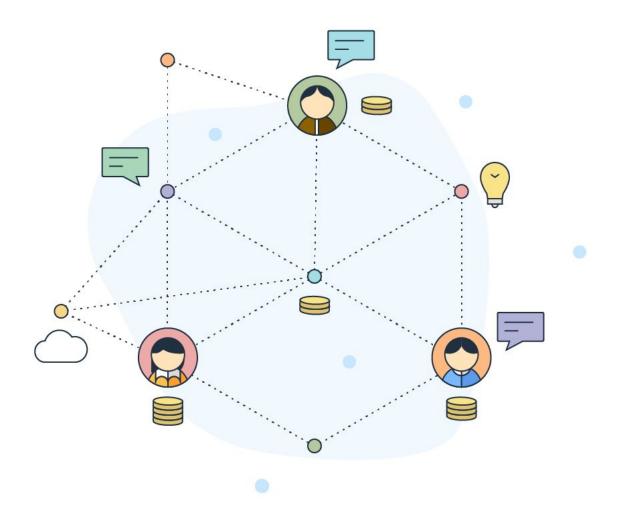
# Measurable Data Token

Decentralized Data Exchange Economy



Draft Whitepaper **Measurable Foundation Ltd.** April 2020

## DISCLAIMER

MDT is a decentralized data exchange economy built on the Ethereum Blockchain. The MDT token is a standard ERC 20 token and facilitates the economy of the MDT ecosystem. It denominates the value of big data and serves as mechanism for utility in the ecosystem.

MDT is issued by Measurable Foundation Ltd, a public company limited by guarantee registered in Singapore, and approved and registered by Singapore Accounting and Corporate Regulatory Authority (ACRA). The Measurable foundation is meant to develop and promote the MDT ecosystem and will dedicate its resources in Research, Development and Governance.

MDT is a utility token and is not supposed to have any particular value outside the MDT ecosystem. Since MDT is not a security token, this Whitepaper cannot constitute a prospectus or offer document for any investment in securities.

MDT (i) shall not provide you with rights of any form with respect to Company or its revenues or assets, including, but not limited to, any voting, distribution, redemption, liquidation, proprietary (including all forms of intellectual property), or other financial or legal rights; (ii) shall not be deemed to be a loan to Company; and (iii) shall not provide you with any ownership or other interest in the Company.

Measurable Foundation warns that the involvement of purchasing any tokens represents a very high risk to any participating contributor. Activity should only be undertaken by those with substantial technical knowledge and that are also able to understand the specific network and related token being offered.

Measurable Foundation Ltd, as well as its partners, team, directors, agents, joint ventures, employees and suppliers, assumes no liability or responsibility for any loss arising out of or related to the use of the MDT ecosystem or any technical, interruption or malfunction of the platform.

This Whitepaper does not constitute or form part of any opinion on any advice to sell, or any solicitation of any offer by Measurable Foundation to purchase MDT or give any help in any investment decision. This Whitepaper does not constitute or relate in any way nor should it be considered as an offering of securities in any jurisdiction.

## Abstract

## Keyword: Blockchain, Big data, Decentralized

Today, we are living our digital lives creating massive amount of data from everything we do. Big data is the new oil, yet the ones who contribute the most of it are unaware of that treasure. Most service providers collect users' data with no intention to disclose the reason and the intrinsic economic value, meanwhile, users trade their data unconsciously in exchange for a free app or service.

What if users could control their data and be rewarded accurately for the value it creates?

The solution is a decentralized, transparent data exchange economy, based on blockchain technology.

We will now introduce Measurable Data Token (MDT), a crypto token for a decentralized data exchange ecosystem. MDT connects data providers, users, and data buyers, and denominates the data's value when exchanged. MDT enables a more efficient, transparent and honest market for data trading.

The first component of this ecosystem is MailTime Email Messenger, a messenger solution based on the email protocol. MailTime Email Messenger connects users with a smooth communication experience. It will be the first service to adopt the MDT ecosystem and utilize it as a payment system to reward all parties involved.

Our vision is a Decentralized Data Value Exchange Economy for everyone in the digital world.

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## 2 Introduction

It's no longer a secret that technology companies are collecting and mining user data. Users download an app which seems to be a free, but unknowingly they compromise their data as a trade-off. It's an unspoken rule in the industry that, "Every company is a data company". Companies strive to mine more data from services and users to profit from the inherent value of information.

Some of them try to hide this intention by posting ambiguous Terms of Services on their websites that most users will give up reading. Even more egregiously, some services that generate revenue from users' data aren't even offered for free.

## 2.1 An Inefficient Market

Services and products store and collect user data for different reasons. The main purposes for collecting user data include: Advertising, Product Enhancement, and Business Insights.

Take Google as an example. When you first sign up for a Google account, Google attempts to collect your name, email address, password, date of birth, gender, telephone and address (Google Privacy 2017). These information help Google know more about their users, thus enabling the company to push more relevant content or advertising to users. When you use a Google account, it collects the emails you send and receive from Gmail, the contacts and calendar events you add, the photos and videos you upload, the Docs, Sheets, and Slides you author, all in pursuit of enhancing the product experience and generating profits. As a huge entity with a wide variety of services, Google does not typically share its information to a third party simply to marginally increase profits, since users' data for its own sake is very helpful for the company.

Location based service Foursquare is another example of tech companies collecting data. They store and analyze users' data for Business Insights. Since the main feature of this service is to allow users to share their location as a social media post, Foursquare frequently stores user's' location data. In early 2016, the company released an in-house big data product called Foursquare Location Intelligence on the basis of all the user location data they have collected. Soon thereafter, they released a report predicting that, according to the data they have, sales of the famous American food chain Chipotle (a publicly-listed company) would drop 30% in Q1.

Even though Foursquare collects location data which seems to be quite personal, it's not actually Personally Identifiable Information (PII). They know fewer users stepped into a restaurant one month compared to the previous month, but they do not know

the identity of those people, because this information is irrelevant in a big data product. Although it's inevitable that companies will eventually mine sensitive data for profits, the current reality is that most tech companies and products do not trade users' PII data.

While internet users knowingly allow their data to be collected, they are typically unaware of the uses for that data, which leads to insecurity and suspicion. This suspicion about the services they use online has led some to block Cookies tracking and ads online to protect themselves.

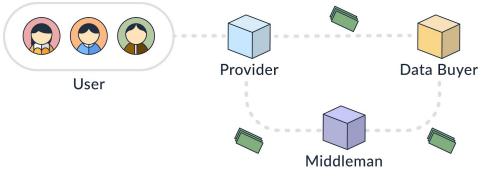
From 2015 to 2016, the number of users using ad-blockers on either desktop or mobile surged to a new high (PageFair 2017 Adblocking Report). Even prestigious companies like Google are facing concerns about exploiting user data. In June 2017, Google decided to discontinue the practice of scanning users' emails for advertising purposes.

Is anonymous data collecting really detrimental to users? If the market is one-sided and users' data is unfairly exploited by data collectors, then the answer is decidedly "Yes". When users can participate in the process and receive incentives for sharing their data, then the process becomes fairer and even beneficial for users.

## 2.2 Traditional Data Trading

A traditional data trading model mostly consists of three parties: Data Provider, Data Buyer, and Users. In the current model, only the economic incentives of Providers

and Buyers are aligned, but in the new model we propose, incentives of all three will be aligned.



## Data Provider

Data provider is the medium where data is generated. It can be an app, a website, or any service that acquires and retains users. Use cases for the collected data include:

- Tracking users behaviour for product enhancement
- Precise advertising where revenue is shared with advertisers
- Selling anonymous user data to third party buyers

## Data Buyer

The buying entity can be a merchant, advertiser, investor, big data institute, or other company that requires the data to predict trends or make decisions. As an example, a consulting company without direct access to first-hand user data could purchase data from a third party provider. Since it is difficult to verify the actual source of the data, mostly buyers do not have guarantees from any party that the data they got is real, clean or even legal.

## <u>User</u>

End users who willingly or unwillingly share their data with all other parties. In the current model, their data sharing activities have no economic gain.

## 3 A Decentralized Data Exchange Economy

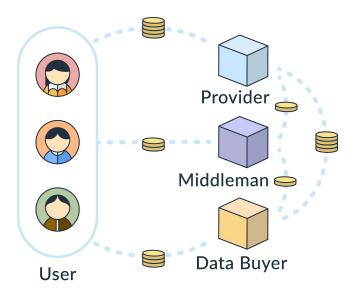
### 3.1 A new ecosystem for data exchange

The era of trading data without user consent is over. The new ecosystem is decentralized, impartial, and mutually beneficial. To change this unfair and inefficient trading model, we need a new platform and unit of data exchange.

The first step towards fulfilling this vision is to introduce Measurable Data Token (MDT), a new token for data exchange.

Measurable Data Token (MDT) connects users, data providers, and data buyers and denominates the value of data. It compensates users for sharing anonymous data points while providing data buyers and providers with a more efficient trading model.

The MDT is a blockchain-based distributed computing platform with smart contracts securely stored in the Ethereum blockchain. It denominates the value of data in this new economy.



In this new ecosystem, sharing one's data is no longer a superfluous behavior; users are incentivized with MDT for the actual data points exchanged. By offering more transparent knowledge of each data exchange for all parties, users will also be more motivated to join this initiative.

On the other hand, buyers are also provided with a more efficient exchange model where all transactions are strictly enforced with cryptographically secure smart contracts. In traditional closed data exchanges, buyers used to be at risk of buying invalid or fake data without any ways to verify. In this new open model, buyers also participate in the validation process of each transaction which ensures they will receive a more trustworthy and risk-free deal.

## 3.2 Token Technology

Measurable Data Token (MDT) is a token based on Ethereum, and is the most important element in this new data exchange ecosystem. Smart contracts, which are applications stored in the Ethereum blockchain, are constructed by data providers, data buyers and the MDT platform. Using cryptographically secure token contracts helps enforce performance of the contracts. To precisely elaborate the technology of the MDT ecosystem, the definitions for all the entities are listed below:

#### Measurable Data SDK

An open-source and free SDK(Software Development Kit): offered by MDT ecosystem for any data providers or developers to use. The SDK includes a wallet address of which users can take advantage to manage their reward income from the MDT ecosystem.

#### Data Provider:

The entity that is capable of collecting user data, and utilizing the MDT ecosystem to perform data exchange and user rewarding.

#### <u>User</u>:

End users who opt into MDT ecosystem and share their anonymous unidentifiable data will receive reward income from the MDT ecosystem .

#### Data Buyer:

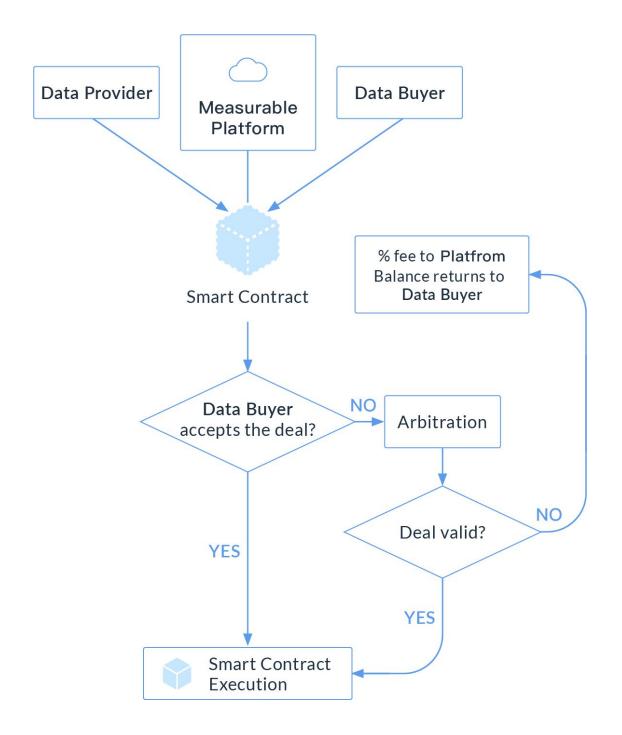
The entity that purchases the right of use of the data points during the exchange. It could mean accessing a database, or purchasing a big data report offered by a data provider. Buying data in the MDT ecosystem currently does not entail purchasing data ownership.

#### Measurable Data Point:

Each data point invoked in the transaction, with verified economic value in the MDT ecosystem.

#### Measurable Platform:

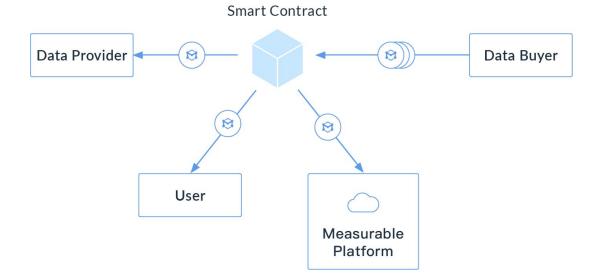
A decentralized data exchange platform where all transactions are based on smart contract technology. Initially the Measurable Platform will be administered by the MDT foundation and will charge calculation fees from each transaction, however, over time, it will be purely based on the smart contract technology.



- <u>Data Buyer</u> submits a request, <u>Data Provider</u> Outputs invoked Data Points and user public key respectively;
- Measurable Platform notified to construct Smart Contract:
  - User Public Key Data Dimensions User Reward % percentage Other transaction condition
- Data Buyer sends payment to the Smart Contract address, request activated;
- Data Buyer Acceptance of the deal;
- *if* Claim  $\rightarrow$  Data is valid *then*
- Deal Accepted, <u>Smart Contract</u> execution: <u>Measurable</u> <u>Platform/User/Data Provider</u> gets MDT rewards ;
- else
- Claim  $\rightarrow$  Data is invalid, <u>Measurable Platform</u> initiates <u>Arbitration</u> ;
- *if* Arbitration Result  $\rightarrow$  Data is valid *then*
- Deal Accepted, <u>Smart Contract</u> execution: <u>Measurable</u> <u>Platform/User/Data Provider</u> gets MDT rewards ;
- else
  - % calculation fee to Measurable Platform, balance returns to

## Data Buyer ;

- end if
- end if



## Example Use-cases:

MailTime Email Messenger is an email messenger app that helps users manage their email as simply as messaging on mobile. As a data provider, it collects and analyzes users' anonymous email receipt data, and transforms it into valuable business insights, which updates daily right after the purchases happen.

Gaming company J is a data buyer, who constantly look for competitors' sales trends for decision making. They discover that MailTime Email Messenger has published a new data dashboard product called "Sales Trends for Game P and Game C in 2016" that they are interested in purchasing.

After Company J clicks the Purchase button on MailTime Email Messenger 's website, this request notifies both the MailTime Email Messenger and the Measurable Platform.

Thereafter, Measurable Platform constructs a Smart Contract which includes:

- Public User Key, which means all the invoked data points and the respective public user key
- User reward percentage: u %
- Data Dimensions: iTunes email receipts, quantity...
- Transaction Price : Va MDT
- Transaction Condition: Accepts deal within **y** hours

Data Buyer sends **Va** MDT to the contract address and then gets the preview access to the product requested. According to the conditions in the smart contract, Company J needs to decide if they accept the deal within **y** hours. Within **y** hours, J believes that the data is valid and the deal is accepted. After the acceptance, the Smart Contract executes, and simultaneously J gets the full access to the product.

- Measurable Platform gets calculation fee: Vm = Va \* x%
- User reward total is Vu = (Va-Vm) \* u%, each user's reward varies depending on their contributing points amount
- MailTime Email Messenger as a Data Provider gets the remainder Vo = Va Vm Vu

If J does not accept the deal in this case, and believes that the data is invalid or problematic, the transaction will automatically go through arbitration on the Measurable Platform. If the arbitration result is deal accepted, the Smart Contract

executes. If the result is deal failed, Company J still needs to pay **x%** calculation fee to the Measurable Platform, and the balance returns to the J Company. It is very likely that for any early adopter, the number of data points being invoked is not large enough to get considerable rewards.For some users, it may take longer time to reach the amount other users only take several days to achieve. After all, the data points every user creates are different.

To solve the potential issue of micropayment and delay in transaction confirmation times (for example, when the rewarded MDT is too small that it fails to cover the cost of Ethereum transaction), MDT will first introduces a reward deposit pool where it stores users' micro-rewards until the quantity reaches an appropriate threshold to be sent to the user.

Users will be notified in their wallet about the number of contributed data points and the amount of reward earned. Only once the rewarded MDT reaches a validated amount will the wallet be activated to use. Users can transparently check reward income and data points in real time to monitor their status in the MDT ecosystem.

For example, User F downloads the MailTime Email Messenger app and opts in to join the MDT data exchange ecosystem. In the first week, his email receipt data is invoked so his wallet displays the current rewarded MDT amount and the data points he has shared so far. The number is below the threshold to activate his wallet, but three months later, the number reaches the verified amount and User F is able to withdraw, make purchases, and transfer his MDT.

We have witnessed many progress in the areas of efficient payments, scalability and more improvements from projects like the Casper Research, the Raiden Network, Tendermint / Cosmos, Graphene, and Decentralized cloud computing Dfinity (Ethereum Blog 2017). To enable a more scalable, cost effective system, MDT looks forward to working with the blockchain community on testing and improving these new technologies in production.

## 3.3 MDT Advantage Matrix

Traditional Data Exchange	MDT ecosystem
Users' data exchange not valued	User is paid for measurable data points
User is excluded	User takes part in the ecosystem
Buyer at risk of purchasing invalid data	Buyer has right to submit an arbitration
Complex negotiation due to different entities	Efficient exchange model
Dispute difficult to solve	Decentralized Platform remains impartial
Unexpected factors in transaction	Smart Contracts to enforce performance

#### 4 More Use Cases

#### 4.1 MDT Integration in MailTime Email Messenger

Messenger apps have become the preferred means for communicating for simplicity, but the market is fragmented. All the messengers, such as WhatsApp, Facebook Messenger, Skype have proprietary, closed platforms. To use them, you have to be on the same platforms as all of your friends.

According to the latest report from Tencent Penguin Intelligence, Wechat now has 889m active users as of 2016. The number of daily active users who spend over 4 hours per day has doubled since last year. In April 2016, Facebook Messenger also boasted 120m monthly active users.

On these huge platforms, users manage their social lives, bank accounts, transportation, entertainment and many other services. To make their users stay and invest more time and money, platforms like Wechat and Facebook spare no efforts to develop as many features as they can. Meanwhile, these huge platforms are closed networks where users can only interact and communicate with others in the network, and use services and features exclusively on the same platforms. Users are increasingly living their digital lives in different closed bubbles controlled by different giant tech companies.

Email is one open and universally used communication protocol. MailTime Email Messenger is a messenger app built on top of the open protocol of email, which makes it a natural fit for adopting a decentralized solution.

Being an open communication platform is not enough, in the future, MailTime Email Messenger is going to be a blockchain-based, open messaging platform to support the new currency MDT, and help establish the new MDT economy.

As the second important element of the MDT ecosystem, MailTime Email Messenger is launching soon on the iOS and Android app markets first.

The MailTime Email Messenger team are veterans of messaging apps. They have successfully developed two popular messenger apps, MailTime and Talkbox Voice Messenger app.

MailTime is built on top of an open protocol to enable it to become as pervasive as email or text messaging, with maximum market potential. Debuted at the TechCrunch startup battlefield SF, backed by Zhen Fund, Gary Rieschel (Qiming, Softbank), Crystal Stream (VP of Engineering of Baidu), Y Combinator, Mark Pincus (Founder of Zynga) and Magic Stone, MailTime was awarded one of the App Store's Best of 2015 and has reached over 3 million downloads. MailTime app was also awarded the Best Lifestyle app at the "Best Mobile App Awards 2016", and the winner of "4YFN" innovation award at the WMC 2017.

Another former project of the team, Talkbox, was the first voice messenger app, with 13 million users. This functionality of "Push a button to Talk" was eventually adopted by major tech companies and is now a feature in most messaging services. However, because Talkbox was a closed network, it ended up at war with other closed networks, fracturing the voice messenger world into several incompatible ecosystems.

From Talkbox, MailTime to MailTime Email Messenger , the vision of building an open platform for anyone to use has never changed. As the very first application to integrate with the MDT currency, MailTime Email Messenger will sit at the center of this new digital economy, driving demand and fundamental value for the MDT ecosystem.

The early version of MailTime Email Messenger supports following features:

- Managing unlimited email accounts within one app
- Email experience as easy as text-messaging
- Earn MDT token from the data exchange economy
- Earn and spend MDT from using the MailTime Email Messenger
- Store and manage crypto-assets with the built in MDT wallet

## 4.2 MDT User Growth Pool

To drive the MDT ecosystem growth, an MDT User Growth Pool is reserved to reward early adopters and users with MDT.

In the early stage, users will also get rewards from being active on the platform. For instance, a user being active for 30 consecutive days will be awarded with certain amount of MDT.

The currency earned from this User Growth Pool can only be used within the MDT ecosystem for value added services.

MailTime Email Messenger will keep developing crypto-currency related features to encourage users to join this new economy. As listed in Chapter 4.3 to 4.6, features like enabling users to utilize their signature as an advertising banner are good ways to earn MDT currency. Users can also send "VIP Mail" to spend their earned MDT.

More feature like these are in the pipeline, with the aim of engaging users in the new ecosystem with the least expense. The goal is also to allow users to earn MDT currency by providing value to the ecosystem and the community through data exchange, commerce and service creation.

## 4.3 Advertising with Your Email Signature

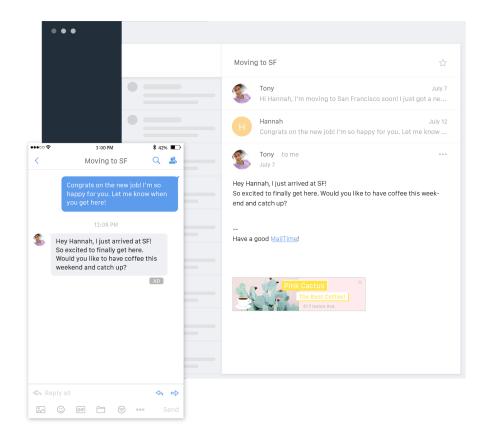
Email signature represents a special piece of your online identity. It's attached to every email you send, which gets viewed every time someone opens your email. MailTime Email Messenger allows users to utilize their signature as an advertising placement.

Would you rather read an advertisement popping up from the website, or something attached to your friend's email signature? In most cases, your friend seems more trustworthy than a strange website.

Users are allowed to decide whether they want to opt-in to the Signature Advertising Campaign or not. If they choose to opt-in, they need to select the specific categories of ads that they are willing to include in their signatures. For instance, they can choose to include only "fashion" related ads or exclude all "e-commerce" ads.

Advertisers will pay for per activation for all the participating users. MailTime Email Messenger Platform will also charge a %fee to maintain this feature.

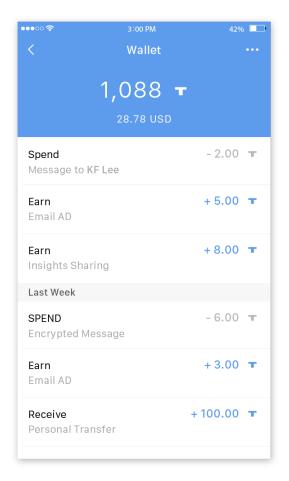
Users of MailTime Email Messenger , however, will not see the email signature since MailTime Email Messenger hides the user's signature to make the communication experience as easy as text-messaging. Only those who are not using the app will see the ads.



Example use-cases:

 User B is a freelance writer who needs to email different editors and clients on a daily basis. He joins the Signature Advertising Campaign and opts-in to the "Books" and "Movies" categories for advertisement. Soon under his personal signature, each email he sends comes with an advertisement banner. Since the category he selects is quite related to his expertise, the conversion rate of his advertisement is quite high, thus earning B a considerable amount of revenue every month.

## 4.4 MDT Wallet



For any cryptocurrency economy, a wallet plays a crucial part. The MDT wallet will first be built in the MailTime Email Messenger app. In the future, it will be an independent open source project that can be used by other developers.

MDT is implemented on the Ethereum blockchain as an ERC20 token, which is a common standard for issuing digital assets.

MDT ecosystem is designed to benefit all digital users who embrace an open, decentralized and beneficial platform. To reduce the barriers of cryptocurrency technology for most consumers, MDT wallet aims to keep it as simple as possible.

We are also open to a more user-friendly onboarding tutorial for any crypto-currency

beginners. In the future, the MDT wallet will enable users to send, receive or transfer payment without understanding the raw technology behind. (Cointelegraph 2017)

Example use-cases:

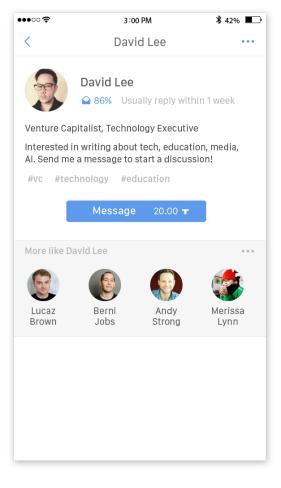
• User C is not a user of MailTime Email Messenger , but he uses another Service W which also adopts the MDT data exchange ecosystem. C gets rewards from the ecosystem and uses a MDT wallet to manage his MDT reward income.

## 4.5 VIP Mail

The VIP mail is an innovative function of Open Massager that facilitates efficient communication between mainstream consumers and celebrities. It allows users to connect with influential celebrities or professionals who were usually difficult to reach while protecting receivers from spams by charging the sender.

Even though email is an open protocol that connects anyone who has an email address, users need to know the email address first.

In the past few years, it has been noticed that there is a growing need for mainstream consumers to communicate with celebrities or professionals directly and personally. Several products has developed such features.

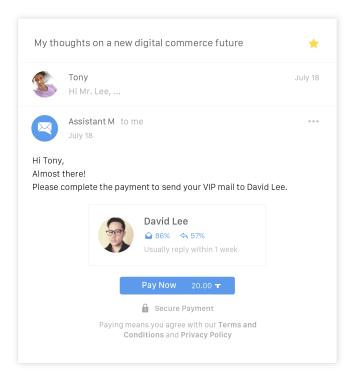


For example, Zaihang is a platform which enables celebrity users to post paid content, for example, a "60-second record answering a specific question". (Fenda 2017)

Another SilToken Distribution Event n Valley based startup 21.co offers a service where strangers can pay bitcoin to send emails to celebrities that are also using 21.co.

One obvious downside of those products is that the closed platform requires both sides to be on the same platform. Though emailing is a perfect solution for this issue, it has its own disadvantage since celebrities or professionals would be flooded by spams if they share their email address in public.

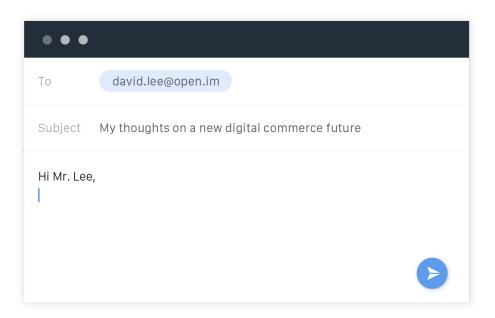
MailTime Email Messenger is introducing a new VIP mail service which is for anyone who does not want to disclose his or her own email address. Through the MailTime Email Messenger platform, user gets a masked email address which is directed to his or her own email address. Users can set a price for his VIP email address, for example, "5 MDT", and then edits his own VIP profile. The VIP user can be a celebrity, a professional, or anyone who wants to keep his inbox from spamming.



After creating this profile, users can share this masked email address publicly, on their business card, personal website, or social network page as a contact email.

Every VIP profile is also searchable on the MailTime Email Messenger Platform, where a VIP email bot will help introduce users to each other. For instance, if a user is looking to speak with a professional lawyer, he can ask the bot for recommendations, and the bot will reply with the best choices on the platform.

When a sender sends an email to a VIP email address, he will get an automatic reply from the platform detailing how much it will cost to send this VIP email. After the payment, this email will be sent and the sender will also be notified when it's opened by the VIP.



#### Example use-cases :

- Professor A does national lecture tours every year, and he always leaves his VIP mail address at the end of the presentations for the audience to contact him. He is very busy doing research and teaching so he wants to make sure that those who contact him are serious about their correspondence.
- B is planning on a divorce with her husband, and she finds a suitable attorney through MailTime Email Messenger 's chat bot. From the profile, she finds out that Lawyer C is a famous divorce attorney in the city where she lives and his response rate is as high as 85%. B sends the payment, successfully sends her request to C and gets a quick response.

## **5 Updated Ecosystem Progress**

Currently, as of March, 2020, the MDT ecosystem has launched two products:

"Data Prodiver (launched in 2019)" - Measurable AI, a business-oriented data analysis platform that turns anonymous data into sophisticated insights

"MDT Wallet (launched in 2019)"- MyMDT Data Wallet Dapp, a user-oriented data wallet for individual users to get rewards for sharing anonymous data.

Both applications have launched and need the MDT token to facilitate the data exchange in the ecosystem.

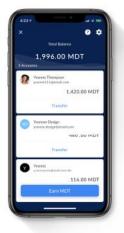
#### FOR INDIVIDUAL

#### First Use Case: **Email Messenger**

Email Messenger is a popular email messaging app with 10 million users all over the world. As the first use case of MyMDT, it allows you to earn rewards by sharing email data easily and anonymously.

Now if you opt-in to share your anonymous email data, you can start earning cryptocurrency right from the app. All you need to do is just use the app as you usually do: sign in your email account and enjoy the smooth email experience with Email Messenger.





Built on top of the blockchain technology, Measurable Al ensures that all data points are collected from real and active consumers. It's one of the most accurate, secure and largest big data panel on consumer insights.



Measurable AI is your real-time consumer data powerhouse.

By scanning and identifying actual online spender's email receipts, Measurable AI transforms them into valuable insights, which updates daily ensures that all data points are right after the purchases happen. Our collected from real and active data dashboard is based on a panel consumers. It's one of the most of a nonymized and aggregated e-commerce e-receipts from over 10 data panel on consumer insights.

million online shoppers all over the world, which updates daily right after the purchases happen.

Built on top of the blockchain technology, Measurable Al accurate, secure and largest big



## **6 MDT Foundation**

Measurable Data Token follows Litecoin and other established crypto currencies to set up a non-profit organization (Public Company Limited by Guarantee) in Singapore to issue, develop and promote MDT. MDT's Singapore foundation is approved and registered by Singapore Accounting and Corporate Regulatory Authority (ACRA).

ENTITY: MEASURABLE FOUNDATION LTD. TYPE: PUBLIC COMPANY LIMITED BY GUARANTEE UEN: 201728042H ADDRESS: 22 NORTH CANAL ROAD #02-00 SINGAPORE 048834 REGISTRATION DATE: OCT 2, 2017

The MDT Foundation aims to be an independent, and democratic governance body for an open and decentralized ecosystem. The principle function of the MDT Foundation is to support the ecosystem partners and provide the technology necessary to ensure the platform develop sustainably. In order to fulfill the mission, the foundation is responsible for:

- Overseeing and supporting the decisions related to the ecosystem partners
- Supporting research on new ways to improve the technology and governance in the ecosystem
- Funding and helping to develop more open source codebase for a sustainable ecosystem

It is inevitable that the foundation will eventually be replaced by other more advanced and innovative governance methodology in the future. However, we must first create a formal governance model.

The Measurable Foundation will dedicate its resources in Research, Development and Governance. The funds raised will first be directed to support the development of tools that help the ecosystem to build, grow and create sustainable value.

## 7 Ethereum and MDT

Ethereum is an open-source, public, blockchain-based distributed computing platform featuring smart contract functionality, which facilitates online contractual agreements. It provides a decentralized Turing-complete virtual machine, that enables end users to construct smart contracts for transactions. (Wikipedia 2017)

New York Times commented in 2016 that, "The promise of such a system is that it allows the exchange of money and assets more quickly and more cheaply than relying on a long chain of middlemen."

We believe that Ethereum is growing to be a ubiquitous technology that not only serves the blockchain field, but also permeates all areas of life.

MDT will be implemented on the public Ethereum blockchain, an industry standard for issuing digital assets and smart contracts .

Meanwhile, we are always ready for new technology to surface and will readily consider any superior solutions.

## 8 Issuance and Allocation

To finance the MDT roadmap, we will conduct a token distribution that will offer for sale 500 million units out of 1 billion unit total supply of MDT.

- Maximum financing : 84,000 ETH
- Minimum financing : 25,000 ETH
- Exchange rate in Pre-sale: 1 ETH = 7,500 MDT, which is fixed during Pre-sale
- Exchange rate for Early Bird: 1 ETH = 6,250 MDT, which is fixed during Early Bird
- Exchange rate in Token Distribution Event : 1 ETH = 5,000 MDT , which is fixed during Token Distribution Event
- If the ETH/USD exchange rate fluctuates that the ETH price during Pre-sale is greater than that during Token Distribution Event by <sup>1</sup>/<sub>3</sub>, stakeholders from Pre-sale will be compensated with the units to match the price difference.
- If less than the targeted ETH are raised during Pre-sale, the remaining units will be reserved for Token Distribution Event
- If less than the targeted ETH are raised during Token Distribution Event, the remaining units will be reserved for a deposit pool, whose purpose will be communicated by the MDT foundation
- Token Distribution Event time-frame: 30 days, or within 24 hours of reaching the maximum
- Token Launch date: TBD

Token Distribution :

- MailTime Email Messenger Team: 240,000,000 MDT
- Early Investors and Advisors: 110,000,000 MDT
- User Growth Pool: 150,000,000 MDT
- Pre-sale: 150,000,000 MDT
- Token Distribution Event : 350,000,000 MDT

240,000,000 MDT will be allocated to the MDT team as the founding team of the MDT Foundation, over a 24 month vesting period. 10% of it can be vested after the Token Distribution Event, 15% of it can be vested 6 months later after the Token Distribution Event. The remaining will be vested by 1/18 per month in the following 18 months. This means the units of the team will not be immediately tradable.

Budget Allocation:

- **MDT team : 40% of budget** The team will focus on the research and development of the MDT ecocsytem, Measurable Platform, MailTime Email Messenger , and the maintainance of an open-source community.
- **Computation : 20% of budget** Computation consists of the Measurable Platform, MailTime Email Messenger servers, and other associated computation for the MDT ecosystem.
- **Administration : 10% of budget** This will cover legal, security, accounting, human resources and other associated administration expenses.
- **Marketing : 25% of budget** Marketing will focus on expanding adoption of the MailTime Email Messenger and the MDT data exchange ecosystem among data providers, data buyers and users. This also covers the growth of the ecosystem community.
- **Contingency : 5% of budget** This is a set-aside for unforseen expenses.

## 9 Conclusion

MDT team's vision since 2011 has been to build an open platform. Their first project, Talkbox, is the first voice messenger app, with 13 million users. This functionality was eventually adopted by major tech companies and is now a feature in most messaging services. However, because Talkbox was a closed network, it ended up at war with other closed networks, fracturing the voice messenger world into several incompatible ecosystems. In 2015, They built MailTime on top of an open protocol to enable it to become as pervasive as email or text messaging. MailTime debuted at the TechCrunch Disrupt startup battlefield, and was awarded "Best of 2015" by Apple's App Store. The team was also invested by Y Combinator, Zhenfund, Mark Pincus and many prestigious venture capital after its launch.

The journey of being an open platform continued when the vision of MDT surfaced. As veterans of communication platforms, the MDT team had already identified a number of established use cases within the new ecosystem and are confident about its adoption and growth.

With the aim of fostering a decentralized and vibrant data exchange economy surrounding the MDT cryptocurrency, the MDT team will pledge all its resources to make MDT accessible to mainstream users. It will establish the MDT Foundation to boost and maintain the growth of the MDT ecosystem and keep users and ecosystem partners engaged in the MailTime Email Messenger platform.

The MDT cryptocurrency will be built on the Ethereum blockchain, and will be used to compensate ecosystem partners and users based on the MDT solution for data exchange. In the future, MDT aims to scale and become an industry standard for data exchange and user incentive model. Achievements

TechCrunch Disrupt SF Startup battlefield 2014 Finalist

Apple App Store "Best of 2015"

Y Combinator 2016 Winter







WMC 4YFN innovation Award 2017 Champion

BMA Best Mobile App Awards 2016 Best Lifestyle App Gold Winner

<u>Appy Awards</u> 2016 Communication Apps Finalist







## References

Google Privacy. (2017, July 27). Retrieved from https://privacy.google.com

Major Challenges to Blockchain Mainstream Adoption: Industry View. (2017, May). Retreived from <u>https://cointelegraph.com/news/major-challenges-to-blockchain-mainstream-adoptio</u> <u>n-industry-view</u>

Interactive Advertising Bureau. Ad Blocking: Who Blocks Ads, Why and How to Win Them Back. (2016, July 1). Retreived from <u>http://www.iab.com/wp-content/uploads/2016/07/IAB-Ad-Blocking-2016-Who-Blocks-Ads-Why-and-How-to-Win-Them-Back.pdf</u>

2017用户&生态研究报告. (2017, April 24).Retrieved from http://tech.qq.com/a/20170424/004233.htm#p=1

Ethereum.(2017, July 1). Retrieved from https://zh.wikipedia.org/wiki/ethereum

2017 Adblock Report. (2017, February 1). Retrieved from https://pagefair.com/blog/2017/adblockreport

Foursquare Predicts Chipotle's Q1 Sales Down Nearly 30%; Foot Traffic Reveals the Start of a Mixed Recovery. (2016, April 12). Retrieved from <u>https://medium.com/foursquare-direct/foursquare-predicts-chipotle-s-q1-sales-down-nearly-30-foot-traffic-reveals-the-start-of-a-mixed-78515b2389af</u>

Introducing Casper "the Friendly Ghost". (2015. August 1). Retrieved from https://blog.ethereum.org/2015/08/01/introducing-casper-friendly-ghost/

High speed asset transfers for Ethereum. (2017, July 1).Retrieved from https://raiden.network

Internet of Blockchains - Cosmos. (2017, July 1). Retrieved from https://cosmos.network

The intelligent cloud - Dfinity. (2017, February 1). Retrieved from <u>https://dfinity.network/</u>

Fenda. (2017, July 2). Retrieved from http://fd.zaih.com/