

LitePaper

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#### DEAR CITIZEN OF THE NEW WORLD

This network is built for the people, by the people.

We've took time to make this paper clear and easy to read.

Because if you plan to be part of the 2key network, you should read it.

This litepaper is a work in progress.

It will be constantly updated to reflect our progress as well as the updates in the market, economy and blockchain ecosystems. We're working hard to stay ahead of the curve, and ensure that anyone contributing to the strength and viability of the 2KEY economy will be well served. That's why we're constantly adapting our tactics, strategy and product to make sure we're keeping a tight product market fit. So anything you read here may be changed as the crypto-big-bang unfolds and as we work to adapt.

This litepaper is for informational purposes only. It doesn't entail or constitute any recommendation or suggestion to purchase 2KEY tokens, nor does it attempt to promise any returns or profits from purchasing 2KEY tokens. The 2KEY token is a utility token which will be used, among other utilities, for accessing the 2key Network services, creating campaigns, paying out remuneration for services received via other participants on the network, collecting fees for services rendered by the network and its participants.



Any early adopters of the 2key Network reading this should perform their own due diligence before purchasing 2KEY tokens and participating in the 2key Network.

Furthermore, you should note that the Whitepaper is our main sales and marketing document, and you should definitely read the full whitepaper before choosing whether to participate in the network in one capacity or the other. The updated whitepaper is always linked from our site at https://2key.network

We strongly encourage anyone with doubts, questions or uncertainties regarding 2KEY token or the 2key Network, underlying tokenomics, technology, product, architecture or any other subject area, to contact us at on our TG group at: https://t.me/twokey\_official or write us an email at: hello@2key.network

Thank you for your interest in 2key Network. We hope you will join us in building a new kind of human web, for the people, by the people.

> Sincerely, eiTan LaVi, Founder & CTO 2key New Economics Ltd.

### Introduction

2key's mission is to empower small businesses and organizations by building a decentralised marketing solution specifically tailored for their needs. 2key now offers a simple-access risk-free blockchain solution that all businesses and organizations can use to target and reach the audience they need in order to grow and achieve their goals.

This document outlines the 2key solution, which includes both the 2key protocol and the 2key network Dapp layer.

#### PROBLEM STATEMENT

The massive online advertising industry has been practically taken over - Google and Facebook control 84% of global digital ad revenue, outside China. This consolidation of power undermines privacy, openness and competition on the web. Small businesses and organizations are struggling to identify and reach the right audiences without going through these platforms and risking their budgets on costly online campaigns that often fail to lead to conversions.

Blockchains and smart contracts have a number of unique features that enable the development of more effective marketing solutions. These include the ability to establish governance and trust among actors, based entirely on autonomous computer software and cryptography - when everything



is run by the code, it's possible to design solutions that are based around collaboration and redistribution of value, rather than on centralized platforms. But these solutions must become more easily accessible to everyone. So far, blockchain solutions that have tried to combat centralization failed to attract the masses because they were incompatible with Web 2.0, and the blockchains they were built on fell short on either security, scalability, or decentralization

We believe that building decentralized solutions that are fully compatible not only with web 3.0 but also with web 2.0 is the best way to ensure their wider adoption, because such solutions would be easily accessible for everyone, regardless of their familiarity with blockchain technology.

#### THE OPPORTUNITY

Online link sharing generates huge economic value. When people share links, they're actually advertising the products, services, or content related to them. This kind of link sharing can have a huge impact, because through our connections and friends, every person in the world is connected to every other person by a maximum of six degrees of separation - so that 'viral' online messages can spread like wildfire across communities around the world simply by passing from one person to another.

Blockchain technology has opened-up the possibility to make online 'virality' more productive by targeting it toward real-life goals. By streamlining



the collaborative link-sharing activities of millions of people towards finding the right target audience for each type of message or campaign, blockchain technology has the potential to turn the entire human network into a powerful targeting and delivery mechanism, which is based on direct human connections rather than algorithms. 2key is using this opportunity to build a solution based around redistributing back to the people some of the economic value generated by their link sharing as incentive for sharing the right messages with the right people.

The 2key solution combines a protocol layer and a Dapp. The 2key protocol is a proprietary 2key innovation that acts as a "bridge" between web 2.0. and web 3.0., enabling people to use smart contracts through their regular browsers simply by sharing links. It can support different blockchain solutions to provide easy access for people who are unfamiliar with blockchain technology. For now, 2key network is the first Dapp implemented on top of the 2key protocol, offering a more fair, accessible, and effective model that small businesses and organizations can use for targeting and reaching the right target audiences.



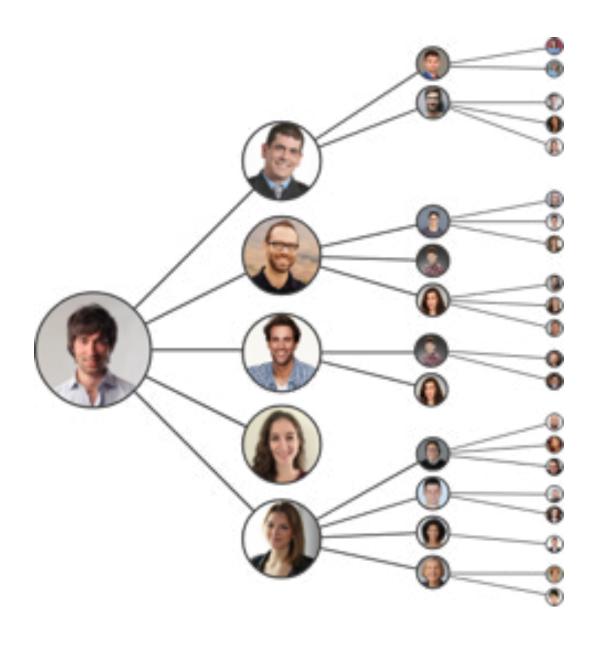
## Introducing the Dapp Layer **2key Network**

2key network offers a simple blockchain-based tool for creating referral campaigns that offer a new level of targeting, have zero entry barriers and pose no risk for those creating campaigns. It aligns the interests of businesses and organizations who create campaigns with the interests of the people who share these campaigns, enabling them to collaborate directly. What makes the 2key solution unique is its incentivisation model, which remunerates EVERY person who contributes to a campaign's success for their labor.

Our revolutionary multi-step tracking technology makes the 2key network possible. It enables simple links to track every person who has shared or interacted with them, forming a record of link-sharing chains. When the campaign generates business results, the link automatically unlocks the remuneration and distributes it among every person who has shared it.

This means that each person who receives the link is automatically incentivised to pass it on and contribute to its success. By remunerating people simply for getting the word out about campaigns, 2key network generates a type of online virality that's focused on achieving business results. Campaigns on 2key network are targeted by the people who share them, who can rely on their social knowledge to estimate which links might interest the people they know.

Businesses can use the 2key network to search for employees with specific skills or for investors who will be interested in their idea, online publications can use it to find new subscribers, artists can search for patrons, the possibilities are nearly endless. The 2key network is a tool for finding specific individuals through collaboration and social connections.





### How Does the 2key Network Work?

#### TYPES OF PLAYERS ON THE 2KEY NETWORK

There are 4 types of playes on the 2key Network:

#### CONTRACTORS

Create campaigns for achieving a business result on the 2key network.

#### REFERRERS

Campaign service providers, tasked with relaying info. about campaigns from contractors towards potential converters, possibly via other referrers.

#### **CONVERTERS**

Take action through the link (e.g. make a purchase, investment, signup, install, subscription).

#### **INTEGRATORS**

Service providers on the 2key network, which contractors may choose to use to ensure transactions, uphold dispute resolutions, prevent abuse, provide KYC services and more. 2key Ltd. will also act as an integrator on the network.

#### CREATING A CAMPAIGN ON THE 2KEY NETWORK









#### CREATION



A contractor creates and designs a campaign in minutes. 2key's friendly campaign builder let's anyone rapidly build a beautiful campaign over a smart contract.



By sharing their campaign's link and incentivizing people to forward it, the contractor reaches the right people and grows their audience. Referrers don't need to have a web 3.0 address in advance!

# TRACKING

Contractors watch as their campaigns spread across the web in real time, understand their real impact and optimize them to drive more conversions.

# CONVERSION

As the campaign results, every person who referred the link to the right people is automatically remunerated. Campaigners can then manage their new funds directly from their 2key dashbaord.

# 2KEY ALGORITHMIC GAME THEORY BASED INCENTIVE MODEL

The novel 2key algorithm computes a reputation score for each of the participants, awarding more reputation points to productive referees according to the results generated by their online sharing and penalizing spam and irrelevant-information sharing.

Combining thousands of factors, the model awards each participant with reputation points individually, according to the value of the services provided by them on the campaign and network levels. This way, the 2key network ensures the optimal incentivization for participants to use their judgement in choosing the people with whom to share the links to 2key campaigns.

To learn more about this technology, please go to our **Incentive Model Document**.





### How It All Works

### **2key Protocol Layer and Technology**

#### THE 2KEY PROTOCOL

The 2key protocol embeds regular HTTP web-links with smart-contracts. This allows users to effortlessly use smart contracts through their regular browsers, as part of their day-to-day online experience.

Smart contracts make collaboration simple by encapsulating agreement terms and carrying them out automatically. Yet because they're based on blockchain networks, most people and small businesses are kept away from using them.

2key's team has built a unique protocol that acts as a "bridge" between regular web browsers and blockchain networks. It enables people to easily use smart-contracts without entry barriers or complex code implementation. The transition is so smooth that most users won't even notice it happened.

Behind the scenes, the 2key protocol infuses regular HTTP links with smart-contracts, by embedding them within the links' front-end code. In this way, the links are infused with the ability to automatically carry out the terms of the contracts within them.





#### **MULTI-PARTY STATE NETWORKS**

To support network demands, 2key is built on its own second-layer Ethereum solution that crushes the blockchain trilemma. We named our solution multiparty state networks.

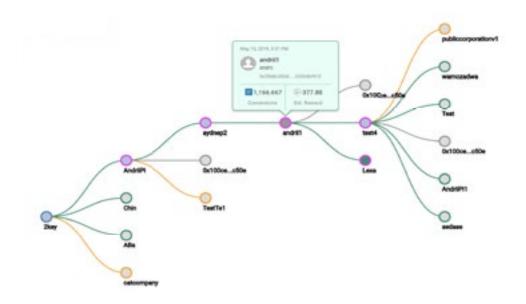
In general, state networks are second-layer blockchain networks, which enable people to perform some transactions more rapidly and effectively by taking them off-line.

2keyenables participants to 'create' state-channels by sharing and forwarding cryptographically signed links with others. It's as easy as sharing regular web-links, 2key simply embeds these links with the 2key protocol, which enables people to create state networks ad-hoc, without requiring prior knowledge of the parties involved.

These state networks are different because they can include multiple participants, allowing them to dynamically interact off-chain. And while 2key network is the first Dapp to use 2key's multi-party state-networks technology, any application built atop this layer benefits from the highly decentralized and robust security of Ethereum, while having the scalability benefits derived from 2key's development.

#### **MULTI-STEP TRACKING**

Multi-step tracking is an innovative technology that enables regular HTTP links to automatically track and record every person who shares them. Using the 2key protocol, multi-step tracking is effortlessly embedded into regular links, allowing them to independently track and record every person who shares them. This makes it possible to remunerate each person who shared the link once a result is generated.



Multi-step tracking is at the core of the 2key network. It enables the network to remunerate each participant individually for their relative contribution to collaborative efforts. When each person knows that their small contribution will be tracked and compensated, each person has a strong motivation to collaborate in providing quality services towards achieving campaigns' target results.

#### **2KEY LINKS**

2key has created two distinct technologies that can be seamlessly embedded into regular links: the 2key protocol and multi-step tracking. A 2key link is a link that's embedded with these two technologies. In fact, this means that the link is embedded with a smart contract and can act as a store of value, which automatically unlocks this value in case certain conditions are met. 2key link is deployed per referral campaign by the campaign initiator (the "contractor"), who deposits value in the form of 2KEY tokens, as a potential success-based remuneration for completing the campaign target results. With the 2key link, the campaign smart contract constructs a multi-party state channel spawning from the initiator of the campaign to the referrers, while 2key's multi-step tracking technology records each person who forwards the link. The 2key link acts as a guarantee for referrers that they will receive a fair compensation for the efforts in case the link reaches its target audience and generates results. There is no need for exchange of commitments, as the 2key link itself acts as commitment and distributes the remuneration automatically to the right people when the right conditions are met.





## Introducing the 2KEY Token and Token Economy

2key tokens (2KEYs) are ERC20 tokens, built specifically as the 2key network's native utility currency. They're needed for all activities on the 2key network such as launching campaigns or rewarding participants. 2key's tokenomics are designed to ensure 2key network's efficiency, health and long term viability. Various mechanisms are at play to ensure 2KEY tokens have liquidity and organic demand. Above all, network participants who want to utilize 2key network services create an organic demand for 2KEY. In addition, the 2key protocol's own smart contracts create an organic demand for 2KEY tokens by offering value-added services like trustless capital distribution, escrow, and convenient token conversion.

To learn more about the 2KEY token and token economy, please go to our token economics paper (accessed from the site).



### 2key Token Distribution - Diagram

A final number of 600 Million 2KEY Tokens will be minted, and will be used to operate and maintain the 2key network. This is how we'll distribute them:



#### 27% Economy Kickstart

21% Token sale, 6% Liquidation supply for exchanges

#### 31% Participation Mining

20% Reputation Mining, 10% MPSN Mining, 1% Social Mining

#### 16% Team

1 Year lockup, 2 years vesting aftewards.

#### **4% Team Growth Fund**

2 Year lockup

#### 6% Advisors and Partners

vesting up to 24 months

#### 16% Long Term Growth Fund

Future reserve locked for 2-6 years

### 2key Token Distribution - In Depth

- Economy Kickstart 27%(162M 2KEYs), which will be distributed in the following way:
  - 21% (126M 2KEYs): Token Sale will be sold to early adopters of the network. 2KEY official price at pre-sale and private-sale phases, before public trading commences, will be set at USD0.06 (6 cents). The target USD worth of the sale is 7M\$. The sale will be ongoing until the public IEO date, after which 2KEY will open to public trading. Earlier adopters and adopters willing to pre-purchase larger amounts of 2KEY will accordingly receive offers for greater bonuses, depending on the status of the sale at that time. All tokens sold as part of the resale and private sale rounds will be subject a lockup schema as will be published by the project team towards the IEO date.
  - 3% (18M 2KEYs) will be used for liquidity depth in the 2key exchange contract
  - **2% (12M 2KEYs) will be reserved for DEX** liquidity depth.
  - 1% (6M 2KEYs) will be used by the 2KEY official Market Makers for their active liquidation operations.
- **Team 16% (96m 2KEYs)**, which will be locked for 365 days, then distributed over a 2 year period in 25 equal portions vesting monthly.
- **Team Growth Fund- 4% (24m 2KEYs)** initially locked for 2 years, will be utilised to fund the future growth of the team.
- Advisors, Partners & Early contributors 6% (36m 2KEYs). 3rd parties and contractors, advisors and early contributors supporting the development, marketing, and growth of the 2key network. Up to 24 months vesting.





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- Participation Based Mining 31% (186M 2KEYs) will be used to compensate 2key network users for active participation and services to progress the network and its stability. 20% will be used for participation reputation mining (released over 10 years), 10% for Broswer-based General-Purpose Multi-Party-State-Network mining (will be started once GP MPSN protocol is ready, aroudn 24months from economy launch as currently planned), and 1% for social mining (will be released over 12-36 months from economy launch date).
- Long Term Fund Ecosystem Growth & R&D 16% (96M 2KEYs). tokens dedicated for future use, might be used in the future for conducting additional token distributions, and/or to continue funding the R&D of the project. Locked for 2 years, then releasing yearly over 4 years.





### Core Team

2key is a global project, our team members are based in 7 countries spread over 3 continents, bringing together leading talents from the fields of blockchain and algorithms, finance, big data, machine learning, smart contracts, and game theory. Together, we're building the technology for a new future of sharing, one that incentivises collaboration, honesty and trust for the benefit of all



**Erez Ben-Kiki** Founder, CEO

Product design specialist, 8 years of experience in the financial industry



eiTan LaVi Founder, CTO

Director of Data Science @Keewee, Head of NLP, Algorithms R&D @ Wochit



**Udi Ben-Reuven** Chief Scientist

IDF cyber unit commander, co-founder @ Algotech, Senior architect @Checkpoint



**Andrii Pindiura Director of Engineering** 

Senior Tech Lead. Enjoys tackling engineering problems and design.

and 14 other team members: Click Here to view them

### Advisory



**Dr. Reshef Meir**Algorithmic Game Theory
Specialist at Technion Institute of technology.



Nimrod Lehavi
Founder and CEO
@ Simplex



**Dr. Roey Tzezana**Author, Futurist



**Guy Zyskind**Founder and CEO

@ Enigma



**Stas Oskin**Wings Foundation
Co-Founder



Sebastian Stupurac
Wings Foundation
Co-Founder



**Shai Mohaban**Blockchain Investor
and Advisor



Idan Lakritz
Token Economics
Specialist

