



A distributed social economy
with a new link at heart -
One that pays you back
for paying it forward



Lite Paper

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June 2018

[LEGAL DISCLAIMER](#)

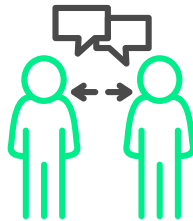
2key's Network

A blockchain-based social economy offering a new economic model for online sharing



For Individuals

2key empowers anyone to earn Tokens and reputation for making successful referrals anywhere online



For Business

2key empowers individuals and organizations to incentivise the human web to produce desired results



For Society

2key serves to incentivize online sharing in respect to the economic value generated from each share

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Abstract

Online link and referral sharing generates huge economic value. Up to 50% of all purchasing decisions are influenced by information shared through word-of-mouth Referrals and have been shown to generate more than five times the sales of paid advertising.

Yet today, people who share information online aren't being rewarded in-line with the value they generate. Available technology lacks the ability to track complex multi-step referral chains, making it impossible to reward those participating in them. Moreover, the installation and implementation of referral marketing technology is a costly and complex process, which prevents the long tail of business from benefiting from referrals.

2key is building the 2key Network to reward informationV sharing directly and automatically. Within the Network, people who participate in referral chains will be seamlessly and automatically rewarded whenever a link they shared results in a conversion event, e.g. consumption of content, acquisition of products or services, lead generation, app install etc..

At the heart of our vision is a groundbreaking solution for multi-step referral and conversion tracking. 2key is developing the technology to enable simple web-links to automatically perform self-tracking as they are distributed online.

2key is combining multi-step tracking with smart contracts to create a new online sharing experience. Embedding simple web-links with Smart Contracts and Multi-Step tracking capabilities, enables them to automatically track and record every person sharing them.

We're building a future where any link you share can improve your reputation and earn you tokens

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Whenever a link is converted, the links themselves act as smart contracts and seamlessly reward each person along the referral chain with a share of the generated value.

2key's Network enables anyone to set in motion online referral chains simply and effectively.

SMBs, freelancers, publishers and others will be able to seamlessly mobilize the human web to produce results such as bringing in new customers, generating leads or acquisitions.

The 2key Network is entirely decentralized. The smart contracts are seamlessly activated by the act of sharing, cutting out the middleman and directly rewarding participants and influencers whose sharing contributed to achieving the desired results.

A unique incentive model fusing game theory with AI will motivate productive participation in the network. To make

the 2key network actually work the incentive model is key. 2key is leading the front in fusing game theory with machine learning to create the first general incentive model for online sharing. The model takes into account dozens of parameters, including a person's position in the referral chain, the relative result delivery-time and the referer's reputation in each link's specific domains, dynamically updated onto a global influence graph utilising a taxonomy of 1600 categories spanning all walks of life.

**We believe
everybody should
get their fair share
for sharing online**

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The currency for referral rewards on the 2key Network will be 2key Tokens (2KEY), which will also be used for budgeting 2key campaigns and purchasing products or services in 2key campaigns. The tokens economics are engineered such that each new 2key campaign produces potential for added distribution and market capital for strengthening the 2key network.

We believe everybody should get their fair share for sharing online. You can think of 2key as a **general distributed social contracting platform for the web** - or as we like to call it - **a Global Referral Network.**

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2key intends to offer innovative referral solutions powered by novel blockchain technology and Game-Theory-based AI. A force for social optimisation, these solutions are usable by anyone and do not require users to implement any special software or code.

Challenge

Time and again, research has shown that word-of-mouth is the most profitable and sustainable marketing channel. Companies such as Dropbox, Airbnb, and Uber have become household names precisely because they knew how to leverage referral marketing at scale. Yet, for SMBs and freelancers, referral marketing has not been an option; solutions that have been marketed to date have been B2B software that SMBs and solopreneurs typically can either not afford or cannot integrate technically or manage. In addition, no B2B solution can create a true network effect, thereby limiting the market reach and global impact of all referral marketing products produced to date.

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Objectives

We established 2key New Economics in June 2017 with the goal of offering a simple democratic referral solution with zero entry barriers, for everybody. We set out to build the first purely online platform - a seamless referral marketing solution - designed to allow the 5 million SMBs and more than 300 million freelancers operating world-wide to grow more easily. This now comprises our **tactical front**, and a beta release of this platform is planned for Q3 2018.

When blockchain, smart contracts, and crypto-economics came to the Forefront, we realized the tremendous potential of these technologies to disrupt the entire structure of the advertising world and much more.

We understood that we could reinvent the very notion of a web link and thereby create a new global economy based on link sharing. This is now our **strategic front**, as we plan to lead the way with a **Game Theory-based AI**, the IP cornerstone enabling a viable mass-scale decentralized link-sharing economy via a generalized incentive model for online sharing.

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2key Multi-Step Tracking

By reinventing the very notion of web-links that connect us to one another within the digital space, we are providing the ultimate technological solution to unleash the immense potential of direct, unmediated referral chains that will benefit us all.

2key's revolutionary multi-step tracking technology makes it possible to track and record every person along link-sharing chains. We developed a unique protocol that can be seamlessly embedded within regular web-links, enabling them to automatically perform self-tracking as they are shared, recording this information as they pass from one person to another.

The integration of multi-step tracking with smart-contracts that automatically reward participants in successful referral chains forms the technological basis for 2key's Network - a decentralised platform for referrals that involves no intermediaries, no fine-print technical overhead or integration requirements.

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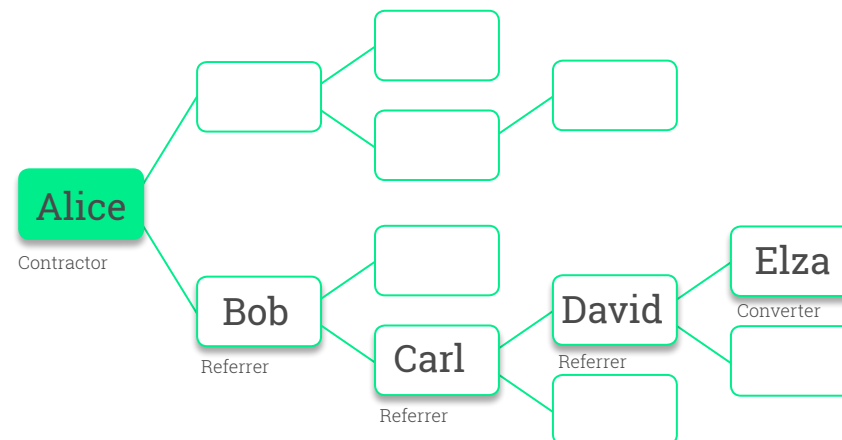
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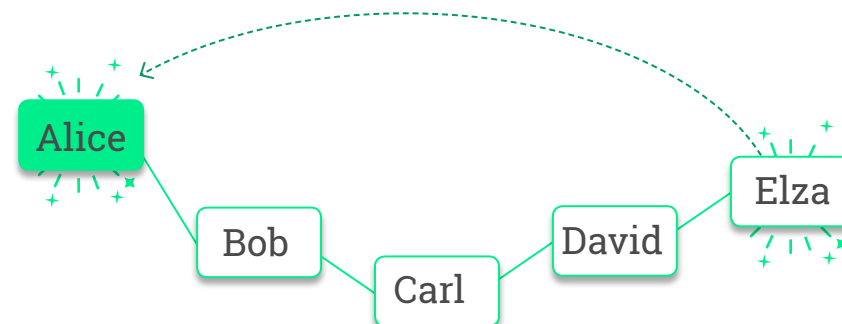
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What Is Multi-Step Tracking?

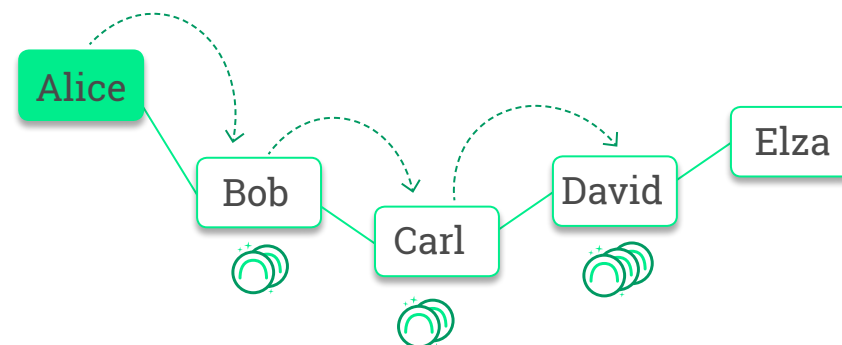
1 A contractor creates a new 2key contract for referrals



2 Link embeded with the Contract is shared from person to person, up to conversion



3 2key's contract automatically rewards every person along a successful referral chain



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2key's Network

2key is creating the **2key Network** - **The first online Social Sourcing marketplace**. The 2key network is a groundbreaking platform aiming to flatten and democratise the advertising pyramid and to disrupt the crowd-sourcing space.

Contractors such as freelancers seeking new clients, SMBs offering new products, schools recruiting new students, publishers looking to expand their core audience and even pharmaceutical companies gathering data on drug side effects from patients will be able to define a required result and incentivize the human web to **pursue** the target audience required for obtaining it, within the 2key network platform.

In other words, the network enables everybody to activate and incentivise the human web to search for the ideal target audience for producing desired results. The network that is designed to incentivise targeted organic virality by means of optimized social sourcing.

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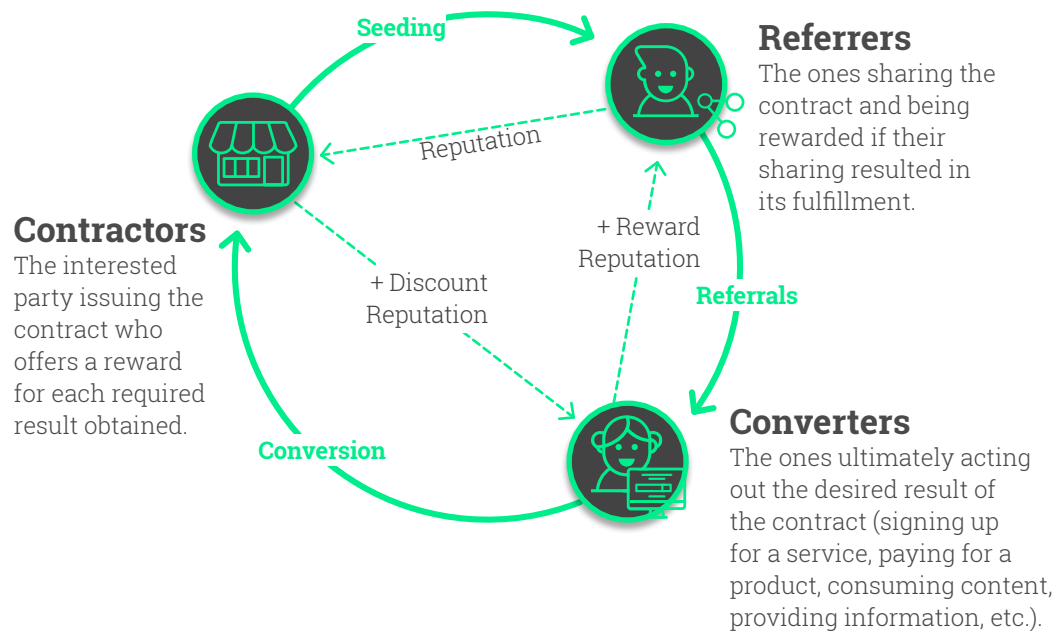
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Entity Model

The basic entity in the network is the Campaign-Contract (2key Campaign) - generated by any interested party that can define a desired result and the reward offered for anyone who enables the achievement of that result via sharing the contract. The 2key-contract is an ARC-2K protocol smart contract, conformant to the ERC-20 standard and extending its interface to allow new functionality. These contracts also have Web2 interfaces via the 2key and GRN domains, for all those who wish to participate in the network without their own Web3.0 interfaces.

Four type of players in the GRN:



2key
NETWORK

An opt out moderator for 2key contracts, acting as a service provider, ensuring transactions, upholding dispute resolutions and abuse prevention, monitoring and persisting reputation of the various players and enabling reputation-based dynamic incentive models for optimized network activation. Infrastructure wise, 2key either moderates the contract transaction fees for web3.0 users, or enables them altogether for web2.0 interfaces. 2key maintains a web application and mobile apps that enable contract generation and advanced contract analytics amongst other functionality, as well as Web2.0 interfaces for the contracts and players in the network

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Token Economics

2key's Action Referral Contract

2key's Action Referral Contract (ARC) is a unique type of link that enables the entire operation of the Global Referral Network. ARC is a self-monitoring web link that automatically tracks and records the people who are sharing it, keeping record of referral chains up to conversion.

Any economic value produced by sharing of ARCs is distributed across the entire referral chain, benefiting both senders and receivers of links according to the economic value they generate.

Technically, an ARC is an ERC20 token, held in balance by influencers in a 2key-contract. The ARC acts as a link in web 2.0, and as an ERC20 token in web 3.0. By passing ARCs from one influencer to another, the referral chain is created, and monitored from within each such token.

While ARCs act as the self-monitoring token-links tracking Referral Chains (RefChains) to conversion, 2key Tokens (2KEYs) are the actual currency used within the network to purchase services and reward participants.



2key Tokens

2key Tokens will be minted once, in limited supply, as part of the Economy Generation Event (EGE), and from then on, the 2key contracts and economy contracts interplay is engineered to foster ingestion of fiat and Ether into the network, to increase the usage of the economy. 2KEYs will be engineered to optimally facilitate the referral economy, and to incentivise users to prefer keeping 2key. We are engineering the economy and network effect to intertwine so that they feed each other, for the benefit of all network participants.

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The economy will be governed by an admin smart contract representing all token holders. Petitioning and transparency mechanisms will ensure that all token holders can view and influence the management of the economy in relation to their amassed reputation in the network. While petitioning does not grant voting rights, it does represent a public feedback mechanism which ensures the voices of the economy participants are heralded loud and clear.

Naturally, for the first years, 2key Ltd. will play a major role in both the legislative and executive processes of the economy. However, as the majority of tokens are offered for sell or as campaign earnings to the public, first during the economy pre-launch and thereafter as part of the ongoing economy exchange process during 2key campaigns, the stake in the economy will start as decentralised and will then gradually and surely dissipate towards distributed.

Ongoing, each 2key campaign executed facilitates exchange of 2KEY Tokens and Fiat currency, and dissipates 2KEYs and Reputation points to participating members. Moreover, special reputation points will be rewarded for active governance participation, incentivising users to take an active part in governing and developing the network.

**Our novel
reputation-based
algo-bidding and
AI-based dynamic
incentive models
optimize the value
generated for
everyone in the
network**

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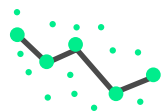
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UX

All sharing and fulfillment of contracts can happen anywhere online, both in Web2.0 and in Web3.0.

The basic UX is simple; An interested party, e.g., a business, initiates a **2key**-contract that offers the network rewards for spreading the word (i.e., referring) towards fulfillment of some desired result, e.g., attracting new clients for this interested party. This initial step requires the **2key** webapp or mobile app.

Spreading the contract is done by sending ARCs from one person to another, thereby drawing a referral graph comprised of many **referral chains (refchains)**. In web2.0, creating an ARC between two people is as simple as sharing a link, while in web3.0 it's as easy as sending someone a coin or signed link. Once the refchain reaches a converter, the conversion itself can also be triggered via the link - as in web2.0 the linked Web interface can be used to convert (e.g. buy the product), while in web3.0 the ARC is in itself a smart-contract facilitating fulfillment of the contract via any client supporting the most common protocols.

2key is a solution **without entry barriers**. The contractor can board in less than 5 minutes, and any end user (influencer/converter) requires only 1 minute to utilise the system. For all parties, the system is fully **self-serve**, partially **bot guided** with an innovative UX and precise UI on a purely **SaaS** platform. A **pixel-less** technology we developed in-house makes all this possible. No **code implementation or software integration on the business/contractor side is needed!** In spite of this, full tracking is available throughout the whole funnel. The **contractor controls the price and pays only per result** (acquisition/lead/content view). The product enables customers or potential influencers to create **personal links** to products, services, and content, which they can then share by any means available (social network/email/SMS etc.), receiving rewards

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- **Blockchain Infrastructure**
 - **PURE Web 3.0 Solution**
 - **Novel Web 2.0 Decentralised Solution**
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when their links lead to conversion events. Our technology utilizes a **novel AI** to monitor and analyze the reputations of the various players to then create a dynamic incentive feedback loop to maintain the high quality of results. 2key is fully geared to generate a network effect, while increase the space between end of section and start of new section.



Blockchain Infrastructure

Pure Web3.0 Solution:

2key's multi-step tracking technology is integrated into the blockchain infrastructure through 2key's Action Referral Contracts(ARCs). 2key's ARC is a specific type of link, embedded with smart-contracts and multi-step tracking capabilities. This enables ARCs to perform self-tracking and play out smart-contracts as they are distributed online.

ARCs form the basis for complex multi-step, multi-party, state syncing as well as continuous real-time access to a blockchain-synced state on the Global Referral Network (GRN).

Novel Web 2.0 Decentralised Solution

2key also developed a patent-pending multi-party state-network solution for scalable yet fully decentralised multi-step referral tracking for a pure Web2.0 experience using nothing but Web2.0 links and users' browsers, while still being synced to the Ethereum blockchain to govern the underlying smart contract and to ensure security, fairness, fraud-prevention, and contract-adherence.

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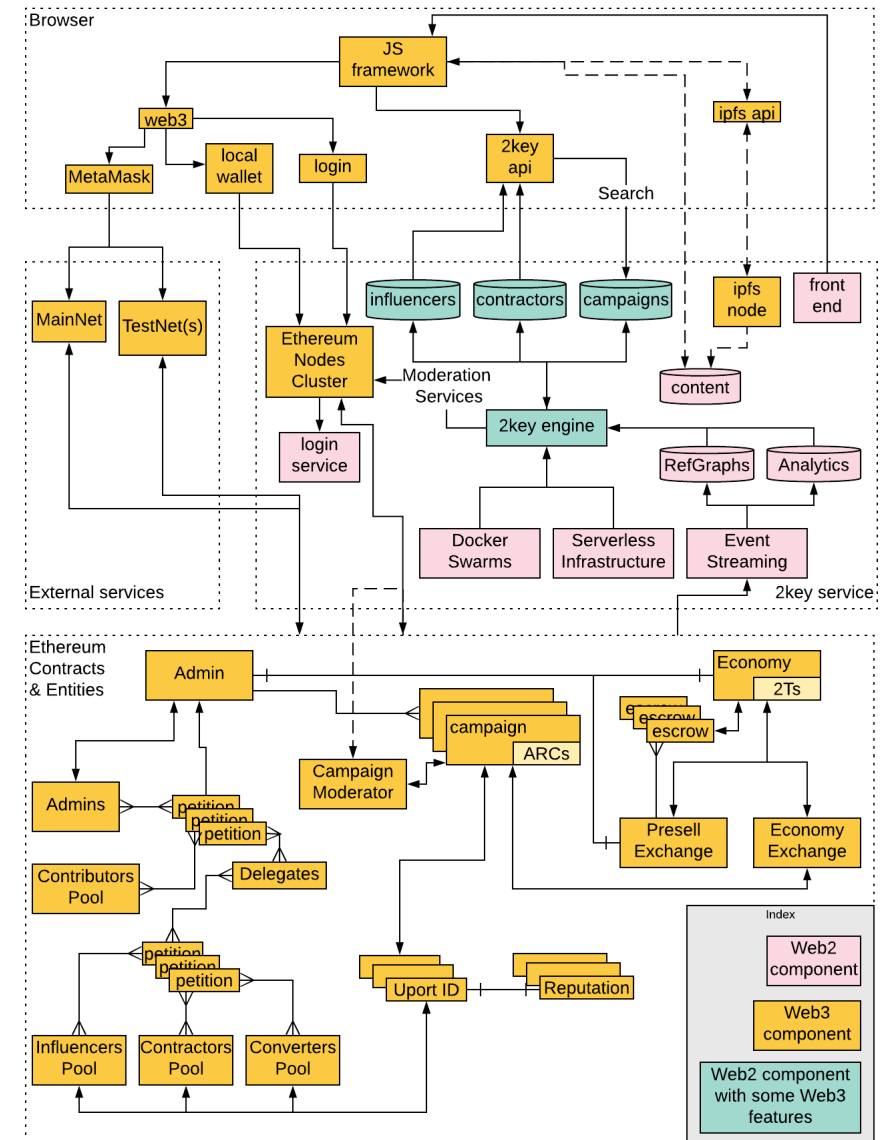
Algorithmic Game-Theory based Incentive Model

The algorithms underlying our predictive models employ novel uses of algorithmic game theory and machine learning to dynamically optimize incentive models based on the a-priori and intra-contract reputations of the various players.

Our reputation-based algo-bidding and AI-based dynamic incentive models optimize the return on investment for everyone in the network.

Furthermore, our token economy is governed by a novel **Token-Economics AI** which utilizes levers such as deflation, inflation, interest rates, and positive/negative taxation to optimise the economy's viability KPIs such as market weight and flow.

Platform Architecture



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The distributed economic network is designed to foster a financial network effect whereby the more participants actively use the platform, the more economically viable the network becomes. Meanwhile, 2key Ltd. is positioning itself to become a leading services provider in the network, offering its moderation services for 2key campaigns and taking a fee from each conversion in campaigns which opt to utilise the 2key Ltd. moderation services. The 2key network and 2key Ltd. are separate entities, and their interplay of influence, power, and economics should change over time. Eventually they will reflect a much more decentralised, independent, viable network on one side, and a more independent, financially viable 2key Ltd. on the other side. This new 2key Ltd. will offer useful services to the 2key network users and amass value in direct relation with the growing value of the 2key network, which is represented by 2key network viability KPIs such as Market Weight and Market Flow. The network will be an open economy where other companies may offer their for-profit services for participants, just like 2key Ltd. will offer its moderation services.



Game Plan

2key's Web2.0 beta is scheduled to be released to the market Q3 2018. In parallel, we're working on a full-scale Web3.0 implementation, which we plan to roll out (alpha version) in Q4 2018.

2key's platform is designed for mass-scale adoption. We're therefore committed to having full Web2.0-Web3.0 inter-operability that will allow anyone online to use 2key, without entry-barriers, software installation and integration, or add-ons activation. The links themselves are always the key to seamless functionality - used to refer, convert, and be rewarded.

Due to the high volatility of the blockchain space, we plan to always keep providing participants with the option of a Web2.0 solution, which anyone will be able to use regardless of blockchain adoption.

We put special emphasis on building mediation layers that will enable our production network to continue to be fully functional throughout the crypto-big-bang. This will ensure that user experience on the 2key platform will not be affected by sways of infrastructure or protocols in Web3.0.

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Timeline

2017	
Q2	<ul style="list-style-type: none">• The 2key concept is born and project launch• 2key's core team is formed
Q3	<ul style="list-style-type: none">• Alpha-version full specification is complete• Development of technological protocol prototype
Q4	<ul style="list-style-type: none">• Full design & architecture for product's version 1.0• Deployment of 2key protocol on Ethereum test net
2018	
Q1	<ul style="list-style-type: none">• 2key's whitepaper version 1.0 is released• Multi-step protocol V 1.0 ready• Project seed investment of \$1m is• 2Key's community is established secured
Q2	<ul style="list-style-type: none">• Product's alpha version is completed• Technical whitepaper is published• Releasing the yellow paper• Private Sale Launched
Q3	<ul style="list-style-type: none">• Delivering platform's beta version including built-in web wallet for ICOs and lead-generating campaigns• Releasing version 1.0 of incentive model• Token Pre-Sale to be Launched
Q4	<ul style="list-style-type: none">• Release of offline acquisition referral product• Enabling the use of fiat currencies converted into 2key tokens, within the 2key platform• Developing 2key's network back-end• Developing 2key's GRN native mobile apps.• Finalize Token Sale and getting listed on top exchanges
2019	
Q1	<p>Releasing version 1.0 of:</p> <ul style="list-style-type: none">• 2key's recommendation graph• online acquisition referral product
Q2 and Beyond	<ul style="list-style-type: none">• Growing adoption of 2key within the digital marketing industry• Completing the final GRN product with new features such as full acquisition campaigns templates and communication tools for users• Improving 2key products: 2key explorer, 2key's wallet, integration to other tools and new smart contracts templates.• Scaling 2key's open-source development community

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Team

The 2key team is a group of leading experts and professionals in computer science, marketing, system design and architecture, algorithmic game theory and blockchain infrastructure.

Together, we are committed to creating a positive change in the world through technological innovation.



Erez Ben-Kiki
Founder, CEO, CPO



eiTan LaVi
Founder, CTO, CIO



Udi Ben-Reuven
Chief Scientist



Andrii Pindiura
Director of Engineering



Shlomi Tzfira
Senior Full Stack



David Semendueb
Senior Blockchain &
Data Engineer



Nikola Madjarevic
Director of Blockchain
R&D



Mark Shvartsman
UI/UX Director



Semion Pirutin
Marketing Director



Idan Portal
Back-End Engineer



Priel Hackim
Art Director



Netta Richter
Director of Content



Ivan Gusak
Front-End Developer

The Rest Of the Team:
<https://www.2key.network/team>

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Advisors



Dr. Reshef Meir

Algorithmic Game Theory
Specialist at Technion -
.Institute of technology



Nimrod Lehavi

Founder and CEO
Simplex @



Dr. Roey Tzezana

Author, Futurist



Idan Lakritz

Token Economics
Specialist



Guy Zyskind

Founder and CEO
Enigma @



Stas Oskin

Wings Foundation
Co-Founder



Sebastian Stupurac

Wings Foundation
Co-Founder



Shai Mohaban

Blockchain Investor
and Advisor

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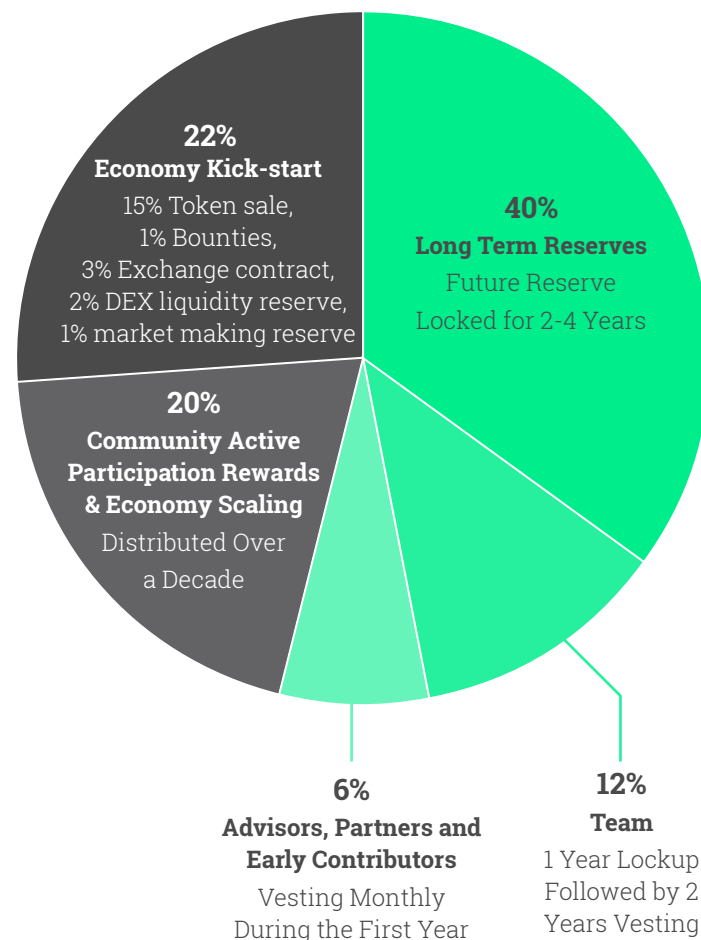
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2key Token Distribution

The network social economy will rely on 2key Tokens as the backbone token which activates 2key campaigns. The economy launch event will generate a fixed amount of 1B tokens, which will be managed by the 2key Economy Smart Contract - a singleton, immutable, smart contract on Ethereum, which will hold the token supply and distribution maps of 2key Tokens and Global Influence Scores for all network participants.

Token Distribution:



2KEY
Symbol

\$0.06
token price

\$6M
Hard Cap

1B
Total Token Supply

ERC20
Platform

- We're minting 1 billion tokens, 70% of which are designated for public distribution through token sales and reputation/ marketing rewards, 47% of which will be distributed shortly after the close of the sale.
- Unsold Tokens will be added to the Long term reserve pool, and kept out of circulation for a minimum of 3 years.

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There will also be an economy exchange contract holding tokens and ETH in reserve to facilitate a baseline market cap, and an interface for campaign contracts to exchange fiat to 2KEY's to enable a seamless cash-in cash-out to and from 2key contracts. With each 2key Contract delivered, fiat money will be inserted by contractors or converters and will be converted into 2KEY Tokens via the economy exchange contract, thereby facilitating a baseline market making and market cap dynamics for 2KEY Tokens. **Team and Advisory tokens will vest** quarterly over 2 years, governed by the 2key economy smart contract and via dedicated vesting smart contracts published on ethereum.

As we currently project, the token distribution will allocate 45% for sell during the token generation event of the economy, 2% for bounties and airdrops, 3% for maintaining a pool used by a change contract for enabling users to convert fiat or ETH to 2KEY's for activating 2key contracts, 12% vested over 2 years for the core team, 7% vested over 2 years for advisors, partners and early contributors, 11% for future use (e.g. in further token sales) - locked for at least 3 years by a smart contract, and 20% for future marketing uses, namely 2key contracts awarding 2key users tokens for referring new users to 2key (a scalable self-marketing approach), and as a dedicated pool for the periodic global reputation rewards. This distribution map is still under discussions with the community, contributors and core team, and is subject to change. The final distribution map will be formally announced

Summary

By reinventing the very notion of web-links that connect us to one another within the digital space, we are providing the ultimate technological solution to unleash the immense potential of direct, unmediated referral chains that will benefit us all.

2key's Network is creating a space in which all participants are rewarded for their online proactivity and productivity, commensurate with the economic value generated by their sharing online.

We envision a world in which the long tail of business has equitable access to referral campaigns that directly reward every person participating in them. 2key's technological innovation is designed to decentralized and democratise the online advertising world and transform participants' online experience.

Website: 2key.network

Contact: hello@2key.network

Full Whitepaper Click here: <https://bit.ly/2yKge8f>

Join our Telegram group: https://t.me/twokey_official

If you think to participate in 2key's token sale, please read the [Legal Disclaimer](#)

Dear Citizen Of The New World

2key's Network is built for the people, by the people.

This paper is a work in progress. We plan to constantly update it to reflect our progress, market updates and blockchain ecosystems development.

As this crypto big-bang unfolds before us, we work to adapt our technology and stay ahead of the curve. For this reason, we're constantly adapting and updating our product and technology.

Except for our economy contract which will remain fixed once published, all other smart contracts will be adjustable. In this way, as the blockchain ecosystem continues to evolve, we will be able to adapt our product and economy.

If you'd like to know more,
we're here for you, at
hello@2key.network

