



# **R-COIN**

## **Building Social Infrastructure and Identity for Refugees and the Stateless**



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## ABSTRACT

The report provides an assessment of a pilot project led by the Rohingya Project (RP), a Malaysia-based refugee-led non-profit social enterprise. The pilot has entailed the valorization and circulation of a blockchain-backed crypto-token called “R-Coin” (short for Refugee-Coin) to 35 participating refugee volunteers. R-Coins were distributed to refugees upon completion of voluntary community-based social services: teaching, cleaning, counseling, etc. The earned R-Coins were eligible for exchange for different ‘prizes,’ from the relatively trivial (Starbucks food/beverage cards) to the essential (ATM Cards; Health Insurance). As Malaysian law prohibits refugees from working, and health services are often prohibitively expensive, R-Coin hence addresses an immediate need by delivering critical goods. R-Coin has medium- and longer-term goals as well, however, including improving skills, integrating refugees into markets, developing networks (medium term), and using the digital record created by the transfer of an R-Coin as a way to build a refugee’s personal identity (longer term). This report describes the pilot’s processes and identifies challenges and potential solutions for roadblocks to efficient and more complete uptake of the R-Coin (of the 35 participants there was significant variation in the engagement with volunteer activities). The report then turns to assessing the medium-term objectives, finding that while these objectives remain mostly potential for the R-Coin, the project has allowed RP to more clearly identify those opportunities and to strategize on how to achieve them. Finally, the report discusses the longer-term objective immanent but unrealized thus far in R-Coin: using it as a ‘first step’ in building a digital identity, one that can give refugees new and valuable opportunities (including ‘financial inclusion’: bank accounts and loans). In this sense while many recent techno-governance innovations promise to improve refugee lives but succeed in more efficiently controlling them, RP has appropriated these technologies and redeployed them in an effort to *transform*, rather than manage, refugee lives. The paper concludes by outlining some procedures in an expansionary phase of R-Coin that could help this transformation materialize.

## Part I: R-Coin Pilot

# Introduction: Refugee Challenges and Responses in Malaysia

Malaysia's political and legal environment creates an ambiguous social situation for refugees and asylum seekers. On one hand, political leaders have communicated to constituents that Malaysia has a long-standing commitment to compassionate refugee care – welcoming both Southeast Asians in the past (Cambodians, Vietnamese) and, presently, those from around the world: Yemenis, Syrians, Somalis, Palestinians, Afghans, Burmese Muslims, Chin, and Rohingya. This means that although legally refugees are considered no different than other so-called 'illegal migrants,' Malaysia permits the UNHCR to identify, register, and distribute an identification card to refugees, which is meant to prevent detention or deportation by immigration officials.

On the other hand, even though it tolerates these refugees, Malaysia is a non-signatory of the 1951 UN Refugee Convention, meaning that it is not obligated to provide care and support for refugees in its territory. Malaysia thus retains the sovereign privilege to formulate its own policies, meaning it is not ultimately compelled to respect its own arrangements with UNHCR: even refugees holding the UNHCR card have ended up in detention centers, where the period of detention is rarely less than two weeks, and death has even occurred.<sup>1</sup> Moreover, Malaysia has prohibited refugees from legally working, denied them access to critical public services (particularly education and health), and barred them from holding bank accounts. While receiving money from humanitarian programs can address perpetual problems of daily life, it also can effectively perpetuate such problems, to which refugees and stateless people in KL – many of whom are now enduring a second generation of exclusion – can attest.

As a result, refugees face a set of interlacing challenges, in which their quasi-legality not only inhibits their livelihoods, but also prevents them from transforming their lives. For instance, they are not able to build skills to improve themselves throughout their lives and across generations. Further their ability to develop a personal identity is constrained, as their lives in the informal economy prevent them from capturing and recording any evidence of the skills they may have developed and the contributions they may have made. It is no surprise then that more than 60% of Malaysians “believe people claiming to be refugees and entering the country are economic migrants and want to claim welfare benefits.”<sup>2</sup>

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<sup>1</sup> The number of deaths of detained immigrants is bracingly high – as a 2017 expose found over 100 in that year and the year previous (Reuters 2017). Local refugee groups report that in a few cases even card holders have perished.

<sup>2</sup> The Star (Malaysia). “Over 50% of M'sians think asylum-seekers are economic migrants.” 20 Jun 2019 <https://www.thestar.com.my/news/nation/2019/06/20/over-50-of-msians-think-asylum-seekers-are-economic-migrants>

This exclusion from the formal sector (whether from the labor market or from government services) has meant that refugees have been compelled to develop sophisticated and robust social systems that allow them to manage the challenges of daily life. Much of this entails refugees supporting one another through direct mutual assistance – from sharing tasks such as child care duties and transport, to aiding with emergent challenges (such as sudden illness). To respond to more durable challenges – such as informal education to children excluded from Malaysian schools – community-based organizations (CBOs) have emerged to facilitate volunteer work.

Hence, refugees hence often express ambivalence about their lives in Malaysia: appreciation for the refuge provided, but frustration with the existential limbo and social derision that defines their lives – and the lives of their children as well.<sup>3</sup>

## Intervention

The Rohingya Project (RP), a Rohingya-run non-profit social enterprise, has responded to the challenges outlined above while leveraging the social infrastructure – local networks of support, CBO projects – that already exists. RP has implemented, with support through a grant from UNHCR’s Connectivity Fund,<sup>4</sup> a short-term pilot project called ‘R-Coin’ (short for Refugee-Coin) to test how a cryptocurrency token-based system can transform the lives of refugees in Malaysia.

It is important to acknowledge that the distributed ledger digital technologies that support crypto-currencies (namely, “blockchain”), have generated significant excitement, there are also attendant concerns about their efficacy. One critique is that rather than improving lives, they extend control over refugees.<sup>5</sup> Other criticisms hold that interventions merely place old wine in new digital bottles, with blockchain acting as a marketing tool rather than a way to substantively transform lives of the marginalized.<sup>6</sup> Indeed, while ‘blockchain for good’ has been much discussed,<sup>7</sup> blockchain-encoded “Community Coins” at first glance appear to embody that concern, seemingly recapitulating classic humanitarian programs while merely swapping Coins for the infinitely more fungible cash that preceded them.

While these concerns remain valid, RP has designed its R-Coin intervention to address both immediate material needs while also creating a system that seeks to redress the more entrenched challenges of refugee life introduced above. Specifically, R-Coin simultaneously addresses all four of the problems outlined earlier: refugees’ inability to work legally, their lack of bank accounts, their underdeveloped skills, and their absence of legal identity.

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<sup>3</sup> For a review of literature on life for Rohingya refugees in Malaysia, for instance, see Equal Rights Trust (2014); Wahab (2017), and Frydenlund (forthcoming).

<sup>4</sup> <https://www.unhcr.org/innovation/connectivity-for-refugees/fund/>

<sup>5</sup> See Madianou (2019); Privacy International (2019); Latonero (2019); for a more nuanced view, see Dohrs (2019).

<sup>6</sup> The Engine Room and Oxfam (2018).

<sup>7</sup> see Al-Saqaf and Seidler (2017).

To tackle the first problem of work being illegal, rather than paying refugees for formal labor, the project rewards volunteer work with R-Coin: one R-Coin per verified hour of volunteer work. Refugees then exchange the R-Coin for goods and services of ascending value: Starbucks food/beverage cards; Lazada gift cards (which can be used to purchase a broader range of consumer goods); an ATM card (giving refugees a mobile bank account); and health insurance packages (providing one year of health services). In this way, R-Coin addresses the most pressing needs: the inability to work legally and the reliance on volunteer work to make ends meet. R-Coin hence works with this existing social infrastructure, supplementing and strengthening it.



Figure 1: an ATM card earned by a Yemeni refugee during the project

How does this work? The R-Coin app was created by the German blockchain developer Datarella,<sup>8</sup> and is run on a private Ethereum blockchain network. This makes R-Coin unavailable for public trade, which ensures that it remains stable, non-susceptible to speculation-driven currency volatility. Yet, even whilst the R-Coin is not a currency but a reward points system, to make that system viable 'R-Coin' has had to circumvent the classic economy (of Malaysian Ringgit mediating exchanges of, for instance, labor, goods, and services) that, legally at least, excludes refugees. In its place, the project has sought to create a virtual economy – an entire social ecology in which the R-Coin mediates and valorizes exchanges that otherwise would not take on as much social value.

Specifically, this means that the R-Coin organizes four distinct entities together around itself, the successful arrangement of which produces new value: (1) **providers** who organize (and verify) volunteer activities; (2) **refugee** participants who complete volunteer activities and earn R-Coins; (3) **vendors** who accept the R-Coin and exchange goods/services for it; (4) the **funder** that circulates the R-Coin through the economy: distributing it to providers and then 'buying it back' from the vendors who had accepted it from refugees.

The technological backbone of the Coin is the blockchain, a decentralized ledger system that inscribes and distributes across multiple nodes any transactions involving the R-Coin: for instance, a volunteer hour is rewarded with an R-Coin transfer; an R-Coin is then exchanged for a vendor service like a gift card; both of these transactions are recorded with a small line of code copied to every node (computer) of the network. This system prevents double spending without requiring a centralized database that is vulnerable to hacking. The R-Coin is exchanged by way

<sup>8</sup> <https://datarella.com/>

of smart phones, stored on designated ‘R-wallets’ accessed through R-Coin’s application. RP felt confident that this was an appropriate platform for refugee communities given that its earlier survey of the Rohingya refugee population found 95% smart phone usage rate, and that representatives of other refugee communities agreed that the phone app was an appropriate tool likely to be used by refugees.

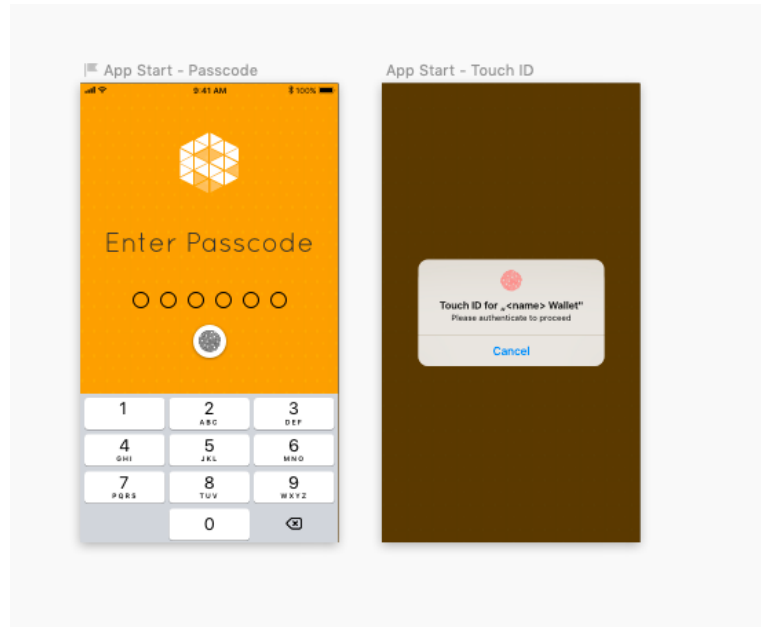


Figure 2: the R-Wallet that contains R-Coins and transaction records

## Outcomes

The first step of the project was hence to enroll providers of the volunteer opportunities (and provide guidance on how they would act as verifiers). These “**Field Partners**” were R-Vision (a Rohingya-led media firm); Malaysia Social Research Institute (a long-standing Malaysian NGO); Myanmar Muslim Refugee Committee (which supports the Myanmar Muslim refugee community); Project Stand Up (which supports Somali refugees); and Refugee Network Center (which provides training and livelihood support for refugees in Malaysia). These partners were responsible for: nominating refugee candidates; determining the community service tasks eligible for volunteering and designing feasible schemes for refugee volunteers to complete; designating a representative who would monitor and verify the completion of community service hours by participants and promptly transfer tokens to each participant as earned; providing weekly updates (progress and immediate feedback) to the R-Coin Project Coordinator; allowing the Coordinator to document the community service by each refugee participant.

**R-COIN REWARDS**

Refugee Participants can redeem their R-coins for the following rewards after 20 December

- GIFT CARD**  
STARBUCKS OR LAZADA  
GIFT CARD OF RM 50 VALUE  
R-COINS 10
- ATM CARD + INSURANCE**  
ATM CARD PLUS ANNUAL ACCIDENT INSURANCE COVERAGE  
R-COINS 20
- HEALTH SERVICE**  
HEALTH SERVICE PACKAGE INCLUDING BASIC MEDICAL CHECKUP AND SCREENING  
R-COINS 40
- BONUS**  
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ADD-ON GIFTS  
GROUPS CAN RECEIVE GIFT HAMPERS OR OTHER REWARDS

FOR MORE INFO  
CONTACT SAQIB  
(0178473839)

**PROJECT**

[www.rohingyaproject.com](http://www.rohingyaproject.com)

Figure 3: Prizes and equivalent in R-Coin

Second, **refugees** were enrolled into the program. While most came through referrals from the Field Partners introduced above, others heard about the project through word of mouth or direct referrals from R-Coin participants. A total of 35 refugees participated in the program, with an age range of 18 to 35, a gender breakdown of 15 female to 20 male, and nationality as presented in the table below.

Nationality	Number of participants
Rohingya	8
Somali	9
Yemeni	2
Palestinian	1
Myanmar Muslim	12
Afghan	3

The refugees accrued a total of 583 R-Coins (community hours) during the pilot period, which comes out to an average of 16 R-Coins per participant. While

initially the program targeted 1,000 community hours over a three-month period, due to delays, the pilot was restricted to just over a month: early November 2019 to late December 2019. The program’s 583 hours thus actually exceeds the *rate* of volunteer work (hours conducted divided by the duration of the project), and so it can be said that the pilot actually exceeded participation expectations.

These volunteer activities were mostly facilitated through the five organizations: at R-Vision, volunteers completed youth mentoring and motivation sessions, mental health education, group cleanups, children’s community activities, and computer training for youth; MSRI had recently launched a refugee school, and refugees provided volunteer teaching and tutoring; at MMRC volunteers completed communal cooking, transport services, and coordination with UNHCR to distribute aid to the MMRC community; at PSU volunteers sewed, baked, made jewelry, gave language training to students and youth mothers, and planned, conducted, and photographed community events. The breakdown by group, hours, and participants is presented in the table below. The final row, “non-group refugees” denotes those who completed volunteer work on their own, rather than through Field Partners, work that was confirmed by RP directly.

Group	Total Hours	Participants
R-Vision	112	8
MSRI	75	4
MMRC	131	12
PSU	233	6
RNC	18	1
Non-group refugees	10	4

Third, **vendors** were recruited to accept the R-Coin in exchange for their services. For instance, RP enrolled Health Capita to provide supplementary health services such as health checks.<sup>9</sup> At this stage in the pilot, the vendors were not required to accept the R-Coin directly. Rather, RP acted as an intermediary, in which refugees redeemed R-Coins through RP, who purchased the prizes and delivered them to the refugees. This intermediary role was further necessary for specific prizes: acquiring an ATM card legally requires the refugee to have a UNHCR card, be 18 years of age, and not be from a country deemed “high risk.” For the other vendors (Lazada, Starbucks), this phase acted as a proof-of-concept period, and in the next phase of the project the vendors will be encouraged to directly accept the R-Coin.

Fourth, and as demonstrated in the sections above, **RP** helped organize the process: it held two trainings on how to use the R-Coin (introducing R-Coin’s objectives and purpose; providing a guided user journey demo of the app; and on-boarding and registering the refugee participants); it employed the Project Coordinator who troubleshooted technical and programmatic problems that arose; and RP assisted in redemption of the prizes. In this way, RP was responsible for investing the entire process with trust.

<sup>9</sup> <https://my.healthcapita.com/HomePage.aspx>.



## Impacts

The project was assessed for its *differential* effects on the relevant variables: the refugees themselves, their networks / families, the organizations, and the broader community. In other words, how did the intervention – rewarding volunteer work with R-Coin – change conditions on the ground?

This is a relevant question because often R-Coin provided a way to remunerate volunteer labor already being done – hence it cannot be construed as ‘new’ volunteer work. In fact, besides a few cases of volunteers taking up new tasks (mostly facilitated by their incorporation into volunteer work groups organized by friends), a key finding from the evaluation of the pilot is that those who had not done much volunteering before the project continued to do little, while many who already had been doing volunteer work mostly did the same amount. This suggests that volunteering requires a social infrastructure – tasks available to which the volunteer can contribute, and from whose execution the volunteer can derive personal satisfaction. Volunteering is also enabled and constrained by one’s material situation: does one have the time to complete the tasks, or is the opportunity cost of that time spent on volunteering too great? Many would-be volunteers felt they needed to use that time working, looking for work, or studying to prepare for the job market. Further, one volunteer pointed out that volunteering is not only an opportunity cost but can bear its own direct costs: “We don’t have transportation to go to do work, I have to pay a lot for that. I have to rent a classroom even to do my teaching.”

Those who did the same amount of volunteering, but who were rewarded for it through R-Coin, reported that not only did it materially improve their lives, but that getting it recorded was personally meaningful. Raza, a Somali refugee: “I teach students who aren’t able to cope up with normal classes. I have got the ATM card and before I would have to keep money in hiding places, or under the mattress. Some carry it around with you, which is pretty risky.” She says she will feel safer once using the ATM card.

Finally, some who had already been volunteering used the R-Coin project to expand and deepen their involvement. For instance, a man who volunteered through MMRC had already been active in the community, before but then got “crazy involved,” as the Project Coordinator put it. He cleaned up the graveyard, and gave extra teaching classes to kids with challenges (two of whom were disabled). He was motivated to get health insurance because he had pre-existing health problems, but the fact that his increased volunteering was not simply instrumental was evidenced by the fact that he continued to do the volunteer work even *after* he got the health insurance card.

In terms of broader impact on communities, because so many of the volunteer activities rewarded refugees for doing work they did already, there was not a huge amount of *differential* impact on communities. A significant benefit, however, was to *families*, and to the local NGOs (the Field Partners) themselves. Families benefitted because the volunteers were now getting valuable goods (insurance, ATM cards) that they did not have before; Field Partners benefitted because they felt less pressure to come up with resources to pay their volunteers for work being done.

## Challenges:

The challenges can be divided between those that conveyed problems with the system's functioning to those which reflected more fundamental problems with the nature of refugee volunteer work.

Regarding technical problems, an overarching problem identified by the Project Coordinator was the low technical competence by users. "They don't have the larger vision, only 'if I do this, I get that.' No matter how many times I explain, they still see it that way." While this remains an obstacle, Aziz, a Rohingya volunteer, suggested that the learning curve is rapidly traversed, pointing out, "My mother now uses WhatsApp – she had not seen a phone a couple of years before." In expansion phases the project can use the short-term goods delivered through the R-Coin as a way of building technical capacity in users.

A related technical problem is that some refugees lost their Coins when theft or misplacement led to them losing their phones. The blockchain system typically precludes this outcome, as all records linking R-Coin transfers with an individual's personal wallet are immutable. But while the pilot used blockchain to record transactions, and while it gave users personal passwords to access their wallets, budget limitations and the short-term nature of the pilot meant the project did not create a 'private key' linked with biometric data, a critical link directly conjoining a user with her data. Instead, refugees were asked to back-up their private key on Google Drive. This extra step was, unsurprisingly, not followed by all of the refugees. This means that if these refugees lost their phones or deleted the app, they lost access to their wallets' contents. While introducing biometrics is still premature due to regulatory concerns, the next phase will work to address this issue by making it easier for users to back up the private key.

The second problem was one related to the vendor side of the ecosystem. Many refugees reported the absence of sufficient prizes, as the ones offered were not desirable. Some refugees, especially youth, were pleased with the Starbucks card – which allowed them to participate in a space of conspicuous consumption from which refugees are typically both materially and symbolically excluded. Others, however, found Starbucks frivolous given the many material problems in their lives. Health insurance was another divisive reward, with young men in particular eschewing it, while women and older refugees identifying it as the most useful. Even so, one female youth suggested that "health insurance can be for the family and not just for the child. The insurance is for one person and not even all that important." Generally, several asked for "more things to spend the R-Coin on," which gestures towards a desire to monetize the R-Coin (currently illegal under Malaysian law). Finally, the truncated pilot duration curtailed the prize list, leaving refugees frustrated that the initially promised laptops and smart phones did not materialize. "They were expecting [those prizes]. One guy was trying to get 100 hours so that he would be able to get a laptop and after he found out after accumulating a lot of Coins that it was not possible," as the Project Coordinator commented.

The third problem concerned the definition of volunteer work itself, and how it was differentiated from personal / self-serving work. The Project Coordinator identified a number of cases where claims had to be rejected: "one lady had a cousin staying with her – she let her stay for free, and tried to claim that [as volunteer

work]. ‘No you are related, so we cannot accept that,’ I had to say. Another lady was buying rice packets for her mother, which also did not count.” Some volunteers tried to take advantage of the system by getting rewarded for lackluster work: “Three guys came to the office and swept for a couple of minutes, and tried to get that to count. They were trying to take advantage.”

## Summary

Refugee participants’ rapid uptake of R-Coin and the enthusiastic participation in the ecosystem was explained in interviews by the allure of the prize system. Participants from all nationalities alluded to how, given that Malaysian law bars refugees from working, that health services are often prohibitively expensive, and that bank accounts are difficult to access, R-Coin addressed immediate needs. This success, it should be noted, was also recognized outside of the refugee community, as in January 2020 RP’s R-Coin project won the Malaysian National Recognition Reward in the Sustainability Category given by the Penang Business Forum.

But beyond these immediate goals, the project used the prize system as a way of encouraging initial enrolment and participation, rather than only promising longer-term goods (such as skills building or digital identity records) with less immediate benefit. The next sections describe those longer-term goals and how the project was able to build a consciousness of them in many refugees, if not yet delivering on them directly.

### **Part II: Medium term goals**

Turning now to the medium-term goals, this section describes the broader effects realized by the project, specifically focusing on how the life trajectories may have been altered. It finds that at this point most of the goals remain unrealized, but outlines ways in which the expansionary phase seeks to address them.

#### ***R-Coin for Skills-Building?***

Many of the existing volunteer activities (cooking, transport, cleaning) may not be seen as directly pertinent to building marketable skills. The Project Coordinator identified one of the benefits of the project as being able to finally reward such ‘ad hoc’ tasks that people did in the course of their lives – but also pointed out that these were not particularly sustainable or scalable. Moreover, other tasks – such as tutoring – do qualify as building skills, but can be interpreted as a *deepening* of an existing skill (acquiring more experience, principally) rather than a *qualitative expansion* of that skill.

To this end, R-Coin Phase 2 will seek to incorporate a feature we are calling the “0 coin transfer.” Here a transfer can be made but bestow no value, instead being used to create a record of the completion of an act (doing a training, for instance) that is not specifically ‘volunteer’ work. This way refugees can begin to record credentials they acquire, trainings they attend, tests they pass, and education they attain – all flowing into the ‘digital CV’ that the next iteration of the app will be engineered to generate (as will be expanded on in Part III).

### ***R-Coin for Social Integration?***

As part of its expansion phase, RP is planning to open R-Coin to Malaysians as well to show the potential for local/refugee social collaboration. The volunteers will work together at urban farm sites doing tasks such as gardening, cleanup, and composting. The redemption of the R-Coin will be available at nearby local coffee houses at point of sale, integrating businesses into the network. The importance of having businesses onboard is not just to increase the list of reward options but also to have them act as standard bearers for refugee acceptance and social integration.

### ***R-Coin for Employment?***

The project would like to give refugees more consistent employment with local firms as part of those companies' Corporate Social Responsibility (CSR) projects. The future goal is for these companies to distribute R-Coin as a way to compensate the labor of those refugee who do tasks for them.

### ***R-Coin Social Networks?***

The pilot has allowed RP to re-imagine how R-Coin might facilitate inter-communal refugee collaborations in the future. Initially, RP presumed that R-Coin might serve as a way to develop social networks between various refugee communities, but at least during the pilot the linkages did not materialize. This was likely because the volunteer activities are located within Field Partners and hence there was little opportunity for new partnerships to be forged. That said, RP imagines that as the user participant size and rewards both expand (both the supply of refugees using R-Coin and the number of 'prizes'), then R-Coin can facilitate exchanges *between* refugees – supplanting cash because of the additional benefit provided by R-Coin: the record of one's labor (more on this directly below).

### ***A Better R-Coin – and a more robust ecosystem?***

While R-Coin records an individual's work, it also records the work accomplished by the Field Partners and the system they come to constitute together. As such, the system developed through the R-Coin, by recording the history of the community work, has potential to transcend classic NGO programs. Indeed, the system makes itself visible to new partners, acting as "proof of work," allowing potential recruits (funders, businesses, etc) to trust that the programs are doing what they claim.

Relatedly, because blockchain inscriptions can be graphically represented for others to view, potential partners – once properly vetted by the community – can view and learn about existing projects so as to then fill critical gaps in funding and programming. This is different from classic NGO projects that only make specific partial aspects of any given project visible to direct recipients and thus must represent them – through promotional materials or evaluation reports – to others. In the R-Coin case, by contrast, groups working in the R-Coin project can also build an alternative 'public' infrastructure, pulling in other partners and coordinating efforts to extend and deepen the utility of the ecosystem: new partners can observe where marginal extra effort should be contributed. Such a tool dis-intermediates gatekeeping entities (such as RP) from the funding and programming flow, building trust in the existence and functioning of the network (demonstrating that these

entities are neither overselling actual programming nor at risk of capturing additional contributions). In fact, the visibility provided by R-Coin spurs the potential decentralization provided by the blockchain architecture: RP will eventually not need to act as the authorizing entity, because as the R-Coin circulates it allows people to bank their hours and hence record themselves (and in turn the community) without any need for ratification from ‘above.’

As alluded to in “R-Coin Social Networks?” section just above, as the ecosystem is built, those who do not participate directly in volunteer work (those whose daily challenges preclude it) could be incorporated into the R-Coin system by simply taking part in the R-Coin economy, as a peer-to-peer user of it. For instance, let us imagine a refugee woman who wants to eventually find work in the childcare sector. She could get paid in R-Coin rather than in cash, which would allow her to build a record of her work. The vision here is that with every additional entrant into the ecosystem, the R-Coin accrues social trust, becoming more flexible, dynamic, useful – more socially valuable. In turn, the record of identity becomes more legible: R-Coin becomes socially recognized as the way of recording one’s existence.

### **Part III: Longer-term vision**

As elaborated throughout, the R-Coin goes beyond cash handouts, providing an additional benefit by acting as a tool that writes an individual’s personal history into existence. Refugees often lack this history, and thus cannot access services that many take for granted (such as loans and bank accounts). Even in the case above in which refugees access bank accounts, they can only get the accounts if they are vouched for by UNHCR and RP. As Aziz, the Rohingya refugee, commented about R-Coin’s record-keeping function: “I can have a record of what I’m doing. This could even help me if I got relocated to another country.” R-Coin’s next phase goes beyond the current mostly theoretical promise of blockchain for ID,<sup>10</sup> actually beginning to build identity.

In Phase Two, R-Coin will seek to upgrade its app to make that link between recorded transactions and personal identity easier for users to wield. The next step is to include in the app the functionality to automatically generate a “virtual CV,” which would arrange all the records of a user’s transactions in coherently organized document, with the authorizing partners included, available for printing or digital transfer. The project will seek general support from different stakeholders in the INGO and local sectors so the R-Coin can include this more sophisticated software.

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<sup>10</sup> see Bindi (2017); Miller (2017)

## Conclusion

While the potentially transformational nature of an R-Coin for refugees/stateless people may prove significant, so is the risk that benefits will fail to materialize. This is because of the perilous position in which refugee/stateless communities exist, and because of the significant external factors – state whim, regulatory hurdles, political concerns, technological failures, etc – that might undermine the R-Coin’s efficacy. That said, this summary has sought to outline the compelling trajectories that an R-Coin unlocks, and welcomes collaborative thinking on further applications and refinements. Building on the results of the pilot, R-Coin hopes to contribute to a brighter future for refugees – one that contains more opportunities, and one that is more firmly in their own hands.

## Citations

- Al-Saqaf, Walid, and Nicolas Seidler. "Blockchain technology for social impact: opportunities and challenges ahead." *Journal of Cyber Policy* 2.3 (2017): 338-354.
- Bindi, Tas. "Microsoft and Accenture Develop Blockchain ID System for Refugees." ZDNET.com, 20 June 2017 <https://www.zdnet.com/article/microsoft-and-accenture-develop-blockchain-id-system-for-refugees/>
- Dohrs, Larry. "It’s High Time to Distinguish Between Biometric Systems and Technologies," *Good-ID.org*, 10 September 2019 <https://www.good-id.org/en/articles/its-high-time-to-distinguish-between-biometric-systems-and-technologies/>
- Equal Rights Trust. *Equal Only in Name: The Human Rights of Stateless Rohingya in Malaysia*, London, October 2014. <https://www.equalrightstrust.org/ertdocumentbank/Equal%20Only%20in%20Name%20-%20Malaysia%20-%20Full%20Report.pdf>
- Frydenlund, Shae. "Securitization, exploitation, and appropriation in Kuala Lumpur, Malaysia," Dissertation, University of Colorado, forthcoming.
- Latonero, Mark. "Stop Surveillance Humanitarianism," *New York Times*. 11 July 2019 <https://www.nytimes.com/2019/07/11/opinion/data-humanitarian-aid.html>
- Madianou, Mirca. "The biometric assemblage: surveillance, experimentation, profit and the measuring of refugee bodies." *Television & New Media* 20, 2019.
- Miller, Ron. "The Promise of Managing Identity on the Blockchain." *TechCrunch.com*, September 10, 2017. <https://techcrunch.com/2017/09/10/the-promise-of-managing-identity-on-the-blockchain/>
- Piore, Adam. "Can Blockchain Finally Give Us The Digital Privacy We Deserve?," *Newsweek*, 22 February 2019 <https://www.newsweek.com/2019/03/08/can-blockchain-finally-give-us-digital-privacy-we-deserve-1340689.html>
- Privacy International. "Privacy International’s contribution to Global Virtual Summit on digital identity," April 2019. <https://privacyinternational.org/advocacy/2994/privacy-international-participates-global-virtual-summit-digital-identity-refugees>
- Reuters. "Exclusive: More than 100 die in Malaysian immigration detention camps in two years," 30 March 2017. <https://www.reuters.com/article/us-malaysia-detention-deaths/exclusive-more-than-100-die-in-malaysian-immigration-detention-camps-in-two-years-idUSKBN1710GR>
- The Engine Room and Oxfam. "Biometrics in the Humanitarian Sector," March 2018 <https://www.theengineroom.org/wp-content/uploads/2018/03/Engine-Room-Oxfam-Biometrics-Review.pdf>
- Wahab, Andika. "Rethinking Refugees as Economically Isolated." *Journal of ASEAN Studies* 5.1, 2017.