

## Building Blocks

**Name:** Building Blocks

**Organization:** WFP (World Food Programme)

**Year launched:** 2016

**Countries:** Jordan, Pakistan

**Users:** 100,000+ refugees and vulnerable individuals

The mission of the World Food Programme (WFP) is to fight hunger worldwide, providing food assistance where it is most urgently needed - during and after conflicts and natural disasters - and changes lives for millions through sustainable development. In 2017, cash transfers represented an increasing share of WFP's total humanitarian assistance (31 percent in 2017), and included assistance distributed as physical banknotes, e-money, mobile money, vouchers or debit cards. In 2017 alone, WFP transferred US\$ 1.4 billion to almost 20 million people in over 60 countries, empowering them to meet their essential needs. Cash assistance and emerging digital opportunities empowered vulnerable households to meet their essential needs according to their priorities.

However, challenges continued to exist around issues of potential financial risk in certain contexts, instability of banks and telecommunications providers in conflict situations or insecure states, transfer fees and customer privacy. WFP staff observing these issues in the field recognized the need for a neutral platform that would tackle some of these challenges.

In the summer of 2016, a finance officer named Houman Haddad attended one of the WFP Innovation Accelerator's "bootcamps" with the purpose of testing his idea to use blockchain technology as a way to improve how WFP's transferred cash. At this bootcamp, Houman talked with everybody in the room to voice opinions on whether blockchain could be beneficial. WFP's Innovation Accelerator, launched in 2015 with strong support from WFP management, hosted regular five-day workshops, culminating in a "pitch night," to bring in staff from around the globe to propose innovative solutions to WFP's most difficult challenges. Teams vied for the chance to win WFP funding, mentorship, staff time and resources as an official work stream in one of WFP's divisions.

After the project successfully completed the bootcamp in January 2017, WFP started to work full time on planning and implementing the Building Blocks pilot. The team traveled to Pakistan as the first pilot location for transferring money via blockchain, hoping to prove the concept and confirm basic assumptions around blockchain's effectiveness in managing cash transactions. They piloted successfully with 100 people before deciding to test it in another location to confirm that the technology was easily transferrable.

The second pilot location was in the Azraq refugee camp in Jordan where the Building Blocks team began implementation with 10,500 Syrian refugees. The cash was transferred through a blockchain-backed system for distributing and recording cash transactions, integrated with iris-scanning technology already employed by WFP. Each refugee had their own unique biometric identification and when the transfer was made the refugee's identification was confirmed via an iris scan to enable the secure transfer. This new cash transfer set-up was not a cryptocurrency transaction, but rather a debit from a "virtual wallet" using blockchain, which functioned as a ledger

of distributed transactions. The refugee's experience remained the same, but the backend technology was more secure and cost effective.



Figure 5: A Syrian refugee has her iris scanned to receive her cash-based transaction.

By 2018, Building Blocks, though it had only recently transitioned out of the pilot phase, had already delivered significant impact for WFP's operations. Providing more than a million USD worth of CBT through 100,000 transactions, Building Blocks reduced local banking fees by more than 90%, transferring cash through a virtual wallet. The initiative avoided the financial risks associated with depositing money up-front to local financial institutions. Building Blocks also

protected the sensitive data of refugee families by bypassing banks to make cash transfers. These benefits prompted WFP to set a goal of scaling up to reach all 500,000 of its Syrian refugees in Jordan (106,000 have effectively received food assistance via the blockchain as of September).

By mid-2018, WFP was exploring how blockchain technology might be used in other WFP workstreams such as supply chain operations and digital identity management. The technology was seen to have the potential to broaden the contributions WFP was making to the Syrian families. WFP also planned to begin using Building Blocks to work more closely with other agencies, hoping that the blockchain platform could become a shared, inter-agency platform of trust that allowed for simpler, more secure transactions to people in need.

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**Key success factors:** Internal structures that nurture innovation, applicable in every context where CBT are used

**Key challenge:** Bringing a large solution to scale while incorporating a variety of stakeholders

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#### Summary Tech Scale Partners Impact Success Factors

Blockchain technology to provide cash-based transfers to refugees	<b>HIGH TECH</b>	Tech used: Blockchain	<b>SCALING</b>	Private sector, government	<b>SOCIAL MISSION</b>	Initiative: Applicable in many locations	Organizational: Dedicated staff time and resources
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