

Bridging Financial Innovation and Regulation Seminar 2018 - CBCS

Prepared by Bitt Inc.
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What's Blockchain, Simply Put?

A blockchain is a secure and open digital ledger system that cannot be tampered with or changed at any time. This means that everyone on the ledger has access to all recorded entries within the blockchain at every moment in the lifespan of the transaction.

Benefits of a Blockchain

- It is 'trustless' and allows for 'trust and verification' for all transactions committed to the ledger.
- It operates through consensus and cannot be tampered with by a single individual or entity.
- It provides an immutable public record of transactions which add to transparency, accounting and compliance measures.
- It removes the risk of forgery and eliminates the 'double-spend' problem.
- It enables an interconnected financial ecosystems and global value transfer systems.
- It provides mathematical and digital representation of real world objects towards the "Internet of Things"
- Every single person can participate following the same rules

Protocol vs. Commodity

- Formal standards and policies comprised of rules
- Procedures and formats that define communication between two or more devices over a network
- Govern the end-to-end processes of timely, secure and managed data or network communication
- Protocols specify interactions between the communicating entities.

Some Applications of Blockchain

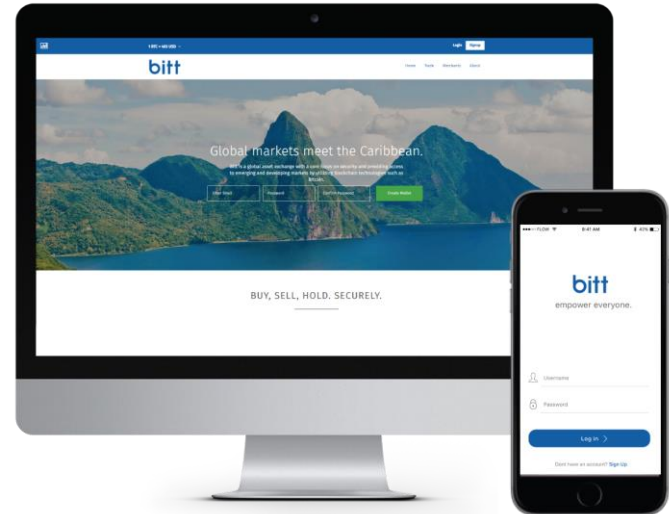
- Land registry, Realty rights, Smart Properties
- Health care records
- Birth, wedding and death certificates
- Personal Identification
- Supply chain sensors
- Asset digitization

Central Bank Digital Currency

- Blockchain technology can be built on top of to provide custom utility while ensuring asset security.
- Digital assets are cryptographically-secured tokens that hold value and can be transferred between two parties without the need of a central counterparty.
- Utilizing blockchain technology such as Bitcoin, Ethereum and side-chains to produce a digital fiat currency.
- With CBDCs the transaction is the settlement and each record is immutable
- CBDC open the door to Smart Economies through the notion of programmable fiat currency.
- Improved AML and KYC policies designed specifically around micro-payments and blockchain-based cash.
- CBDCs can transform communities, provide financial access to the unbanked and underbanked.

A BIT ABOUT BITT

Bitt is a Financial Technology company utilising blockchain technologies to bring the world of digital currencies to Central Banks and Monetary Authorities. Bitt architects solutions that facilitate secure peer-to-peer transactions with frictionless mobile money across a suite of Software and Mobile Applications at all Three Layers of the Money Base. Bitt's services allow all financial transactions to become digital, affordable and openly available to everyone with the goal of accomplishing Global Financial Inclusion.



DIGITAL DOLLAR LAYERS

LAYER 1

Asset Issuance

LAYER 2

Asset Integration,
Circulation and Distribution

LAYER 3

Asset Accessibility and
Interface

The Ecosystem “3 Layers of The Money Base”

BLOCKCHAIN

(Distributed
Ledger
Technology)

DIGITAL DOLLAR STANDARD

(Cryptographic
ally secured
Assets)

LAYER 1: ISSUANCE

Users: Central Bank

Function: A platform and solution for monetary authorities to issue digital assets securely onto the blockchain

LAYER 2: INTEGRATION

Users: Financial Service Providers, Commercial Banks

Function: Integration of digital dollars and blockchain technology into the legacy banking architecture

LAYER 3: INTERFACE

Users: Consumers, Merchants

Function: Ability to send, receive and process digital dollars to and from smartphones and mobile devices

Digital Currency Ecosystem Example (Barbados)

- The Barbados Digital Dollar is a digital representation of the fiat Barbados Dollar
- Will always remain on a 1:1 ratio with the Barbados Dollar
- Cash out whenever you want
- mMoney Mobile Wallet users can pay mMoney Merchants for goods and services or each other from the convenience of their smartphone.



mMoney seeks to solve the following problems:

Lengthy
Settlement Times

Financial Inclusion
and Unbanked

Restrictive Barriers
to Ecommerce and
Innovation in
Payments

No Open Gateways
and Open Payment
Standards

mMoney Merchant App

Point of sale application that facilitates Digital Dollar Transactions

mMoney Merchant-Teller Management Panel

Desktop version of the App that allows merchants to produce reports and monitor the growth of their business

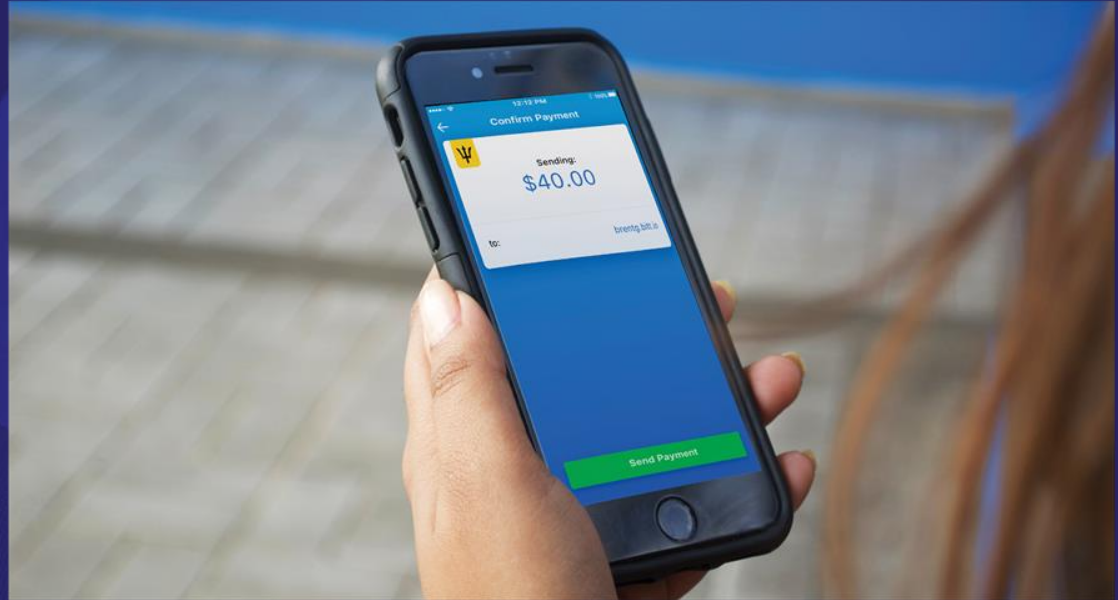
mMoney Wallet

Consumer side of the solution that allows transactions to be made using Digital Dollars





How the
customer uses
the wallet





How the merchant uses the Point of Sale

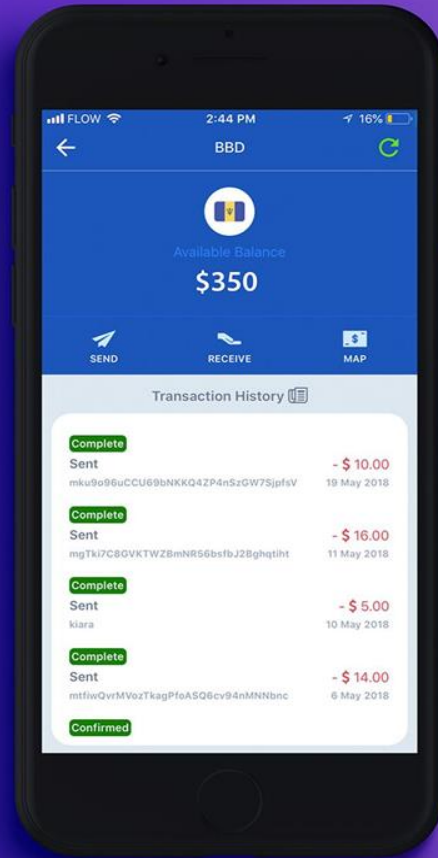




Becoming an
mMoney Merchant
is easy



The economy of the future is Digital



Advantages to Central Banks

- Increased Seigniorage
- Secure Non-counterfeitability
- Auditability
- Monetary Policy
- Interoperability
- Efficiency
- Financial Inclusion

Digital Dollars Perceived Risk

- Scalability
- Hacking
- Money Laundering / Terrorism Financing

Conclusion

By issuing digital currency, a central bank can solve the problem of not having a legal tender to securely, swiftly and uniformly be the medium of exchange in an e-commerce setting. In effect, a central bank digital currency solves the problem of cumbersome physical notes in much the same way that physical notes solved the problem of cumbersome precious metals.