

## The Dash Difference

# Dash and Bitcoin

It's more than just privacy!

**Bitcoin isn't perfect.** Dash takes all of the technology that Bitcoin utilizes and expands on it. From privacy to transaction speed, governance, funding and overall incentive structure: **Dash innovates!**

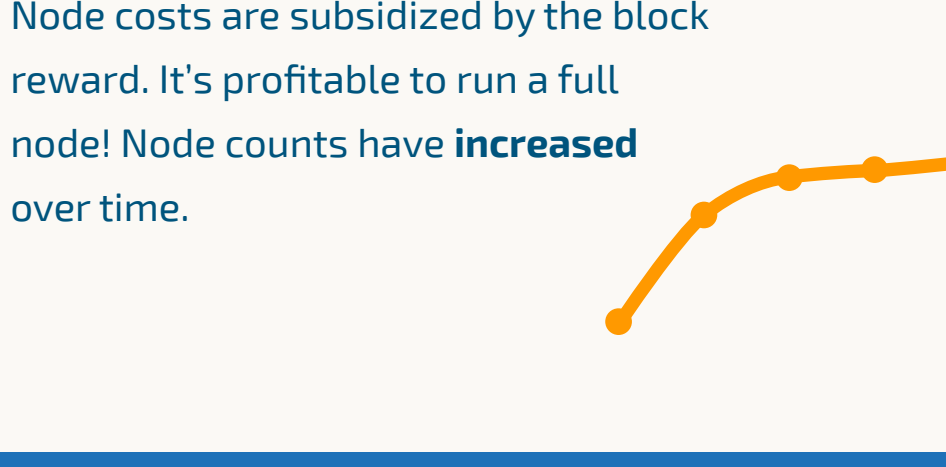
### Dash is a fork of Bitcoin

Even with all its improvements, Dash still utilizes the same DNA of the Bitcoin protocol, so it can readily be integrated into the ecosystem already built around Bitcoin!



## A 3-Way Split Block Reward: A Better Incentive Model

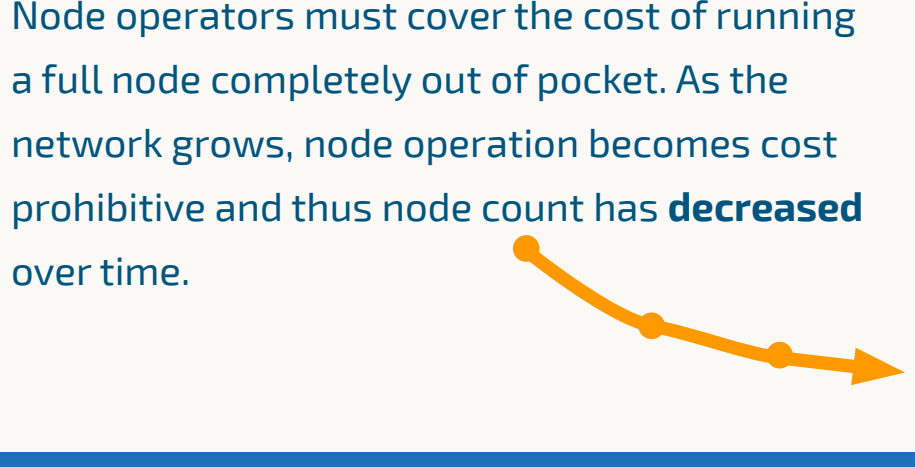
### Dash Block Reward



#### Node Costs are No Problem

Node costs are subsidized by the block reward. It's profitable to run a full node! Node counts have **increased** over time.

### Bitcoin Block Reward



#### Node Costs are Expensive

Node operators must cover the cost of running a full node completely out of pocket. As the network grows, node operation becomes cost prohibitive and thus node count has **decreased** over time.



## Masternodes are the 2nd Tier of the Network

Any node continuously holding 1000 Dash can become a Masternode

This "collateral":

- Helps reduce price volatility
- Makes Sybil attacks cost prohibitive
- Incentivizes smarter Development Grant Approvals



## Masternode Hosting

### Have less than 1000 Dash?

Users can allocate them towards a hosted masternode

Traditional banks allocate your savings to loans which pay back about **.08%** annual interest to you

Hosted masternodes allocate your savings towards creating network masternodes which pay back about **8%** annual interest



**Dash, unlike Bitcoin, can offer its holders this form of an "interest bearing account" by supporting its infrastructure**

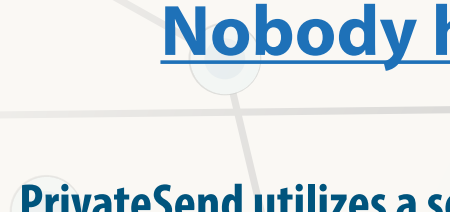
## Masternodes perform functions not possible with single tier networks like Bitcoin

### Dash

Mix coins at the protocol level with PrivateSend



Lock inputs & prevent double spends, allowing instant transactions with InstantSend

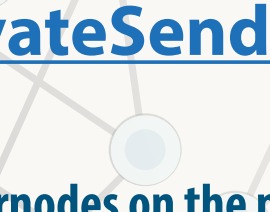


### Bitcoin

Coin fungibility requires mixing through trusted 3rd parties



Settlement on the Bitcoin blockchain can take anywhere from an hour or more



## How Private is PrivateSend?



### Nobody has ever cracked PrivateSend

PrivateSend utilizes a selected "quorum" of random Masternodes on the network

An attacker would need a hyper majority of Masternodes to have even the slightest chance at owning the selected random quorum of Masternodes at any given time

With a 1000 Dash requirement per Masternode, it becomes cost suicide to attack the privacy of the network

## How Fast is InstantSend?

### InstantSend is ...Instant!

Masternodes "lock" the inputs of coins which prevents double spends and allows transactions to occur in about **1 second or less!**

InstantSend allows Dash users the ability to buy a cup of coffee in-store or a soda from a vending machine instantly - no waiting for confirmations!



## Dash is true Digital Cash

## Protocol Level Funding & Governance: The Underrated Defining Feature

1 Masternode = 1000 Dash = 1 vote for: Network Development Grants/Network Direction

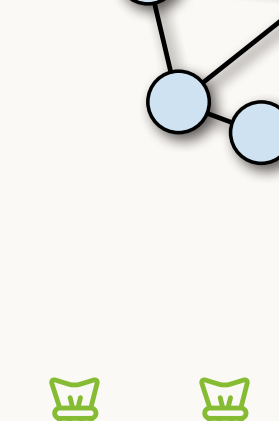
**1000 Dash "collateral" incentivizes Masternodes to grant money to projects that serve only to benefit the network and its value**

**Anybody can submit a project and apply for a grant**

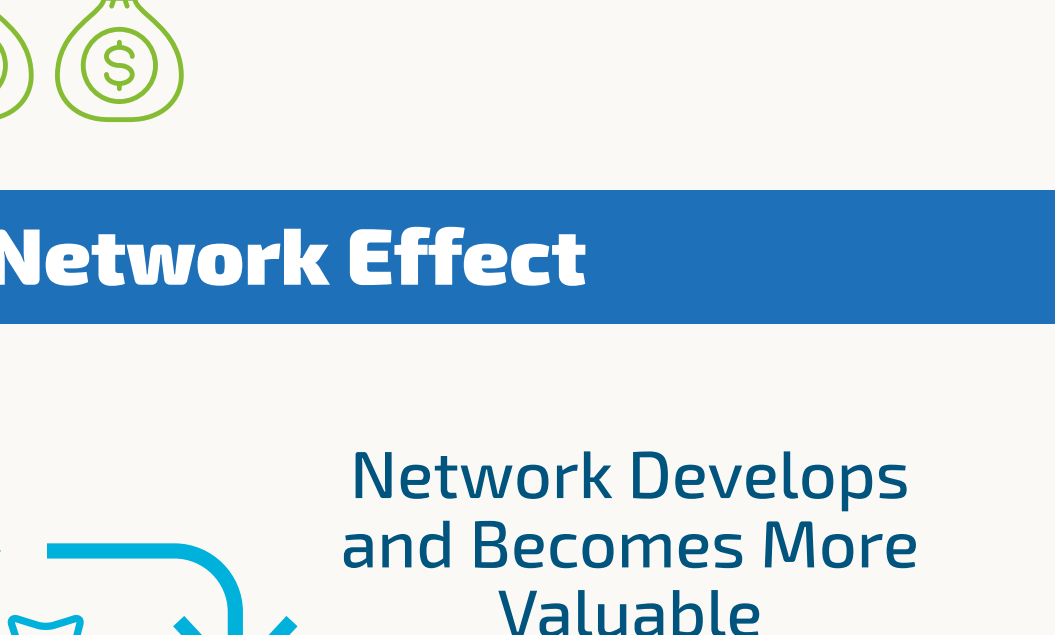
### Development Project X



YES



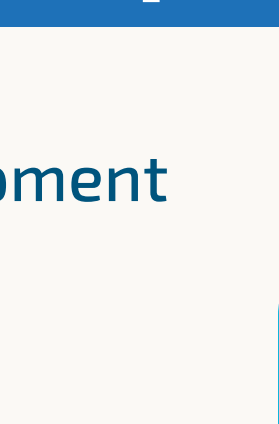
Masternode Network



### Marketing Project Y



NO



### Infrastructure Project Z



YES



## A Perpetual Network Effect

Project Development Funding

Network Develops and Becomes More Valuable

More Development Money Available per Month

Price of Dash Appreciates



### Monthly Development Budget

\$32,000 (2015)

\$5,316,823 (2018)

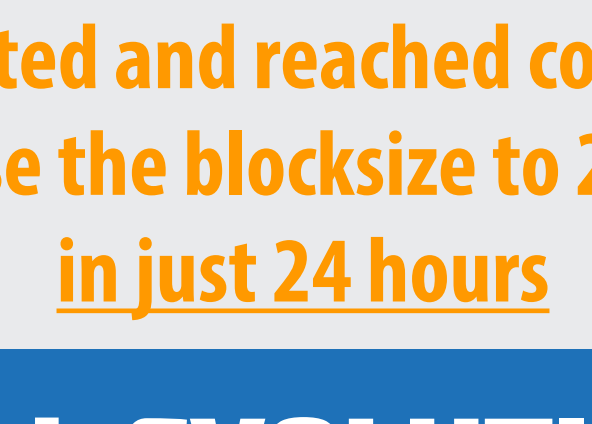
**Dash is a currency AND a working Decentralized Autonomous Organization (DAO)**

**Dash Development is paid directly from the blockchain and is not dependent on donations, foundations, or any single third party (such as BlockStream)**

The Dash network can stop payment to its current development team and start paying another at any time if the network feels unsatisfied

### DEV TEAM A

"We should implement changes A/B/C to the protocol"



### DEV TEAM B

"Changes A/B/C aren't good enough, X/Y/Z is more effective"



**MASTERNODE NETWORK**



"Team A, we like what you've done up to now but you're no longer in line with what we want. We voted and we're hiring Team B"

**Dash Masternodes voted and reached consensus to eventually raise the blocksize to 2mb in just 24 hours** (2015-01-18)

## Dash EVOLUTION: Bringing Crypto Mainstream

**DASH** Evolution brings the focus back to the user experience

Aimed at the everyday user, it makes things "So easy your grandmother could use it"

This is all made possible by the First Ever Decentralized API

This API acts as the communication line between familiar front-end user interfaces and the bleeding edge Dash blockchain network



Merchants/Users no longer have to directly implement/run the Dash network - just the code that talks to it

Crypto addresses are replaced with usernames and a more Paypal/Venmo type of experience is now possible

Any network changes can now be made "under the hood" and isolated from the user

## Dash is Digital Cash

Picking up where Bitcoin left off, fulfilling Satoshi's vision of a true electronic peer-to-peer cash system

<https://goo.gl/rHqFvj>  
Original design by J. Arroyo  
Last updated 18 March 2018  
Icons: Made by Made from The Noun Project and Freepik from Flaticon

