

# Q4 2019 Summary Call

Dash Core Group, Inc. 30 January, 2020

## A few things before we get started

- This call is being recorded and will be shared on the Dash YouTube Channel
- Audience microphones are muted
- Questions were collected previously and will be answered at the end
- Additional, ad hoc questions please type on the Youtube chat

Moderator: Ryan Taylor, CEO

Operator: Robert Wiecko, COO





## What is Dash?

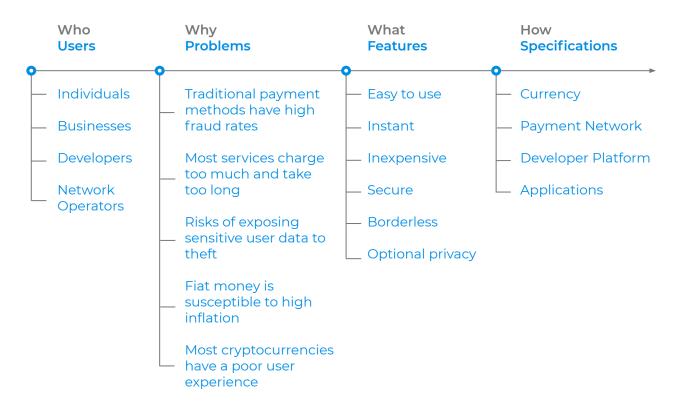
### Goal

Financial freedom for everyone

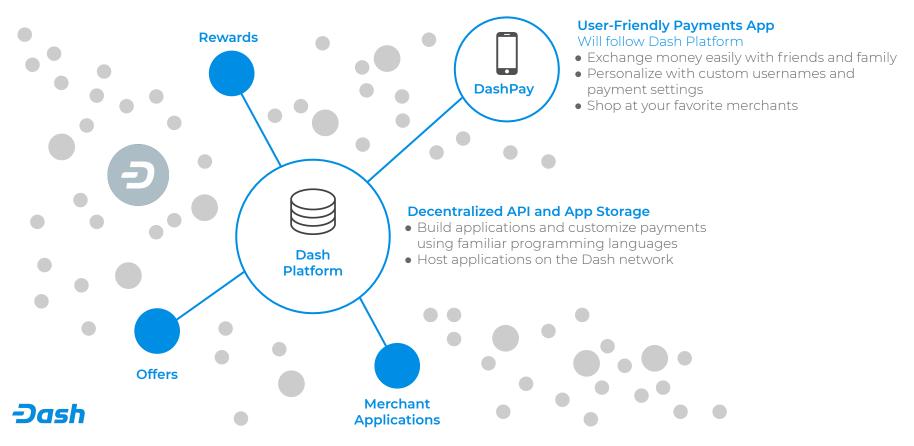
Your money, your way - move your money to anyone, anywhere, anytime.

### Mission

Make payments as quick, easy, secure and inexpensive as possible.



## What is *Evolution*?



## How DCG is Growing Dash

### Growth Build the ecosystem

#### Build brand

Increasing brand awareness by expanding Dash's presence in verticals in addition to blockchain

#### Build community

Cultivate a community of contributors and maximize the network's potential

#### - Build partnerships

Greatest Need

Greatest Fit

Growth

Multipliers :

Prioritize financially underserved markets based on user need and market fit

Venezuela

Remittances

Developers

Merchants



Product

Functional Functions as intended

Reliable
 Secure and performant

Easy to use Fast, affordable, intuitive

- Delightful Fun to use

### Technology Build the system

### Increase access

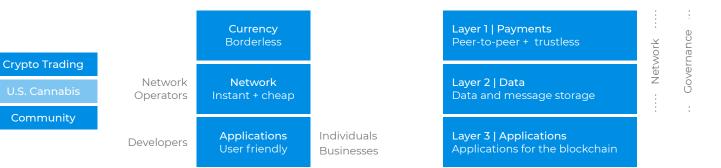
Provide solutions for consumers, merchants and developers

### Extend capabilities

Create blockchain platform upon which to build distributed applications

#### Scale performance

Ensure network level performance while scaling transaction volume



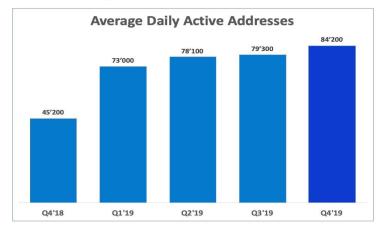


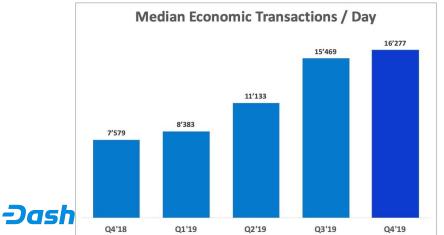
## **Market Performance**

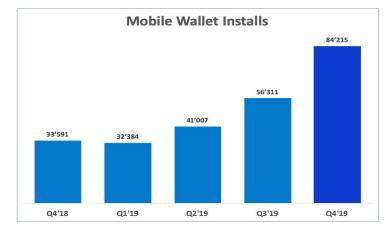
-Dash

Question	Metric	Q4 '19	QoQ	YoY
PRODUCT: Is Dash a Better Way to Move Money?	•			
How much is the currency fluctuating?	Daily Volatility	3.32%	-19.4%	-48.0%
How much does it cost to send a payment?	Median Fee	\$0.0003	-37%	-44%
USERS: Are More People Using Dash?				
How many daily active addresses?	Avg Daily Active Addresses	84.2K	6.2%	86.4%
How many DCG wallets are installed on active mobile devices?	Installed Wallets on Active Devices	84,215	50%	151%
How many addresses have a balance greater than 1 USD?	Total Addresses > 1\$	575,658*	52.7%	38.8%
USAGE: What are Dash Users Doing?		•	-	•
How much Dash is traded daily on exchanges?	Avg Daily Traded Vol	\$274M	28.8%	62.4%
What is the total payment volume?	TPV	\$1.52B	-16.4%	18.2%
What was the number of economic transactions?	Economic Transactions	1.65M	-38.8%	-61.4%
What is the median transaction value?	Avg Daily Median Tx Value	\$10.31	-11.3%	-28.9%
What percentage of transactions are InstantSend?	% InstantSend	100%	n/m	n/m
What percentage of transactions are PrivateSend?	% PrivateSend	0.47%	68%	213%
CRYPTOCURRENCY PAYMENT GROWTH: How fast are other payment-o	oriented networks growing?			
What was Dash's typical number of economic transactions?	Median Economic Transactions / Day	16,277	5%	115%
What was Bitcoin's on-chain typical number of transactions?	Bitcoin Median Transactions / Day	312,556	-5%	21%
What was Lightning Network growth?	Lightning Network Capacity	\$6.21M	-5%	223%
What was Bitcoin Cash's typical number of transactions?	Bitcoin Cash Median Transactions / Day	40,176	-15%	148%
What was Litecoin's typical number of transactions?	Litecoin Median Transactions / Day	21,269	-22%	<b>-9%</b>
MARKET: What is Dash Market Value?		_		
How many coins are circulating?	Supply	9.24M	2.0%	8.3%
What was the quarterly (last day mean) price of Dash?	Price	\$42.26	-39.1%	-47.8%
What is the network value of Dash?	Market Cap	\$391M	-37.9%	-43.5%

# **Quarterly Performance Trends**











### Balance Sheet (Non-GAAP compliant. See disclaimer.)

Cash/Dash assets at the end of 2019 totaled ~\$1M, essentially flat from \$1.1M at the end of 2018

Dash Core Group received 60% of the Dash Network proposal funding during 2019

Dash

(In thousands \$US)	At December 31 FY 2019	At December 31 FY 2018	Increase / Decrease Vs. Prior Year
Assets- USD Equivalent, DASH at ma	rket value		
Budget Accounts			
Bus Dev - General	169	296	-43%
Core Team Salaries	546	424	29%
Evo - External Contractors	0	72	-100%
Infrastructure	19	5	256%
Legal	80	129	-38%
Marketing / Comm / Conf / Travel	85	85	0%
Property Lease	25	3	695%
Public Relations	6	19	-71%
Escrow	0	32	-100%
Other			
Prepaid Expenses & Retainers	28	49	-43%
Other Current Assets	38	14	172%
Total Assets	995	1,130	<b>-12</b> %
Liabilities			
A/P & Accrued Expenses	94	230	-59%
Escrow Balances	0	32	-100%
Other Current Liabilities	5	0	NM
Equity			
Retained Earnings	868	9,243	-91%
Net Income	29	(8,375)	NM
Total Liabilities & Equity	995	1,130	

Percent

Management has elected to omit substantially all of the disclosures required by accounting principles generally accepted in the United States of America ("US GAAP"). If the omitted disclosures were included in the financial statements, they might influence the user's conclusions about the Company's financial position, results of operations and cash flows. Accordingly, the financial statements are not designed for those who are not informed about such matters. Treatment of "DASH" as a foreign currency and its "mark-to-market" accounting is not in compliance with US GAAP; Statement of Cash Flows has been omitted.

### Income Statement (Non-GAAP compliant. See disclaimer.)

Recognized \$4.3M as revenue from the Dash Network proposal system in 2019

DCG revenue matched total expenses during the year

Dash

The largest expense item continued to be compensation, dwarfing the rest of the expense categories

(In thousands \$US)	At December 31 FY 2019	At December 31 FY 2018	Percent Increase / Decrease Vs. Prior Year
Revenue			
Dash Budget System	4,253	7,284	-42%
Uncategorized Income	30	101	-70%
Total Revenue	4,283	7,385	
Expenses			
Bus Dev / Marketing / PR	206	2,363	-91%
Compensation Costs	3,111	4,874	-36%
General & Administrative	202	222	-9%
Occupancy Costs	25	54	-54%
Professional Fees	241	1,103	-78%
Travel & Entertainment	89	199	-55%
Total Expenses	3,875	8,815	
Other Gain/Loss			
Exchange Gain (Loss)	(129)	(6,756)	-98%
Fiat Guarantee Gain (Loss)	(3)	(147)	-98%
Other Income	0	30	NM
Total Other Gain (Loss)	(132)	(6,873)	
Interest Expense	0	2	-100%
Tax Expense	247	70	253%
Net Income	29	(8,375)	

Management has elected to omit substantially all of the disclosures required by accounting principles generally accepted in the United States of America ("US GAAP"). If the omitted disclosures were included in the financial statements, they might influence the user's conclusions about the Company's financial position, results of operations and cash flows. Accordingly, the financial statements are not designed for those who are not informed about such matters. Treatment of "DASH" as a foreign currency and its "mark-to-market" accounting is not in compliance with US GAAP; Statement of Cash Flows has been omitted.



## Roadmap



#### Dash Platform - Evonet

- Public testnet
- Data contracts, documents & identities
- Naming service and DashPay contracts
- Libraries
- Developer documentation

#### Q1 2020

#### Dash Platform - Evonet

- Light client support
- 3rd party data contracts
- 3rd party node support
- Stabilization of Evonet
- Platform console project

### Developer Meet-up

#### Future

#### Dash Platform Rollout

- Credit system
- Proof of service
- Improved identity and data contracts
- Protocol & chain optimizations

#### Q4 2019

#### DashCore v0.15 Testnet

- Backports to BTC v0.15.2
- QT Wallet UI update
- Post stress test enhancements

#### New documentation site

#### Q1 2020

#### DashCore v0.15 Mainnet

- PrivateSend enhancements
- Faster mempool syncing
- QT Wallet UI enhancements
- Backports for BTC v0.16

#### Future

#### DashCore

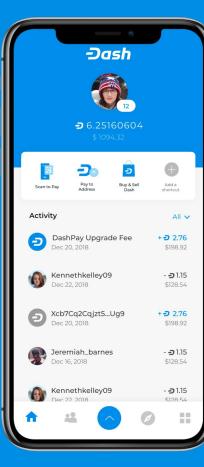
- Proof of service enhancements
- Platform credit distribution
- Store of value enhancements

# **Dash Platform Development Goals**

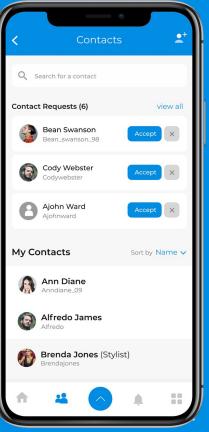
Secure Platform Solidify security model for storing + retrieving data • Ability to safely register application data schemas (data contracts)	Incentivize Platform Encourage network participants to host platform components • Proof of Service (PoSe) to enforce hosting requirements	Prepare for Mainnet         Finalize implementation for mainnet +         launch         • Improvements to platform chain to support         chain halts + improve consensus efficiency			
<ul> <li>Storage of platform data in authenticated tree structures</li> <li>Proofs of data in DAPI responses</li> <li>Signing platform data using BLS</li> <li>Research for support of light clients / SPV through DAPI and Proof of Service (PoSe)</li> </ul>	<ul> <li>Fees associated with data operations</li> <li>Distribution of rewards to masternode owners</li> <li>Recovery mechanisms for identities</li> </ul>	<ul> <li>Feature flags to allow for the smooth introduction of new features</li> <li>Final security checks</li> <li>Mainnet release</li> </ul>			
Access Platform Inspire new use cases & demonstrate capabilities					
<ul> <li>Platform access via the Decentralized API (DAI</li> <li>Decentralized application storage via Drive</li> <li>Identities registered on the platform blockchait</li> </ul>	Simplified developm	d by Dash Platform Name Service (DPNS) aent workflow via Dash SDK documentation + tutorials			

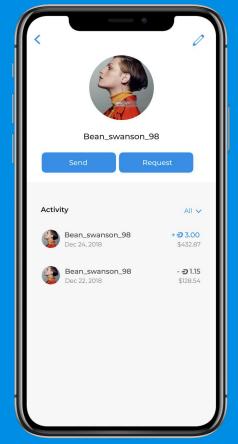


# DashPay Development Update



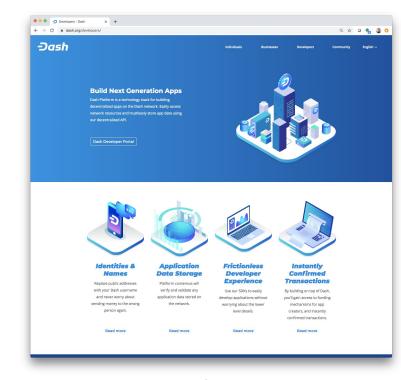






Designs Subject To Change

# **Developer Portal & Documentation**



		sh Core	Dash Platform Dash.org	🖈 🖸 Log In
	Guides > Intro		Contraction Devices	Q. Search
90.15.0	Guides > Intro	duction		u, search
CORE REF	ERENCE		Introduction	E SUCCEST EDITS
Introductio				
Block Chai		>		
Transaction	19	>	The Developer Reference aims to provide technical details and API information to help you	TABLE OF CONTENTS
Wallets			start building Dash-based applications, but it is not a specification. To make the best use of	Not A Specification
P2P Netwo		>	this documentation, you may want to install the current version of Dash Core, either from	
improveme	nt Proposals		source or from a pre-compiled executable.	
CORF API	REFERENCE		Questions about Dash development are best asked in one of the Dash development	
Hash Byte			communities. Errors or suggestions related to documentation can be submitted as via the	
	ocedure Calls	>	"Suggest Edits" button on the top, right of each page.	
HTTP REST		>	In the following documentation, some strings have been shortened or wrapped:	
HITE NGA		,	" [] " indicates extra data was removed, and lines ending in a single backslash "(" are	
CORE GUI	DES		continued below.	
Introductio	0			
Dash Featu	ires	>	Not A Specification	
Block Chair		>	This Developer Documentation describes how Dash works to help educate new Dash	
Transaction			developers, but it is not a specificationand it never will be.	
Contracts		,		
Wallets			Dash security depends on consensus . Should your program diverge from consensus, its	
Operating	Index	,	security is weakened or destroyed. The cause of the divergence doesn't matter: it could be	
P2P Netwo		,	a bug in your program, it could be an error in this documentation which you implemented as	
Mining	16	,	described, or it could be you do everything right but other software on the network behaves unexpectedly as in the case of Bitcoin's v0.8 chain fork. The specific cause will not matter	
senting			to the users of your software whose wealth is lost.	
CORE EXA	MPLES			
Introductio	n		The only correct specification of consensus behavior is the actual behavior of programs on	
Configurati	on File		the network which maintain consensus. As that behavior is subject to arbitrary inputs in a	
Testing Ap	plications		large variety of unique environments, it cannot ever be fully documented here or anywhere	
Transaction		>	else.	
P2P Netwo	rk	>	In addition, we also warn you that this documentation has not been extensively reviewed by	
			Dash experts and so likely contains numerous errors.	
ADDITION	AL RESOURCES			
Dash White	apapar		B	
API Service	- <b>6</b>		Updated 2 months ago	
SDK Resou	rces			
Bitcoin Wh	itepaper 🖬			
			What's Next	
			Reference Sections	
			> Block Chain	
			> Transactions	
			> Wallets	

### dash.org/developers

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### new documentation site



## Growth

Venezuela	BURGER	LA BIT CONF Life American Bitolin 8. Bickchait Cafference	Biack Friday 29 de Noviembre Pagas con Dash y distrina del Major 2017 Som Bo Service States	Contraction of the second seco	
Trading		VCC EXCHANGE	gate.io		
	ABRA	#BBOD			
Remittances				<b>BEME</b> ZAZA	
Other	cryptoworth				







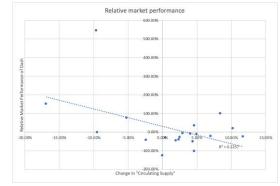
# Outlook

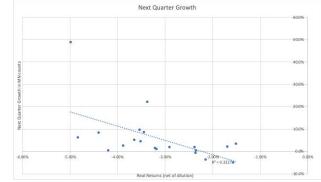


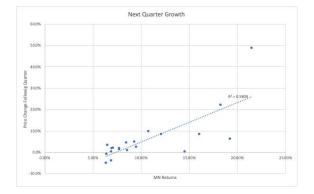
## **Improving Dash as a Store of Value**

There is a moderate correlation between the change in circulating supply and relative market performance. High MN returns seem to attract MN investments, so the relationship is causal...

...and is strongly correlated with resulting increases in Dash's price.









## **Improving Dash as a Store of Value**

Historical returns demanded by MNOs suggest ROI measures are converging toward ~3-5% over time...



... and so it is likely that MNOs will continue demanding lower "headline" ROI in the future, but the declines will moderate.



## **Mining Reallocation Effects**

Token	Hashrate
Ðash	~5 PH/s
Happycoin	~0.066 PH/s
Axe	~0.037 PH/s
ImageCoin	~0.027 PH/s
Others	~0.017 PH/s
Total	~5.15 PH/s

- Dash is protected against 51% attacks by ChainLocks
- It also heavily dominates X11 hashrate ( > 97%), giving us ample opportunity to reallocate safely
- Idle Dash mining capacity is largely technically obsolete, meaning it can no longer be deployed economically even if the price increases
- If performed slowly over time, a reallocation would allow additional time for technical obsolescence of old mining equipment to take hold



## **Still Emerging Solution**

### **Reward Reallocation**

- Reallocate block reward from 50 / 50 split today (excluding proposal allocation) to 25 / 75
- Transition would take place over time at a rate of 1% per quarter (25 quarters total)
- Provides a "soft-landing" in 2026, by which time inflation rates will be much lower
- Significantly dampens circulating supply growth without high risk of spiking price (e.g., simply takes pressure off inflation)

### **Broader Participation**

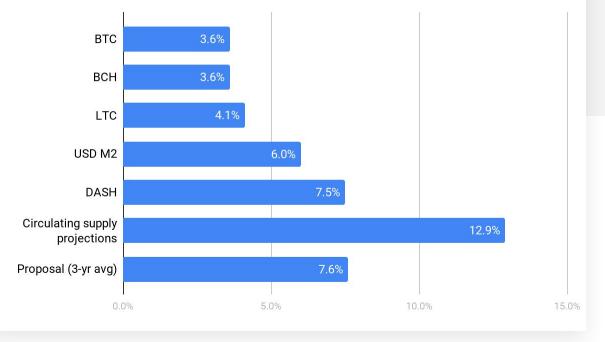
- Trustless masternode shares would allow smaller amounts to participate in MN collateralization
- MN operators would be required to contribute at least 100 Dash of own funds to align incentives
- Shared nodes would not be vote-eligible due to scalability and implementation complexity issues
- Collateral providers name their terms (duration and rate)

### Proposal System Flexibility

- Proposal system funding limit would be eliminated or increased (e.g., 20%)
- However, any "unused" funding would roll over to miner / MN allocations, rather than get "burned"
  - Month A: 24% miner / 72% MN / 4% proposals
  - Month B: 22% miner / 66% MN
     / 12% proposals
- Creates healthy tradeoff requiring "value" for proposals to pass

## **Circulating Supply Inflation Rates**

Annualized Money Supply Growth (as of 12/2019)





## **Next Steps**

- Continued engagement with community to shape final proposal(s)
- Test model and analyses with additional experts, including Arizona State University researchers
- Formal presentation livestream with community to share detailed findings, economic models & assumptions, and proposed changes
- Formal decision proposals for each protocol change: reallocation of rewards, introduction of masternode "shares", and proposal process changes
- It is possible (and healthy) for competing proposals to present alternative solutions; to the extent they directly compete with the final DCG proposal, we would cooperate to structure a "bake-off" voting process







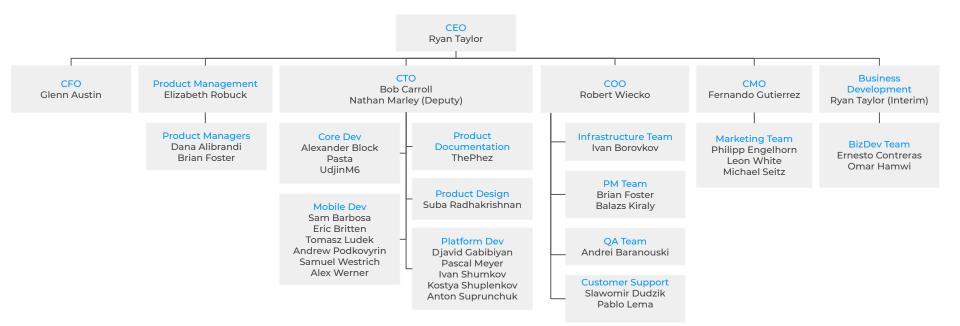
- 1. Do DCG core developers plan to spend more time engaging with other blockchain experts to discuss things, sharing, learning, feedback and at the same time getting exposure, and understand what the market want? (jleony)
- 2. Will implementation of Tendermint protocol allow cross-chain communication and what is our relationship with COSMOS (ATOM)?
- 3. For many centralized APIs, the service provider imposes limits on how many API requests a registered user is permitted to prevent abuse. I think that many people will be relying on the DAPI to be reliable for servicing requests. How will the new Evolution DashDrive and DAPI deal with spam and DOS attacks? (MoreEXP)
- 4. How has the testing for Dash Platform been going? Are any dapps being tested at the same time? Is the Dashpay dapp being tested on Dash Platform test-net? Has a timeline been explored for the main-net releases of Dash Platform and Dashpay?
- 5. Has optional privacy on mobile wallets been discussed as a deliverable? If so, is there a rough date users can expect this functionality?
- 6. Will relevant Dash Core members consider putting on a group livestream to talk solely about Dash's marketing/branding/Evo marketing for 2020, and beyond....plus include some community member questions in the livestream? (Critical\_Input)
- 7. How does DCG strategy fit into the DCW governance proposal that just passed? (AgnewPickens)
- 8. With Dash Force being defunded, does DCG have any plans to fill the void, in particular, the back end work they did? (kanuuker)

### -Dash





# How DCG is Organized



### -Dash

# What the Teams Accomplished

Tech	Business Development	Marketing
<ul> <li>Dash Core v0.15.0 released to testnet</li> <li>Began Bitcoin backports for BTC v0.16.x</li> <li>Launch Dash Platform and SDK on EvoNet</li> <li>DashWallet re-design</li> <li>DashWallet iOS beta launch</li> <li>Launched developer documentation portal</li> </ul>	<ul> <li>Educated exchanges to both reverse privacy-related delistings and proactively ensure others have the required information</li> <li>Grew our Dash ecosystems in Venezuela supporting payment processor partners</li> <li>Completed InstantSend/ChainLocks exchange campaign reachouts. Currently in the process of adding IS/CL to over a dozen exchanges</li> <li>Begun conversations with South Latin America exchanges and remittance providers to enable Dash activity</li> </ul>	<ul> <li>Sponsored and participated in Money 20/20</li> <li>Sponsored and participated in Labitconf</li> <li>Organized Evolution Open House</li> <li>New developers page in dash.org</li> <li>Improved payment processors content in dash.org</li> <li>Increased visibility of IS exchanges on dash.org</li> <li>New languages for the website</li> <li>Prepared tools to do media outreach internally instead of through an external firm</li> </ul>
Finance/HR	Operations	Product
<ul> <li>Monthly Board of Directors and weekly balance sheet report communicated internally</li> <li>Continued to request funding from the Dash network for DCG</li> <li>Engaged with crypto ratings council leading to Dash being rated a 1 (consistent with few or no characteristics of a security)</li> </ul>	<ul> <li>Evonet launch preparations project</li> <li>Q3 call + internal call preparations</li> <li>Dash Explorer deprecation</li> <li>Regulatory issues - support</li> <li>360 Review</li> <li>Salary framework - project start</li> <li>Business Continuity Plan</li> <li>Process for periodic accounts review (AWS, Slack, Github)</li> <li>Process for review and decommission of hardware and software</li> </ul>	<ul> <li>Supported Dash Platform and SDK MVP release to Evonet and creation of Dash developer documentation portal</li> <li>Completed prioritization of high level backlog</li> <li>Drafted initial version of high level roadmap (WIP)</li> <li>Finalized new UI designs for DashWallet (iOS + Android) to refresh and unify the UX</li> <li>Kicked off project to improve outside development contribution process</li> <li>Kicked off store of value discussions</li> </ul>

# **Current Activities**

Management Team Understand problems and determine priorities CEO, CFO, CTO, CMO, COO, BusDev, Product

360° Final Reviews

- PrivateSend and compliance issue (Japan)
- SoV Discussion (initiation)

US Open House

- Dash price issue mitigation (internal actions)
- Revenue sources policy

Value Team Deliver products with user-first approach CEO, CTO, CFO, CMO, COO, BusDev, Product

- Product prioritization process
- Mobile store accounts migration
- EvoNet release preparations
- Explorer deprecation
- DashCore 0.14.1 release

Growth Team Design go-to-market activities and drive growth CEO, CMO, BusDev, Product

- Partner strategy planning
- Remittances channels design
- Gaming strategy Evaluation
- Venezuela strategy
- Wider LatAm strategy
- InstantSend & ChainLocks exchange campaign
- Marketing Strategy Coordination
- Technology and Dash Platform Strategy
- New Opportunities for Adoption

# What's Next (Q1)

Tech	Business Development	Marketing
<ul> <li>Dash Core v0.15.0 release to mainnet</li> <li>Continue Bitcoin backports for BTC v0.16.x</li> <li>3rd party contracts on Dash Platform (EvoNet)</li> <li>DashWallet iOS re-design launch</li> <li>DashWallet Android re-design beta</li> <li>Maintain developer documentation portal with DashPlatform and Dash Core updates</li> <li>DashPay demo (EvoNet)</li> </ul>	<ul> <li>Develop and integrate liquidity solutions to complement ecosystem in Venezuela (Remittance, acquire options and new ones)</li> <li>Close larger scale and headline integrations</li> <li>Add fiat pairs in top Venezuela migrant destinations and build remittance corridor tests in two locations</li> <li>Develop New Business Development Strategy for the US and Canada to replace Cannabis/Gaming</li> <li>Complete onboarding of IS on BTI Exchanges</li> </ul>	<ul> <li>First animated Dash explanatory video</li> <li>Series of videos about Dash Platform</li> <li>Direct media outreach</li> <li>Remittances campaigns to increase the availability of Dash in Venezuela</li> </ul>
Finance/HR	Operations	Product
<ul> <li>Optimally manage balance sheet reserves</li> <li>Automate monthly salary payouts to contractors</li> <li>Continue engagement with regulators and exchanges on privateSend and security status</li> <li>Finish year end finance and human resource activities</li> <li>File federal and state taxes</li> </ul>	<ul> <li>Align expectations for estimation and predictability between management and development teams</li> <li>Find a solution for the situation with developers having very limited transparency</li> <li>Finalize salary framework</li> <li>Create process for review and decommission of hardware and software (review testnet servers)</li> </ul>	<ul> <li>Refine plan for Dash Platform phased rollout</li> <li>Support release of UI redesign on both iOS and Android</li> <li>Develop plan for piloting improved outside contribution process</li> </ul>

# **Quarterly Performance Trends**

Metric	Q4 '18	Q1 '19	Q2 '19	Q3 '19	Q4 '19	QoQ	YoY
PRODUCT							
Daily Volatility	6.39%	3.57%	4.42%	4.12%	3.32%	-19.4%	-48.0%
Median Fee	\$0.0006	\$0.0003	\$0.0005	\$0.0006	\$0.0003	-37%	-44%
USERS							
Avg Daily Active Addresses	45.2k	73.0k	78.1k	79.3k	84.2k	6.2%	86.4%
Mobile Wallet Installs on Active Devices	33,591	32,384	41,007	56,311	84,215	50%	151%
Total Addresses > 1\$	414,750 :	619,951	600,349	376,953	575,658*	52.7%	38.8%
USAGE							
Avg Daily Traded Vol	\$169M	\$214M	\$365M	\$213M	\$274M	28.8%	62.4%
TPV	\$1.29B	\$1.85B	\$3.50B	\$1.82B	\$1.52B	-16.4%	18.2%
Economic Transactions	4.27M	0.77M	1.10M	2.69M	1.65M	-38.8%	-61.4%
Median Economic Transactions / Day	7,579	8,383	11,133	15,469	16,277	5%	115%
Avg Daily Median Tx Value	\$14.50	\$10.49	\$20.76	\$11.63	\$10.31	-11.3%	-28.9%
% InstantSend	0.13%	0.75%	35.37%	71.38%	100%	n/m	n/m
% PrivateSend	0.15%	0.79%	0.62%	0.28%	0.47%	68%	213%
CRYPTOCURRENCY PAYMENT GROWTH							
Bitcoin Median Transactions / Day	258,207	304,128	363,947	329,536	312,556	-5%	21%
Lightning Network Capacity (USD)	\$1.92M	\$4.35M	\$10.94M	\$6.54M	\$6.21M	-5%	223%
Bitcoin Cash Median Transactions / Day	16,232	10,722	47,743	47,487	40,176	-15%	148%
Litecoin Median Transactions / Day	23,309	22,871	25,997	27,434	21,269	<b>-22%</b>	-9%
MARKET							
Supply	8.54M	8.72M	8.89M	9.07M	9.24M	2.0%	8.3%
Price	\$80.95	\$105.65	\$164.81	\$69.35	\$42.26	-39.1%	-47.8%
Market Cap	\$691M	\$922M	\$1.47B	\$629M	\$391M	-37.9%	-43.5%

-Dash

# **Customer Support Q4 2019 Summary**



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# **Data Glossary**

METRIC	DEFINITION	SOURCE	NOTES
Daily Volatility	Standard deviation of daily close price variance	<u>coinmarketcap.com</u>	
Median Fee	Mean of the daily median fee in USD for each day in the quarter	https://coinmetrics.io/newd ata/dash.csv	
Avg Daily Active Addresses	Mean Daily Active Addresses (sum of unique in-out addresses for the day)	https://coinmetrics.io/newd ata/dash.csv	
Wallet Installs on Active Devices	Estimated number of instances of installed Dash Wallet app on devices that have been active within the last 30 days	google play console. iTunes connect	Only 30% of iOS users permit app reporting. In order to reach a more accurate estimate of the number of iOS wallets, we divided the number of app installations for iOS by 0.30. It is likely that this estimate is nonetheless below the actual installation count, since Dash and cryptocurrency users are more likely than the general population to value privacy and opt out of app reporting.
Total Addresses > 1\$	Amount of addresses with a balance greater than 1 USD (snapshot)	bitinfocharts.com	*Should be a snapshot of last day of the quarter, but the snapshot this quarter was not captured until January 22nd, by which time the price had increased substantially. By that time, a large number of PrivateSend denominations of 0.0100001 Dash became worth > 1 USD
Avg Daily Traded Vol \$	USD Volume traded on exchanges, daily mean	<u>coinmarketcap.com</u>	CoinMarketCap relies on self-reported volume, which is known to be exaggerated by exchanges to boost their perceived liquidity. OpenMarketCap is an alternative that reports only "trusted exchanges", but this metric changes as exchanges are vetted and added, and historical data is inaccessible.
тру	Total Payment Volume in USD	https://coinmetrics.io/newd ata/dash.csv	We are using a new metric for payment volumes that excludes certain volumes to improve accuracy. A detailed post on the approach can be found here: <a href="https://coinmetrics.io/introducing-adjusted-estimates/">https://coinmetrics.io/introducing-adjusted-estimates/</a>
Economic Transactions	Number of on-chain transactions excluding PrivateSend mixing and coinbase transactions	<u>dashradar.com</u>	We leverage data on transactions per day, subtracting from the total mixing transactions, and coinbase transactions.
Median Economic Transactions / Day	Median number of on-chain transactions per day excluding PrivateSend mixing and coinbase transactions	<u>dashradar.com</u>	Calculated by extracting the daily transaction count and subtracting mixing and coinbase transactions. Median is useful because stress tests have minimal effect on this metric, which provides a snapshot of typical usage levels.
Avg. Daily Median Tx Value \$	Mean of the daily median transaction value in USD for each day in the quarter	bitinfocharts.com	
% InstantSend	# InstantSend / # Economic Transactions	n/m	All transactions are now InstantSend, so we will be discontinuing this metric going forward. We left this metric on the slide to include that fact in the discussion and will remove it starting next quarter.
% PrivateSend	# PrivateSend / # Economic Transactions	dashradar.com	no coinbase & no mixing transactions in denominator. These are transactions that utilize only PrivateSend denominated inputs.
Cryptocurrency Payment Growth	Median transactions per day, except Lightning Network for which this data cannot be obtained.	<u>bitcoinvisuals.com</u>	LN does not reveal or enable tracking of the number of LN payments. The best proxy for usage may be the number of unique open LN channels.
Supply	Number of coins circulating	<u>blockchain</u>	
Price	Avg price for the final day of quarter (across a number of exchanges)	bitinfocharts.com	
Market Cap	Product of Price and Circulating Supply	bitinfocharts.com	Also known as Network Value