around flight risk. Besides helping them to secure credit in Jordan and upon return to Syria, these digital lockers can answer other needs of refugees, including the provision of a secure place to store identification documents issued by the Syrian or Jordanian governments. This use of digital economic identities improves upon previous financial inclusion efforts with refugees that used paper certificates to communicate credit worthiness.^{xxix}

Supported by funding from RTI's Global Center for Youth Employment, Making Cents will expand this initiative in 2018 to establish digital economic identities for 250 **young** Syrian refugee entrepreneurs ages 18-25. Of particular focus will be economically active Syrian youth who are graduating from NGO-provided entrepreneurship support programs and seeking credit to start or expand their businesses. A digital economic identity comprised of records from the support program, such as training certificates, mentor attestation, and a business plan, can provide valuable information that will counteract MFI perception that youth are risky and inexperienced. This information is expected to support Syrian youth's applications for credit from MFIs, leading to more of them being approved for credit. As with adults, with loan repayment information immutably recorded on the identity, youth will be more incentivized to repay loans, with the knowledge that positive repayment data can be leveraged when seeking access to credit back home in Syria or elsewhere.

Proposed Model

The digital economic identities will be created on BanQu's distributed ledger technology-based platform using technology commonly known as "blockchain". Distributed ledgers are decentralized and immutable (unable to be changed) records of economic transactions. BanQu has created its digital identity solution on a distributed ledger platform as a secure means to provide individuals, rather than a centralized authority, the ability to record and confirm transactions. This technology is particularly advantageous for mobile populations who cross borders, as it will provide an identity that is portable, secure, and verifiable. More information on BanQu's digital identity solution is available at www.banquapp.com.

In this proof-of-concept initiative, a local organization will pay BanQu for the license to use the company's platform and enable refugees to create economic identities. Refugees will create digital economic identities through pre-approved organizations, such as MFW and the IRC. MFW and IRC staff will provide an orientation to refugees about the platform, explaining the purpose of the identity, how information can be entered and accessed, and how the owner can allow others to view parts of the identity.

Then, data will be entered through two-party "transactions" whereby both parties authenticate that the data is true. For example, at enrollment, the refugee might request through the platform that the partner organization verify their identity and related identification documents. The partner organization would review the documents and then authenticate them on the platform, allowing the documents to be placed on the refugee's identity. Once information is authenticated on the identity, the refugee would *control access and viewing of the data*. They can grant permission to various people or organizations to see parts of their economic identity, such as transaction history or a certificate tied to an asset (like a vehicle

registration), on a case-by-case basis or during a period of time (e.g. a loan cycle). For example, the refugee may allow a financial institution (in Syria, Jordan, or elsewhere) to view his or her transaction or business history with another financial institution in Jordan or elsewhere in order to establish credit eligibility.

RESEARCH OVERVIEW

Given the innovative and untested nature of this initiative, our focus during the project will be to research the effects of the digital economic identity, especially upon Syrian youth ages 18-25. Two primary research questions focus on the credit use cases: first, that having a digital economic identity will facilitate refugees' access to credit (by making the credit assessment process easier for MFIs), and secondly, that having an identity will increase refugee loan repayment (as credit history will be immutably recorded on the identity). The third primary research question focuses upon whether having a digital economic identity makes a young person more hopeful for the future (see box).

This research is being conducted in three stages:

1. Initial qualitative research on the feasibility of providing digital economic identities to youth taking place in November 2017
2. Establishment and monitoring of digital economic identities between April and August 2018
3. Final qualitative research on the influence of digital identities on youth's access to credit and credit repayment in August/September 2018.

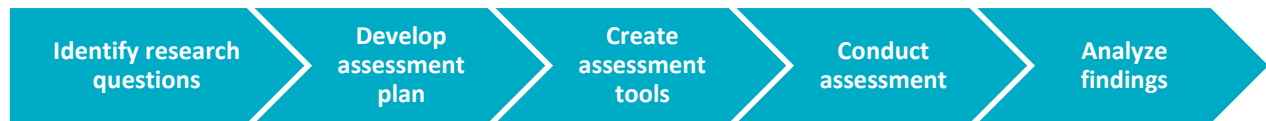
Project Research Questions

1. Does having a digital economic identity facilitate refugee youth's access to credit through formal financial institutions?
2. Does having a digital economic identity influence refugee youth credit repayment rates?
3. Does having a digital economic identity influence a refugee youth's plans/aspirations for their future?

Initial Research on the Feasibility of Providing Digital Economic Identities to Youth

In November 2017, Making Cents followed a five-step qualitative research process (Figure 1 below) in order to assess the feasibility of providing digital identities to Syrian youth in Jordan.

Figure 1: Making Cents' Research Methodology



As part of this five-step research process, Making Cents:

1. **Identified Research Questions.** Making Cents determined the primary and secondary research questions to answer as part of the overall project and then used these questions as a basis for the development of the assessment plan and tools for the feasibility study component.
2. **Developed Assessment Plan.** Based on research questions, Making Cents developed an assessment plan for the study in collaboration with project partners (BanQu, MFW, IRC) outlining the research methodologies to be used for gathering data (i.e., focus group discussions, stakeholder interviews, desk review), the target populations for the study, and the times/locations for assessment activities.
3. **Created Assessment Tools.** Making Cents developed a focus group discussion (FGD) guide to lead the facilitator through a series of open-ended questions designed to solicit a variety of information from youth and ranking exercises to enable participants to prioritize their responses. The FGD also included a paper-based demonstration of the BanQu platform.
4. **Conducted Assessment.**
 - **Focus Group Discussions** – Making Cents conducted five FGDs with youth in two Jordanian cities: on November 12th in Irbid and November 14th in Zarqa. Focus groups were conducted in English by Making Cents and translated into Arabic.
 - **Stakeholder Interviews** - Making Cents conducted interviews with Amman-based financial institutions, NGOs, and other stakeholders knowledgeable about Syrian youth livelihoods.
 - **Desk Review** – Making Cents consulted various secondary sources as part of a desk review included in the initial research process.
5. **Analyzed Findings.** Initial findings have been compiled by Making Cents and are presented in this report.

INITIAL RESEARCH FINDINGS

Making Cents conducted five total FGDs — three targeting young men and two targeting young women. In total, Making Cents met with 27 young people ages 18-25, all of whom were economically active. These youth were mobilized by MFW (existing credit clients) and IRC (current participants in entrepreneurship trainings). A market research firm also recruited economically active young men who were not associated with MFW or IRC from local communities. The average age of both young women and men was 21 years old. FGDs took place in two cities in Jordan – 16 young men and women participated in focus groups in Irbid, and 11 men and women participated in Zarqa.

Livelihoods of Syrian youth FGD participants varied by gender, age, and region. The majority of participants did not have steady work and were engaged in seasonal/casual labor jobs (men) or home-based micro businesses (young women). For example, a number of young men were earning income through painting, construction, metal working, and mechanics, while one young woman was participating in a home-based retail business. One young woman aged 20 tried to start a home-based food production business with her mother-in-law using her MFW loan, but the business failed.

Capability of Youth to Use BanQu Platform

Making Cents asked youth questions about their access to and use of digital technologies. This questioning was designed to help assess the overall digital capabilities of refugee youth and their interest/ability to use the BanQu digital economic identity platform.

Access to Technology. Overall, youth participants have access to digital technology, primarily through mobile phones. All but three youth (one young man, two young women) had internet-enabled smartphones. Of those without phones, one young man used his brother's smartphone, one young woman had given her phone to her husband when his broke (she expected to get a new phone herself in time), and the third young woman was simply not interested in mobile phones, to the chagrin of her husband. She did, however, have access to her husband's phone when she needed it.

In addition to mobile technologies, several youth had access to computers at their homes, and a few others noted having and/or using computers back home in Syria for personal or for business purposes.

Use of Technology. Youth use their mobile phones for multiple purposes. All of the participants used mobile phones for communication, either through calls and texts through a SIM card or through voice/chat communication applications such as Skype, WhatsApp, Facebook Messenger, IMO, and Viber. Use of email was less common, with only a handful of young men referring to email accounts.

Use of social media was very high among youth respondents. Social media platforms mentioned include Facebook, Twitter, Instagram, and Snapchat. Other uses of the internet through mobile phones included accessing YouTube, an online marketplace called 'Open Souk', and websites, such as those for embassies. One individual shared that he used Google Drive to store some of his documents online; a few others noted that they had taken photos of documents on their phone for safekeeping.

Figure 1 Popular Applications Used by Syrian Youth FGD Participants



Technology Cost. Youth shared that they were on their phones for multiple hours a day, from a few hours in the evening to “all the time.” Frequency of data use impacts the amount of money Syrians are spending on mobile credit (from both data/voice services). On average, participants reported spending between 5-10 JDs/month on credit, a relatively high proportion of their income,^{xxx} with some young men spending up to 20 JDs/month. Several participants shared that they have Wi-Fi at home, at a cost of 20-30 JDs/month. Others use public Wi-Fi where they can, but oftentimes run into challenges when they do not have the right passwords.

Feedback on the BanQu Platform. After providing an overview of the BanQu solution, participants were asked their initial opinions. Initial responses were overwhelmingly positive, with individuals noting that such a platform would be ‘amazing’ and ‘beneficial.’ Participants asked a number of questions about the platform, ranging from ‘Is it available now?’ and ‘How do I sign up?’ to ‘Is it legal?’ and ‘Is this a searchable database that others could access?’ After responding to initial queries, participants were asked about the positive aspects of the platform. Many noted the convenience and security of having all of one’s documents in one place, and how having had a platform such as this in the past would have made their transition to Jordan much smoother. When asked to vote for which of the platform’s features were most attractive, many noted that the platform ‘meets their needs’ (for document storage) and is ‘private’ and ‘secure.’ The biggest concerns the participants voiced about the platform were around privacy/confidentiality of data, data security (ability to withstand hackers), and cost to access the platform via mobiles.

Youth were asked to vote whether they would be interested in using the platform: 76% shared that there was a high likelihood they would use the digital economic identity platform while 24% said there was a medium likelihood they would use it. No youth voted that they would not use the platform. However, some youth noted that they wouldn’t really know the value of the platform until they tried it, and that how much they used it would depend on how useful it was to them at that time.

Potential Usage of BanQu Platform. Participants offered their ideas about how they might use the platform. Document storage was highlighted as a major benefit of the solution, especially the potential added layer of verification of documentation. Others noted that they could use the platform to demonstrate their creditworthiness or their employment history as they sought credit or employment. A few young women expressed hope that the platform could allow them to connect with others and expand their network.

Figure 2 BanQu Platform Arabic Demonstration Tool



Making Cents asked youth specific questions about whether having a digital economic identity would incentivize repayment of credit, given that BanQu would capture both successful repayment and loan default data. This was not a concern to youth, as they thought it fair that failure to repay a loan would follow him/her historically in their digital identity. Most felt that they would never fail to repay a loan, so this situation was only theoretical. When asked about their comfort if

this platform were made an MFI requirement as part of the loan approval process, participants were similarly comfortable with this concept.

Participants were given an opportunity to offer guidance and advice to Making Cents and BanQu on the platform. The bulk of the suggestions centered on making the interface easy to use in Arabic, with others noting the need for security and marketing for uptake.

Ability of BanQu Platform to Solve Other Youth Problems

The BanQu platform is a multifaceted solution with the potential to respond to multiple challenges youth refugees face, including demonstrating credit/employment-worthiness and document storage. To understand to what extent the 'personal digital locker' component of the BanQu solution might be useful for youth, Making Cents asked youth questions regarding their forms of identification and documentation.

Refugees' Identification Documents. The majority of youth possess a security card from the Jordanian Ministry of Interior (MOI); this card, in effect, gives them legal status as refugees in Jordan. The other common document that Syrian refugees have is their UNHCR registration paper, obtained when they officially registered with the UN agency upon arrival in Jordan. With these two documents in hand, Syrian refugees typically do not face any challenges in living in Jordan legally.

In addition to the MOI and UNHCR documents, some Syrian youth also possess forms of identification from Syria. Several had access to a 'family booklet' issued by the Syrian government that is a compilation of all official family records, including certified marriages and births. Other Syrian refugees still have their Syrian national ID card or passport, issued before the war. The Jordanian government also issues certified documents for life events that occur while the refugees are living in Jordan; some youth had received marriage and birth certificates from the Jordanian government.

Challenges Regarding Identification and Documentation. Syrian FGD participants noted that their biggest challenge with regards to their documentation is that they are missing many of them. Many refugees left key documents, such as educational certificates and marriage/birth certificates, behind in Syria when they fled their homes. For example, one participant shared how he left his driver's license in his car back in Syria, assuming he would come back to it. An additional challenge is centralizing complete family records. Though no FGD participants mentioned this specific case, other stakeholders interviewed noted that couples married in Syria, but not in possession of their marriage certificate, face difficulties registering the birth of children in Jordan.

Another significant challenge noted by the young men in particular is that they lack income and employment records, as most work illegally and receive pay 'under the table.' They recognize that it is difficult for them to prove a source of income and a history of employment, and this lack of documentation impedes their ability to seek credit or secure a new employment opportunity.

Benefits of BanQu Solution. Refugee youth noted that while their MOI and UNHCR documents are sufficient for life in Jordan, when they return to Syria (or are resettled elsewhere), they will once again start lives anew. Though the youth plan to carry paper copies of any relevant documents back with them to Syria, they worry that the documents could get lost or could be insufficient in helping them access credit or employment back in Syria. With these challenges in mind, youth were very interested to hear

how the BanQu platform could help them easily store and access their important documents as well as capture information regarding their business records and loans.

Digital Economic Identities and Impact on Youth Hope

Research shows that Syrian children and youth suffer from mental health issues stemming from trauma, loss, and exposure to violence.^{xxxii} Barriers to resuming education and establishing livelihoods compound existing mental health challenges, and over time, children and youth can feel marginalized, hopeless and become depressed.^{xxxiii} To combat these feelings and to foster renewed hope, children and youth “need a sense of security, belonging, and the opportunity for a better future.”^{xxxiii} With this in mind, the proof-of-concept initiative seeks to determine to what extent, if any, a digital economic identity might influence a young person’s hope for their future. One hypothesis is that by having an identity replete with authenticated information on business experience and skills, young people may feel more confident in their ability to leverage these records for future employment or access to credit, in Jordan or elsewhere. Furthermore, refugee youth may feel more involved in the greater system around them, fostering a feeling of belonging. The privacy and immutability of the identity may also provide refugee youth with a greater feeling of security.

To measure the influence of a digital economic identity upon a refugee youth’s hope for the future, Making Cents developed a short self-report survey based on two validated indices developed to assess levels of hope in children and youth. In these indices, hope is defined as “broad trust that the future will turn out well, in one’s own life and in general,”^{xxxiv} and is considered to be “reflective of a combination of agentic and pathways thinking towards goals.”^{xxxv} Under this initiative, Making Cents, in conjunction with project partners, plans to apply the self-report survey with youth upon enrollment on the BanQu platform and then again at the six-month mark, when young people have begun to populate their identities with information and are more familiar with BanQu.

To test the tool, Making Cents applied the survey with refugee youth during FGDs. In general, youth found the survey easy to use, though parts will need to be better translated in the future. Results from initial testing of the tool show that youth refugees’ self-reporting of hope is mixed, with youth in general feeling more hopeful than less. Despite this, qualities such as the ability to problem-solve and reporting on life status (‘doing well’) do seem to be fairly low. However, more systematized collection of data using the hope survey will take place upon youth’s enrollment in the BanQu platform and later on during the monitoring period. Data collected in these efforts should prove more conclusive on the ability of the BanQu platform to influence refugee youth’s hope.

In general, refugee youth initially agreed that if they had access to the BanQu platform, and that if the platform could facilitate opportunities for credit and/or employment, they would feel more hopeful for the future.

Capability of Partner Institutions to Use BanQu Platform

As part of this feasibility study, Making Cents also interviewed representatives from partner organizations, Microfund for Women and the IRC, and other MFIs/NGOs to assess their interest in and the possibility of implementing the BanQu technology solution with Syrian refugees, including youth.

Microfund for Women. Making Cents interviewed MFW loan officers and project managers to understand MFW's existing loan assessment processes and to assess how the BanQu solution could fit into those processes. Findings from interviews show that it will be straightforward to align the BanQu platform with MFW's existing processes, which will expedite the integration of the platform into MFW activities. Furthermore, when asked their opinions on the proposed BanQu solution, MFW staff shared that the platform could be useful in MFW's credit assessment process. If an individual's identity could contain verified information about their business, an individual's capacity to run their business effectively, and an individual's business network, the MFW credit assessment process could be shortened. In addition, the more information a loan officer had on a potential client, the better placed a loan officer would be to recommend an appropriate loan amount for the individual. With regards to implementation, MFW is willing to both enroll potential clients onto the platform and then upload verified data on an individual's loan repayment onto the platform. They are also interested in requesting access to an individual's economic identity (for those enrolled at the IRC) as part of the loan assessment process.

International Rescue Committee. Making Cents interviewed a representative from the IRC's Economic Recovery and Development unit to learn about its existing livelihoods programs and how data from these programs could be uploaded onto the BanQu platform to accelerate the MFW credit assessment process. The BanQu platform can be configured to align with IRC's existing processes and thus will be able to be integrated into their practices easily. For implementation, the IRC is interested in and willing to collaborate with Making Cents and MFW to enroll their youth clients onto the platform. Enrollment would most likely occur for new clients at the start of the livelihoods training program, as well as during follow-on meetings/trainings for existing clients. As clients complete aspects of the livelihoods program, IRC staff will verify and upload key data points, such as training certificates, business plans, monitoring reports, and mentorship attestations, onto the BanQu platform for individual clients.

Other MFIs and NGOs. Other MFIs and NGOs interviewed have similar capabilities to those of MFW and IRC. They currently use information systems to assess and track clients and could adapt their procedures to enroll refugees and use their credit assessment data, or to track refugee beneficiaries. There is already a practice of information-sharing among these groups, so contributing to a shared database like a digital ledger has been normalized and could be added to their practices easily.

CONCLUSION AND NEXT STEPS

In this phase of the research, Making Cents found that refugee youth are very interested in establishing digital economic identities, as the security and convenience of BanQu's 'digital personal locker' meets their needs for both document storage and compilation of verified records/attestations of employment and credit history. Refugee youth are generally equipped with the devices and skills necessary to access the BanQu platform, though data costs may challenge access when free Wi-Fi is not available.

Based on these findings, Making Cents is proceeding to create 750 digital economic identities for Syrian refugees in 2018, of which 250 of these identities will be for youth ages 18-25. To achieve the project's research objectives, data will be collected on youth by project partners upon enrollment of refugees onto the BanQu platform, including the completed youth self-survey reports on hope. Six months following enrollment, partners will conduct another round of data gathering; additional information, such as loan

acceptance and repayment rates, will be compiled from MFW. To allow more rigorous analysis of results, clients will be selected (when possible) using a quasi-experimental design that includes a random selection of clients who obtain an identity and a comparison group.

This data will be leveraged to assess the influence of these identities upon youth's ability to access credit, the effectiveness of the identities to facilitate repayment of credit by refugee youth, and other influences on refugee youth attitudes towards returning to Syria (e.g., hope, future orientation).

Specifically, the 2018 detailed implementation plan for the project is as follows:

- **Develop and test the digital economic identity platform (January – April 2018).** During this time period, the BanQu digital economic identity platform will be configured for this project, including a fully functional Arabic-language interface. In addition, Making Cents and BanQu will train project partners on how to use the BanQu system and how to support refugees to enroll and access their identities.
- **Enroll refugees onto the BanQu platform (April – June 2018).** Enrollment of Syrian refugees onto the platform will begin in April and continue on a rolling basis until all 750 identities have been established. Project partners (MFW, IRC) will lead the enrollment process. Initial data on refugees will be collected upon enrollment.
- **Monitor project implementation (April – September 2018).** Making Cents will provide ongoing technical assistance to project partners and will monitor overall project progress in this six-month period. As part of this monitoring activity, Making Cents will submit a Field Monitoring Report in August 2018.
- **Capture and disseminate project results (September – October).** At the end of the project, project partners will collect another round of data. Making Cents will analyze the data and produce a final research paper on the project. This research will be presented as part of a future RTI-hosted webinar/learning event.

Making Cents will proceed with the preparations for this proof-of-concept initiative. The next deliverable to be produced under this project is the Field Monitoring Report, due in August, presenting interim results of the acceptance by youth of the digital economic identity, and its initial influence on loan acceptance and on forward-looking behaviors (e.g. agency, positive self-concept).

ⁱ Christophersen, Mona. "Educating Syrian Youth in Jordan: Holistic Approaches to Emergency Response." Dec. 2015, www.ipinst.org/wp-content/uploads/2015/12/IPI-Rpt-Syrian-Refugee-Youth-Final1.pdf.

ⁱⁱ *Consultations with Youth from Refugee and Jordanian Communities*. UNHCR, 8 Nov. 2017, <https://reliefweb.int/report/jordan/consultations-youth-refugee-and-jordanian-communities-enar>.

ⁱⁱⁱ Laub, Karin. "Spike in Number of Syrian Teens Marrying as Child Brides in Jordan." *The Independent*, 7 Aug. 2017, www.independent.co.uk/news/world/middle-east/child-brides-jordan-syrian-teenage-refugees-a7880831.html.

^{iv} "A Study on Early Marriage in Jordan 2014." UNICEF, 2014, www.ipinst.org/wp-content/uploads/2015/12/IPI-Rpt-Syrian-Refugee-Youth-Final1.pdf.

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- ^v Christophersen, Mona. "Educating Syrian Youth" (see endnote i)
- ^{vi} Ibid.
- ^{vii} Ibid.
- ^{viii} Ibid.
- ^{ix} *Youth Assessment Zaatari and Azraq Camps*, Jordan. REACH, Nov. 2016, www.nrc.no/globalassets/pdf/reports/youth-assessment-zaatari-and-azraq-camps/youth-assessment-zaatari-and-azraq-camps-jordan.pdf.
- ^x "Verme, Paolo; Gigliarano, Chiara; Wieser, Christina; Hedlund, Kerren; Petzoldt, Marc; Santacroce, Marco. 2016. *The Welfare of Syrian Refugees : Evidence from Jordan and Lebanon*. Washington, DC: World Bank. © World Bank. <https://openknowledge.worldbank.org/handle/10986/23228> License: CC BY 3.0 IGO."
- ^{xi} *Work permits regulations and employment outcomes of Syrian refugees in Jordan: towards the formalisation of Syrian refugees employment* / International Labour Organization, Regional Office for Arab States. - Beirut: ILO, 2017.
- ^{xii} *Syrian Refugee Unit Work Permit Progress Report*. Ministry of Labour Syrian Refugee Unit , 3 Dec. 2017, <https://reliefweb.int/report/jordan/syrian-refugee-unit-work-permit-progress-report-november-2017>.
- ^{xiii} *Work permits regulations* (see endnote xii)
- ^{xiv} "Frequently Asked Questions: Work Permits for Syrian Refugees in Jordan." UNHCR, Nov. 2017, <https://data2.unhcr.org/fr/documents/download/60951>.
- ^{xv} *Work permits regulations* (see endnote xii)
- ^{xvi} "Frequently Asked Questions" (see endnote xv)
- ^{xvii} *Syrian Refugee Unit Work Permit Progress Report*. Ministry of Labour Syrian Refugee Unit , 3 Dec. 2017, www.reliefweb.int/sites/reliefweb.int/files/resources/MinistryofLabourSyrianRefugeeDepartment-WPsMonthlyProgressReportNovember2017.pdf.
- ^{xviii} *Impact of the influx of Syrian refugees on the Jordanian labour market: findings from the governorates of Amman, Irbid and Mafrq/Svein Erik Stave and Solveig Hillesund* ; International Labour Office ; Fafo Institute for Applied International Studies. - Geneva: ILO, 2015.
- ^{xix} Ibid.
- ^{xx} Ibid.
- ^{xxi} "Microfinance for Syrian Refugees - The Lebanese and Jordanian Market", Making Cents International, November 2017.
- ^{xxii} *Women Working: Jordanian and Syrian Refugee Women's Labour Force Participation and Attitudes Towards Employment*. UN Women, Aug. 2016, http://www.reachresourcecentre.info/system/files/resource-documents/reach_jor_report_working_women_jordan_and_syrian_refugee_womens_labour_force_participation_and_attitude_towards_work_august_2016.pdf.
- ^{xxiii} "Microfinance for Syrian Refugees" (see endnote xxii)
- ^{xxiv} "Agriculture and Syrian Refugees in Jordan: Current Situation and Opportunities Ahead." UNHCR Jordan, 23 July 2017.
- ^{xxv} "New Entrepreneurship Development Programme for Syrian Refugees and Farmers of Host Communities Launched in Jordan." UNIDO, www.unido.org/news/new-entrepreneurship-development-programme-syrian-refugees-and-farmers-host-communities-launched-jordan.
- ^{xxvi} "The IRC and Citi Foundation Partner to Mentor Refugee Youth in Entrepreneurship." International Rescue Committee (IRC), 4 Oct. 2017, www.rescue-uk.org/press-release/irc-and-citi-foundation-partner-mentor-refugee-youth-entrepreneurship.
- ^{xxvii} "The Netherlands Support Jordan in Coping with the Protracted Syrian Crisis." NRC, Nov. 2016, www.nrc.no/news/2016/november/the-netherlands-support-jordan-in-coping-with-the-protracted-syrian-crisis/.

^{xxviii} “Emergency Jobs Sow Long-Term Livelihoods for Youth in Jordan.” UNDP, www.undp.org/content/undp/en/home/ourwork/ourstories/emergency-jobs-sow-long-term-livelihoods-for-youth-in-jordan-.html.

^{xxix} Nourse, Timothy. *From Refuge to Return: Operational Lessons for Serving Mobile Populations*. USAID 2004

^{xxx} Though the average income of Syrian refugee youth is not known, findings from quantitative research on Syrian refugees conducted in Jordan by Making Cents can put mobile costs in perspective to total Syrian *household* income. This research found that the average income for Syrian households surveyed (out-of-camp adult and youth refugee households) ranged by source of income. Households with a primary source of income: from wages or salary (permanent work) earned an average of 270 JOD per month, from wages or salary (temporary or seasonal work) earned an average of 226 JOD per month, from business or self-employment earned an average of 257 JOD per month, and from agriculture or farming activities earned an average of 290 JOD per month. Thus, individual Syrian youth average mobile costs represent between 2-4% of the total *household* income.

^{xxxi} Sirin, Selcuk R., and Lauren Rogers-Sirin. *The Educational and Mental Health Needs of Syrian Refugee Children*. Migration Policy Institute, October, 2015.

^{xxxii} Ibid.

^{xxxiii} Ibid.

^{xxxiv} Lippman, Laura, et al. “Measuring Flourishing Among Youth.” *ChildTrends*, 19 July 2012, <https://www.childtrends.org/wp-content/uploads/2013/05/FlourishingChildren.pdf>.

^{xxxv} “Pathways thinking” is defined by the authors as being able to envision differing means to achieve their desired health outcomes, and “agentic thinking” is the ability to initiate and sustain efforts at applying oneself to these means. See Snyder, C. R., et al. “The Development and Validation of the Children's Hope Scale.” *Journal of Pediatric Psychology*, vol. 22, ser. 3, 1997, pp. 399–421. 3.