



*Everyone's dreams,  
all kinds of dreams,  
taking off like a rocket.*

### TakeOff News Search

Specialized search engine for investment-related information

Prototype is Here. <https://take-off.news>

### TakeOff Centre

Support for startups specialized in IT

<https://takeoff.center>

### TakeOff Exchange

Decentralized Exchange + Decentralized Multi-Token Payment

# Our Spirits

Since we are engineers, we want to compete with technology.

We intend to use management resources of staff, goods, fund and time intensively in business promotion and development and want to make the services better. It is because we are convinced that it will benefit those who believed in us and invested.

The prototype of TakeOff News Search ver0.4 (<https://take-off.news>) and TakeOff Centre (<https://takeoff.center>) have already been released. TakeOff Projects are planned to be upgraded in sequence. Artificial intelligence gets smarter every day.

How good we can create a service is directly linked to the price of our issued token, so we are seriously working on development.

Please look forward to TakeOff Projects and TakeOff Center's startup's services that will be released one after another.

We believe that the time will come when it is recognised that good things are good.

For everyone who agrees with our projects, it is our mission to continue developing technology, provide many useful services to the world, and increase the value of tokens.

**Note: Changes from the first edition of the whitepaper are displayed in dark blue.**

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## 1. Summary

### 1.1 TakeOff News Search: Specialized search engine for investment-related information

TakeOff News Search is a specialised search engine that provides investment-related news and articles collected from the Internet. This exceptional tool<sup>1</sup> was developed with the aim to help investors accurately understand trends in the markets they have invested in. The main features are as follows.

- Browse and search investment-related news and articles.
- Instant and automatic AI translation of news from other countries into major languages.
- Display public data related to news and articles, such as stock price and virtual currency charts, basic information of companies, and key persons on the same screen.
- Browse news and articles selected by AI, including not only similar articles but also articles which express different points of view and opinions on the same topic.

The prototype version is here. (<https://take-off.news> ver. 0.4)

In ver.0.3, automatic category classification using deep learning was loaded.

In ver.0.4, it supports automatic translation by AI, it corresponds to multilingual (now 6 languages, languages will increase in the future). In ver.0.7, automatic judgment of quality / importance of news was carried. (Currently being tested on development server, scheduled for release soon)

In the future, we plan to improve accuracy at the judgment of quality/importance of news and related news by AI. In addition, we are currently promoting the research and development of machine translation by AI, and we are working on improving the accuracy of translations specialized especially for news manuscripts. We implement a service called "Takeoff is the best for news translations".

### Technology Background

In 2007, there was a project to develop search engines in Japan, but it did not work. It was a large-scale project launched by the Ministry of Economy, Trade and Industry of Japan, called the "Information Voyage Project", with a national budget of over \$150M spent.

We were very sorry about that, we tried and tried to make our search engine, developed and

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<sup>1</sup> TakeOff News Search is a tool that helps investors understand market trends by searching and analyzing investment-related news. We do not provide investment advice for specific companies and securities.

accumulated know-how over seven years, and finally succeeded.

That is the core of TakeOff News Search and the next project "Regional Information Search Engine". (See "3.4 Project 4: Regional information search engine ")

Today, our search engine technology was born in Japan and grew up in Europe, organize the collected data by AI, and continue to grow to be able to convey accurate information to users.

## **1.2 TakeOff Centre: Support for startups specialised in IT**

TakeOff Centre comprehensively provides, with the collaboration of our partner companies, advice on business planning, technical support, IEO(Initial Exchange Offering<sup>2</sup>) , and legal support to companies and ideas (hereinafter referred to as startups) that have outstanding IT technology and business plans.

In principle, the screening standard is that startup can make a prototype that can be used by customers by Main Sale, or that about blockchain technology, cross chain technology and virtual currency platform technology, there is a design document. The project we support is designed so that the added value of the project can be more than 20 times from the time of token sale within several years by a consultant who made grand-designs at large companies.

Investors using TakeOff News Search Premium Service can view information on the startups it supports. Information on startups includes the description of business and news releases, such as token presales, service release notices, business cooperation, and business development, announced by said startups.

Projects related to TakeOff Centre are currently being under. For following details, please refer to *TakeOff Centre's support schedule project details*. Each project is a business owned by another corporation. Startups interested in financing through token sale have contacted us for consulting in the fields of social news services, news media, and virtual currency settlement, so new applications are closed.

TakeOff Centre continues to support businesses even after the IEO stage has been

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<sup>2</sup> A way for exchanges to review projects and sell tokens and raise funds for the project. TakeOff Center plans to do IEO on TakeOff Exchange in cooperation with other exchanges.

completed by each startup. TakeOff Centre also supports cooperation and collaboration between startups, and it supports to accelerate each other's business.

TakeOff Centre does not confine startups within it. They can freely invite investors as the entity responsible for implementing fund raising and act as independent business entities without any restrictions.

For the latest information please visit TakeOff Centre (<https://takeoff.center>)

### **1.3 TakeOff Exchange: Decentralized Exchange**

TakeOff Exchange is a trustless and High-Speed-Tradable Decentralized Exchange<sup>3</sup>, which realises high liquidity.

While the rapid matching system of Off-chain Orderbook (Wallet to Wallet mode) and Hi-Speed/Realtime Trade with technologies of side-chain/off-chain etc. (Deposit mode) provides the High-Speed Trade, its high liquidity is achieved by Token pool + Trade Manager(AI), the collaboration with other exchanges, and Decentralized Multi-Token Payment (TakeOff Exchange Payment).

So far, not a few cracking incidents have occurred in conventional centralised exchanges, such as the incident of coincheck led to the largest-ever damage of approximately 58 billion yen (Approximately 530 million dollars).

Therefore, to avoid risks of cracking and internal frauds, decentralised exchanges which enable users to trade without sending private key is the focus of attention as the next generation of exchanges.

However, the decentralised exchanges have several demerits. Here are the examples:

1. Transaction fee of blockchain is charged at every time the order is made/edited/cancelled.
2. Waiting time caused by every writing of the blockchain.
3. Low liquidity because there are only a small number of users
4. Unable to trade with other blockchains

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<sup>3</sup> When TakeOff Exchange becomes able to deal with fiat money as well, it will become a hybrid of secure exchange and decentralized exchange.

TakeOff Exchange realises the trustless transactions keeping the high speed, by writing only the actual transaction results on the blockchain, proceeding quickly until the transaction establishment by the rapid matching system of Off-Chain Orderbook.

In addition, by depositing tokens to TakeOff Exchange's Smart Contract, it also offer a mode that enables high-speed/real-time transactions. These are realized by selecting suitable ones from technologies of side-chain, off-chain, zero knowledge proof, etc. and combining them. (Currently under research and development)

Trade Manager(AI) trades automatically among the token pool, wallets for pooling the virtual currency or tokens that TakeOff Exchange has, and also sharing the order with other exchanges. This leads to the high liquidity. TakeOff Exchange is also an exchanger of the token. Its price of the rate is determined by Trade Manager(AI).

TakeOff Exchange Payment is a Decentralized Multi-Token Payment service. It accepts any virtual currencies and tokens that are available on TakeOff Exchange Payment. Each token can be used to pay for an actual service, which makes the token's liquidity high.

Suppose that a user has no token A from startup A, but only token B in the wallet, for example. Generally, the user can't pay for the services of startup A using token B. TakeOff Exchange Payment proceeds payments by exchanging each virtual currency and tokens listed on TakeOff Exchange automatically following the rate by TradeManager(AI). This means the user can pay for the services of startup A using token B. Conversely, services of startup B can be paid by token A.

TakeOff Exchange Payment executes the payments trustlessly through an easy-to-use interface(dApps). It is not necessary for users to share the private key to TakeOff.

The interface of payment is displayed as a part of a webpage of each service, and the payment will be completed by just a few clicks with metamask or dApps browser. The record of payment will be recorded on the smart contract. Premium services by each startup are offered as soon as they confirm the payments recorded on the blockchain.

TakeOff Exchange Payment offers a multi-token payment function also to general service providers who do not issue any tokens. In this case, the providers choice the virtual currency (including ETH, token) that they will receive for their payments. For example, you can use it for buying products on EC websites, payments for web services, purchasing tickets, etc.



Payments in these cases can be completed through every virtual currencies and token that are available on TakeOff Exchange Payment.

TakeOff Exchange is starting operation from the every pair trading of ETH, TKO token, and original tokens issued by startups which TakeOff Centre supports.

The following will be transferred to the token pool; a part of TKO token that TakeOff has, and a part of tokens that TakeOff Centre acquires from startups (10% to 20% of total supply).

The Corporate values of each startups TakeOff Centre supports is more than tens of million dollars. Four projects besides TakeOff Projects moving forward, no doubt the big market will soon be formed.

TakeOff Exchange will start dealing with the major currencies on Ethereum. The currencies will be purchased using a part of token pool and a part of sales by TakeOff Exchange (transaction fee, spreads, and payment transaction fee).

We keep on watching off-chain technologies, side-chain technologies, cross-chain technologies, and technologies like atomic swap, will validate them and will adopt those innovative and practical technologies step by step. Those technologies will make TakeOff Exchange offer more rapid transactions, which is trustless. Furthermore, transactions between the different blockchains and multi-virtual currencies payment will be realized in the future.

The reason why it is possible to achieve above, there already exists technology developed with partner companies. Currently, 50% of whole TakeOff Projects are completed. This has been achieved only by the management resources of ours and partner companies'.

TakeOff Centre will gain 15% to 20% of each startups' fundraising amount as support fee. TakeOff Centre expects revenue equivalent to TakeOff Exchange.

Our company pursues better and more substantial services, developing them with our partner company.

Right now, we are preparing to acquire a license with lawyers. The license is necessary to transact between virtual currencies and fiat money. When TakeOff Exchange becomes able

to deal with fiat money as well, it will become a hybrid of secure decentralised exchange, and conventional exchange that the rapid-transaction and fiat money are available. Recently, several stable coins have appeared, so we decide whether or not to deal fiat currencies and the timing with looking at the trend of the virtual currency industry and the regulations of each country.

Our company will implement TakeOff Exchange as an exchange with the technology of the highest level in the world. We offer our know-how of management and technologies to other exchanges at a fee, cooperating for pervasion of a token economy to the real society.

#### **1.4 TKO tokens**

TKO tokens issued by TakeOff can be used for settlement as the fee for TakeOff News Search Premium Service and TakeOff Exchange. The usage fee for premium service can also be paid in fiat money.

TKO tokens do not represent usage rights of any TakeOff services. Also, they do not represent any securities such as TakeOff stocks or bonds.

TakeOff Centre only supports startups that implement IEO that correspond to utility tokens.

TakeOff tokens can also be used as utility tokens for usage fees for services provided by startups supported by TakeOff Centre. Similarly, original tokens issued by startups can be used mutually as a service charge for startups. Figuratively speaking, tokens representing admission tickets that can be used at amusement park A can be used at museum B, and vice versa. This will increase the liquidity of the original tokens issued by startups, including TKO token, and the value is expected to improve. However, whether the mutual use of tokens is deemed appropriate or not, depends on the intention and the service contents provided by the startup. The circumstances are different for each startup and not certain.

TKO token will be one of base assets on TakeOff Exchange.

TKO token will also be listed on other company exchanges.

Some projects, namely TakeOff Centre and TakeOff Exchange, may not be implemented if distrust in virtual currency increases due to laws and regulations on virtual currency and IEOs, or damage is incurred to virtual currency exchange services as a result of hacking. Also, TakeOff's business direction may change significantly due to technological innovations

including virtual currency, IEO circumstances, AI, and blockchain.

### **1.5 Value of TKO token**

We provide investors with useful tools by TakeOff News Search, connect investors and startups at TakeOff Centre, and provide a place for trading original tokens issued by startups at TakeOff Exchange. Furthermore, startup's services make mutual utilization of the original tokens, and it increases the liquidity and the value of each token. This is our business model.

The more startups that "take off" from the TakeOff Centre provide more useful services in the world, the more liquid and values of mutually available TKO token will go up. Also, sales of TakeOff Centre will increase, and TKO token linked with the value of the business will also increase in value. [Takeoff Centre will continue even after TKO token sale, so the value of TKO token will up as startups will create new added value.](#)

The commission for comprehensive support by TakeOff is between 15% to 20% of the funds raised by startups. 50% of the commission is planned to be allocated to cooperating businesses.

Also, TakeOff gets 10% to 20% of original token issued by each startup. In order to increase the value of original token issued by each startup, TakeOff Centre will support each startup continuously for management, technology, legal and many other aspects.

Even in the case of stocks, things with substance have stable value. We believe that enriching our services and business is the only way to increase value of tokens in the long term.

Currently, listing tokens on the market is generally(/commonly) used to make a profit, but foresighted long-term holders can take much money with their benefits. For example, the value of bitcoin is more than temporarily 100 thousand times since the time the first settlement was done with a pizzeria in 2010.

TakeOff projects with substance and the startup projects supported by TakeOff Centre more grow, the value of the tokens will go up in the long term. For everyone who agrees with our projects, it is our mission to continue developing technology, provide many useful services to the world, and increase value of tokens.

## **TKO Total Supply And Lockup plan**

The total supply of TKO token is 20 billion tokens.

Part of the tokens held by our company TakeOff Technology OÜ (35% of the total supply) and the tokens (20% of the total supply) held by our partner companies are locked up<sup>4</sup> for one year after it is listed on the first exchange.

The mass sale of TKO tokens in a short period leads to price breakdown of TKO token, which is not favorable for our company. So, when releasing TKO tokens to the market, we will gradually release TKO tokens in a way that preserves the added value of the token as much as possible.

As of October 1, 2018, when we took a questionnaire to the large investors of TKO token, a half of the large investors think that big projects will continue at TakeOff Center, so they do not plan to sell their TKO token within six months after listing on the first exchange.

## **2. Services planned to be offered**

### **2.1 TakeOff News Search: Specialized search engine for investment-related information features**

TakeOff News Search features are as follows.

#### **Main Features**

1. Browse and search investment-related news and articles.
2. Browse and search news and articles of other countries (automatically translated into major languages).
3. Browse public data related to news and articles (stock price and virtual currency charts, and basic information of companies and key persons).
4. Browse news and articles selected by AI, including not only similar articles but also articles which express different points of views and opinions on the same topic.
5. Personalization of pages, searches, and browsing (personal optimisation, manual setting of news and articles in fields investors are interested in, and optimal display by AI).
6. Customize Dashboard (arrange information cards of investment companies, services used to purchase tokens, and fields of interest).

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<sup>4</sup> 55% of total supply (11,000,000,000 TKO) is locked up.

The prototype version 0.4 of TakeOff News Search has been released. Ver0.7 is coming soon. (Currently being tested on development server.) (<https://take-off.news>) Approximately 50% of above Main Features has been completed.

TakeOff News Search has Search Engine and AI, and allows you to view the latest articles at once. Extracts related news, people, companies, virtual currency from news by AI and natural language processing and displays it along with stock chart and virtual currency chart.

This service can be used with smartphones and tablets in responsive design, but you can access much information with a big screen, so please try it on your computer.

AI is currently learning with teacher data. Also, we are developing AI using deep learning. The accuracy of correlating the relevance of news to related news and basic data will increase. In addition, crawling target sites is more and it becomes international, it will correspond to the stock price of many companies and the chart of many virtual currencies.

You want to know exactly how news is reported on other media right? In this news, you want to know immediately how the stock price of the related company and the chart of the virtual currency fluctuated? TakeOff News Search realises that. (Currently under development.)

News articles displays individual words or very short text excerpts to comply with the copyright laws of each country. However, depending on the copyright law of each country, there may be cases where TakeOff News Search service itself cannot be provided in that country.

To globally distribute as many articles as possible, we will make affiliation inquiries to each media<sup>5</sup>. Regarding the providing of full articles from each media, we will share part of the profit from TakeOff News Search Premium Service and advertisements. However, since this depends on each media, it is uncertain whether such affiliation is possible. Developing a system where users send donations by tokens directly to each media for useful articles is being considered.

The quantity and quality of information provided by TakeOff News Search may be subject to

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<sup>5</sup> We will make efforts within our capacities to set up this service. If we acquire permission from the copyright owners, this service can be used even in countries where copyright applies to the display of news titles.

change due to revision of laws of each country, changes in publication policy for search engines to crawl destination sites, and termination of public data (especially stock price and virtual currency chart).

## **2.2 TakeOff Centre: IT specialised startup support business**

TakeOff Centre, along with its partner companies, supports startups with the following.

1. Consulting support (management, market trend surveys, and legal support).
2. IT technical support (technical support such as ICOs, AI, search engine, and blockchain).
3. Support for the use of issued tokens (mutual use between startups).

The commission for comprehensive support by TakeOff is between 15% to 20% of the funds raised by startups. 50% of the revenue is planned to be allocated to cooperating businesses. As the support necessary for each startup varies significantly depending on the business provided by said startup, the amount of the commission will increase or decrease accordingly. TakeOff gets 10% to 20% of original token issued by each startup. To increase the value of original token issued by each startup, TakeOff Centre will support each startup continuously for management, technology, legal and many other aspects.

We will work with partner companies to develop next-generation IT technology. There are several partners (search engines, AI, consulting, legal etc.) with our company; we may not disclose details of our partners due to contract between us.

## **2.3 TakeOff Exchange: Decentralized Exchange**

TakeOff Exchange is a trustless and High-Speed-Tradable Decentralized virtual currency Exchange<sup>6</sup>, which realises high liquidity.

Following are the main features of TakeOff Exchange:

1. Decentralized, trustless and rapid transaction
2. a rapid matching system of off-chain OrderBook (Wallet to Wallet mode)
3. Hi-speed/Realtime Trade (Deposit mode)
4. Automated trade with Token Pool + Trade Manager(AI)

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<sup>6</sup> When TakeOff Exchange becomes able to deal with fiat money as well, it will become a hybrid of secure exchange and decentralized exchange.

5. Sharing orders with other exchanges
6. Decentralized multi-token payment, TakeOff Exchange Payment

### **2.3.1 High-Speed-Tradable Decentralized Exchange**

Users' Orders are saved to TakeOff Exchanges' database and collected to off-chain OrderBook. The rapid matching is proceeded by our company's search engine technology (database technology). TakeOff Exchange offers interface of real-time OrderBook, charts, and transaction history which the other leading exchanges have.

The actual transaction is executed by the smart contract and recorded on a blockchain. Users do not have to send private keys. Every process on a transaction is executed trustlessly.

In the Wallet to Wallet mode with off-chain OrderBook, you do not need to deposit virtual currency or tokens on TakeOff Exchange's Smart Contract. At the time of establishing a trade, the exchange of tokens will be carried out between mutual wallets of the two trading parties directly.

In the case of a high-speed/real-time transaction (Deposit mode) with the latest technologies such as side-chain and off-chain, it is necessary to deposit virtual currencies and tokens to TakeOff Exchange's smart contract beforehand, but you can trade with high-speed/real-time and operability like traditional centralized virtual currency exchanges. Gas cost on the Ethereum is necessary only for deposit and withdrawal, but it is not required at all to making orders, fill order and cancel.

TakeOff Exchange is implemented as dApps. Wallets like metamask, hardware wallets or dApps browser built-in wallet application are available.

### **2.3.2 High Liquidity**

Trade Manager(AI) trades automatically among token pool (a wallet of TakeOff Exchange that pools virtual currencies and tokens), and share the Order with other exchanges. This realizes the high liquidity.

#### **TradeManager(AI)**

Trade Manager is an artificial intelligence that performs transactions about virtual currencies and tokens automatically. TradeManager(AI) learns from chat data of the other

exchanges, news analysis from TakeOff News Search, and the transition of token pool balance, and optimize the transaction at the time.

### **Token Pool**

Token Pool is a wallet of TakeOff Exchange that pools virtual currencies and tokens. A part of TKO token TakeOff has, and a part of token attained from the startups that TakeOff Centre supports are transferred to the token pool.

The Corporate values of each startups TakeOff Centre supports is more than tens of million dollars. Four projects besides TakeOff Projects moving forward, no doubt the big market will soon be formed. Apart from 4 projects, TakeOff Center will continue to support startups in the future.

TakeOff Exchange will start dealing with the major currencies on Ethereum. The currencies will be purchased using a part of token pool and a part of sales by TakeOff Exchange (transaction fee, spreads, and payment transaction fee).

The virtual currencies on blockchains other than Ethereum (Bitcoin, EOS, Stellar etc) will be listed by peg-coins and cross-chain technologies.

### **Collaboration with other exchanges**

The Collaborations are done through 0x protocol<sup>7</sup>. The orders of Trade manager(AI) is broadcasted not only in TakeOff Exchange but also to the other exchanges. Conversely, orders shared by the other exchanges are collected to OrderBook of TakeOff Exchange and be proceeded rapid matching. Trade Manager(AI) can also be a taker.


### **Token Exchanger**

TakeOff Exchange is also an exchanger, which buys and sells tokens at the rate determined by Token Manager(AI). We offer an easy-to-use interface, which is also suitable for beginners.


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<sup>7</sup> IFinex, which operates Bitfinex, one of the world's largest exchanges, has made public its Ethfinex (<https://www.ethfinex.com/>) Hybrid Distribution Exchange that adopted the 0x protocol from January 15, 2018. Exchanges scheduled to be adopted or adopting the 0x protocol is 19. (As of July 20, 2018)




 TakeOff Exchange
 0x34a154...d83f

**From:**


 TKO
 

100 TKO

Available Balance  
 1,000 TKO



**To:**

 AAA
 

334.5 AAA

1 TKO = 3.345 AAA

EXCHANGE

### Decentralized Multi Token Payment (TakeOff Exchange Payment)

TakeOff Exchange Payment is a decentralised multi-token payment service. It accepts any virtual currencies and tokens that are available on TakeOff Exchange Payment.

For example, you can use it for buying products on EC websites, payments for web services, purchasing tickets, etc. Payments in these cases can be completed through every virtual currency and token that are available on TakeOff Exchange Payment.

Each token becomes available as a payment token for the actual services, so the liquidity of tokens will be higher.

Following is how to use TakeOff Exchange Payment;

firstly, service providers which introduce TakeOff Exchange Payment providers choice the virtual currency (including ETH, token) that they will receive for their payments.

Users go to the websites of service providers and pay through the simple interface(dApps) of TakeOff Exchange Payment built into the website. If users are using metamask or dApps browser built-in wallet, those wallets automatically become available. Users select which

token to pay from the tokens in the wallet that are available on TakeOff Exchange Payment after confirming the amount calculated automatically by the current rate and click the payment button. The wallet will ask users to approve the transaction, so they re-confirm the amount and transfer tokens to the smart contract where the transaction takes place.

The smart contract will exchange the virtual currency or token users pay with that of what the service provides already paid in advance, and will transfer tokens to them. Tokens users pay will be transferred to the token pool and used by automated trade by Trade Manager(AI).

The screenshot displays a payment confirmation screen for 'TakeOff Exchange Payment'. At the top, there is a logo and a wallet address '0x34a154...d83f'. Below this is a blue abstract logo. The main text reads 'Startup A Premium Service (per month)' followed by '100 AAA' which is underlined. Below this, there are two input fields: 'Choose Token' with a dropdown menu showing 'TKO' and a double-headed arrow, and 'Pay Amount' with a text box containing '33.46' and 'TKO' to its right. Below these fields, it shows 'Available Balance' as '1,000 TKO'. At the bottom, there is a large blue button labeled 'PAY WITH TKO'.

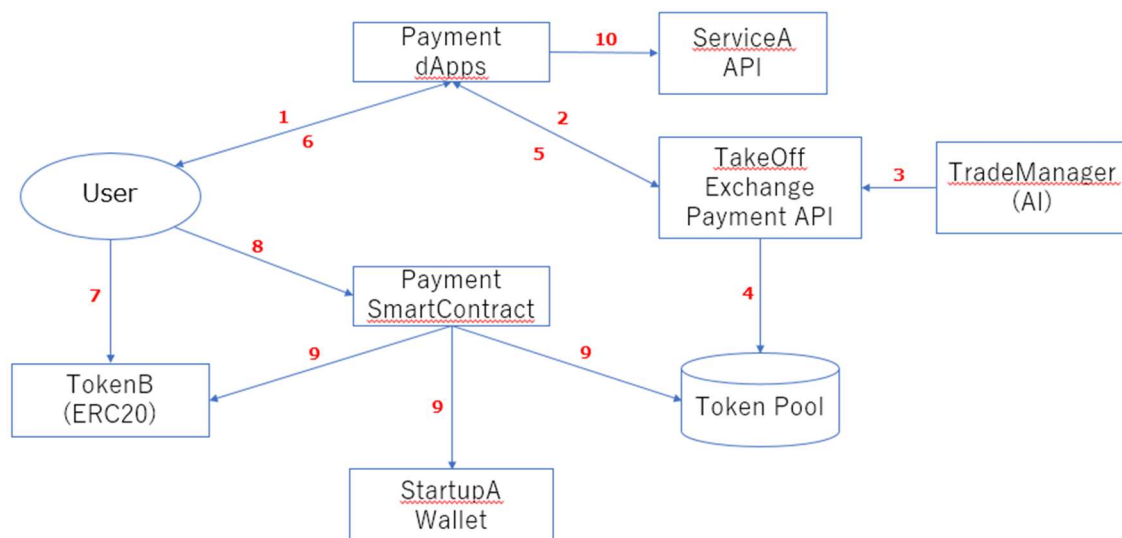
### 2.3.3 The Specification<sup>8</sup> of Decentralized Multi Token Payment (TakeOff Exchange Payment)

1. Select Payment Token (TokenB), confirm its rate and click the “Pay” button.
2. Call TakeOff Exchange Payment API to generate the invoice.
3. Identify if the request is valid confirming the current rate from TradeManager.

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<sup>8</sup> Specifications are subject to change.

4. Approve the payment contract to access the balance of TokenA in the token pool
5. Send the invoice with signature by TakeOff's private key.
6. Users receive the invoice with signature.
7. Confirm the invoice and approve the payment contract to access the balance of TokenB.
8. Sending the invoice to the Payment contract to payment execution.
9. Payment contract transfers tokenB from users to the token pool, and tokenA from TokenPool to startupA's wallet.
10. dApps detects the approval of blockchain and calls the ServiceA API. ServiceA checks the payment from the users on the blockchain and offers the service to the users.



### 2.3.4 Implementation Plan

TakeOff Exchange will start operation from the every pair trading of ETH, TKO token, and original tokens issued by startups which TakeOff Centre supports.

To speed up the transactions and payment, off-chain technologies such as Raiden Network, Lightning Network, and side-chain technologies such as Plasma Cach, Zero knowledge proof are currently being developed.

Also, to realise the transactions among the different blockchains, the development of cross-chain technologies such as atomic swap technology, Cosmos, and Polkadot is underway.

We keep on watching off-chain technologies, side-chain technologies, cross-chain

technologies, and technologies like atomic swap, will validate them and will adopt those innovative and practical technologies step by step. Those technologies will make TakeOff Exchange offer more rapid transactions, which is trustless. Furthermore, transactions between the different blockchains and multi virtual currencies payment will be realised in the future.

We keep on watching surrounding technologies, validating them, and will adopt those innovative and practical technologies step by step with partner companies (including the startup that TakeOff Centre supports, which is proceeding “Multiple token payment services” project).

Those technologies will make TakeOff Exchange offer faster transactions, which is trustless. Furthermore, multi-virtual currencies payment with trustlessness and high speed will be realised in the future.

Right now, we are preparing for license with lawyers. The license is necessary to transact between virtual currencies and fiat money. When TakeOff Exchange becomes able to deal with fiat money as well, it will become a hybrid of secure decentralised exchange, and conventional exchange that the rapid-transaction and fiat money are available. Recently, several stable coins have appeared, so we decide whether or not to deal fiat currencies and the timing with looking at the trend of the virtual currency industry and the regulations of each country.

### **Test Case Project of TakeOff Exchange**

As a test case of TakeOff Exchange (+ TakeOff Exchange Payment), we are planning a project to experience purchasing.

We consulted one of our sponsors, who is descendant of the former Daimyo family of Japan. Then, to preserve the traditional culture all over the world as well as Japan, we will have to make an organization, so it was an opinion that it would be better to make a project that meets the purpose. For that project, we got permission to use hundreds of kimono the sponsor own.

As introduced in movie SAYURI, one of kimono is very valuable, from tens of thousands of dollars to several million dollars.

Although details are yet to be determined, we asked our experts in management of our alliance to formulate a project.



Design of Kimono

### **3. TakeOff Centre's support schedule project details**

Below are the details of projects we plan to support. For each project, each startup (another corporation that is not our company) will implement and provide the fund raising and service products.

At the moment, we will refrain from publishing details of other projects that we have consulted with TakeOff Centre. As soon as we can publish such details, we will inform TakeOff News Search Premium users with the latest information on each startup. The following projects are being developed or under consideration. Depending on future laws and regulations, and technological innovations, the direction of business may be changed significantly or projects may not start, and the feasibility and the timing of the IEO implementation of the projects below are undecided and uncertain at present.

#### **3.1 Project 1: Market Analysis AI Platform**

This project provides news and indicators that are expected to affect market overall, stock prices, and virtual currencies.

AI analyses news, social media, stock price, and virtual currency value fluctuations in real time. When important news or signs are detected, this service will notify you by the mobile app's push notification or e-mail.

[This system automatically trades by AI to maximise profits using API of exchanges \(including TakeOff Exchange\).](#)

Not only natural language processing is applied to news and text on social media, but also machine learning is applied based on the impact of each news article on stock prices and virtual currency trends, leading to improved accuracy. [Currently, AI to be incorporated in the prototype is under development.](#)

This project is an investment analysis tool. It does not anticipate purchasing advice on individual stocks or virtual currency or price movements of stock prices or virtual currencies.

#### **3.2 Project 2: Human Resource Matching Service**

This project is a human resource matching service that uses AI to find talents needed by companies.

AI analyses data registered by people who are looking for work, and data made public by

individuals, such as social media and blog posts, and source code. Securing excellent talent is essential for success in projects. Naturally, matching the rewards and skills alone is not enough in the present era when the values of individuals are diversifying. However, it is difficult to fully grasp the skills and the personality of each person just by looking at the resume or by having an interview with candidates. Also, candidates have difficulty grasping the company's work environment and culture. In addition to registered data, this project analyses published data, visualises actual results in a user-friendly manner, and presents them to companies. People searching for jobs can control how much information they publish for each company that has made offers. Also, it is possible to choose good work from among the recommended companies that match each characteristic and direction analysed by AI. [It is currently under design.](#)

In the long term, this project will create good relationships satisfying both companies and workers, aiming to stabilise employment.

### **3.3 Project 3: Multiple Token Settlement Service**

This project provides a system that allows customers to easily settle items and services with multiple tokens and virtual currency.

TakeOff tokens can be used to pay the service use fee of startups. However, immediate settlement or settlements of small amounts may be required depending on the services of the startups. At that time, TakeOff tokens issued on the Ethereum may become difficult to use regarding settlement speed and settlement fee. Similar inconveniences will be encountered by businesses other than startups supported by the TakeOff Centre.

It is fascinating that next generation Ethereum technologies and payment systems integrating multiple blockchains like TenX are under development. We will decide whether to adopt optimal platform technologies or develop them independently while seeking realistic demands desired by startups or general business operators, and assessing the progress and technology of various blockchain projects. [It is currently under design.](#)

To make multiple practical tokens that can be used for actual settlements, we plan to implement IEO to develop our own platform and/or develop user-friendly interfaces.

### **3.4 Project 4: Regional information search engine**

This project provides search engines that can search for regional information such as

sightseeing spots, shops, and area news etc.

The goal of this project is to realise a search engine that seems as if you are walking while enjoying the atmosphere of the city, yet you have never been there before you can tell secret spots that local people only know. If you use this service, before you move to an unknown town or before you go on a trip, what kind of landscape the town is lined with, what kind of shops are lined up, what kind of sights are there, somehow, you can know the atmosphere of the town.

Even if you are a locally living person, you will discover what kind of menus and goods the shops in the back place are offering, and rediscover the charm of the local.

People have limited places to go out during their lifetime. It is a wonderful experience that you can experience a simulated experience of visiting various places in the world, staying at home with this service.

In the search results of this service, you can see the atmosphere of the shop and the atmosphere of the town by a large number of images like the menu, the appearance, interior decoration of shops on a search result page. In the sightseeing spot search, the search results are displayed with a slide show. It is planned to enrich VR contents. You can also view the search results on the map.

Also, while searching for sightseeing spots and shops, this automatically judge and display relevant contents (Wikipedia and sightseeing information explaining culture and history) such as regional culture, food culture, history etc on the same screen.

These have been made possible by crawling technology that acquires structural information, natural language processing and AI technology which correlate information distributed among multiple sites.

To fulfil the responsibility of the search engine as social infrastructure, the information gathered from the Internet is clarified and guided to the source website.

Also, we will ask users to contribute content through the token economy, and thus we provide more attractive services.

This service provides opportunities for shops and business owners to be exposed. When there are shops and business establishments in the back place, it is often difficult to have



the world know about their services.

In the service dealing with "regional information", in principle, the search results are displayed in the order closer to the position of user or the position to be searched, based on the absolute standard "position". This means that there is a possibility that all shops and business establishments will be displayed on top of search results. If owners can represent the service of their shops visually and attractively with pictures, they will be able to attract users strongly. Posting content to this service can be hospitality to their potential customers.

TakeOff Technology OÜ concluded business transfer agreement of this project and TakeOff Technology OÜ decided to establish a subsidiary.

A part of the prototype of this project has already been completed, and it is under further development now. The whitepaper described more details is coming soon.

## **4. Technical overview description**

We will describe our technologies as easily as possible. Please note that the descriptions are overall descriptions as the technology and know-how being researched and developed is confidential.

### **4.1 Search Engine**

A search engine consists of large-scale data collection technology (called crawl technology), index technology to realize high-speed searches, and search technology. To operate these on a large scale, various technologies and know-how are necessary. Our search engine technology and know-how are being developed in collaboration with several companies. As a result, we can process more than 10 million items daily from over 100 sites, which can still be scaled out (further increase the number of servers and boost performance).

It may be a bit difficult to understand, even with a technology called the search engine, the difficulty will be improved significantly when processing large amounts of data exceeding tens of millions. We possess the world's highest level of technology that structurally processes over tens of millions of data every day.

One feature of our search engine is that it treats the collected data as structural data, not as only full-text strings. For example, when applied to TakeOff News Search, news articles, news categories, article titles, article bodies, image URLs, country names, company names, people's names, and virtual currency names are interpreted and extracted. This operation is performed by applying natural language processing and processing by AI to the collected data. By treating them as structural data, it becomes possible to link each news article with related public data (stock price and virtual currency charts, and basic information of the company and key person).

### **4.2 Natural language processing and AI**

How does the fourth feature of TakeOff News Search "Browsing news and articles selected by AI including not only similar articles but also articles which express different points of views and opinions on the same topic" work?

To describe the principle easily, distinctive words are extracted from news articles and to the importance of the extracted words are interpreted by the connection between words. The question here is "What is a distinctive word?" The answer depends on the AI you want to implement. As an example, if you want to create an automatic AI classification for news categories, a distinctive word means a characteristic word in the category's classification.

“Ethereum” and “Bitcoin” are characteristic of the "virtual currency" category, and “stock price” and “labour statistics” are characteristic words in the "stock price" category. However, what happens if there is a news article that has the sentence "labour statistics are strong, stock prices rise, also Bitcoin and virtual currencies"? For this, it is necessary to consider the importance and the position of each word in the sentence. The relationship between each word must also be considered. AI will take all of these aspects into consideration<sup>9</sup>.

Know-how and technology are also necessary for natural language processing. For languages in which words are not separated by spaces like Chinese or Japanese, it is necessary to interpret verbs and nouns. Also, in the real world, new words will occasionally emerge. For example, a new president, a new prime minister, a new company, and a new blockchain name. It is necessary to interpret and process these. Research and development of the above technology have been completed and implemented in the developing prototype. With these technologies, information can be linked from investment-related news and articles, and users will be able to grasp the current situation quickly. However, it is more useful to know what kind of news and articles will affect stock prices and virtual currency value' fluctuations.

The Market Analysis AI platform described in TakeOff Centre's support schedule Project details section implements this feature.

The Market Analysis AI platform attempts to develop further the technology described above. The characteristic word this time is defined as a "word that influenced price movements of stock price and virtual currency". Although what it is can be expected to some extent, it is necessary to analyse it together with the time series data of actual stock prices and virtual currency value fluctuations. It is necessary to quantify the context in which a word appears and the emotions of investors. A key person's remark on social media may be the key. Alternatively, AI may find out the long-fashioned adage in the world of investment.

The Market Analysis AI Platform is still under research and in the concept stage. Along with our partner startups, we will complete the stages until the practical stage as soon as possible.

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<sup>9</sup> One AI that automatically extracts relationships between words is the "word2vec" developed by the research team led by Google's Tomas Mikolov. This technology uses deep learning to express words as vectors with around 200 dimensions so that addition and subtraction between vectors can be performed.

## **5. Business planning background**

### **5.1 Trigger**

For IT engineers, people who are not interested in blockchains or virtual currency technologies do not exist. Not only the technology itself but also various ideas that incorporate virtual currency into business are amazing. Exciting startups are emerging and making us think that it will change our life altogether.

Since 2017, with the soaring of virtual currencies, regulations of countries have been reported as well. The more information about virtual currency we acquire, the more we are aware of the importance of news and articles that are more global and fast. This is because of the dynamism of the blockchain technology that goes beyond country borders, and the world moving and creating something. However, although there are many players such as governments, startups and their own tokens, and blockchain platforms, there is no service to view news and articles collectively. Every time we search for newly-seen keywords, translating anxious articles, and inputting information is a hard time. Also, even after searching, we have discovered the latest articles after about two weeks since searching, and the policies have changed significantly. This inconvenience will be felt by startups working on virtual currency related businesses as well as investors investing in virtual currency and tokens.

Fortunately, we have been engaged in search engine research and development for many years, and we already own automatic category classification technology for news and articles by AI, crawling technology, and search technology. Also, from the research of natural language processing and AI, we also have the technology to link stock data related to the news article, which is the flow data that flows immediately.

We decided to develop the service to relieve our "pain". With this service, users can (1) quickly check the newest news and articles including news from other countries on the same screen and (2) browse information about companies, startups, keywords, key people, and stock prices and virtual currency charts appearing in news and articles. Such is TakeOff News Search specialised search engine for investment-related information. However, as we collect much information on blockchains, virtual currencies, ICOs, and trends in each country, and as we listen to the forecasts of top management advisors on the future of virtual currency, we realised we must work with a broader perspective. We will describe our hopes for TakeOff News Search and the planning background of TakeOff Centre and TakeOff Exchange.

## 5.2 Current situation surrounding virtual currency

In turbulent periods of change, accurate and rapidly reportable information from reliable information sources is indispensable to find the right path. Even in news and articles that do not include obvious errors, opinions and tone vary significantly depending on the position of each messenger, as represented by recent virtual currency related news. Official views and policies of governments may change dramatically. The fact that such a situation is occurring can be said to be a flip that virtual currency technology has the rare possibility of creating innovation. However, we are confused as to what to trust and what to guide. The article by Kaspar Korjus, e-Residency Managing Director in Estonia, about the national ICO plan helps to have a balanced perspective. It's quite an impressive article.

*“Blockchain technology has opened up a divide in the way we structure our world. On one side there are governments and traditional institutions, while on the other side is the crypto community. Both of these sides often behave as if the other has no future.*

*Like most things, the truth is somewhere in the middle and this division is holding everyone back. By not embracing crypto, governments are failing to unlock a powerful driver of economic growth and risk losing relevance entirely. By not embracing public oversight, legitimate crypto investors are tarnished by fraudulent ones, and crypto investors are far less certain about the value and legitimacy of their tokens.*

*For an overview of the risks and complexities involved, the U.S. Securities and Exchange Commission has just published a comprehensive statement on cryptocurrencies and Initial Coin Offerings that is worth reading.*

*We all need to acknowledge that blockchain is developing powerful new solutions that are going to disrupt the world, but public authorities can play a key role in supporting this for the benefit of everyone. In effect, we need a peace agreement between these two sides.”*

**Source :** We're planning to Center estcoin—and that's only the start<sup>10</sup>. e-Residency Managing Director Kaspar Korjus

Market capitalisation of the virtual currency sometimes fluctuated wildly as a result of remarks by key persons in conflicting positions. While there are things that seem to be too strict among various regulations by states, there are things that seem to contribute to a healthy market. Such turmoil will converge after a while, factions divided into two will reach a peaceful agreement, and a healthy market will be formed. However, reality seems to take some more time by a stable future. For startups trying to develop using technologies related to virtual

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<sup>10</sup> <https://medium.com/e-residency-blog/were-planning-to-center-estcoin-and-that-s-only-the-start-310aba7f3790>

currency, as well as investors supporting them, governments considering what the right regulation is are also players and each of us will play our part in building the foundation for the next world.

Depending on our choice, the complete collapse of either traditional institutions or crypto community may occur. Alternatively, we may find the direction where everyone is convinced at the end of passionate discussions. We need to decide the direction we believe is right and make a better world. What kind of choice should we make in this period of innovative upheaval?

### **5.3 What we need to make a better future**

The key is having a deep understanding of accurate, highly informative, and global information related to each news article from various perspectives. It goes without saying that the importance of accurate information and high reportability is important.

Global information is essential for discussing virtual currency and blockchain technology beyond national boundaries. It is particularly important to thoroughly understand news articles in many ways in turbulent periods of change. The so-called divided "two factions" tend to state completely the opposite by their position and background. Also, each supporter tends to psychologically emphasise articles that they want and news that they can agree with. Then, the groove spreads. Dare to take in different opinions and views, inconvenient news, mature ourselves, decide how the future will be, what should it be, what should be done, and how much investment should be made. It must be.

In the long run, it will be the right investment that will result in profit, and at the same time, it will also be the driving force to build the foundation of the new world.

### **5.4 TakeOff News Search features and aims**

As a specialised search engine for investment-related information, TakeOff News Search makes it possible to search and view global news and articles that are accurate and highly responsive to support investor judgment. At the same time, information related to each news article and news with different views will be displayed. TakeOff News Search supports multifaceted understanding of investor market trends.

We hope that TakeOff News Search will be used as a tool to think about how to have an appropriate peaceful agreement between traditional institutions and the crypto community.

### **5.5 TakeOff Centre Project and Role**

TakeOff Centre is an IT specialised startup support project. We will continuously provide comprehensive support for business planning, IEO implementation support, and technical and legal support to startups with outstanding technology and business plans concerning IT. We will also support startups to accelerate their business by taking advantage of the scale merit through collaborations and cooperation between startups.

In the first place, whether a startup business will succeed or not depends on many uncertainties, even though startup managers and staffs do their best, sometimes it does not work. However, at least it can increase its probability. Getting assistance from experienced experts as mentioned above is one factor that raises the success probability. Also, obtaining earnings of collective financing is another factor that increases the probability of successful business.

IEO are a good way to get power with quick financing for startups with excellent technologies and ideas. TakeOff itself became a case of success, and we would like to increase the success stories of startups with TakeOff Centre. We hope IEO will develop soundly as one of the options for raising funds by increasing the number of cases where businesses have grown by raising funds through IEO, even if only a little.

TakeOff Centre specialises in supporting startups in the IT field because TakeOff itself needs to judge the future of each startup. TakeOff Centre supports only startups that are capable of sustainable growth and that are highly likely to generate value for issued tokens. TakeOff News Search investors using premium services can view information on each of the startups that TakeOff Centre supports.

There are many tokens for each startup, and the tokens are handled only through exchanges, these things are not what everyone in the Crypto community wants. Tokens are used for various services and are used for innovative services that require virtual currency, which is what many people in the crypto community want. TakeOff increases opportunities for each token to be able to be used for actual services by mutual use of tokens issued by each startup.

### **5.6 TakeOff Exchange business and aiming role**

The main purpose of TakeOff Exchange is to make the transactions and payment of virtual currencies rapid, safe and trustless, and make the token available at the actual payment scene, which is the desire of many people in the crypto communities.

We will implement TakeOff Exchange as an exchange with the technology of the highest level in the world. We cooperate with other projects and try to pervade a token economy to the real society by the latest technologies.

### **5.7 What TakeOff aims for**

Even if it is the right choice in the short term, it may become obvious that it was a wrong decision at a later date from the viewpoint of long-term and sustainability. We must use human assets to guide what is good for the future of the economy, not in a short-term perspective.

We will build a TakeOff service that hopes that legitimate economic power will be given to technologies and startups that can cause true innovation, not speculative. We want to work closely with the entrepreneurs and technicians of each startup to catch the thoughts of investors who gained power from funds at an early stage and create a better future by thinking about with the approval of our projects.



## **6. About us**

### **6.1 About us**

Our company TakeOff Technology OÜ is an Estonian corporation (Private limited company (OÜ)). TakeOff News Search, TakeOff Centre, and TakeOff Exchange are provided by our company.. [Considering risks such as geopolitics and conflict, our server is located in several countries in Europe.](#)

Also, TKO token is issued by our company at it's our risk.

Companies that we plan to partner with do not have any responsibility or obligation on the success or failure of business we conduct.

Also, TakeOff Centre does not have responsibility for fund raising, businesses, or services which are provided by each startup supported by us.

### **6.2 About representative**

Tomoyuki Nozato

Born in 1980. Japanese. Graduated from the Graduate School of Mathematical Sciences, Nagoya University. Master of Mathematics.

Having a speciality in differential geometry, dynamics system. In the field of mathematics, he researches on KAM theory on the stability of the solar system, and researches on information manifold, data mining etc in applied mathematics field.

He has 23 years experience in programming since he was 14. He got multiple major qualifications like Technical Engineer (Database) and Application Engineer by IPA (Information-technology Promotion Agency, Japan) while studying in college.

After graduating, he worked for a company engaged in research and development of search engines, AI. For the last five years, he had been SEO at the company.

And finally in April 2018, established TakeOff Technology OÜ in Estonia to provide global services beyond national boundaries.

[We received applications of TakeOff Projects advisors from people with extremely wonderful backgrounds, via e-mail, LinkedIn, Bitcointalk, etc., such as European lawyers and people belonging to a major bank.](#)

[Because of the backgrounds of advisors, there is a possibility that investors will be biased,](#)

so we do not disclose advisors.

Our staff are valuable technicians of search engines, AI and block chains. Therefore, we do not disclose to protect engineers from various risks. There are several partners (search engines, AI, consulting, legal etc.) with our company; we may not disclose details of our partners due to the contract between us.

## 7. Link

**Token Sale Site:** <https://takeoff.center/takeoff/index.html>

**twitter:** [https://twitter.com/takeoff\\_tech](https://twitter.com/takeoff_tech)

**telegram:** <https://t.me/takeofftech>

**facebook:** <https://www.facebook.com/takeoff.tech.ou/>

## **8. Legal information**

TKO token is a crypto token that is designed to be used for TakeOff Premium Services.

TKO token is considered to be used for settlement of service usage fee of startups which are supported by TakeOff Centre.

Although TKO token can be used for settlement of TakeOff Premium Service to be offered in the future, it does not mark rights of use like membership right when using paid service. TakeOff Premium Services will also be available in fiat money. TKO token can be used as a payment token for settling TakeOff Premium Service.

TKO token is not intended to constitute security in any jurisdiction. This white paper is not a solicitation for investment and does not pertain in any way to an offering of securities in any jurisdiction.

Individuals, businesses, and other organizations should carefully weigh the risks, costs, and benefits of acquiring TKO token.

### **LIMITATION OF THE PURCHASERS**

You are not eligible to and you shall not purchase TKO token through its token sale if you are a citizen or resident (tax or otherwise) of any country or state where the purchase of TKO token or similar Crypto Token may be prohibited or not compliant with the applicable laws and regulations. In particular, if you are a resident of People's Republic of China, USA, and Japan, you cannot purchase TKO token.

Purchases of TKO token should be undertaken only by individuals, entities, or companies that have significant experience with, and understanding of, the usage and intricacies of Crypto Tokens and blockchain based software systems. Purchasers should have functional understanding of storage and transmission mechanisms associated with other Crypto Tokens. Any entities of TakeOff Technology OÜ (hereinafter referred to as TakeOff) and officers and employees thereof will not be responsible in any way for loss of any Crypto Tokens, TKO token or fiat money from actions taken by, or omissions of the purchasers. If you do not have the required experience or expertise, then you should not purchase TKO token.

You should carefully consider the risks, costs, and any other demerits of acquiring TKO token, and, if necessary, obtain your own independent advice in this regard. If you are not in the position to accept nor to understand the risks associated with purchasing TKO token

(including the risks related to the non-development of TakeOff's Projects) or any other risks as indicated in this whitepaper, you should not acquire TKO token, until such that you have received the necessary independent advice.

## **RISKS**

The purchase of TKO token carries with it significant risk. Prior to purchasing TKO token, the purchaser should carefully consider the risks listed below and, to the extent necessary, consult a lawyer, accountant, and/or tax professional prior to determining whether to purchase TKO token.

- a. TKO token will be stored in an Ethereum wallet, which can only be accessed with a password selected by the purchaser. If a purchaser of TKO token does not maintain an accurate record of their password, this may lead to the loss of TKO token. If your password protection is weak and it is cracked or learned by somebody else, this may also lead to the loss of TKO token. As a result, purchasers must safely store their password in one or more backup locations that are well separated from the primary location.
- b. The purchaser recognises that some of the services under TakeOff's projects are currently under development and may undergo significant changes before release. The Purchaser acknowledges that any of its expectations regarding the form and functionality of TakeOff's projects may not be met for any number of reasons.
- c. The purchaser understands that while TakeOff will make best efforts to release TakeOff's projects on time, however it is possible that the official release may be delayed.
- d. As with other Crypto Tokens, value of TKO token may fluctuate significantly and become reduced in value for any number of reasons, including but not limited to, supply and demand, overall Crypto Tokens' market conditions, political or geographical reasons, changes of regulations in any jurisdictions, and technical reasons.
- e. TKO token will be issued on the Ethereum blockchain. As such, any malfunction or unexpected functioning of the Ethereum protocol may impact the purchaser's ability to transfer or securely hold TKO token. Such impact could adversely affect the value of TKO token.

## **DISCLAIMER**

To the maximum extent permitted by the applicable laws, regulations and rules, TKO token, any entities of TakeOff and officers and employees thereof shall not be liable for any indirect, special, incidental, consequential or other losses of any kind, in tort, contract or otherwise (including but not limited to loss of revenue, income or profits, and loss of use or data), arising out of or in connection with any acceptance of or reliance on this whitepaper or any part thereof by you.

Any entities of TakeOff and officers and employees thereof shall not be liable for your loss of TKO token after it is transferred to you by any reason including but not limited to your failure to maintain or backup an accurate record of your password or password cracking by somebody due to any reason.

TakeOff will do its best to launch its operations and develop TakeOff's projects. Any person undertaking to acquire TKO token acknowledges and understands however that TakeOff does not provide with any warranty as to the release of TakeOff's projects. They acknowledge and understand therefore that TakeOff (incl. its bodies and employees) assumes no liability or responsibility for any loss or damage that would result from or relate to the incapacity to use TKO token.

Regulatory authorities are carefully scrutinising businesses and operations associated to Crypto Tokens in the world. In that respect, regulatory measures, investigations or actions may impact TakeOff's business and may limit or prevent it from developing its operations in the future. Any person undertaking to acquire TKO token must be aware that TakeOff's business model or TakeOff's projects and its existing platforms may change or need to be modified because of new regulatory and compliance requirements from any applicable laws in any jurisdictions. In such case, purchasers and any person undertaking to acquire TKO token acknowledge and understand that neither TakeOff nor any of its affiliate shall be held liable for any direct or indirect loss or damages caused by such changes.

This whitepaper and any other materials or explanations made by TakeOff and its officers and employees shall not and cannot be considered as an invitation to enter into an investment. They do not constitute or relate in any way nor should they be considered as an offering of securities in any jurisdiction. This whitepaper does not include nor contain any information or indication that might be considered as a recommendation or that might be used as a basis for any investment decision.

Neither TakeOff nor any of its officers and employees are to be or shall be considered as an advisor in any legal, tax or financial matters.

Acquiring TKO token shall not grant any right or influence over TakeOff's organization and governance to the purchasers.

#### **NO REPRESENTATIONS AND WARRANTIES**

TakeOff does not make or purport to make, and hereby disclaims, any representation, warranty or undertaking in any form whatsoever to any entity or person, including any representation, warranty or undertaking in relation to the truth, accuracy and completeness of any of the information set out in this whitepaper.

#### **UPDATES TO THE DETAIL**

TakeOff reserves the right, at its sole discretion, to change, modify, add, or remove portions of this whitepaper and the terms at any time posting the amendment on TakeOff website (URL:<https://takeoff.center/takeoff/assets/docs/whitepaper.pdf>). Any purchaser will be deemed to have accepted such changes by purchasing TKO token. If at any point you do not agree to any portion of the then-current version of this whitepaper and the terms, you should not purchase TKO token.

## **9. Change Log**

### **January 13, 2019**

Added Technology Background of TakeOff News Search

### **November 28, 2018**

Added Detail information of TakeOff Exchange

Added Descriptions about TakeOff News Search ver.0.7

Added Lockup Plan of TKO token

### **October 1, 2018**

Added Descriptions about TakeOff News Search ver.0.4

Added Information on server's location

Added Descriptions about advisors

### **September 4, 2018**

Fixed TKO token sale overview

### **August 29, 2018**

Added Tact Case Project of TakeOff Exchange

Added Business Transfer agreement of Regional information search engine

Fixed Token Sale

### **August 3, 2018**

Added TakeOff Exchange details

Determined total supply of TKO token

### **July 3, 2018**

Added progress of TakeOff Exchange

Added explanation of features of Market Analysis AI Platform

### **June 30, 2018**

Fixed our spirits.

Added screening standard of TakeOff Centre

Fixed technical overview description of search engine

Added progress of projects supported by TakeOff Centre

Fixed About us

**June 28, 2018**

Added our spirits.

Added schedule of TakeOff News Search ver0.3, 0.4

Added schedule of TakeOff Exchange