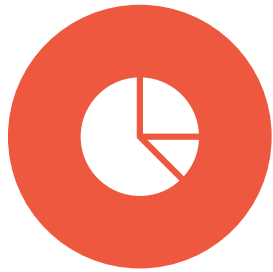# Neighborhood Improvement with Blockchain

CONCEPTUAL DESIGN

BY

NICHOLAS KARELS

Blockchain technology can be used to:

ALLOCATE SPENDING

APPROVE TRANSACTIONS

ENSURE COMPLIANCE

PREVENT FRAUD

This means that Blockchain also can:

Ensure charitable funds are used as intended

Provide a medium for those in need of monetary assistance

Help revitalize and improve struggling neighborhoods

Help a business improve their community/curb appeal

Stimulate a local economy

Be secure and easy to use
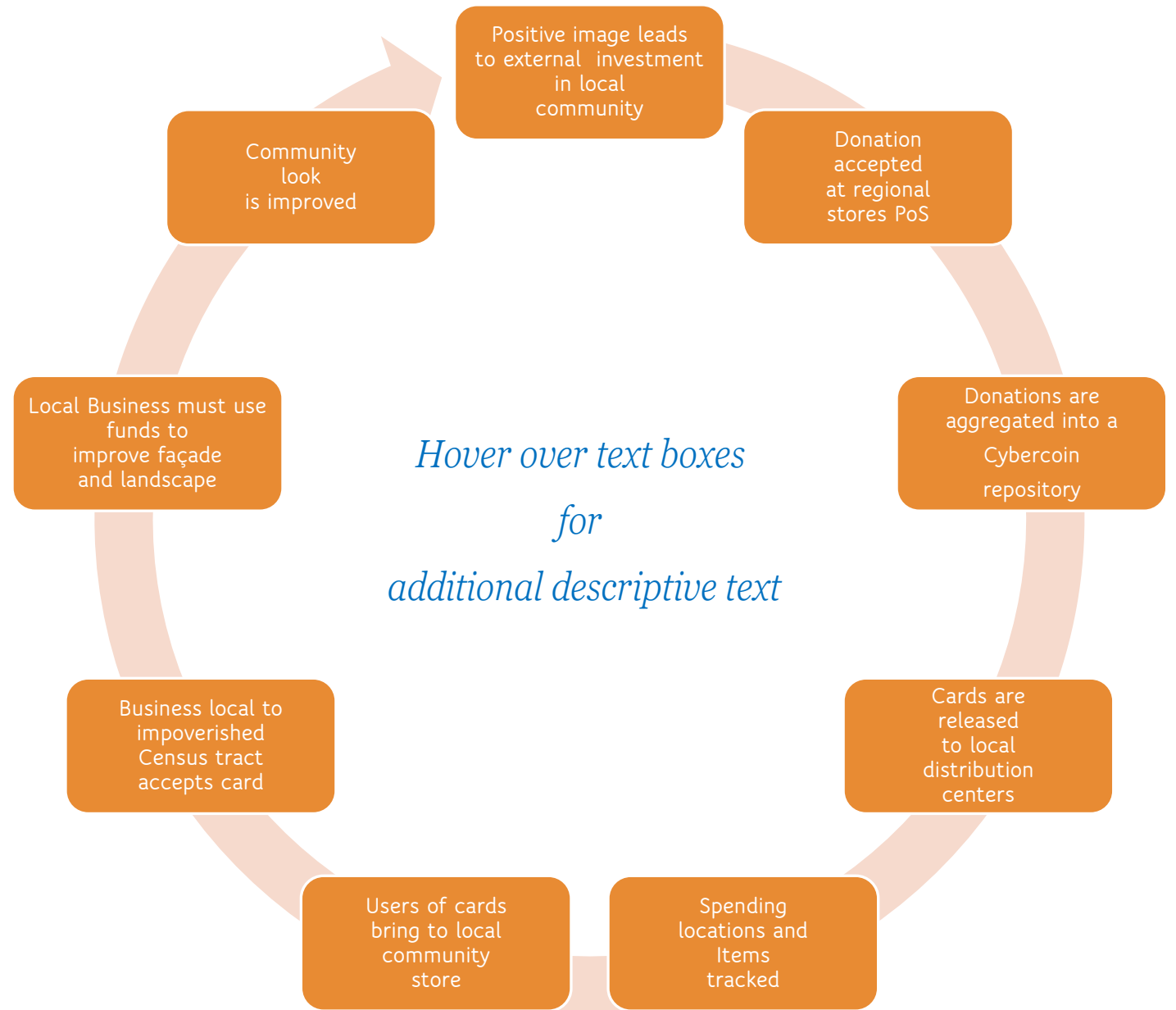
How can we take advantage of these traits?

With a blockchain-backed, dual purpose debit card solution designed to benefit both people and businesses in need

- People in need get a card with a spend cap and spend geography (spend geo)
- Businesses in the "spend geo" get reserve funds added to their crypto wallet on every card use
- Spend of the reserve is controlled by smart contract for community visible improvement projects – Front Façade, Curbside, Structural, etc.

Blockchain Card Concept for Poverty Mitigation

Proposal by Nicholas Karels
Method for neighborhood financial relief and business benefit

Charitable Blockchain Model

Positive image leads to external investment in local community

Community look is improved

Donation accepted at regional stores PoS

Hover over text boxes

for

additional descriptive text

Donations are aggregated into a Cybercoin repository

Local Business must use funds to improve façade and landscape

Cards are released to local distribution centers

Business local to impoverished Census tract accepts card

Users of cards bring to local community store

Spending locations and Items tracked

Basic components of the operating model

Debit/Gift Card Medium

Standard chip-enabled gift cards as a front-end gateway, except the processing will use blockchain and cryptocurrency.

Pooling of investment funds

Funds are pooled into a blockchain controlled chain of custody for management and distribution.

Control of how funds can be spent

Card funds are allocated and segregated between individual access funds and place of business funding.

Simplified use case

Spender

1. Receives card at food pantry in impoverished census tract, or shelter center etc., and is informed of means of use and 'spend geo' (Neighborhoods).

2. Takes card to impoverished census tract business (spend geo) and initiates spend for needs same as any other payment system, except must be used in neighborhoods designated.

Business

1. Accepts payment card

2. Transaction recorded and validated against blockchain fund pool.

3. Pooled "smart funds" increment added to community improvement crypto wallet

4. Smart funds used for other local businesses to perform improvement services, pre-authorized via smart-contract ecosystem

How can a Blockchain-backed model help revitalize and improve neighborhoods?

Smart contracts can be used to pool and manage funds tied to a gift card or other funds conveyance mechanism.

The blockchain stipulation can be used to control what the pooled funds are spent on by any business that received the card funds.

These contracts can be used to manage donated funds and allocate spending to reduce fraud and stimulate local economies.

These cards have two key features – spending for the recipient of the card, and donated funds accessible by the business the card was used at.

How do these funds get attached to a card for use? At checkouts, customers can donate to a neighborhood relief fund. This fund can be pooled for smart contracts.

Development Concepts

1. "Smartpools" = Allocate donations for users and set charitable spend for businesses
2. Capabilities to manage dual transactions
3. Smart Contracts on Ethereum or other chain
4. Integration with payment kiosk providers
5. Ability to control spending locations
6. Smartpool – Card is "loaded" with funds for user, also loaded with funds for participating businesses.

BIO

Nicholas Karels — Innovation Executive

Who I am:

Forward-thinking executive connecting innovation and technology with business acumen to create new service capabilities, increase revenue and lead digital initiatives to deliver business value.

How I add value:

• Drive conceptual development of innovation, delivery of technology platforms, spearhead new services, augment product portfolios and optimize service delivery and support.

• Understand and communicate impacts of emerging technology, value proposition and potential disruption to products and services.

• Create revenue generating offerings, increase profit margins, streamline processes, enhance compliance, and reduce risk.

• Improve your IT services ecosystem.

• Leverage business acumen, technology understanding and communication to build and grow IT-to-Business partnerships.

• Build and coach leaders and high performing teams in highly matrixed, remote office and client-facing environments.

Proven history:

• Designed $50M in service offerings.

• Enabled a $20M increase to revenue in first two years as a master innovator with over 200 innovations and product offerings evaluated for business value.

• Improved time to market of innovation by 40%.

• Delivered $25M+ in engagements on or ahead of schedule with high profitability, client satisfaction, and cost savings in retail, distribution, healthcare, finance, and government.

• Captured millions in sales through pre-sales efforts and follow-on signings.

• 8 patent achievement awards, IBM Master Innovator title 2 consecutive years, Chicago Innovation Awards Nominee and more.

Target roles:
• Chief Innovation Officer/ Vice President Innovation
• VP or Chief of Strategy & Innovation
• VP of Business Technology Services

Ask me about possibilities in:
Digital Twin | IOT | Drones | LIDAR | Blockchain | AI | Augmented Reality | Patent Development

https://www.nicholaskarels.com