# DATO WHITEPAPER



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#### I. Introduction

Introducing DATO, a solution that is based on ethereum blockchain and smart contracts. We offer a solution that involves creating a blockchain database for a targeted audience. This database will be created simply by analyzing various social networks such as Facebook, VK, Twitter and other social platforms. Our database will be accessible via smart contracts and our token will also be used to facilitate database access.

The major aim of our solution is to solve the problem of targeted audience preferences simply by accessing the blockchain database through smart contracts. Anyone that is willing to carry out targeted audience research for advertisement can perform this action simply by accessing our blockchain database with the aid of smart contracts and the DATO token as a fee. In addition to this, the fee will be calculated based on the request.

Our platform is made up of a team of intelligent individuals that are based in Tokyo, Japan. Shota Tanako is the name of our CEO with over 25 years of working experience in top Japanese companies. He was heavily involved in the Tokyo Institute of Technology "Future of Tokyo" workshop. Other talented team members comprise of talented graduates from Tokyo Institute of Technology. We work together as a team to move DATO project to the next level.

Investing in ICO involves a lot of risks which is accompanied by a corresponding reward. However, choosing DATO ICO to invest in will help you to solve all your challenges especially with our professional team with high level of experience.

With the aid of our blockchain database, anybody that is willing to research targeted audience will do this through the use of our blockchain database via smart contract and use the DATO token as a fee.



# II. Problems of Targeting Audience For Advertisement



Advertising challenges are the major problem that affects any brand especially the area of determining and reaching the target audience. Consumers are always on the go hence, it is important to be able to pinpoint their location and making sure that they see ads that will act as a daunting task. Some of the problems that affect the act of targeting audience for advertisement include:

# Target audience identification

Most brands suffer from the problem of determining their actual target market. Even though they have a vague idea, however, they might still lack a vivid description and this can limit advertising efforts.



Consider a scenario where a brand wants to target women that are over 50. This is not detailed information. Additional information such as "Are they Married?", "What kind of jobs they do?" "Do they have any kids?" will make advertising efforts more efficient.

# Reaching the target audience

After successfully identifying the target audience, the next problem lies in reaching them. The act of delivering the right message to the right audience at the right time and place is one of the most difficult branches of advertising.

#### Focusing on one method of advertisement

It is a simple task to lay emphasis on one mode of advertisement especially when it is yielding positive results. It is also important to know that audiences evolve the same way as advertising methods. The act of concentrating on a single advertising method may lead to companies missing the right opportunities to connect with the right customers.



#### **III. Solutions**



The act of employing various methods and gathering necessary information about target audiences is quite easy. All you need to do is to consider a short survey of the available customers and gather necessary information based on consumer replies. You can create quizzes or social channels to facilitate this process.

Programmatic advertising is another method that can be considered. It simply allows brands to target ideal customers and deliver attractive messages online. This is achieved by buying an ad on a site that an audience criterion is about to visit in order for consumers to see it. Pragmatic advertising employs the use of automation and algorithms to locate the best ad space that is available for a brand. They simply purchase it and display their ads. It is a cost-effective and superb way of locating customers.

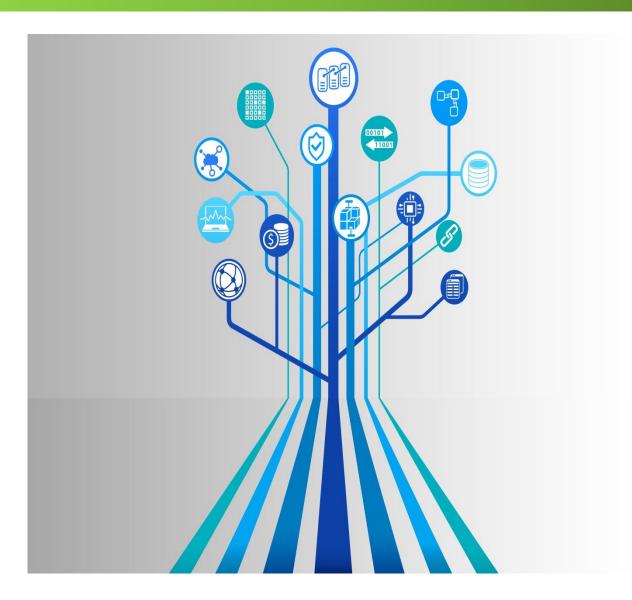


Another solution is the diversification of advertising tactics. Various advertising methods are utilized to reach the target market. For instance, email marketing can be combined with social media advertising in order to reach customers online. Ad options should be diversified in order to ensure continuous success.





# IV. Marketing Opportunities



Usually, the first step towards sale on any site is by clicking on an ad and this is the major reasons there is an undervaluing of social media by just 116%. Most advertisers do not experience the actual dollar value of online advertising. From the period of 2011 to 2013, the Ad revenue generated has risen by 36% from 86.4 billion to 117.6 billion. The revenue that was generated from online advertising has actually increased by more than a factor of 31 billion dollars and the platform with the largest platform was the Google Adwords.



An estimate showed that by the end of 2016, the online ad spend in the US will have increased by a multiple of two since 2011 thereby reaching 67.4 billion dollars per year. The top three video ads of 2006 clinched a combined share of 244, 395 as compared to the top three in 2013 that generated a total of about 12 million shares which is an improvement of over 5000%. The viral nature of a particular advertisement is usually increased by social shares especially when shared through Facebook and Twitter. Usually, a Youtube AD typically costs about \$400,000 and it receives up to 60 million views from over 23 million unique users daily.

In addition to this, 9.65% of Twitter Ad revenue usually exists on smartphones and mobile tablets. This statistics should not come as a shock since 75% of Twitter users access their Twitter accounts from a mobile device. Furthermore, 10.87% of twitters revenue is generated from advertising. There is a possibility of this number to increase since the mobile statistic was only 66% in June 2012 as compared to the 75% number generated in June 2013. In 2013, Twitter delivered 400% of revenue per visit in 2013 as compared to what was generated in 2011.

Since 2012, the click-through rate that is available for Facebook ads has increased 275 %. This was as a result of the targeting capabilities of the Facebook Ads and the use of superb tools. For retailers that use Facebook Ads, the average click-through rates are up to 375% as retailer get higher CTR because they find it easy to include Ad image and value proposition that is well understood to their audience.

Research from a reputable marketing company shows that more than 200 billion Facebook ads on iPhone generate 1,790% ROI as compared to Android OS. The returns on investment of Facebook Ads have increased by 152% between the year 2012 and 2013. This increase can be traced back to the greater understanding of targeting capabilities of Facebook Ads. The ability to accurately target half nurtured leads creates higher conversion rates than just spreading out a particular Facebook ad to the general public.



95% of Google's total revenue is derived from advertising and this also includes YouTube. Google made up to \$14.9 billion alone in the third quarter of 2013 and this implies that they made a total of 14 billion from AdWords and AdSense. 3.16% is the average click-through rate for a Google ad and an ad in the first position can boast of an average click-through rate of more than 7%. One of the advantages that Google enjoys is that its ads are triggered by search keywords. Platforms such as Instagram, Facebook, and Twitter have found a way to divert user's attention away from the subject they are there for.

In addition to this, Google AdSense has over 2 million publishers who made a total of \$7 billion in 2012. There has been 22% growth of Google Adwords for the current year while Google AdSense have experienced no growth.



# V. Blockchain Technology



#### WHAT IS BLOCKCHAIN?

The blockchain is a decentralized and digitized ledger that is available for all transactions involving cryptocurrency. It is growing constantly as a completed block and it is recorded in a chronological format from the most recent to the least recent. It gives market participants the opportunity of tracking their digital currency transaction without any form of central record keeping. For every computer that is connected to the network, there is always a blockchain copy that is dedicated to it and automatically downloaded.



Blockchain was actually developed as an accounting way of virtual currency. Blockchain uses a form of distributed ledger technology and they are appearing in most commercial applications that are used today. The blockchain is currently used to check transactions that are made via digital currencies although, it is also possible to code or embed any form of document in the blockchain. This creates a permanent record that cannot be altered. Instead of confirming a record authenticity through a centralized authority, blockchain is used.

#### BENEFITS OF BLOCKCHAIN

The benefits of Distributed Ledger Technology (DLT) can result to serious cost savings and DLT systems give businesses and banks the opportunities to streamline internal operations thereby strategically reducing mistakes, delays and expense caused by the traditional methods of keeping records.

The adoption of blockchain technology will give rise to the following benefits:

- 1. An automated blockchain technology reduces errors and eliminates repetitive confirmation steps.
- 2. Electronic ledgers are very cheap to maintain as compared to the traditional accounting systems.
- 3. There are minimal capitals that are held at risk of pending transaction thereby reducing processing delay.

In addition to these three major benefits, some amount of funds will be saved and transparency will be improved. With blockchain technology, auditing will become easy and smart contracts can be created or payments can be triggered when specific conditions are met. The tech companies were attracted by the idea of eliminating middlemen and diving towards decentralization and demoralization thereby adopting the



Blockchain technology with the aim of disrupting various industries. The Silicon Valley and other startups are already leveraging blockchain technology.

#### DATO AND ETHEREUM BLOCKCHAIN TECHNOLOGY

DATO is another technological innovation. The fact that it is not being controlled by any forms of central authority and allows its users to dictate and confirm transactions is outstanding. It simply ignores the need for a third party or a middleman during a transaction that involves Payment for online advertisement research service. The finished transaction is simply recorded in blocks and then blockchain where it is subjected to verification and recording.

The blockchain database is shared by all participating nodes based on DATO protocol. Every computer that is connected receives a blockchain copy which consists of records and proof of every executed transaction. It provides information about the value that is attached to a particular address at any point in time.







#### HOW ETHEREUM SMART CONTRACT WORKS

Even though Bitcoin was actually the first platform to support basic smart contracts since the network can allow the transfer of currency from one person to another. The node network only validates necessary transactions only if the set conditions are met. Bitcoin has a limitation on currency use case.

Ethereum is an advancement of the Bitcoin more restrictive language with a simple language that gives developers the opportunity of writing their own programs. Ethereum gives developers the opportunity to code their own smart contracts with the language known as the Turing-complete.



Smart contracts can act as a multi-signature account thereby allowing a certain amount of funds to be spent after a mutual agreement between certain numbers of people. It also helps to manage any agreement that exists between users. In addition to this, Ethereum smart contract provides utility to other contracts. They help to store information about a particular application.



# VI. Our Technology



DATO offers an ethereum blockchain technology and smart contracts. With the aid of our technology, we will develop a means of creating a blockchain database of the targeted audience. Social networks such as Facebook and VK will be analyzes and this will help to create a database. Our blockchain database will help anybody that is willing to research targeted audience to access our blockchain database via smart contract and using the DATO token as a fee.



Even though other forms of advertising networks offer great services as they help to facilitate advertising services for publishers, the future of the advertising industry goes beyond this. Introducing the blockchain technology, a distribution ledger that can help to improve the efficiency of the advertising industry within the websites and mobile apps. Here are some of the benefits of our technology:

# 1.) Elimination of Middlemen.

DATO technology will change the world and the method that is used by global organizations to share data. The improvement will also benefit the digital markets since advertising is one of the fastest growing industries that currently exists. The incorporation of DATO technology in the advertising sector will contribute to the growth of the industry.

Research shows that the publishers removing middlemen will boost their CPM. Utilizing DATO technology may even do better. This technology will improve the market and allow companies to directly pay their target audience to view ads. Companies will have access to actual audience attention and not just bots. This will give them the proof that they have gotten the attention of customers before the exchange of currency. In summary, this implies smarter spending and better connections with potential customers.

# 2.) Creating Trust With Ad Buys

One of the benefits of online advertising is that it is quite difficult to deduce whether the stats are accurate. Are we actually counting real customers through click and view on our site or we are counting hired bots and clickers. That artificially generates stats so that their distributors can charge at a higher rate. This is usually hard to tell from research shows that bot owners have caused damages worth \$7 billion in 2016 alone.



The introduction of blockchain will change this story for good. Since the chain is quite transparent, consumers will be able to determine the people viewing their ads and determine if they are actual members of the target audience. This will help advertising companies to save millions per year. DATO will use tokens to establish trust among users since they enjoy the benefits of cryptographically secure impression tracking.

# 3.) Better Targeting Of Audiences

Advertisers previously obtain customers information through disparate sources. With these methods, one will be able to conclude the age or sex of clients. One might even be able to detect their, age, sex and the type of cars they drive.

With the involvement of DATO Technology, advertisers will have the opportunity of building a customer profile directly from the customer. The advertisers will be able to get the customer's information easily. It will also enable advertisers to target those customers that are most likely to purchase your product.

# 4.) Improving Transparency

You don't need to purchase a product to find out if it is a counterfeit. Our technology offers a ledger system that ensures tamper-proof transparency especially considering every transaction that moves through the supply chain. This will give the buyers opportunity to know where a product came from and the person that handled it.

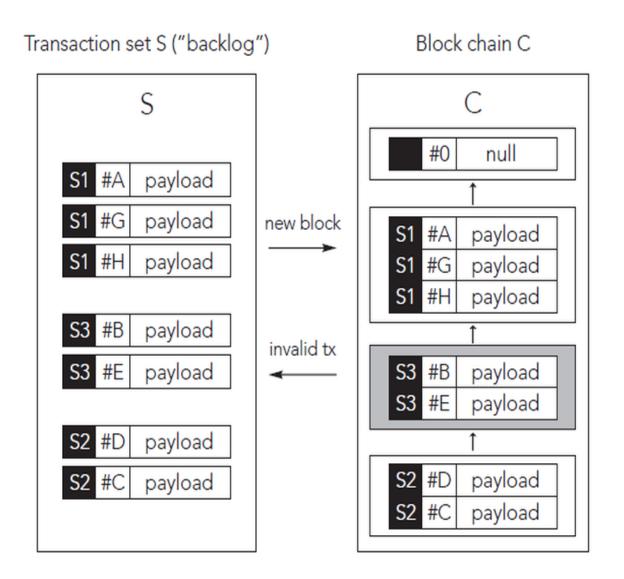
#### **DATO'S MECHANICS**

In order to analyze financial models by taking historical data as input and produce relatively good performance, we decided on SVR with linear kernels to be choice of techniques for generating models. In a situation of high frequency trading is updated every time.



Furthermore, In our blockchain database creation. After creating SQL cloud database, we will implement blockchain usability for this database. Then, using custom smart contracts, this database can be accessed and different requests can be made.

Let SDB = {s1,s2...st} be a quantitative sequence database or a q sequence database such that SDB is a set of tupples of the form <sid ,s> which is a q sequence and sid is its unique identifier (sK means the sid of the q sequence is k.)





# VII. Road Map

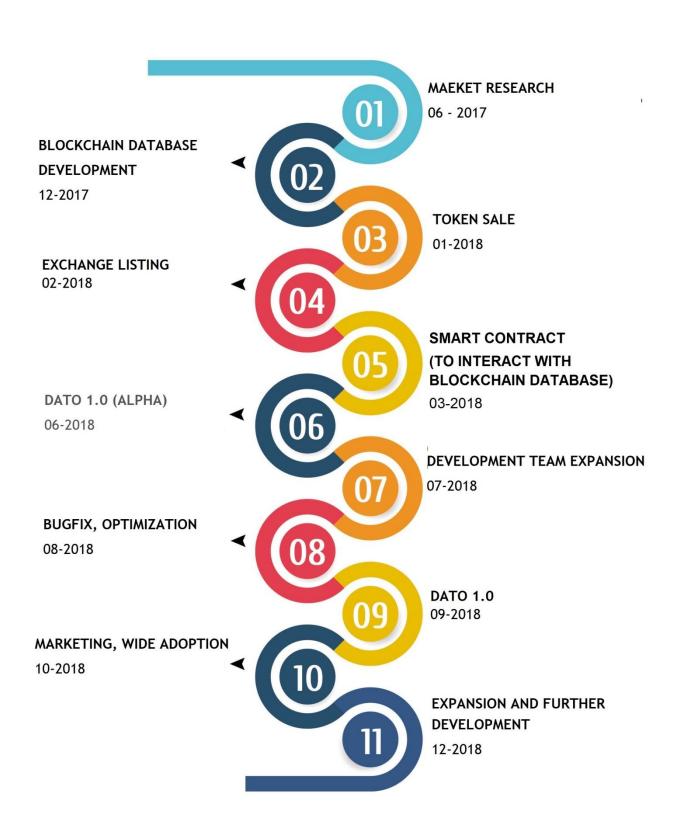
The first section of the roadmap is made up of the market research and it involves analysis of and systematic collection of data about a specific target market. This will basically help to improve the understanding of our competitors. The second section involves the blockchain database development for providing transaction history or transaction log that will be used for all participants especially through a secured cryptographic layer.

In addition to this, we will have a section for token sale and distribution which will help us to raise funds. The next stage is the exchange listing to facilitate the transparency in the listed security transaction, especially in a competitive environment. Smart contracts will be created to interact with the blockchain database and various marketing techniques will be adopted to ensure further development and expansion.

- 4 06-2017 market research
- 🖶 12-2017 blockchain database development
- **4** 01-2018 token sale
- 02-2018 exchange listing
- 03-2018 smart contract (to interact with blockchain database)
- 4 06-2018 DATO 1.0 (alpha)
- ♣ 07-2018 development team expansion
- ♣ 08-2018 bugfix, optimization
- **♣** 09-2018 DATO 1.0
- ♣ 10-2018 marketing, wide adoption
- ♣ 12-2018 expansion and further development

The diagram below illustrates the roadmap from the commencement of the project to the end and this will serve as a guide to potential inves



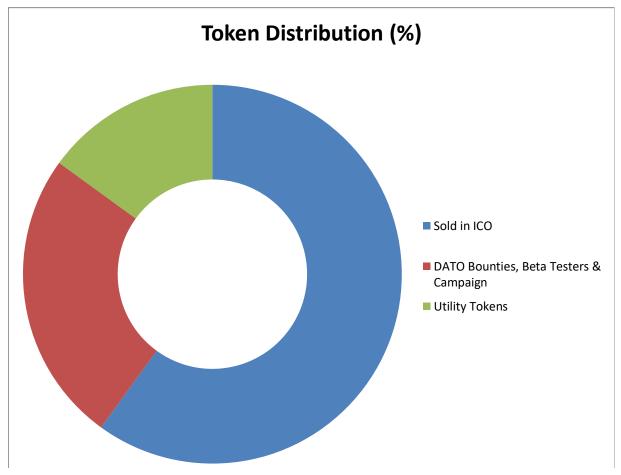




# VIII. ICO Details

Investing in DATO ICO simply means that investors don't have to contend with the challenge of having to research on whether a particular ICO has a prospect or whether a particular ICO is a scam. However, we don't just have experienced investors, we have professional dream teams that have been tested and trusted, with existing strategies on how and which ICOs and tokens to invest in.

DATO ICO will commence on the 31st of January, 2018 and it will run for just 7 days. The ICO will be stopped after achieving a sale of 10,000,000 tokens at a rate of 1 DATO = 0.002 ETH. The HARD CAP will be 20,000 ETH with a minimum contribution of 0.1 Eth.





#### **TOKEN DISTRIBUTION**

60% of the token will be sold in the ICO and 25% will be reserved by DATO for bounties, beta testers and campaigns while 15% will be sold on the platform as utility tokens locked for a period of 12 months. The doughnut chart of the distribution is displayed below as this will enable investors to understand how DATO token will be distributed.

The distribution has been segmented into percentages for better understanding and it can be seen that majority of the token will be sold in the ICO.



#### IX. Conclusion

DATO solutions will help to solve major advertising challenges that affect various brands thereby helping them to effectively reach their target audience at a minimal cost. Our solution will provide the best method of pinpointing consumer's location anytime.

Even though the act of creating various employment methods and gathering meaningful information about target audiences are quite easy, DATO will provide an ethereum based blockchain technology and smart contracts that will help to reach a targeted audience. With the aid of our blockchain database, anybody that is willing to research targeted audience will do this through the use of our blockchain database via smart contract and use the DATO token as a fee.