Dether.io

BUY & SELL CRYPTO FOR CASH.
SPEND IT AT PHYSICAL STORES.

WHITE PAPER

Version 4.6

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1. ABSTRACT

Buying and selling ether remains a centralized process that's long and difficult:

- It takes time and costs money. Registering online, depositing money and getting verified takes days or weeks. And time is money.
- Decentralization is at the core of blockchains value proposition; yet, central entities still play a major role in the process of buying cryptocurrencies.
- The overly complex buying process creates barriers to Ethereum mass adoption, as more than 2 billion adults are unbanked and don't have the necessary bank account to buy ether.
- The last mile issue in cryptocurrency transactions has yet to be solved. How to transform cryptocurrency into cash in only minutes.

That's why we created Dether.

WHAT IS DETHER?

Dether provides a decentralized peer-to-peer ether network that enables anyone on Earth to buy ether with cash and spend it at physical stores nearby. No bank account is needed, just a mobile phone with internet access. Our belief is that the beauty and power of the Ethereum technology should be easily accessible to all.

We've decided to put all of our energy and that of the Ethereum community into helping us build the first trustless solution that will allow anyone to be able to interact with the Ethereum blockchain no matter who you are, where you are, and without the need for a middleman.

CROWDSALE DETAILS

ĐTH token total supply: **100.000.000 ĐTH** max will be minted during the crowdsale.
Maximum cap on crowdsale: **15.000 ETH**
Method: **ETH accepted**

Dether.io

BREAKING BARRIERS TO ETHEREUM MASS ADOPTION

As Satoshi Nakamoto envisioned the first blockchain use case as a “peer-to-peer electronic cash system,” people all over the globe have been increasingly using not only bitcoin, but also cryptocurrency, as a means of payment.

With cryptocurrency you can now:
Buy a Subway sandwich in Buenos Aires.
Buy a painting in Paris.
Pay your children’s tuition fees in New York City.
Buy a deli sandwich in Melbourne.
Buy a camera in Tokyo.
And that’s just the beginning.

In this context, mobile phones are the new banks. And cryptocurrency is the new money. That’s the reason we’ve also shaped the Dether map as a decentralized solution for any physical store willing to accept ether as a means of payment.
No credit or debit card is needed to spend ether at physical stores.

WHITE PAPER

This paper first underlines the current and future issues faced by billions of individuals at a moment in history when Ethereum adoption, and more globally, blockchain technology adoption, is more than a buzzword. It then presents the core principles of the decentralized mobile application that is Dether, its adequate features to make it a worldwide success and the use of the ĐTH token. We will also present a market study stressing the time to market accuracy, along with a presentation of the market to be addressed and its targets (from early adopters to the late majority).

ACKNOWLEDGMENTS

We would like to thank all of the contributors and supporters for their comments and advice on Dether and this whitepaper.
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- The CryptoFR community
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2. INTRODUCTION

With the 2007 financial crisis still leering over the economy, the need for a decentralized banking solution has come to the forefront of ingenuity. Against the backdrop of raising awareness and the need for more trusted global solutions, blockchain technology opened doors for new opportunities by using cutting-edge technology to serve societies all over the world. The technology initially underlying the Bitcoin protocol has the power to have a great impact on our society by transforming our industries. Financial services, healthcare services, even governance: a wide range of fields could be disrupted using blockchain technology. And by disrupting those multiple fields, it could also allow for better inclusion of populations left behind by globalization.

When Satoshi Nakamoto created Bitcoin, the first blockchain and its cryptocurrency, it was aimed at being a "peer-to-peer electronic cash system." A digital form of money that could be used by anyone, from anywhere, and without having a central organization behind it that has power over the entire system. Cryptocurrencies are often referred to as digital gold: digital money, not ruled by any government, and secure from political influence. In countries experiencing hyperinflation, it's used to store value. It also allows for fast, secure and convenient payment over the internet, preserving the anonymity of the participants.

Bitcoin: A Peer-to-Peer Electronic Cash System

Satoshi Nakamoto
satoshin@gmx.com
www.bitcoin.org

Abstract. A purely peer-to-peer version of electronic cash would allow online payments to be sent directly from one party to another without going through a financial institution. Digital signatures provide part of the solution, but the main benefits are lost if a trusted third party is still required to prevent double-spending. We propose a solution to the double-spending problem using a peer-to-peer network. The network timestamps transactions by hashing them into an ongoing chain of hash-based proof-of-work, forming a record that cannot be changed without redoing the proof-of-work. The longest chain not only serves as proof of the sequence of events witnessed, but proof that it came from the largest pool of CPU power. As long as a majority of CPU power is controlled by nodes that are not cooperating to attack the network, they'll generate the longest chain and outpace attackers. The network itself requires minimal structure. Messages are broadcast on a best effort basis, and nodes can leave and rejoin the network at will, accepting the longest proof-of-work chain as proof of what happened while they were gone.

The creation of the first blockchain with Bitcoin has highlighted the fact that decentralization is the core value of blockchain. Going through a centralized organization or institution has a systemic risk, being that this central entity is in fact a single point of failure that can destroy everything that's below it.

[1] Satoshi Nakamoto, Bitcoin: A Peer-to-Peer Electronic Cash System - Bitcoin.org

Decentralization matters because it redistributes power back to society, without the control of a central authority, as beautifully explained by Vitalik Buterin:

- **"Fault tolerance** – decentralized systems are less likely to fail accidentally because they rely on many separate components that are not likely.
- **Attack resistance or seizure resistance** – decentralized systems are more expensive to attack and destroy or manipulate because they lack sensitive central points that can be attacked at a much lower cost than the economic size of the surrounding system.
- **Collusion resistance** – it is much harder for participants in decentralized systems to collude to act in ways that benefit them at the expense of other participants.
- **Censorship resistance** – this is one of the most important distinguishing factors of cryptocurrencies. Centralized systems are notoriously easy to censor. Censoring transactions allows for third parties to prevent the flow of transactions to or from certain sources.
- **Access control resistance** – Centralized services are easy to have access blocked by an ISP, government, or other authority. Even if the internet was completely shut down, however, blockchains could survive through satellites or shortwave radio.
- **Change resistance** – Blockchains are also incredibly resistant to change and are not subject to the whims of a few individuals. Any major change requires consensus from the vast majority of participants."

Blockchains are powerful because they generate decentralization. Decentralization has the unique ability to give people control back over their rights, their digital assets, their data, their vote and more.

Beyond that, the Ethereum blockchain goes even further.

More than a simple cryptocurrency, Ethereum offers promising opportunities. Ethereum enables anyone to access and interact with Distributed Applications (Dapps) and Smart Contracts. It gives the disruptive ability to build trustless digital societies and organizations where its applications don't have any kind of censorship, fraud or third party interference. Here, we are talking about societies where you can participate in a democratic and autonomous organization with trust, and without previously knowing any participants. The power of Ethereum's technology and its extremely active community opens up a world of possibilities for the future of our society.

Ethereum technology and its community are flexible enough and ready for scaling its protocol in the near future with prospects for off-chain systems–its security being one of the strongest ones.

[2] The meaning of Decentralization, Vitalik Buterin / Why decentralization matters, Alphonse Pace

As you will see below, many applications using the Ethereum blockchain are under development.

We are living in a turning point in history when Ethereum has the power to change the societies we live in, and therefore, the world. And one of its challenges is mass adoption. By mass adoption, we mean that anyone in the world should be able to interact with its network and have the ability to build or participate in trustless organizations without a middleman or fiat currency barriers.

Thus, **this white paper aims to give the necessary explanation about Dether,** its context, its technology, its market, its targets, its tokens, its team, and its current state and future development. It sums up our thoughts and strategy in the current stage of the project and may evolve in the future. We're building a trustless solution needed worldwide to foster Ethereum mass adoption, and this white paper is the first step.

[3] Source: dapps.ethercasts.com

3. OBSERVATIONS & CURRENT CHALLENGES

3.1 THE MISSING PIECE TO MAKE CRYPTOCURRENCY A TRUE "PEER-TO-PEER ELECTRONIC CASH SYSTEM"

Decentralization is at the heart of blockchain; it is even viewed, in the words of Vitalik Buterin , as "blockchain's entire raison d'être." On the one hand, Bitcoin paved the way for the first use case of blockchain technology; an "electronic peer-to-peer cash system" as described by Satoshi Nakamoto. What's more, Ethereum enables anyone to build unstoppable applications: a trustless digital world where its applications don't have any kind of censorship, fraud or third party interference. A world where you can participate in a democratic and autonomous organizations without previously knowing any participants.

In fact, when one buys ether (Ethereum cryptocurrency), it then becomes possible to access and interact with the Ethereum blockchain. While we're living in an important time in history, where blockchain technology, and especially Ethereum, is changing the world , one of its greatest challenges remains mass adoption.

3.2 CURRENT PROBLEMS FACING ETHEREUM MASS ADOPTION

Nevertheless, mass adoption cannot happen if:

1. **Buying crypto-currency remains a long and difficult process.** Registering online, depositing money and getting verified can take weeks. And time is money. Cryptocurrency's volatility is sometimes presented as a barrier. But as we've seen in the past few months, volatility can also be seen as an opportunity, especially when ether's value can rise dramatically within hours or even minutes during a single day. In order to interact with the Ethereum blockchain, people should be able to quickly and safely buy ether, without having to pay high fees when they want to do so.

2. **Financial institutions still play a major role when it comes to buying and selling ether** through cryptocurrency exchanges. The most common way to buy cryptocurrency remains online exchanges that require bank transfers, despite the fact that the technology's core purpose is to bypass central institutions. There are systemic risks of having these giant central institutions that are single points of failure. This current use is far from Satoshi Nakamoto's vision to create "a purely peer-to-peer version of electronic cash [that]would allow online payments to be sent directly from one party to another without going through a financial institution."

3. **Going through financial institutions or using credit cards creates barriers to mass adoption.** This problem becomes massive when over 2 billion people are unbanked.

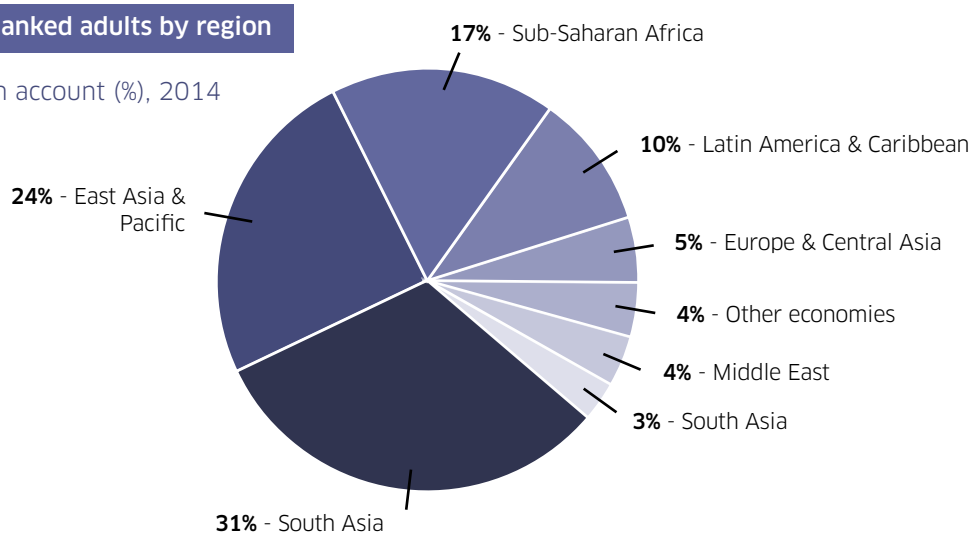
These people, who are mostly located in Africa, South Asia and South America, are usually living in societies sensitive to abuses of government power and corruption where democracy is not the rule and where corruption exists.

[4] https://medium.com/@VitalikButerin/the-meaning-of-decentralization-a0c92b76a274
[5] https://bitcoin.org/bitcoin.pdf

Thus, by being unbanked, it's not only impossible for them to interact with the Ethereum blockchain, it's also impossible for them to use it in fighting censorship, fraud or third party interference, while building societies which allow for participation in a democratic and autonomous organization.

The world's unbanked adults by region

Adults without an account (%), 2014



Selling fish inside Mogadishu's fish market in the Xamar Weyne district of the Somali capital.

The last mile issue in cryptocurrency transactions has yet to be solved. Today, Ethereum enables anyone to send ether, so value, from one point to another within seconds. So when Alice (who's located in Europe) sends ether to Bob (her father who's located in Africa), it takes only seconds, and the only thing they need for their transaction is a smartphone. However, when Bob receives ether in his wallet on his smartphone, he cannot transform it into cash to pay rent or buy supplies. Nor can he quickly find stores, shops and other businesses that would trade ether for fiat currency or that would accept ether as a means of payment.

By centralizing all of the data they gather, current solutions act as a middleman between the buyer and the seller. Moreover, the level of services provided, as well as the user experience is poor. Transactional and user information is stored in their servers, which constitutes a security risk. And the risk of having a user with a fake rating constitutes a point of failure, as it's centralized and could thus be hacked.

[6] Source: Global Findex database
[7] https://bitcoin.org/bitcoin.pdf

3.3 USER PERSONA

Hassan, the Tunisian developer and human rights activist.
Hassan Labid lives in Tunis. Since his childhood, he's been a fan of video games. He used to spend his days playing video games in the city's arcade, where he would meet up with his friends.

At 18, his mom bought him his first computer. He started playing with computer games and quickly realized that he wanted to become a developer. But as a human rights activist during the Arab Spring, he soon became interested in blockchain technology, and more particularly in Ethereum. He wanted to build a DAO (Decentralized Autonomous Organization), that would allow him and other residents of the country to express themselves freely, without censorship, in a country where any kind of public space is controlled by the police, making it difficult to criticize institutions.

He also plans to set up a transparent voting system to allow his community to designate the future elected representatives of the country. Although he's closely following DAO projects, he cannot interact with the Ethereum blockchain because he doesn't own ether. His first thought was to mine ether, but he needed a more powerful computer and electricity bills were expensive. Then he thought of buying ether online. He has a bank account, but no online exchange accepts Tunisian dinar.

Today, he is looking for a simple and effective solution to acquire ether by relying on the millions of Franco-Tunisian going back and forth between France and Tunisia, who are able to play the role of human mobile ether ATMs.

Adama, the hard worker immigrant from Mali.
Adama Touré is a young Malian immigrant currently based in Paris. He is from a small village near Markala in Mali. He crossed North Africa two years ago to go to France. As he was fleeing the misery of his home country, he spent all of his money and his mother's to come to France to find a better life.

Now, it's been two years since he's been working on construction sites in Paris with other people from different countries in Africa who are also being paid minimum wage. While he struggled to find a job and a shelter that he shares with other employees from Mali and Senegal, he saves a part of his salary every month to send money to his mother to pay off his debt and help her live decently. Because of this, Adama goes through Western Union every month. A company that takes a 10% commission fee every time he sends money to his mother.

Fed up with this system, Adama attended one of the monthly «Ether Africa» Meetup in Paris and learned more about Ethereum. Today, he would like to send ether to his mother, but he also would like her to convert the cryptocurrency into fiat CFA Franc once she receives her ether. With no time to waste, he desperately seeks a quick and effective solution.

Angel, fighting hyperinflation in Caracas.
Angel is an electrician in Caracas, Venezuela. He is the father of two boys and works hard to provide for his family and support their needs. Angel didn't attend school when he was young, and now he wants his two sons to study at college, so he's started saving money.

Although he has a steady job as there's always a need for an electrician in Caracas, Angel is having a hard time putting money aside for his two boys' future because of the hyperinflation that is taking place in his country. Consumer prices rose by 800% which decreases the value of the money he makes every month.

His customers always pay him in cash and today, he is looking for a solution, like ether or another cryptocurrency, that will allow him to use the cash he makes and convert it into a safe-haven currency as an investment.

Ania, the future rockstar?
Since she was a child, Ania has always been a "natural performer," just like her father loved to call her. Whether Billie Jean is playing on the radio, or she's giving a private concert in the mirror, she is always the first one to sing on the dance floor … or in the middle of the street.

Since she started singing and dancing in a band, she's been performing in many local bars. Her audience keeps asking for more music. Now, she's looking for solutions to listen to music on demand, as well as upload her music to gain popularity.

She's heard about Ujo Music, a home for artists that allows them to own and control their creative content and be paid directly for sharing their musical talents with the world.

But Ania's never had the chance to own ether. Cash is king in her hometown.
With Dether, she'll be able to upload her album to Ujo Music to let the whole world know about her talents. Whenever a user listens to one of her songs, she'll automatically get paid in ether within seconds. Her goal is to earn enough ether on Ujo Music in order to cash it out afterwards and record her brand new album.

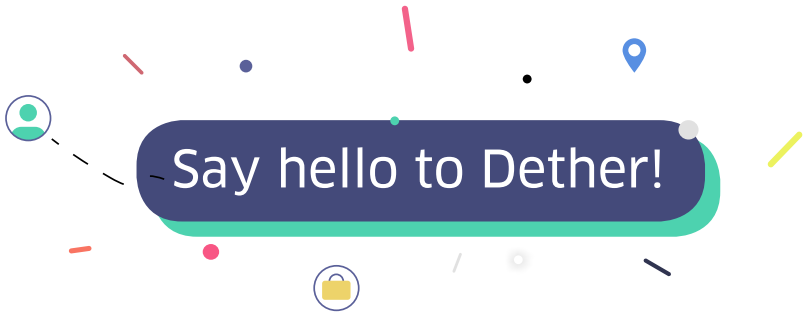
Hans, the German student who wanted to buy ether.
Hans is a business school student in Berlin. Since his internship at Rocket Internet, he's been interested in the startup ecosystem and new technology-related topics.

He started attending conferences and Meetups about new technologies and successful startups. Eventually, he discovered blockchain technology after attending a conference about the use of smart contracts.

He then wanted to invest some of his savings in ether. Observing that the ether price was 90$ on May 18, 2017, he went through an online exchange to transfer his savings from his bank account.

But by the time his account was validated due to KYC regulations and the bank carried-out the transfer to the online cryptocurrency exchange, the price had already risen to 120$. Like Hans, tomorrow millions of people will look for a quick and efficient way to get ether without having to go through a middleman or a long and cumbersome process.

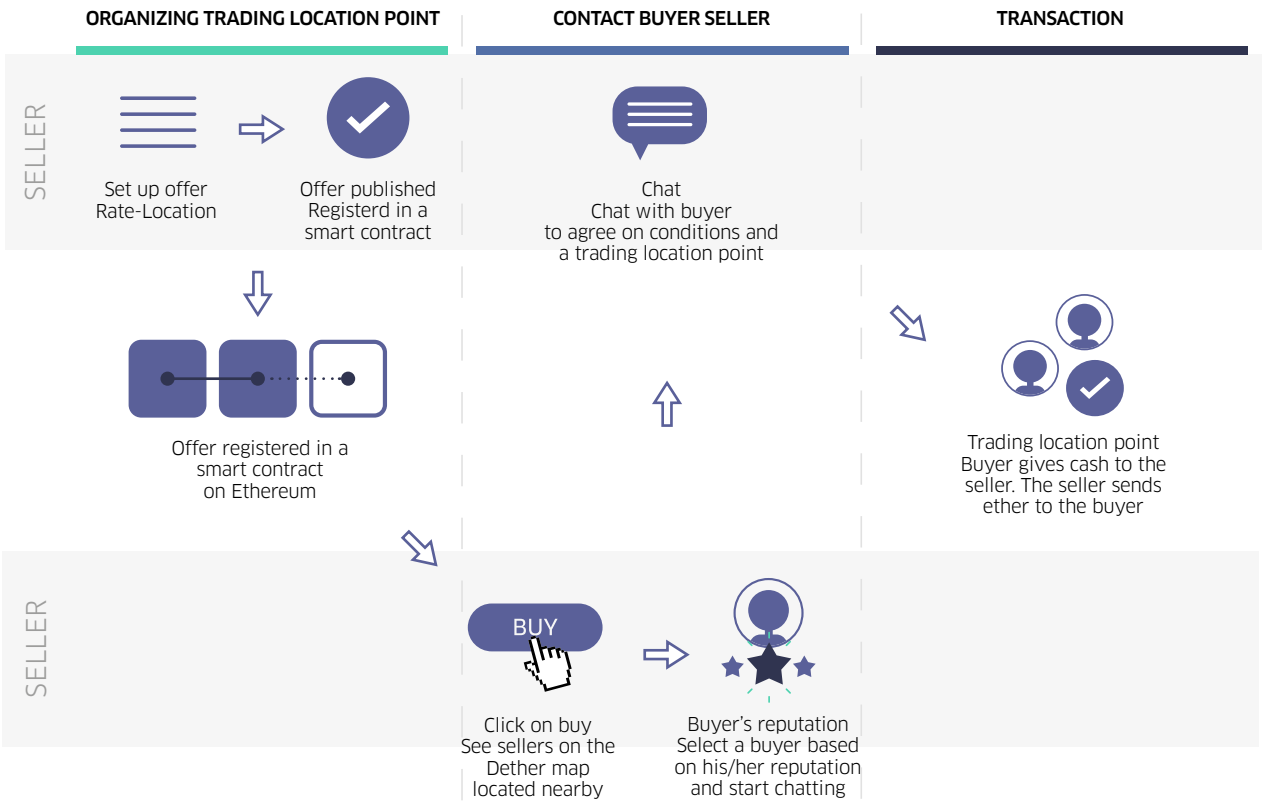
4. SAY HELLO TO DETHER!



4.1 A CUTTING-EDGE APP FOR ETHEREUM MASS ADOPTION

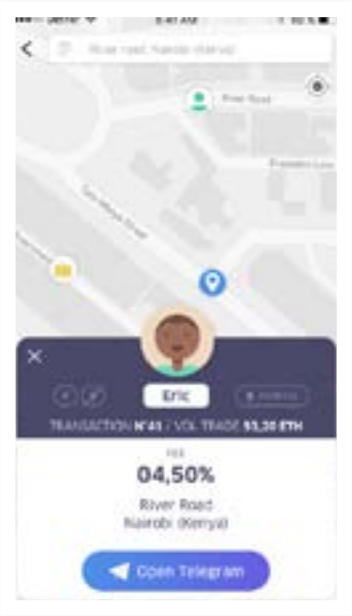
Dether is the world's first peer-to-peer ether network. It enables anyone who has a smartphone to buy and sell ether using cash and spend it at physical stores listed on the Dether map.

Dether creates a worldwide ecosystem of ether buyers, sellers and physical stores willing to trade ether for fiat cash and accept it as a means of payment. Dether provides the infrastructure for people to embrace Ethereum technology in their everyday lives. Dether is available on any smartphone. No bank account is needed to buy and sell ether. No credit or debit card is needed to spend ether at physical stores.



4.2 BUY AND SELL ETHER. ANYWHERE. ANYTIME. WITH CASH.

Dether offers the unique ability to let anyone safely buy and sell ether anywhere, anytime, with cash. Because we believe that Ethereum won't know mass adoption until it's easily and quickly accessible to anyone on Earth, we decided to create the first Dapp that brings the key solution in order to interact with the Ethereum blockchain from anywhere in the world.



- **The fastest and easiest way for anyone to buy ether**

Dether offers the unique opportunity to have access to ether within minutes by using a phone and spending cash.

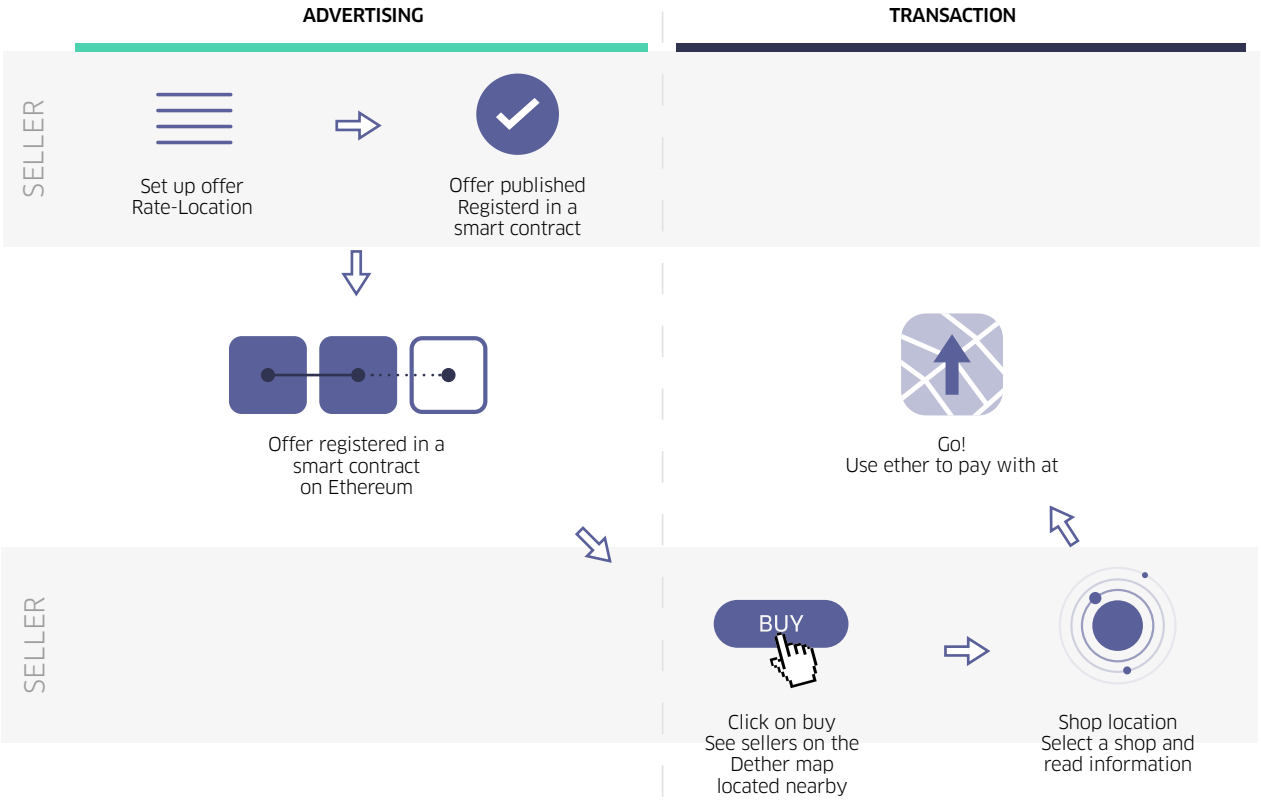
Users are able to discover ether sellers, called tellers, near them on the Dether map, their ETH/fiat rate, the fees that they take, and chat anonymously with them. Buyers are free to engage a conversation with the seller they want to trade with in order to agree on the trading conditions and the meeting point to exchange ether for cash.

Any individual that has cash is able to buy ether on Dether. Cash is used in all countries across the globe whether or not a person is unbanked. And the adoption of smartphones is increasing all over the world. At the crossroads of cash usage and increasing smartphone adoption is Dether. Its unique solution gives anyone the opportunity to access ether, and thus Ethereum blockchain, by spending cash. Dether aims at unleashing the potential of Ethereum technology by providing a quick, easy and secure gateway to the decentralized future.

- **A cross-border market for ether tellers**

Any ether owner can officially become a seller on Dether and benefit from a new, profitable activity.
Ether sellers can now become mobile "PTM" (People Teller Machine) by being on the Dether map and selling ether for fiat currency anywhere in the world at any time. Sellers are free to set up their own ETH/fiat rate and their own fees.

4.3 USE YOUR ETHER IN PHYSICAL STORES ALL OVER THE WORLD

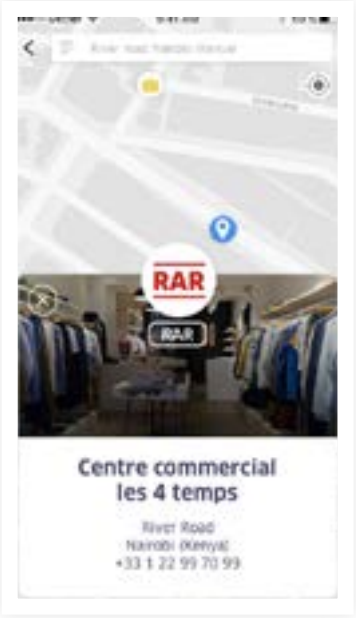


- **Spend ether at local stores, shops and businesses**

On Dether, users discover physical stores near them that accept ether.

As Ethereum popularity is quickly increasing throughout the world, more and more businesses are accepting ether.

Today, buying a Subway sandwich in Buenos Aires with cryptocurrency, a deli sandwich in Melbourne or a camera in Japan, is now possible. Tomorrow, the Dether map will give everyone the opportunity to discover all of the places nearby where ether is accepted.



Dether users are able to discover shops near them that:
- accept ether as a means of payment
- are willing to buy or sell ether for cash

Users are able to spend their ether without the need for a bank account or a credit/debit card. For specific needs, users are able to type the kind of physical stores they are looking for (e.g.: “restaurant”) in their city to see which ones are accepting ether.

- **Adding their own shops to the Dether map and expanding their businesses**

Shop owners can let the whole world know that they’re now accepting ether! As the number of ether buyers and tellers that use the Dether map will grow rapidly, physical stores are also able to be part of the ecosystem by being listed on the Dether map.

Thanks to an auction mechanism, shops will compete with other businesses nearby for better visibility on the Dether map. Similarly, like on any search engine or promotional marketplace, physical stores are able to bet on specific key words and expressions to be more visible to Dether users on the map.

In addition, Dether will offer a complete back-office system to any shop wishing to accept ether, in order to manage their liquidity and keep up with cryptocurrency fluctuations, thus having the possibility to directly convert received ether into fiat currency.

4.4 MODERATION AND ARBITRATION

To preserve quality of service and adhere to the legalisation of a zone’s state governance, users may report physical stores for bad behavior or non-compliance with local laws. Initially, the Dether team will oversee this activity. In the future, the Dether project wishes arbitration to be handled completely through decentralized arbitration services currently under development by other teams in the blockchain ecosystem. An escrow service for especially large trades may be provided in a similar manner: first by the Dether project, but eventually by specialized projects aimed at solving those specific problems.

A user may dispute any of their transactions by hiring an arbitrator for a fee. Dether will first provide built-in arbitration services, but will eventually support third-party arbitration projects such as kleros.io.

4.5 PRINCIPLES

Our mission is to break barriers to foster Ethereum mass adoption. In other words, Dether aims at making Ethereum accessible to anyone on Earth who wishes to interact with it. Dether is built on features that guarantee its use by anyone who owns a smartphone and has internet access.

4.5.1 Fully decentralized

- **Peer-to-peer messaging:** Dether uses a fully encrypted peer-to-peer messaging solution, where none of the information is kept by any entity. Buyers and sellers are able to talk directly to each other to agree on trade conditions and set up a meeting location.

- **Peer-to-peer trading:** buyers and sellers are able to trade together directly from one Dether Wallet (D-Wallet) to another. When they meet up, sellers are able to scan the buyer's wallet QR Code or copy his/her address to transfer the ether. Buyer's hand deliver the cash in the exchange.

4.5.2 Powered by Ethereum smart contracts

- **Keys stored encrypted on device:** when creating a Dether account, users' keys are created and stored encrypted on their local device. Users retain full and exclusive control of their wallet.

- **Smart contract rating system:** buyers and sellers have their own public reputation rating based on the transactions they have successfully achieved and their volume of transactions.

4.5.3 Trustless

- **Secured local transactions:** Dether never holds a user's funds. Sellers are free to transfer ether to their D-Wallet. When they do so, buyers are able to see the amount of ether the sellers are willing to sell. Only the user has the ability to fund his wallet, sell or withdraw his ether.

4.5.4 Mobile first and responsive design

- Individuals move and need solutions adapted to their needs. That's the reason Dether is a **mobile first solution with a mobile responsive design.**

4.5.5 No bank account is needed

- **Phones are the new bank and ether is the new currency.** By using a smartphone, anyone can localize ether buyers and sellers on the Dether map, as well as stores that accept ether as a means of payment.

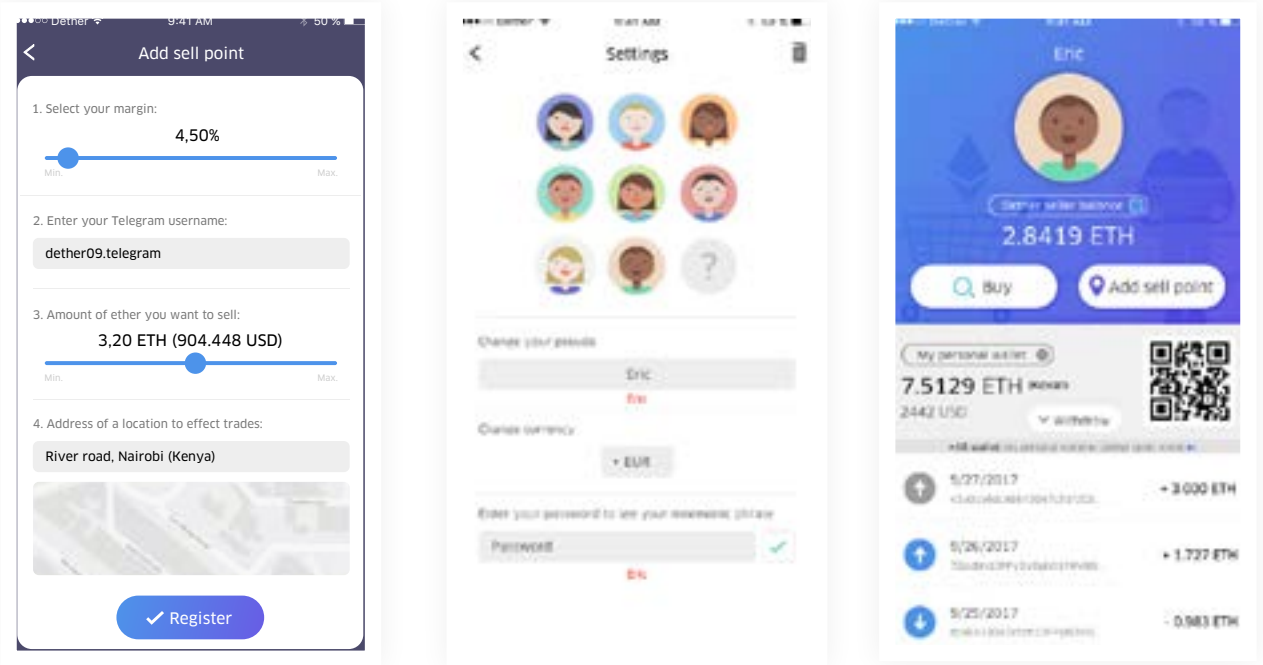
4.6 TRADE EXAMPLE: DENIS AND NADIA

Denis has been interested in crypto for two years and he travels a lot due to his job. Every time he travels to a new country, he always comes back with a lot of souvenirs and gifts for his relatives back in France.
Next month, he's travelling to Algeria for six weeks and he'll have to exchange Euros for the national currency, the Algerian dinar. As the fees taken by the foreign currency exchanges are rising these past six months, he would like to trade some ether for Algerian dinars.
When he lands in Houari Boumédiène Airport in the Algerian capital, Alger, he goes on Dether to trade ether for Algerian dinars.

- Denis creates a Dether Wallet (D-Wallet) within seconds and transfers 2.5 ethers to it
- He discovers ether buyers near him on the Dether map. He quickly sees that Nadia is also currently located at the airport, and that she would like to trade the sufficient amount of dinars that Denis needs for ether. None of them have access to each other's personal data. Pseudonyms and avatars are being shown on the Dether app.
- Denis and Nadia chat anonymously together in order the agree on a price and a safe meeting point at the airport. They decide to trade 2.5 ethers for Algerian dinars with a 3% profit rate that goes to Denis.
- As Denis has saved 2.5 ethers in his D-Wallet, Nadia can verify that he has it before he meets up with Nadia in front the coffee shop at Gate 3.
- When they meet, Denis scans Nadia's wallet QR Code to transfer the 2.5 ethers to her wallet, and Nadia gives the cash to Denis.
- When the trade is done, a pop-up displays on both of their phones that allows them to evaluate the transaction.
- As it went well for both of them, they both get a better personal rating on their profile on the Dether map that will help them for their next trade.

4.7 UX/UI

Dether is built with the idea that even a child could be able to understand how to use it. As a matter of fact, Dether offers a simple and intuitive user experience without the need to have any technical background. Our vision is that User Experience is as important as development, and it should always be the case when launching a Dapp.



From creating a wallet within seconds, to finding ether sellers around you with the simple touch of a button, Dether offers a smooth and enjoyable user experience that targets any user familiar or unfamiliar with blockchain Dapps:

- Use of comprehensive pictograms that make the process understandable without reading the text
- Simple User Interfaces with bright and enjoyable colors
- Friendly and fun imagery through avatar customization
- Fewer clicks for each step: from creating a wallet to trading
- Instant peer-to-peer messaging
- Position sharing on demand controlled by the user at anytime
- Instant push notifications whenever a seller matches a buyer's needs and vice versa
- Trading QR codes
- And more…

4.8 KEY METRICS AND PERFORMANCE

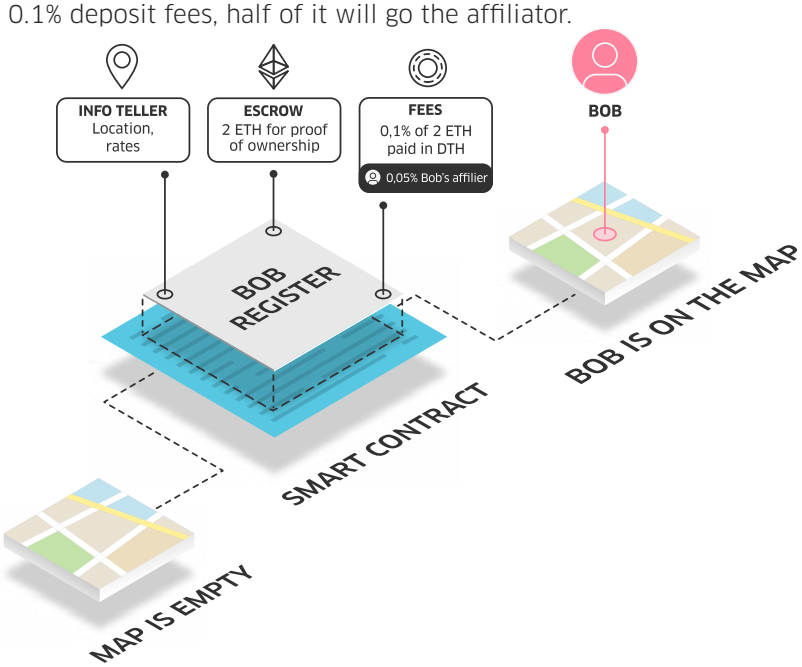
Dether's KPIs will be closely followed by the team to monitor and manage performance. Among the metrics to be followed, are:

- the number of buyers and sellers (overall and per region)
- the number of buyers per seller and vice versa
- the average time a buyer/seller is available
- the number of connections on Dether per user
- the volume of successful trades (overall and per user)
- the average volume of a trade
- the most active regions

4.9 AFFILIATE PROGRAM DETAILS

To sustain organic growth, Dether will launch with an affiliate program. Incentives are provided to users to encourage them to strengthen the Dether network. Affiliate program details are as follows:

- Every teller has an affiliate balance in ETH.
- Every teller can withdraw 90% of his own affiliate balance and 10% of all of his user balance.
- A teller can have multiple users.
- A teller can just have one affiliate.
- The more a teller trades, the fewer fees he'll pay (volumes targeted to have his fee decreased will be established later).
- Teller will pay 0.1% deposit fees, half of it will go the affiliator.



5. DETHER TOKEN MODEL SUMMARY

Dether is a project that facilitates access to cryptocurrency marketplaces through a network of Tellers. Tellers become authorized to vend cryptocurrencies on the Dether network by staking the DTH token with amounts dependent on locality and monthly transaction volume requirements. The Dether team has identified and is attempting to address the following network issues with the DTH token: network congestion, lack of market safety, and network takeovers.

Reducing Network Congestion and Improving Market Safety
By allowing any party to easily register and vend on the Dether network, it would be reasonable to expect significant counts of low-quality or fraudulent listings. To prevent this, a staking mechanism requires that participants have "skin in the game" by locking in a minimum amount of DTH prior to transacting. Those with larger transaction volumes and therefore more potential to negatively impact the network through fraud or scams are required to have larger safety deposits.

The amount staked is subject to arbitration that penalizes bad behavior, as the most straightforward way to punish bad actors in cryptosystems is to take away their money. With a token, the stake amount is automatically correlated to network valuation, and therefore protection for market participants will rise or fall depending on the total value of the network.

If replaced with a cryptocurrency or fiat currency, these scaling staking amounts would require far more intensive price discovery and accompanying politics to effectively protect market participants as the network shrinks or grows. It is also unclear that those tasked with setting the new amounts would do a better job than the market for the token itself.

Protecting Against Network Takeovers
Network attackers may raise capital and attempt a network takeover by staking large amounts to create many fraudulent accounts, increasing network congestion and undermining the overall legitimacy of the network. With the DTH token, any attempts to aggressively purchase en masse will be met with sharp price increases, which would make the attack far more expensive and likely unprofitable.

Consider the use of ETH instead of DTH for staking in this situation. In the early stages of the Dether project, its entire network valuation may be but a tiny fraction of of the $120 billion ETH market cap as of Q1 2018. As a result, the price movement of the staking currency would be unresponsive and unable to effectively counteract the aggressive amassing of resources for a network takeover.

5.1 GENERAL GUIDELINES AND USAGE

Users wishing to operate as sellers or shops must stake a minimum amount of ĐTH tokens for entry, just as taxi drivers must hold medallions to do business in many parts of the world. This requirement helps Dether attract only real users willing to engage in authentic transactions on the marketplace and Dether map.

Required ĐTH stake amounts per account are based on monthly transaction volumes that a vendor wishes to conduct. Greater transaction volumes amount to greater potential to commit fraud and harm the network, justifying more collateral that the network should hold.

For each vended ETH or item, a user earns loyalty points which may be staked to access premium services such as "owning" a geographical zone or "owning" a geography-locked keyword on the Dether search engine for fixed periods of time. Loyalty points are used instead of ĐTH for access to premium services as to prevent deep-pocketed attackers from engaging in undesirable behaviors such as "buying out" the entire Dether map at once. Instead, long-term market participants with healthy transaction histories are best positioned to take advantage of premium services that may also be rival goods.

Upon unstaking of ĐTH, account holders will lose their accrued loyalty points and active premium features. This is to encourage long-term staking for reputation on the network over time.

a. For the ether seller:
1 - Bob wanted to become a seller in Paris, so he had to stake 50 ĐTH* to be listed and to be able to operate. He can now trade 5 ETH/month.
If he wants to be able to trade for more, he'll need to add more ĐTH to his safety deposit: for each additional 10 ETH he wants to trade, he'll need to add 50 ĐTH* /month.
Bob can now stake his loyalty points, in order to be able to have premium zone services.

b. For shops:
1 - Bob wants to list his restaurant as accepting ether on the Dether map. He will have to stake ĐTH tokens for 50 ĐTH*. If he wants to generate loyalty points, the shop has to stake additional tokens based on the volume of sales generated.
Shop owners can stake their loyalty points to either own a zone, or own keywords for the search engine.

NB: All amounts are subject to adjustment reflecting community feedback.

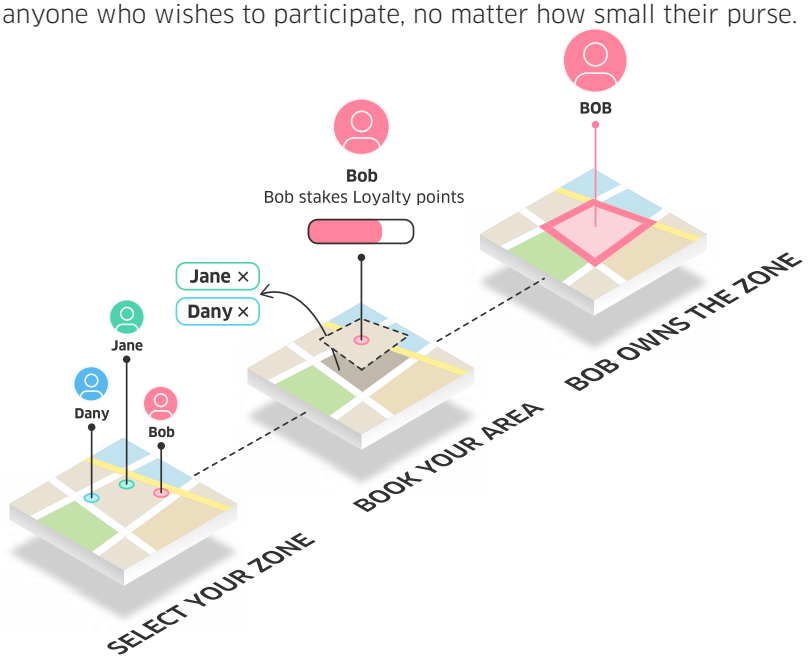
Customer retention policy and loyalty points calculation:

The longer a user stakes ĐTH, the faster they will earn loyalty points. In addition, the more trades a user makes, the faster they earn loyalty points. We want to encourage sellers to be active on the map; that's why the number of loyalty points will be correlated with the number of trades a user makes, not only the volume.

* The starting price for minimum stakes has not yet been fixed and may change overtime.

5.2 LOYALTY PROGRAM AND PREMIUM SERVICES

Users are rewarded loyalty points per ETH volume earned. The reward amount is based on transaction volume and number of trades such that frequent small transactions with diverse parties are rewarded more generously than a handful large transactions with a select few. One of Dether's project goals is to advocate for open access to anyone who wishes to participate, no matter how small their purse.



a. Dether zoning system:

Zones represent a parcel of land that users can effect influence over through premium features such as Dether map visibility. Initially, zones will each begin as areas of 30 square meters on the Dether map, but they will eventually be able to adapt to their localities by growing, shrinking, splitting, and merging. For example, the starting zone size of 30 square meters may be too small for rural areas and too large for busy city districts, so they must be adapted accordingly.

Zones must be “owned” for a particular purpose through winning auctions with bids placed in loyalty points.

An auction system will take place like this:

1. The user selects the zone (or multiple zones) they want to own for a specific benefit such as map visibility.
2. Each zone may be empty or possessed by another user. The challenging user can outbid the previous owner with more loyalty points. If multiple zones are selected, the total bid is divided by the number of zones for the per-zone bid. In future iteration, the Dether project is considering the use spectrum auctions, which were designed exactly for situations where parcels are packaged and repackaged into reusable “sets” for bidding.
3. The bid auction system is open for 24 hours*.
4. The auction winner will “own the zone” and enjoy the specific benefit for at least 24 hours.

*The 24 hour bidding schedule could be adjusted regarding the market activity in the area, or the number of bidders expressing interest to challenge the current winner of the zone.

Zone owners will lose a percentage of their staked loyalty points every 24 hours to prevent the concentration of power. A high-visibility zone owner might otherwise enter a virtuous cycle of transacting and earning loyalty points at rate that could unravel a competitive market.

Initially, the benefits that zone owners can enjoy will be implemented by the Dether team. As progress is made, community members are encouraged to take advantage of the project’s open protocol to create new benefits that zone owners. The premium features that Dether team has implemented for zones include:

- Preferred visibility on the Dether map
- Fee collection privileges to allow other sellers to operate in zone for fees collected by the zone owner.

It is important to note that benefits are very sensitive to particular localities, and that proactive efforts to further engage with prospective marketplace vendors will inform these developments the most.

b. Premium keyword:

Shops will have the possibility to own premium keywords tied to geographic identifiers such as city names, zip codes (or similar), zones, or group of zones. For example, a restaurant accepting cryptocurrency in Paris could own the keywords “restaurant in Paris 75009”.

c. Third party Dapps interface for staking ĐTH:

The Dether project shall implement a smart contract interface for dApp developers to utilize Dether’s zone and loyalty points systems. It will provide facilities such as interfacing with user accounts, managing zone auctions, accessing transaction histories, and methods for collecting fees. The Dether project fully believes that it alone cannot conceive of all the add-on features to address needs across hundred of different and unique localities, so it chooses to open this aspect up to its own market.

Dether’s own premium features such as its visibility map and fee collection privileges will be implemented using the same open interface available to any other developers.

NB: All amounts are subject to adjustment reflecting the community feedback.

5.3 FUTURE DEVELOPMENT AND MITIGATION OF POTENTIAL RISKS:

a. Minimum Staking Amount Variation

It’s more expensive to open a new shop in the busy city of Paris than in the calmer commune of Le Havre, and the same should hold true for vendors on the Dether network in more competitive or less competitive areas. One way to achieve this is to allow the of minimum stake amount to scale depending on local volumes. The calculation might be based on the global volume traded against the local volume in specific areas, along with consideration to a floating ĐTH/ETH price variation to avoid discouraging newcomers. Any scheme should favor early adopters.

Example:
The starting minimum stake in Paris is 50ĐTH*. With transaction volumes picking up, the minimum stake rises, but to protect the current sellers, their existing stake are grandfathered to allow the originally promised volumes to confer first-mover advantage.

b. Staking for Buyers
Sellers may wish to also require buyers to stake ĐTH prior to transactions. Credit cards have a clearing period of several weeks, while ETH may be confirmed in several minutes. This may cause sellers to only accept cash, which would reduce the possible amount honest transactions. To mitigate this, the Dether project may enable staking for buyers and allow sellers to express their buyer requirements.

c. Gaming of loyalty points through transactions among conspirators
To combat conspiring users who trade among themselves to game the loyalty point system while providing no useful activity to the network, the Dether protocol could reward only KYC-passing user accounts with loyalty points. Additionally, overly-frequent trades between the same account pair may generate fewer loyalty points.

d. New Users Without Loyalty Points
Transactions are necessary to generate loyalty points, yet loyalty points spent for premium services are very helpful in increasing transaction volumes. How is a new user without any loyalty points to compete?

The Dether project may consider a combination of both loyalty points and ĐTH as an appropriate bid for premium services, with loyalty points holding more weight. Alternatively or additionally, a secondary market for loyalty points may be created with fractions of the loyalty points burned per transfer to discourage frequent trading, but allowing demands to be to better fulfilled. Loyalty points cannot simply be freely traded because they are an important account-specific mechanism to ensure good behavior.

e. Future Services Built on DTH
► General marketplace:
With sufficient transaction volumes on the network, the Dether platform could attract many third-party developers to provide new services alongside the traditional services offered by Dether itself. As mentioned in section 2.C., dApp developers will have access to the same open interface used by the Dether project for its services, and furthermore it is possible for new dApps to obviate the original services themselves by delivering better customer value.

For example, a third-party developer may aspire to create a Craigslist-competitor on Dether utilizing many of the platform's open components, including the zones, staking mechanisms, and reputation system. Users might list items for local sale or offer services such as plumbing, bike repair, etc. Posting ads may require staking ĐTH. The development of these features would be subsidized through use of the protocol's features.

► Arbitrator:
Dether will allow users to hire approved arbitrators for disputing their transactions. Arbitrators must stake tokens to ensure the quality of their arbitration.
(More details in section 4.4)

► Affiliates:
Those who improve the network strength by bringing in participants should be rewarded. Affiliates should stake ĐTH to reduce fraud. (see section 4.9)

6. MARKET STUDY, STRATEGY AND TIME TO MARKET

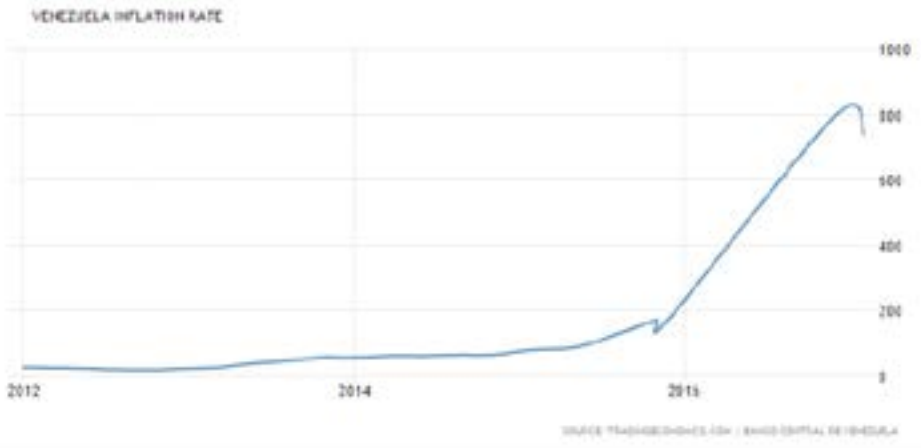
6.1 GREEN LIGHTS FOR A PERFECT TIME TO MARKET

Dether's team has been focusing on building a trustless mobile app since 2016, and all the lights are green to launch a ground-breaking blockchain app in a favorable economic context. That's the reason we've been focusing on studying and understanding our market targets in order to know which ones will most likely be Dether's early adopters, early majority and late majority.

6.2 A RISING INTEREST IN CRYPTOCURRENCY ALL OVER THE WORLD FOR POLITICAL, SOCIAL AND ECONOMIC REASONS

The volatility of cryptocurrency is sometimes described as a disadvantage for its adoption. If this may be true in some situations, it hasn't stopped many nations from all over the world from beginning and continuing to invest in cryptocurrency, due to economic, social and political factors.
Overall, there's an increasing interest in cryptocurrency that is very much related to one of the following reasons:

- **The (hyper) inflation** that a country's population can undergo due to the currency fixation by the government. In 2016, fourteen countries had inflation levels above 18%. According to the International Monetary Fund (IMF), the Venezuelan economy will see an inflation rate of 1,600% in 2017. Nigeria is also a pertinent example of a country whose inflation of the local currency was caused by the decision of the government to fix the exchange rate of the naira, leading its population to consider cryptocurrency as a safe-haven currency.



- In countries where **freedom of speech is not guaranteed,** the anonymity that a cryptocurrency offers has made it widely popular. This represents a powerful tool for migrants and refugees leaving their home country because of war or unrest, and who may wish to eventually speak out against a regime or the government. It also functions as a powerful tool during revolutions and demonstrations. The Arab Spring is a pertinent example of a time when social media was used by both rioters to organize demonstrations and also by authoritarian governments to prevent unrest by identifying demonstrators.

- In a time in history where populations can easily move from one country to another, **high trading fees and commissions** taken by remittance companies represent a rising and tremendous business, and cryptocurrency has the power to lower these financial barriers by proposing almost no fees and commissions on cryptocurrency transactions. This trend is particularly important among diasporas of workers who go abroad to find a better economic situation and who allocate a percentage of their income for their family back home.

- If **cryptocurrency can also be seen as a form of investment** due to its volatility, the fact that its value in terms of market cap continues to rise makes it an attractive investment.

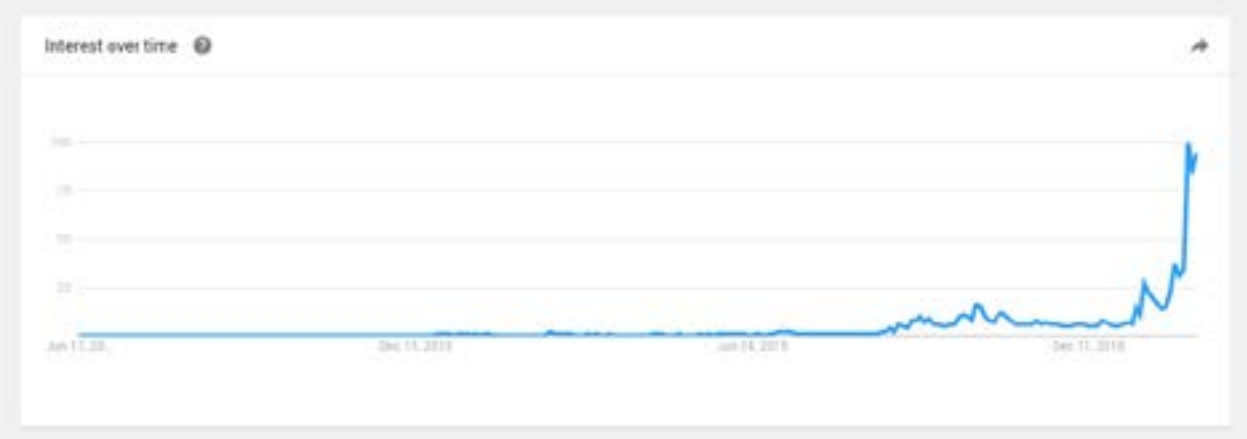
China remains the country where the demand is rising the most in the world. Among other countries where cryptocurrency demand is rising, we can count: Nigera, Japan, India, South Korea, Singapore, Malaysia, Hong Kong, Taiwan.

6.3 A RISING INTEREST IN ETHEREUM BLOCKCHAIN AND ITS CRYPTOCURRENCY ALL OVER THE WORLD SINCE 2016

Overall, 2016 was marked by a turning point in overall interest in the Ethereum blockchain. While Ethereum was still unknown to the general public since its first release in July 2015, the trend began to evolve in 2016. There are several reasons for Ethereum's growing success. This is related to:

- Its flourishing global ecosystem, combined with a growing number of developers and Ethereum enthusiasts
- The organization of international conferences like DevCon2 in Shanghai in September 2016, EDCON in Paris, February 2017 and the upcoming DevCon3 in Mexico
- TheDAO case, which brought Ethereum blockchain potential front and center, despite its outcome
- The appearance of the first versions of decentralized applications (Dapps)
- The use of ether as true cryptocurrency and not merely as a means of paying fees

The world's interest for Ethereum has been exploding since the beginning of 2017. Its steady rise in recent months has led people to consider it more seriously as a form of investment.



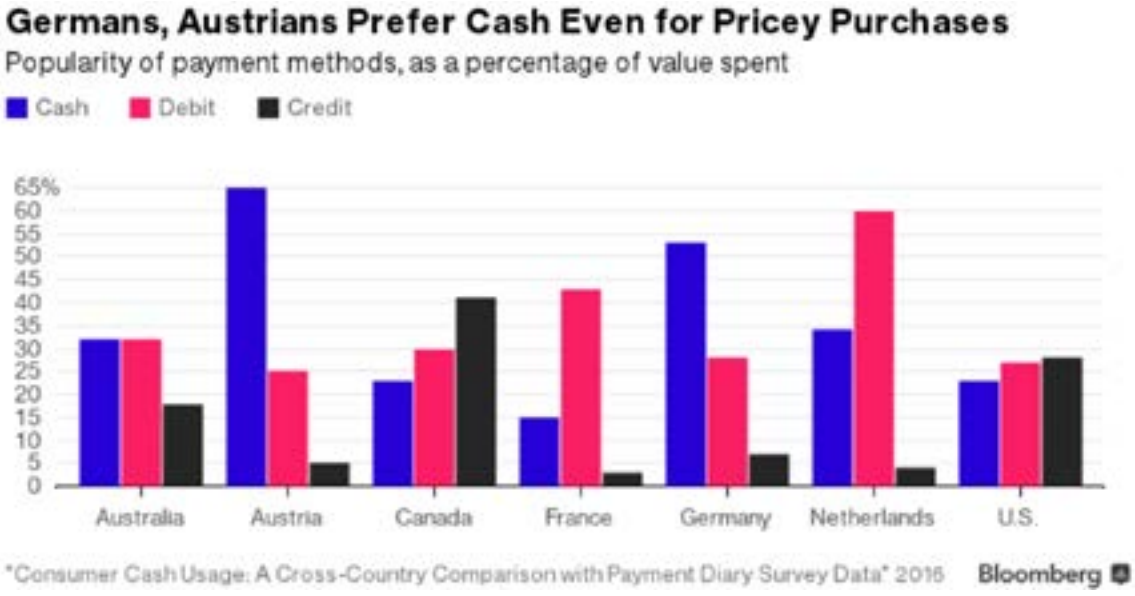
This interest in Ethereum varies from one country to another. Western countries are not the only ones concerned, as one might assume; every continent is now implicated in a renewed interest in Ethereum.

Looking at the top thirty, it's clear that the Asian and European countries dominate the ranking.
Countries, Ethereum: (05/18/2012 to 05/18/2017)
Singapore 100 Switzerland 87 Netherlands 86 Venezuela 85 Austria 67 South Africa, 64 South Korea 61 Canada 58 Ukraine 54 Australia 46 Russia 44 USA 43 Malaysia, 43 Sweden 41 Germany 40 United Kingdom 38 France 29 Poland 25 Italy 25 Spain 24 India 20 Vietnam 20 Brazil 16 Mexico 16 Indonesia 14 Turkey 12 Japan 8

6.4 THE USE OF CASH THROUGHOUT THE WORLD AND FINANCIAL EXCLUSION

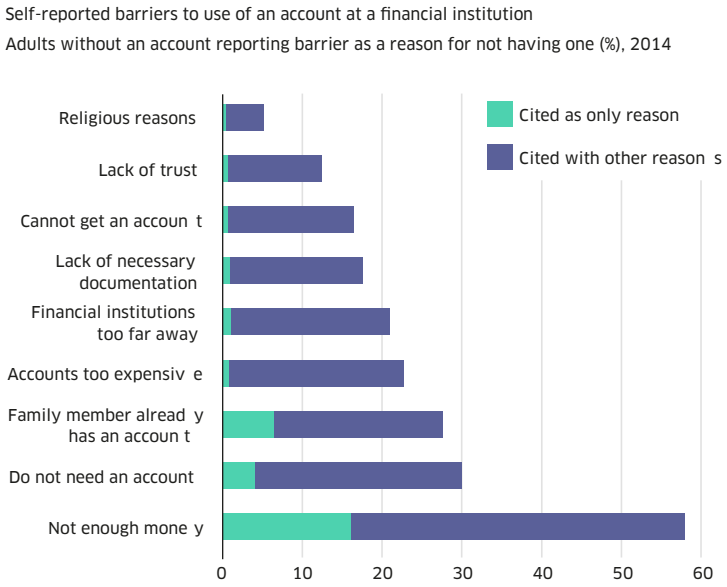
Nowadays, the vast majority of cryptocurrency buyers all over the world make deposits from their bank accounts to online cryptocurrency exchanges, in order to interact with blockchain. The trend is similar whether they are buying bitcoin or ether.

However, a significant number of people around the globe remain excluded from the financial system. According to the World Bank "Two billion poor adults remain excluded from the financial system, with unmet needs and untapped market potential." For them, it's either impossible to buy cryptocurrency, expensive, or the process is even harder and longer than it is now with bank transfers to online exchanges. This significant number underlines the need for a solution for this significant part of the population.



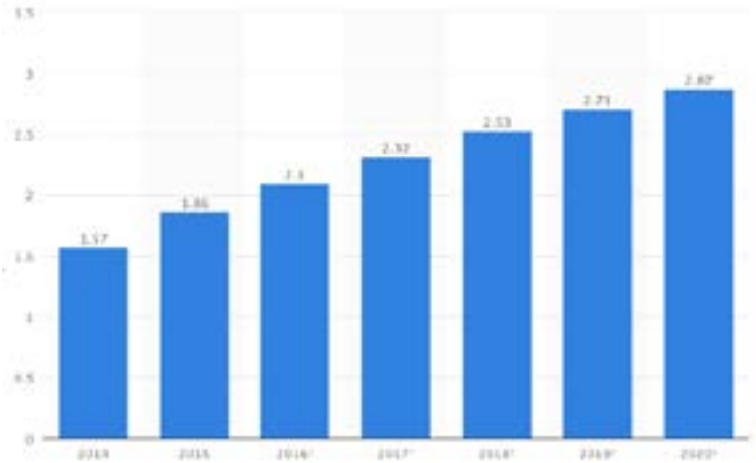
In parallel, cash remains widely used to pay for basic needs all over the world. The World Bank notes that *"1.3 billion adults with an account in developing countries pay their trash, water, and electric bills in cash, and over half a billion adults with an account in developing countries pay school fees in cash."* Cash is not only the most popular means of payment in countries that have the highest number of unbanked people, but in many Western countries as well. For example, Germany and Austria represent two Western countries where cash is more popular than debit or credit cards, even for costly purchases.

The steady success of cash throughout the world, even in the West, is explained by different reasons, including, not having enough money to open and maintain a bank account, or simply not needing one, as credit and debit cards are still not accepted by a significant number of merchants. Cash is also well known for being used by people who keep this means of payment by habit.



6.5. MOBILE PHONES ARE THE NEW GATEWAY TO FINANCIAL, AND THUS BLOCKCHAIN, INCLUSION

While 2 billion poor adults remain excluded from the financial system, the number of smartphone users is forecast to grow from 2.1 billion in 2016 to around 2.9 billion in 2019.



- **Bitcoin demand on Localbitcoins filtered by country:**

The devaluation of the currency by the regulatory authorities as in Asia or South America, as well as the withdrawal of certain banknotes deemed too high to slow down inflation, as in India, is strongly correlated with the growing demand for cryptocurrency as a form of investment or safe-haven currency.

- **Analysis by country according to the volume of bitcoin exchanged during a week in May 2017**

In terms of the volume of bitcoins bought on Localbitcoins over the past year, we can see that China is far ahead, with $14.7 million traded in just one week in late May 2017.
China is the only country where the level of $10 million traded per week was crossed over the same period, reflecting the country's importance in the world of blockchain and cryptocurrency (DevCon2 and International Blockchain Week took place in Shanghai in September 2016). Russia, the United States and the United Kingdom hit $10 million traded in a week in May 2017, representing a total of nearly $30 million for the three zones. Australia, Europe, and Venezuela are above the million dollar mark a week during the same period. India and Colombia hit the million-dollar mark in a week.

- **Analysis by country according to the evolution of purchases and sales of bitcoin on Localbitcoins from November 2016 to May 2017 (6 months)**

Among the five countries with the fastest growth in demand for bitcoin in six months are:
China: + 4431%
Venezuela: + 1632%
Colombia: + 1016%
Hungary: + 1016%
Tanzania: + 976%

In the top ten, we then find:
6. Denmark: + 943%
7. Saudi Arabia: + 907%
8. Nigeria: +868%
9. Singapore: +771%
10. Ukraine: +738%

6.7 THE INCREASING USE OF CRYPTOCURRENCY AS A MEANS OF PAYMENT IN SHOPS

Shops, businesses and retailers accepting cryptocurrency as a means of payment are becoming part of the blockchain revolution.

6.7.1. Buying a Subway sandwich with crypto in Buenos Aires, Argentina

In Argentina, where inflation has been particularly high, merchants like Subway franchises have decided to accept cryptocurrency as a means of payment.

Fernando in front of his Subway store in Bueno Aires

6.7.2. Grilling beef and chicken thanks to ether in Melbourne, Australia

In Melbourne, Australia, the Eastern European deli at Preston market is challenging the thinking of fiat currency, by embracing virtual currency, accepting ether, bitcoin, and litecoin as payment.

Eastern European deli at Preston market, Melbourne, Australia

6.7.3. Art exhibition in Paris, France, where artists only accept ether

In April 2017, in Paris, Christophe Pouilly launched the first art exhibition where buyers were able to buy art with ether.

Art bought with ether in Paris

6.7.4. Getting a new camera

Japan has embraced cryptocurrency by recognizing it as a legal method of payment. A few weeks after the decision, major leading retail groups, Bic Camera and Recruit Lifestyle, announced that they would be testing cryptocurrency as means of payment.

Bic Camera Store in Japan

6.8 TARGETS

Taking into account the analysis of bitcoin's demand for cash via Localbitcoins, the penetration of smartphones around the world, the continued preference for cash in certain countries, and particularly, the growing interest in Ethereum blockchain, the following segmentation is conceivable:
Early adopters: China, Venezuela, Singapore, the United States, Europe, South Africa, South Korea, Argentina, Mexico, India
Early majority: Saudi Arabia, North Africa, Colombia, Nigeria
Late majority: Vietnam, Indonesia

6.8.1 Market positioning

Unlike existing peer-to-peer cryptocurrencies solutions, Dether's goal is to become a fully decentralized application where users can freely and directly trade among themselves, without a middleman holding the funds. Private keys are encrypted and locally stored in the user's wallet. None of the ether traded is kept by Dether or any central entity. Users have their own wallet on their phones and tellers are free to fund their own Dether wallet to show buyers the amount the ether they are willing to sell.

6.8.2 Go-to-market strategy

Having a go-to-market strategy is essential for Dether, as it will be used by many people from different countries all over the world. We consider that online marketing is not enough. That's the reason why we have decided to have a go-to-market strategy that will takes us all over the globe to market Dether by meeting our potential users.

Dether will be organizing events through a worldwide roadshow. The goal is to be present in the main cities where Dether could potentially be used the most among the countries listed in section 6.8. Organizing these events and bringing people together around Dether will be the opportunity for us and our community to present Dether, have demos to explain how it works, as well as present future developments. Moreover, it'll be the opportunity for Dether's team to identify specific needs depending on the situation in each country. This feedback is crucial to us, as it will shape Dether's future developments.

7. A ROAD TO DECENTRALIZATION

Dether's strategy is to build a fully decentralized app accessible to anyone on Earth who has a smartphone and internet access. Breaking barriers to Ethereum mass adoption is our slogan.

We strongly believe that having a trustless solution is the key to Dether's development. Users must be able to exchange and trade with one another with trust, despite not knowing each other beforehand. In other words, we've decided to align our strategy with blockchain's core principles, where the power of its users, and not a central entity, determines its success.

That's why we've decided to create a technology roadmap that integrates different key elements of decentralization on each feature we integrate, in order to propel Dether towards full decentralization.

7.1 PROGRESSIVE WEB APP WITH REACT

In a world full of uncertainty, a new economic crisis is still conceivable and cryptocurrencies will play a crucial role. Proposing an application that relies on a decentralized infrastructure, while being dependent on a centralized body (app stores) is no longer a viable option. In some countries, institutions sometimes prohibit mobile applications, a practice that violates freedom of speech.

That's why from its outset, we envisioned and built Dether to be compatible with the Progressive Web App (PWA) format. The progressive web app is a new format based solely on Web technologies, allowing a user experience close to native applications, while relying only on a web browser. Progressive Web Apps can be installed with a simple click of your smartphone browser, and thus do not pass through the app stores.

However, we are aware that the progressive mobile web-app technology is still in its infancy. That's why we will be developing native versions of mobile iOS and Android, up until the point that the UX on the progressive web app is as functional as on the native app, while still pushing the progressive version web app to its maximum potential. This is in order to maintain a viable option without requiring app store validation.

7.2 ENCRYPTED PEER-TO-PEER MESSAGING

Globally, every smartphone user has a three out of four chance of having a chat application already installed on his or her mobile phone. In addition, each user has a one in three chance of using two or more chat applications.

But there are two major problems with these applications today.

On the one hand, there are serious concerns in the protection of personal data. Protection is not guaranteed, and data is often exploited to the detriment of users. However, some messaging applications, such as Telegram, do better than others by encrypting end-to-end communications.

On the other hand, there are hurdles related to the centralization of the service. Here, the solution has yet to be found. Whisper, the peer-to-peer messaging protocol native to Ethereum, is in the process of providing a solution to this problem.
That's why we will allocate resources to actively participate in its development and integrate Whisper to the Dether system as soon as possible. Whisper messaging allows direct encrypted interactions between users using Ethereum addresses. Buyers and sellers are able to chat together directly without having the risk of their data or information being stolen by a middleman who would have control over the conversations. Meanwhile, rather than reinventing the wheel, we will rely on the best current application, which remains Telegram.

7.3 ETHEREUM SMART CONTRACTS

Ethereum is a protocol based on blockchain. This technology allows to exchange value, like Bitcoin offers, but also to deploy programs on this protocol. These so-called intelligent programs are called “smart contracts.”
We have chosen to program the reputation system on these autonomous and decentralized programs.
The value is to: 1) ensure high availability of the service 2) validate tellers’ reputations without going through a trusted third party that could be hacked or biased The solution proposed by Dether’s team for building the reputation system is “proof-of-burn.” A small percentage of the ether traded is burnt on each trade. Proof-of-burn prevents from Sybil attacks by making it costly to hack the system. The basic reputation system will be based on the volume and the number of trades.

7.4 REPUTATION SYSTEM

The reputation system is based on the number of transactions and volume of ether bought/sold on the app by the user, the KYC process, and the review comments left by users. These three pieces of information assist buyers in decision-making, allowing them to distinguish between all of the tellers displayed on Dether Map.

Reputation-Related Information:
-The volume a user generates as a seller or buyer over an account history. Presumably, frequent transactions over a long period of item improve trustworthiness.

-A user’s real-life identity. The early stages of the project will rely on centralised KYC, but the Dether project aims to fully support decentralized solutions like uPort in the long term.

-Reviews. After valid transactions, buyers and sellers may leave reviews for each other. Dether will store the actual reviews on IPFS and anchor them to on-chain smart contracts for lookup and authentication.

Identified future risks and potential solutions:
Repeated trade among conspirators can result in high volumes to increase reputation and loyalty points generation.

Solution: Dether could potentially add weighted factors to decrease the reputation point between two addresses trading together multiple times and empower the community with abilities to report and arbitrate bad behavior.

7.5 IN-APP WALLET

Dether uses a standard light wallet with encrypted private key on the device, enabling the user to safely send and receive ether. The user’s private key is created on his local device and never sent to any central entity or servers.

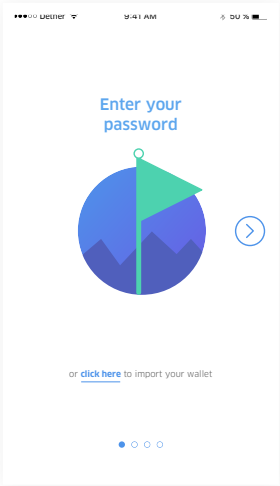
A 12-word seed phrase is generated and associated with the user’s wallet. The backup phrase is a combination of 12 random words set in a particular order and acting as a tool to recover or back up his wallet. The user, and the user only, is able to regenerate his backup phrase on his device and back his wallet up.
We use the standard derivation path “m/44’/60’/0’/0” so our generated seed phrase is fully compatible with wallet like Myetherwallet or metamask.
In order to enforce security, the user is invited to set up a password when creating his wallet to secure his wallet access. For example, securing Dether Wallet with a password enables the user to prevent fraud if he loses his phone.

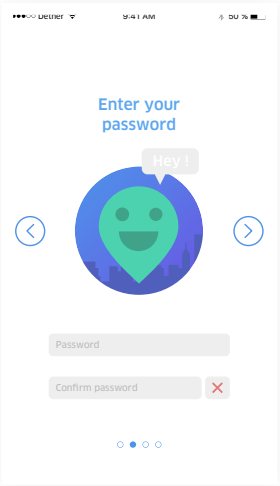
7.6 DECENTRALIZED TRADING ESCROW SYSTEM

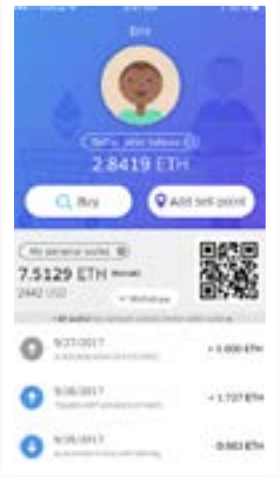
In order to facilitate peer-to-peer transactions, Dether aims at integrating a decentralized trading escrow system. This system will enable buyers and sellers to digitally trade online with the security that buyers are receiving the cryptocurrency they bought and that the seller gets paid in fiat currency. Dether will integrate various online methods of payments, such as Paypal or bank deposits, to facilitate peer-to-peer transactions from fiat currency to cryptocurrency, without having to meet the seller or the buyer.

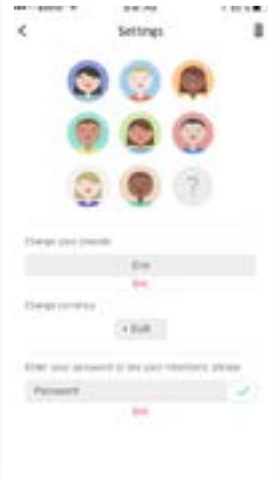
Decentralized courts like Aragon or Kleros will be added to Dether, playing the role of a trusted third party in charge of securing the transaction.

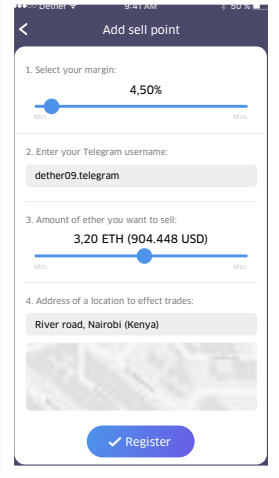
7.7 WIREFRAMES

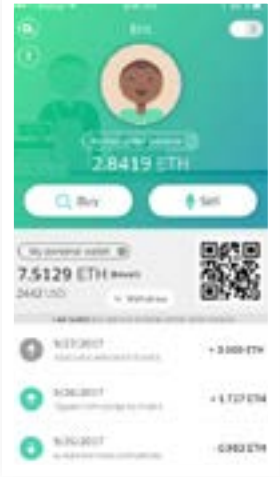


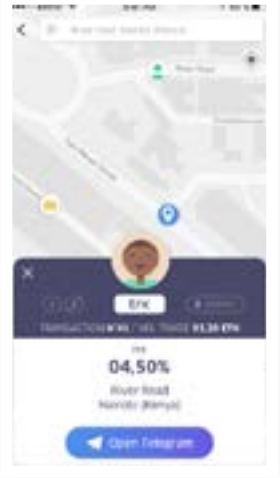




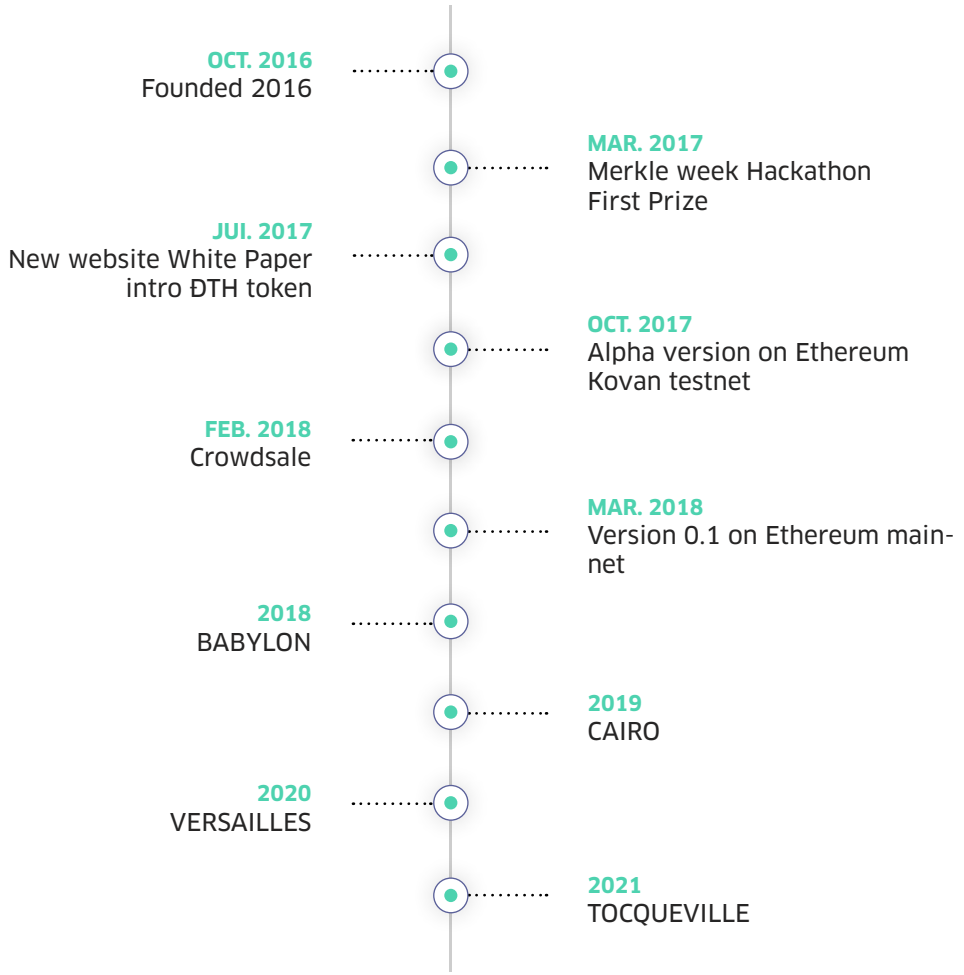








8. DEVELOPMENT ROADMAP



8.1 CURRENT STATE

2017 Q1
Proof-of-concept

- Participation in the Merkle Week Hackathon in Paris
- Development, smart contract, and wireframes design
- Proof-of-concept development that enables users to register as a seller on a map, chat with buyers and trade
- User tests
- Live demo and pitch in front of the jury
- First prize winner

October 2017
Alpha version on Ethereum Kovan testnet
- Interface: progressive app available on any smartphone
- Smart contract:
  - ◇ smart contract enabling tellers to register a location point on Dether map
  - ◇ availability button for tellers to show buyers when they are available for trades
- Wallet: light wallet with encrypted private key on the device
- Peer-to-peer messaging: encrypted third party messaging (ex: Telegram)
- Map: external provider
- Ethereum provider: Infura

8.2 FUTURE DEVELOPMENTS

March 2018
Version 0.1 on Ethereum mainnet
- Interface: progressive app available on any smartphone
- Smart contract:
  - ◇ ERC20 tokens integration
- Wallet: light wallet with encrypted private key on the device
- Peer-to-peer messaging: encrypted third party messaging (ex: Telegram)
- Map: external provider
- Ethereum provider: Infura

2018
V1: BABYLON
- Peer-to-peer Ether trades
- Stable coin integration
- Whisper client chat
- Staking and keywords for shops'

2019
V2: CAIRO
- Raiden network to pay with crypto in shops
- Reputation system with comments on IPFS/Swarm
- Native apps (iOS & Android)
- Decentralised affiliate Program

2020
V3: VERSAILLES
- Premium place auction system for shops and Ether trader
- Decentralised moderation
- Professional shop application plugged with cashiers systems
- Big network of shops integration

2021
V4: TOCQUEVILLE
- Decentralised map
- Multi blockchain interoperability
- Universal token reserve for automated token trading

9. LEGAL

Dether has identified various risks associated with its activity. For each risk identified, Dether has designed solutions that will be implemented in order to alleviate the possibility of said risks.

9.1 KYC

9.1.1 Risks identified

The KYC (Know Your Customer) process is a legal risk associated with Dether's activity. Because individuals exchange cryptocurrency for fiat currency in a variety of countries, and each country has their own legislation related to KYC, this could pose a potential risk to Dether's operation. Although cryptocurrency has differing legal status in various countries (or no legal status), there is the risk that the KYC process is needed to identify the buyers and sellers, especially when the amount of ethers trades is substantial.

9.1.2 Solutions identified

Dether has defined a short and middle term strategy for KYC regulation.
In the short-term, users will have the option to go through a KYC process in order to have a verified account that is displayed on their profile. To perform this, Dether will have its own KYC verification process. As a short term requirement, in order to be able to quickly propose a solution on the market, Dether will have to use centralized KYC verification. Dether will provide different levels of verification. The basic level will enable Dether to identify the user via his telephone number. For larger transactions, users will have to provide more information about their identity in order to unlock the additional features (ex: verified account shown on users profiles).

Moreover, Dether will also allow sellers to perform the KYC verifications themselves and identify the buyers with whom the sellers have traded. This will give sellers the opportunity to have their own transaction ledger.
In the medium-term, as soon as decentralized KYC solutions become available, Dether will transition to them. Dether will implement decentralized KYC solutions, such as Civic and/or uPort, a solution already used in Zug, Switzerland. These KYC solutions are being developed by independent teams and will enable any user to create an identity validated by a trusted third party. Once they create a wallet on Dether, users will be able to share their identity information with the buyers, sellers or physical shops with whom they're exchanging.

9.2 AML

9.2.1 Risk identified

Money laundering is a risk associated with Dether's activity. By giving people the ability to buy ether using cash, there's a risk that the money used in said purchase could come from illegal activities. It could be a way for criminals to launder money with cryptocurrency.

9.2.2 Solutions identified

Dether has defined a strategy and a set of procedures to aid in preventing the generating income through illegal actions:

- First, Dether will limit a user's transactions in terms of volume per day. A user will be limited to 1000 USD a day. It will be technically impossible to trade more than 1000 USD a day with the same wallet. This will thus act as a major obstacle to those wanting to launder a significant financial sum.

- Second, Dether will do all in its power to track and blacklist all dangerous and potentially dangerous Ethereum addresses from which funds come. Regarding Dether's first version, we are exchanging with a third-party solution, and keep the possibility of using a third-party service provider to blacklist Ethereum addresses on the smart contract. In order to do this, Dether is considering working with a blockchain AML/KYC compliance solution and analytic platform that puts entities on the safe side in terms of regulatory and fraud risk. The AML/KYC and Compliance platform uses proprietary algorithms to provide structured information on blockchain transactions and transactions parties. The platform is the most effective solution for managing your AML/KYC, Compliance and blockchain transactions counterparties risks. When a seller registers and credits his wallet, Dether will be able to track his funds provenance and block the user if we notice red flags. Thus, it will enable Dether to deal with suspicious Ethereum addresses which have been identified as risky, regarding money laundering activities. For further versions, Dether will use similar, but decentralized solutions.

- Finally, Dether will implement a set of procedures that aim at identifying suspicious activities. For example, Dether will be able to identify Ethereum addresses on Dether that trade 1000 USD every day, or those who buy ether quickly and sell it immediately. Once identified, Dether retains the right to conduct further research about suspicious Ethereum addresses, in order to detect any fraudulent activity.

10. TEAM

10.1 ADVISORS

William Mougayar

Blockchain investor, thought leader and author

William Mougayar is a Toronto-based investor, researcher, blogger, and author of The Business Blockchain (Wiley, 2016). He is a renowned authority on, and a direct participant in the crypto-technology market, and an advisor or board member to some of the world's leading blockchain organizations, including Ethereum, OpenBazaar, Coin Center, Steem, Stratumn, Cofound.it and Bloq. He blogs regularly about the present and future of blockchains at Startup Management.

Eddy Travia

CEO of Consilium

Eddy Travia is a pioneer investor in blockchain technology startups and the CEO of Coinsilium, a London-based venture builder, accelerator and investor in early-stage blockchain technology companies. Coinsilium shares are traded on NEX Exchange in London (NEX:COIN). He was named among the 'Top three Most Influential Investors' at the Blockchain Awards. He also regulary delivers keynote speeches on blockchain and advises corporates and financial regulators.

Yacine Terai

CEO of StartupToken & Token Capital

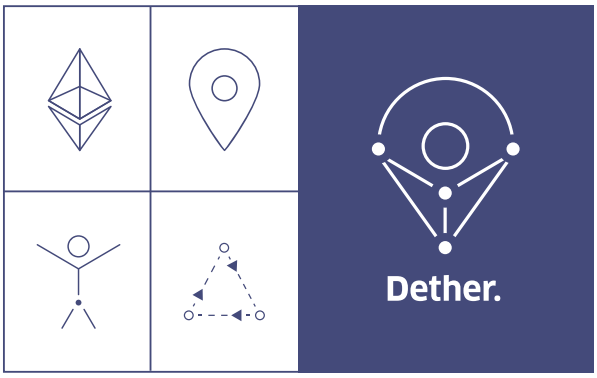
Founder of StartupToken, a global accelerator and consultancy for startup Token Generating Event. CEO of Tokens Capital, a crowd sales and Blockchain investment firm as well as Blockchain VC for Consilium, the first ICAP ISDX Blockchain investment company to be publicly listed. Speaker, professor, angel investor and educator on Blockchain & crypto investment space with 15+ years in the global technology startup space.

10.2 CONTACT

To reach us, feel free to send us an email: hello@dether.io

10.3 JOIN DETHER'S COMMUNITY

Dether.io


Dether.