

Alternatives for the unbanked: lessons learned from payment kiosks

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A decade after Bitcoin came to the scene, and the subsequent emergence of hundreds of other cryptocurrencies, the announcement of a Facebook cryptocurrency took the world of fintech by storm. On June 18, 2019, Facebook and its 30 partner organisations launched the Libra Association, the backbone of what should become the Libra cryptocurrency some time in 2020. This was the first time an established international player of this size with an incomparable digital network and userbase as its foundation, stepped into the cryptocurrency space.

A central feature in the communication around Libra was their aim to create a “simple global currency and financial infrastructure that empowers billions of people.” The Libra whitepaper includes statements like “Reinvent money. Transform the global economy. So people everywhere can live better lives.” They describe how, while banking seems a simple fact of life for some, “large swaths of the world's population are still left behind — 1.7 billion adults globally remain outside of the financial system with no access to a traditional bank”.

It just so happens that about a month after the Libra announcement, we traveled to Georgia (the country) and we were confronted with a technology that seemed to address similar issues, however from a very different technological and infrastructural perspective. Blockchain-based solutions have dominated the space of alternative money design in the past decade. With this presentation we want to trace some of the similarities and differences between Libra and this rather unnoticed alternative in order to open up the imagination for money infrastructures for the unbanked.

Georgian payment kiosks are ATM-like devices located in public space, often near banks and convenience stores around the country. Similar systems are used in Tajikistan, Mongolia, and other post-Soviet states.

What are the points of contact between Libra and payment kiosks? We identify three common characteristics:

1. Both cater to the unbanked outside of conventional banking infrastructure
2. Both provide access to online and international transactions
3. Both include the conversion of physical to digital money

Georgian payment kiosks are still-unstudied artifacts at the intersection of HCI / design research and fintech. As a first attempt to identify important lines of inquiry, we outline four characteristics that highlight differences with Libra's blockchain-based proposal.

1. infrastructure
2. identity
3. embeddedness
4. connectedness.

Infrastructure

To add coins to a Libra account, a user can either buy them online (which requires already having access to a digital money system) or exchange cash for Libra in local stores. In order to then use these Libra coins, one must have a mobile phone and internet access.

In the case of the payment kiosks, the user does not need anything other than cash and for example an account number with the particular service that they want to pay for.

Identity

While users may create several pseudonymous accounts, the Libra association is working on a "decentralized and portable digital identity". In the payment kiosks, a verified digital identity is not necessary. Each service can be accessed separately, without establishing something like a 'kiosk identity'.

Embeddedness

Libra exists in phones and potentially as exchange services offered by local shops. This is a quite a difference with the physical presence of the payment kiosks. These are embedded in daily life: graffitied, vandalized, take up space and sometimes the cause of a small queue. Kiosks and shops that sell items like phone credit often appear in similar locations.

Connectedness

The Libra blockchain will, at least in the beginning, be permissioned, meaning that the technological backbone is still quite centrally controlled. Any developer is invited to build services and products on top of the Libra system, eventually producing an "interoperable ecosystem of financial services".

In the case of the payment kiosks, we're seeing something similar yet with some differences. Kiosks are made by different brands and each is operated by their own

consortium of companies taking care of the various infrastructures and services. The services accessible for payment through the kiosks are a very broad range. We came across cemeteries, online games, international magazines, utility companies, local NGOs, medical centres, and webstores.