

CRDTpay



CRDTPay Overview

Description of CRDTPay

CRDTPay is a unique, end-to-end payments technology solution that functions as a proprietary payments network, analogous to operating one's own Visa network or Mastercard network where one controls the following:

1. Who is allowed to join the payment network as a Merchant, and at what cost (if any)
2. Who is allowed to join the payment network as a Customer, and at what cost (if any)
3. Who can download the payments application
4. What assets will be supported in the payment network
 - 4a. Fiat (i.e. Albania lek, Euro, US dollars, British pounds, etc.)
 - 4b. Cryptocurrency (i.e. customized coins like CRDT, Bitcoin, Ethereum, etc.)
 - 4c. Third-party payment cards issued by banks or others (Visa, Mastercard, etc.)
5. The fee for processing transactions between Buyers (Customers) and Merchants (Sellers)
 - 5a. Will the fee be payable in lek or CRDT or another asset?
 - 5b. Will the fee be uniform or variable? (i.e. charge more for crypto?)
6. Issuance of payment credentials (i.e. customized payment cards)

Functions of a Typical Payment Ecosystem

In a typical payments ecosystem, different roles and responsibilities are performed by different entities including:

Card Issuance: Typically performed by a bank or Electronic Money Institution (EMI)

Acquiring: Typically a different bank or financial institution that processes credit or debit card payments on behalf of a merchant, allowing the merchant to accept card payments from the card-issuing banks or EMIs within the network

Functions of the CRDTPay Ecosystem

In the CRDTPay ecosystem, the different roles and responsibilities are performed by the same entity, which means CRDTPay eliminates the middleman, leading to lower fees:

Card Issuance: Issued by the CRDTPay payment network

Acquiring: Processed by the CRDTPay payment network



Supports Android and iOS Devices

CRDTPay can be used on Android and iOS devices, enabling cross-platform payments from a Buyer using an Android device and a Seller using an iOS device like an iPhone or tablet (and vice versa).

Supports Contactless Payments

CRDTPay supports contactless payments, meaning the following are enabled:

- a. Buyer contactlessly taps his phone against a Seller's phone to complete a transaction
- b. Buyer contactlessly taps his CRDTPay payment card against a Seller's phone to complete a transaction

Integrated with Apple Wallet and Google Wallet

Third-party bank or EMI payment cards that are natively supported and accepted by Apple Wallet and Google Wallet can be stored on a Buyer's device, and can be integrated with CRDTPay.

This allows the Buyer to select a third-party bank- or EMI-issued Visa or Mastercard that is stored on his device and contactlessly pay a Seller/ Merchant on their device (i.e. phone, tablet, etc) where CRDTPay is installed. The third-party Visa or Mastercard payment card does not itself need to be tapped or swiped if it is stored on the device.

Supports Fiat, Cryptocurrencies and Digital Assets, and Payment Cards

CRDTPay supports the following media of exchange and assets for payments:

- a. Fiat (i.e. ALB (lek), Euro, USD, Pound, etc.)
- b. Cryptocurrencies and Digital Assets Third-party
- c. payment cards (see above)

example: Let's say an Albanian Seller/ Merchant only wants to accept Albanian lek because they are in Albania and they have to pay their employees and suppliers in lek only. Let's say a Buyer/ Customer in his store only has US dollars and Bitcoin in his CRDTPay wallet. When the Buyer/ Customer contactlessly taps his card or device against the phone or tablet of the Merchant/ Seller, a conversion between Bitcoin and lek is performed by the CRDTPay application, and the Seller receives Albanian lek in his wallet instantly which can then be withdrawn through the banking channels provided by the CRDTPay payment network.

Determining the Processing Fee

The operator of the CRDTPay network determines the fee for processing and settling the transaction between Buyer/ Customer and Seller/ Merchant.



Network Rewards

To incentivize Buyers/ Customers and Sellers/ Merchants to enroll in the network and use it, CRDTPay can offer different incentives to use it including (but not limited to):

- a. Cash Back
- b. Redeemable Points
- c. Tokens
- d. Loyalty Rewards

Complete Merchant Management

The CRDTPay application enables Sellers/ Merchants to list every product and service they offer and each price onto the phone or tablet. The Seller/ Merchant notes the quantity of each item that the Buyer/ Customer wants to purchase, and the Buyer/ Customer contactlessly taps his phone against the phone or tablet of the Seller/ Merchant when he is ready to check out. The transaction is completed seamlessly and rapidly.

Chargebacks

The CRDTPay network allows Merchants to deal with chargebacks efficiently.

Cash Top-Up

CRDTPay also functions as a cash top-up solution. If a Seller/ Merchant receives cash from a Buyer/ Customer, he can credit the CRDTPay Wallet of the Buyer/ Customer in real-time.

Exchange Fiat and Cryptocurrency

CRDTPay also functions as an exchange. If a network member wants to exchange one fiat currency for another fiat currency, he can do that. If a network member wants to exchange fiat for cryptocurrency or cryptocurrency for fiat, he can do that.

Remittance

CRDTPay supports remittance. If one network member wants to send an asset from his CRDTPay digital wallet to the CRDTPay digital wallet of another member, he can do that in real-time at whatever cost he decides.

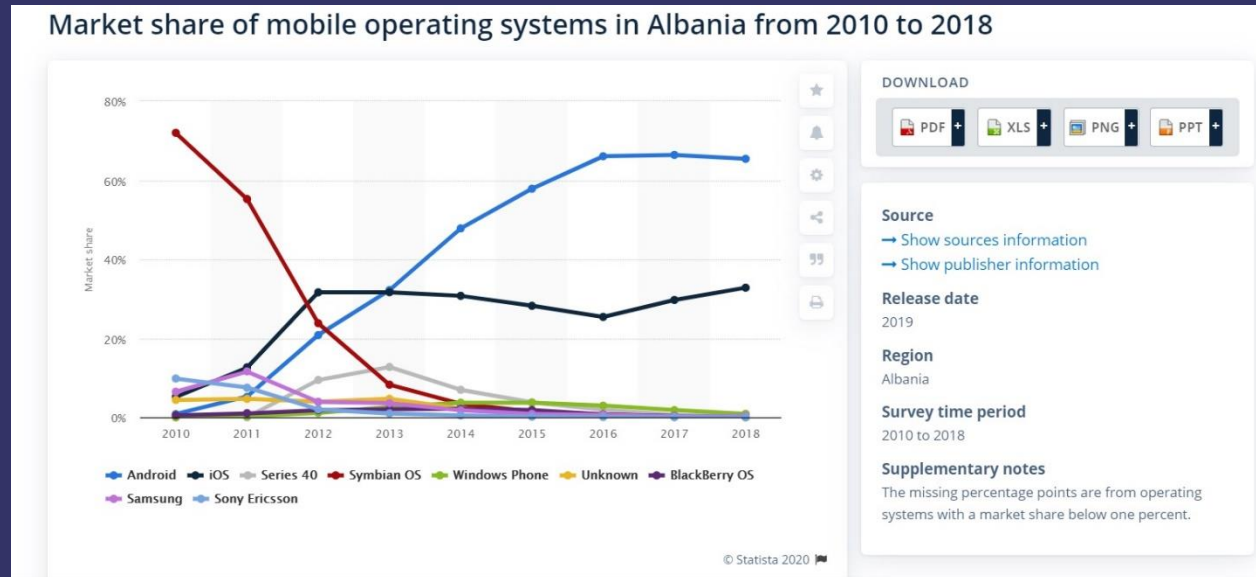
Send and Receive Cryptocurrencies

CRDTPay supports cryptocurrencies. If a network member wants to send or receive cryptocurrencies, a one-time QR code is generated and this enables the transaction to take place.



Example: Size of the Albanian Addressable Market

As seen in the tables below, the mobile penetration rate in Albania was estimated to be 4.72 million devices in January 2018. An estimated 63% of Albanian mobile users use Android devices, and an estimated 36% use iOS devices.



JAN 2018

DIGITAL IN ALBANIA

A SNAPSHOT OF THE COUNTRY'S KEY DIGITAL STATISTICAL INDICATORS



SOURCES: POPULATION: UNITED NATIONS, U.S. CENSUS BUREAU; **INTERNET:** INTERNET WORLD STATS (IWS), EUROSTAT, ITRB INTERNATIONAL, CIA WORLD FACTBOOK, MEDIA+MEDIA.BG, FACEBOOK, GOVERNMENT OFFICIALS, REGULATORY AUTHORITIES, REPUTABLE MEDIA; **SOCIAL MEDIA AND MOBILE SOCIAL MEDIA:** FACEBOOK, TENCENT, WOVON, BA.TE, KAKAO, NAVER, DING, TIKTOK, SINA WEI, KIPROS ANALYSIS; **MOBILE:** GSMA INTELLIGENCE, GCGGLE, EBCO SHOW, KIPROS ANALYSIS. **NOTE:** PENETRATION FIGURES ARE FOR TOTAL POPULATION (ALL AGES).



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FINANCIAL INCLUSION FACTORS

PERCENTAGE OF THE POPULATION AGED 15+ THAT REPORTS OWNING OR USING EACH FINANCIAL PRODUCT OR SERVICE



SOURCE: WORLD BANK: GLO-BAL FINANCIAL INCLUSION DATA (2018). **NOTE:** FIGURES REPRESENT THE PERCENTAGE OF PEOPLE AGED 15+ ,NOT TOTAL POPULATION.



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MOBILE CONNECTIONS BY TYPE

BASED ON THE NUMBER OF CELLULAR CONNECTIONS (NOTE: NOT UNIQUE INDIVIDUALS)



TOTAL NUMBER
OF MOBILE
CONNECTIONS



4.72
MILLION

we
are
social

MOBILE CONNECTIONS
AS A PERCENTAGE OF
TOTAL POPULATION



161%

we
are
social

PERCENTAGE OF MOBILE
CONNECTIONS THAT ARE
PRE-PAID



96%

we
are
social

PERCENTAGE OF MOBILE
CONNECTIONS THAT ARE
POST-PAID



4%

we
are
social

PERCENTAGE OF MOBILE
CONNECTIONS THAT ARE
BROADBAND (3G & 4G)



42%

21

SOURCE: GSMA INTELLIGENCE, Q4 2017. NOTE: PENETRATION FIGURES ARE FOR TOTAL POPULATION REGARDLESS OF AGE.

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CRDT

