



e-Cash Smart Cards

Name: e-Cash Smart Cards

Organization: International Organization for Migration (IOM)

Year launched: 2016

Countries: Turkey, Iraq

Users: 19,300 refugee households (17,400 in Turkey and 1,900 in Iraq)

Tech used: encrypted smart cards, smartphone app, integrated data platform

Hassan was on a solo mission in 2016 to pilot a cash-based assistance (CBA) project in Turkey's Refugee program, one of the International Organization for Migration's (IOM's) largest programs. A key part of IOM's mission - to promote orderly and humane migration across the world - was procuring emergency relief supplies and needed goods for displaced migrants to help them return to a life as normal as possible. In a fluid migrant crisis, supply did not always meet demand in a traditional procurement process and was not always efficient. In one instance, a large migrant family from Syria had newly arrived with no personal belongings and minimal savings to last a few months for rent and basic food. They did not need NFI nor food kits, but their priority was clothing and shoes for the women, children and elderly. With the provision of the smart card from the basic needs project, they were able to purchase clothing and basic kitchen utensils to meet their priority needs. In another instance, a migrant in Iraq requested a welding machine and a generator. Upon finally receiving the machinery three months later, the two items were incompatible, and the man could not use them together! With the provision of cash-based assistance, migrants could now purchase from local markets and fulfill their needs according to their priority and specifications in a dignified manner.

No policies and procedures existed to guide the project, but Hassan's background with cash-based assistance from another local NGO prompted an idea to combine both cash assistance and data collection in one streamlined tool to make purchasing more effective. After some research, Hassan identified a humanitarian technological service provider "RedRose One solution" which had already created an integrated cash management system¹. The platform seamlessly brought together data collection, cash distribution, beneficiary and vendor management, beneficiary feedback mechanisms and monitoring and evaluation features into one highly customizable product that worked offline and synced with a thirty-second online connection at the end of each day.



Electronic Voucher Project
Elektronik Kart Projesi
مشروع البطاقة الإلكترونية



Figure : The e-Cash SmartCard, front and back

¹ <https://www.redrosecps.com/>

The product was designed to ensure cash projects stayed fit for purpose but fulfilled all of IOM's requirements and that of beneficiaries. Every beneficiary received a chipped smart card that was fully encrypted and secure which then interplayed with a unique Android app that was provided to each vendor. Migrants took their cards to vendors directly, checked their e-cash balance, and the vendor debited the value of the good purchased. IOM received the purchasing data directly and followed up with the vendor to repay the balance. No currency was handled.

Calling the project a short-term alternative to avoid raising any alarm at a system overhaul, Hassan informed his manager of the basics and began working promptly to customize the platform for IOM's migrants. "In the process, if someone wants to ask a question, they can ask," was the attitude – the pilot results would prove the project's superior efficiency. Funding from another work stream was allocated to the cash assistance project (Hassan didn't request additional funding) – the beginning of a massive shift within IOM Turkey to cash based assistance. The project began to pick up, and additional funds started to be reallocated to the cash-based assistance team. After only five days of training, IOM Turkey's cash team was able to start managing all technical and operational processes end to end with round the clock technical support from over 30 staff from RedRose.

Already in the first two years of existence, the e-cash smart cards reduced delivery lag time in Turkey from an average of three months to just three weeks. The new system allowed IOM to reach migrants in new provinces where before there were no IOM offices or even staff. Turkey's Cash team estimated that when fully scaled throughout Turkey, the smart cards could reach over 20,000 households; already the initiative had scaled to 17,400 households – an enormous jump over IOM's initial 3,000 households receiving traditional support. The e-cash smart cards also made transactions much more transparent and reduced the inaccuracies around reporting financial results. The cards also helped track migrants' movements more accurately, enabling IOM to understand how to better serve them and define their needs as they move.



Figure 1: Vendor in IOM's cash system

Even with these extraordinary results, the cash team struggled to convince other departments that this digitized cash-based assistance, rather than traditional physical delivery methods, were more efficient. Insufficient institutional structures and an "old guard" mentality kept teams from being willing to learn this technological route to efficient aid delivery. What was needed was "institutional willingness, mindset shift and capacity to run parallel delivery models with the mindset of efficiency," Hassan believes.

There were also some operational issues with IOM CBA projects. Repaying vendors could take up to a month, so although vendors were eager for additional business, they had to trust that they would be repaid. The system built on trust did not work as well in Iraq, where the e-cash smart card assistance mechanism was invited to expand in 2017/18 and move the entire in-kind assistance model to cash-based assistance for the livelihoods component of the Community Revitalization Project. As some locations were newly liberated from ISIS,

smaller vendors were unable to accept late payments and only larger vendors agreed to work with IOM's system.

The Iraq CBA project was still young at the time of this case but had successfully transitioned and delivered assistance. The team was hopeful that the delayed repayment challenge could be overcome through linking to alternative payment modalities such as mobile money and hawala. With additional funding in Iraq, the opportunity for scale was there and cash based assistance could easily surpass initial targets with the potential for other departments to transition too. And all from just three staff, some data collectors, and a cabinet – no warehouse or trucks needed. Abdullah, technically developing the program's rollout in Iraq, was confident in the initiative's success: "Any program manager who experiences this will ask for it."

Key success factors: project champion from design phase to implementation phase; flexible line management that allowed for innovative thinking; strong partner

Key challenge: lack of organization-wide buy-in for an alternative procurement strategy which is necessary for scaling to other IOM offices and regions

Summary	Tech		Scale	Partners	Impact	Success Factors	
Encrypted ID card that links to app allowing migrants to track and purchase goods	MID TECH	Primary tech used: App	SCALING	Non profit	SOCIAL INTERNAL	Initiative: Simple, strong project owner	Organizational: Alignment to strategic objectives