KEYVIAN

WHITEPAPER

TABLE OF CONTENTS

INTRODUCTION

Keyvian is a mobile app created to serve as a crypto community hub. It features a social network and messenger dedicated to DeFi projects. Our vision is to create a platform dedicated to blockchain information sharing. We aim to educate new investors in order to increase the number of professional investors, and to improve trust between communities and project teams. We believe that such a hub is essential, and that the value will only grow in the years to come as the existing crypto markets grow and evolve.

1.1 Mission

The mission of Keyvian is to nurture an environment where individuals can safely invest and where Decentralized Finance communities can thrive.

1.2 Vision

Keyvian will empower people to find and maintain financial literacy and freedom. Restore trust in DeFi and to legitimize it in the eyes of newcomers to the space. We will help people find and maintain financial literacy and freedom.

OUTLINE OF THE PROBLEMS

2.1   A Fragmented Market

New investors in the crypto space face a bewildering medley of information. Telegram, Twitter, Discord, Facebook, and an assortment of "Crypto News!" websites all vie for their attention. Both investors and projects suffer from the mismatch between advertising dollars spent and individuals reached. Investors are overwhelmed by the firehose of information, and it's easy to feel as if they always need to be spending more time in disparate places, looking for alpha. Projects, conversely, suffer due to being unable to be everywhere at once; they miss large numbers of potential clients due to the staggering costs of running marketing across numerous platforms.

2.2   Project Reliability

Dozens of unreliable projects are born every day. While each claims to solve a problem within the space, many are in reality little more than traps meant to steal the liquidity of unwary investors. Financial literacy is lacking within the crypto space, and few are capable of spotting the red flags that some new projects give off. This results in millions of dollars being stolen every month.

Simultaneously, the crypto advertising cycle on social media specifically seeks to prey upon the uninformed. Influencers shilling a project and paid news articles are the norm, while 'pump and dumps' or other scams are commonplace. The lack of moderation and reliability is a significant drain on the liveliness of the space as a whole, and prevents broader societal adoption.

2.3   Decentralized Ethics

The dominant social networks are free and therefore rely on the resale of users' personal data to be economically viable. There is an inherent conflict of interest between the user's privacy and the social networks making it difficult for customers to know whether their personal data is being respected or not. This is an especially acute problem in a decentralized space; many crypto users jealously guard their privacy, making the 'user data as a revenue stream' business model extremely fraught. By explicitly safeguarding user privacy, we strengthen our company reputation and create a bond of trust with users.

FOR EACH PROBLEM, A SOLUTION

3.1   All-in-One App

The Keyvian app has been designed from the ground up to seamlessly blend a social network, a mass communication platform, and a tested, safe wallet focused on finance and cryptocurrency projects. As projects verify with Keyvian, they become able to connect with a growing and high-value user base that has reason to trust the project has good intentions and the ability to carry out their plans. Keyvian will also offer simple access to full project information (tokenomics, the roadmap, and team members) in an easy-to-use interface. By being explicitly crypto-friendly, we anticipate being able to move large amounts of crypto-related conversation to Keyvian. This "one-stop shop" will result in large network effects between users, aiding the platform's growth.

3.2   Product Reliability

Decentralization is both the promise and bane of cryptocurrencies. While bad actors hide behind anonymity to defraud others and manipulate public opinion, privacy is itself a fundamental human right. In accordance with the Swiss tradition of respect for privacy, Keyvian will offer a free and secure KYC option, partnering with an existing and trusted KYC provider in order to verify the identity of users while guaranteeing security. In this manner, user data will be siloed and separate, thereby making Keyvian's verification process effectively unhackable. This information will be used solely to protect the users:

- Project owners and community channels will be marked based on their verification status, in order to reassure Keyvian users of the reliability of the project.

- Users receiving messages from unknown accounts will receive a warning when the sender seems suspicious. Examples could include excessive (spam) messaging, suspected phishing, or attempts to manipulate markets. Verification allows better filtering, and provides an incentive for a verified user to not behave poorly.

- Creating a verified account necessarily prevents identity duplication. While we understand users' desires for anonymity and have no intent to block the creation of multiple accounts, verified accounts are 'special' within our system, and the perks and privileges associated with them will not be shared among multiple accounts.

3.3   Privacy and Data Protection

One of our core values is the protection of personal data. As we have no interest in selling the user's information, the collected data will not be used for targeted advertisements. We are also a Swiss company, and the right to privacy is enshrined in the Swiss constitution, guaranteeing freedom from outside interference. By offering multiple levels of KYC (see 5.2.4) to suit every user and ensuring a very high standard of data security, including encryption and off-line storage of user data, we can minimize the perception of risk for users to KYC. In doing so, we create a new standard of safety and security.
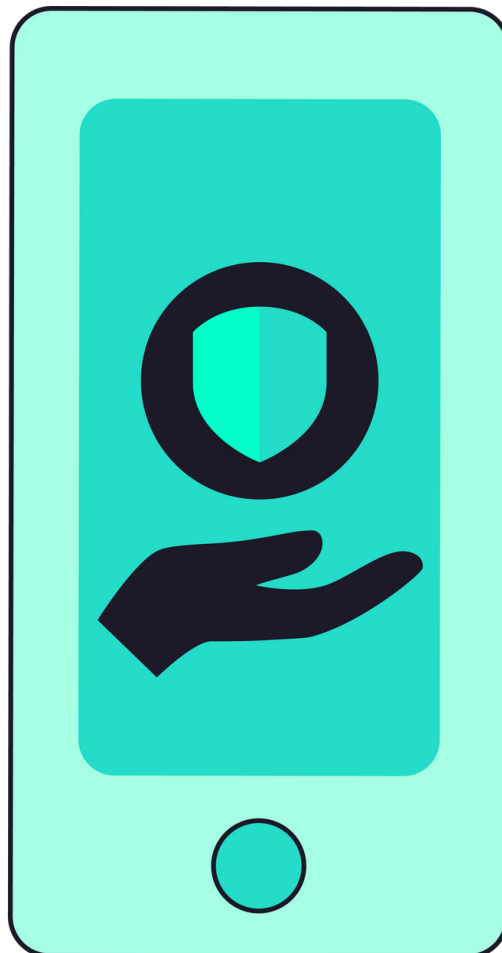
GENERAL PRODUCT DESCRIPTION

4.1   Social Media

Combining the crypto-related uses of Telegram, Discord, and Twitter, Keyvian will offer a cryptocurrency-specific feed. By aggregating what would instead be disparate information on various platforms, Keyvian can by itself fulfill all the needs of its users–and do so more efficiently than the competing options in the space. Furthermore, by giving the content creators the option to securely KYC, we minimize the searching costs for our users, creating a safer (and thus more profitable) environment for crypto enthusiasts. This results in an improved platform for both users and crypto projects. Note as well that while Keyvian is designed for crypto-natives and non-natives alike, our ingenious platform will allow us to expand into various other communities with time. While we're focused on the cryptocurrency space, such communities as Play To Earn games offer opportunities to expand our niche.

Semi-anonymous social media can be achieved by privately verifying users through connections to existing accounts. Varying levels of KYC are done by showing proof of one or more of the following user's features: email, phone number, address, and ID card, as well as linking to other platforms such as Instagram, Facebook, and LinkedIn–especially if the user is an already verified public figure.

4.2   Wallet

Our integrated wallet application allows all users to track their portfolio across different exchanges. This functionality exists to facilitate users staying on the Keyvian app; by preventing them from having to go elsewhere (Binance, Coinbase, etc) in order to stay on top of their valuations. Our wallet is currently under development, and will begin with manual addition of assets and automated value tracking. Our next phase will have automated address tracking, in which a user can sign a free transaction from their wallet to verify their possession of the account and allow the API to automatically update on the Keyvian back-end. Following this, we intend to partner with one of the many exchanges, allowing for asset management (buying, swapping, tipping, etc) directly within the Keyvian app. Having automated asset management behind the scenes also allows Keyvian to provide a smoother service for users and to make money ourselves, by providing liquidity and taking a fee on transactions.

4.3   Messaging

Designed with privacy in mind, Keyvian provides its users an efficient end to end encrypted messaging experience. As a user, one will be able to reach out to like-minded individuals all around the world by sending invitations, reminders and updates via a chat platform. This feature will allow the user to rapidly switch between cryptocurrency or other communities and share valuable information instantly. Keyvian's Messenger picks up the architecture of already successful messengers, but with the addition of specific features related to Blockchain, for example :

- Dashboard

- Transfer of cryptocurrencies to an attached wallet via direct messages

- Multiple channels in one group.

The last feature will ease the communication on different topics, while avoiding text and vocal channel proliferation usually occurring on some popular social medias.

4.4   Dashboard

Each project has a unique dashboard, describing every key aspect in an easy-to-find location. The user may find the roadmap, the tokenomics graph, ICO related information, the main social media accounts, founder's names, and much more. More features will be added as Keyvian grows, with the goal of creating the most advanced project dashboard in the cryptosphere. Our users won't need to waste their time vainly searching for the tokenomics, the roadmap, etc. They will all be accessible with the touch of one button in our app. Our vision goes beyond the purely informative utility of this feature, as we would like our users to take part in tomorrow's dashboard. Each future addition to the dashboard will be voted on by KVN token holders in community votes.

4.5   Community badges

A community dashboard is available in the Keyvian app. Simply engage, discuss and post to earn Keyvian tokens. Badges and tokens will be earned both by KYC'ing to various tiers and via accomplishing different 'missions' over time. Users will also have the option to display them on their profiles, both to gamify using the app and in order to showcase one's experience and gain the trust of other users. These community badges will be "use to earn", and the more a user engages with the app the more they will be rewarded. Users who accomplish special weekly or monthly challenges will be rewarded with both a Keyvian badge as well as tokens.

4.6   Trust Score

We are currently developing a proprietary machine learning algorithm, with the intent of automatically scoring all cryptocurrency projects by 'Trust Score'. There are at least 20 to 30 different factors that can be used to evaluate the success of a project. By using machine learning, we can identify not only the 'usual red flags', but detect hidden correlations with unsavory behavior, expanding our list of factors with time. This feature will be very useful to allow any user who does not have the time or ability to assess the credibility of a project to quickly get an idea of the situation.

KEYVIAN'S APPROACH TO DECENTRALIZATION

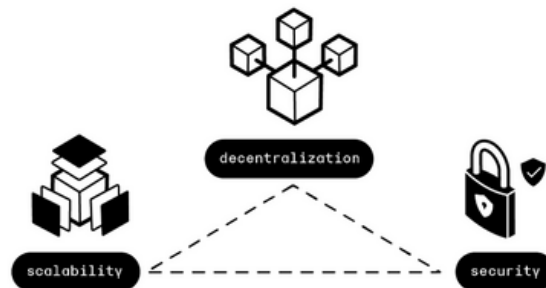## 5.1   A Primer on Decentralization

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Figure 1: The Blockchain Trilemma [1]

The perfect blockchain boasts three elements: security, decentralization, and scalability. But finding a balance between the three is difficult and presents a problem referred to as the blockchain trilemma.

Scalability and decentralization are often held back by security, but security tends to be compromised by any shifts on a network that offer scalability. Projects either choose to focus on two out of three or work on finding a solution to tackle the trilemma once and for all." [1]

Keyvian's vision is to provide a service that is a safe environment for anyone. This means the security needs to be perfect, both in terms of protecting and encrypting user communications and in the sense of vetting and ensuring that content promoted on the platform is safe for users to engage with. A totally decentralized messaging system may protect users' messages from prying eyes, but it wouldn't provide any protection from malicious attackers creating fraudulent advertisements. We desire a service that is usable by people all over the world, but we also choose to prioritize user safety, which requires a certain level of oversight and moderation.

For these reasons, we prioritize scalability and security over decentralization. However, our team is committed to the blockchain ethos and actively working to maximize the 'decentralization' of the app, while still capitalizing upon the advantages provided by centralized systems.

5.2 Comparing Centralized and Decentralized Messaging Platforms

Centralized Social Media and Communication Platforms

Advantages	Disadvantages
Lower costs (coordination and servers)	Potential for abuse of authority
Moderation of content is possible	Centralized data can be hacked or leaked
Can offer KYC and still protect anonymity	
Private data is secure– not "on-chain"	
Intuitive and easy to use	
Higher efficiency	

5.2 Comparing Centralized and Decentralized Messaging Platforms

Decentralized Social Media and Communication Platforms [2] [3]

Advantages	Disadvantages
Anonymous	Permanent record of on-chain activity (including messages and publications)
Can still be secure, but at a cost to efficiency	Transaction fees provide barriers to entry
No single point of failure or tempting hacking target	Fees can be volatile and dependent on market conditions
Control stays in user's hands	

As you can see, centralization offers a number of tantalizing opportunities for a social media network. Let's explore them in depth.

5.2.1   Significantly Lower Costs

Centralized servers cost orders of magnitudes less than the operational costs of an entire network of nodes. They also offer greater efficiencies; there is no need for "gas" as in a decentralized network, reducing barriers to entry for users in lower socioeconomic status countries.

5.2.2   Capability to Moderate Fraudulent Content

The decentralized model allows for full freedom of speech. This is a keystone value that Keyvian shares, and we will ensure that freedom of speech is safeguarded on our platform.

However, both legal frameworks that threaten social media companies for the content they host as well as our own moral imperatives require us to support our users. Crypto criminals stole $14 billion USD in 2021 [4]. There is a proven need to ensure that the advertised content is not a scam; it is for this reason that we are willing to take on the responsibilities of moderation, as well as allowing publicly posted content to be deleted after reporting. It is worth noting that a fully decentralized model, where messages or posts become part of the blockchain, would enshrine these malicious advertisements forever; this is a strong advantage to Keyvian's model.

5.2.3   Intuitive and Easy to Use

By providing an easy-to-use platform for beginners in the cryptocurrency sphere, we will share in the growth offered by mass adoption. It is important to offer a service that handles the complicated aspects of interacting with blockchains on the back-end, as many users struggle to understand the complexity of DeFi applications. Our app will allow consumers to utilize our user-friendly for their transactions, making Keyvian the 'path of least resistance' and furthering adoption.

5.2.4 "Secure KYC" Offers Anonymity with the Benefits of Verification

Anonymity will be possible, but we will also offer tiered KYC, in line with the advantages listed in the "Solutions" section.

KYC Tier	Requirements
Tier One	Registration: name, surname, and email address
Tier Two	Connection with other social media (Google, Facebook, Twitter, etc.)
Tier Three	Phone number verification
Tier Four	Address verification (shown by recent invoice displaying identifying info)
Tier Five	Identity card or passport verification

5.3 How Keyvian Retains the Advantages of Decentralization

5.3.1 Decentralization is Very Secure

We are cognizant of the fact that services as Keyvian are prone to attacks and potentially data leaks. In order to preempt any potential issues, we have several solutions:

- While we work to ensure the absolute highest levels of security for our servers, our interim hosting solution will be Amazon Web Services. AWS are extremely well-protected against attacks and have the highest standards of privacy when it comes to customer data.

- Identity verification will take place on a separate, airgapped, and encrypted server. By doing so, we effectively cut off the possibility of a sensitive data leak, leaving communications as the only remaining potential attack surface.

- All communications will be end-to-end encrypted. Even in the unlikely event of a data leak, private user data would remain uncompromised.

- The best protection from attacks is making the expected value of the attack low. No money can be stolen through Keyvian's platform; user data and communications are separately stored and encrypted; and they are themselves not monetized, creating minimal incentives for hacks.

5.3.2   The Blockchain is Forever

Messengers that (unlike Keyvian) are fully decentralized must use a blockchain for every sent communication. Messages, images, videos, stories, advertisements, and anything else our users care to send must all go through the process of posting a transaction to the blockchain, having that transaction verified, and being permanently stored in a node.

For these reasons, a completely decentralized blockchain is a suboptimal choice for a social network. Forever storing thousands of terabytes of data a year is a waste of resources, an ecological disaster, and introduces significant security risks into the system. Having public nodes with the information allows infinite tries at decrypting the stored messages. While that may currently be technologically infeasible, quantum computing and advances in technology will change that in time. This is an unacceptable risk to privacy and runs counter to our values. By centralizing the message servers we add additional layers of protection for our users. Lastly, messages will still be end-to-end encrypted. This is equivalent in terms of security to that given by a blockchain, but with the additional privacy provided by the Keyvian servers.

5.3.3   Interacting with a Blockchain Isn't Free

As explained in the last point, in the case of a decentralized system, every communication is a transaction on the blockchain. Different messages being sent and stored on the blockchain also require different amounts of gas; images or videos would require exponentially larger amounts than pure text communications. Using a blockchain for simple messaging means that every action has a fee–and even if that fee is extremely cheap, it still needs to be paid for the user. There is the added dilemma that if gas was cheap enough, it would disincentivize validators from running nodes, decreasing the overall number of people supporting the network and thereby effectively decentralizing it... Unless fees were higher, which brings other problems.

By centralizing messaging on our servers, we effectively sidestep all of the above issues. We are a team of forward thinkers and are strong believers in a decentralized future–but also in a future where the architects of complex systems consider the needs of their system and the best route forward.

5.4 Blockchain of Choice

With all of that being said, there are certain features (such as the issuance of the KVN token, on-chain events, user rewards, interacting with wallets, etc) which do require connection to a blockchain. For this purpose we have chosen to use the Avalanche (AVAX) blockchain. AVAX is a next-generation ethereum virtual machine compatible blockchain with a strong mission to support decentralization. As of this writing AVAX has about 20,000 validators, making it one of the most decentralized blockchains. It also has very low gas fees, allowing Keyvian as a company to minimize our costs when hosting on-chain events or when bridging transactions from the Keyvian secure wallets into the blockchain as a whole. We strongly feel that AVAX is well-positioned to continue gaining in value and popularity and to continue its trend of becoming as one of the front-runners for next-generation blockchains.

5.5 Conclusion

Despite a totally decentralized system being perfect for currency transfers, it is not ideal for a social network that requires the ability to send messages and media. For this reason, our dedicated servers for transmitting messages will be centralized. However, private communications will be end-to-end encrypted, and the traditional social media model of treating the users as a resource to be exploited is turned on its head. Control is given to content creators, as a decentralized protocol would do. Users own their content, their data, and their monetization of what they produce. Keyvian's innovative system provides an opportunity for the cryptocurrency community to transition to a bespoke platform created with their needs in mind–a superior alternative to the existing, fragmented landscape.

ROADMAP

01. Phase 1

Completed Keyvian design
Functional and polished website
First app prototype (MVP)

02. Phase 2

Pre-seed round
Infrastructure rental and staff hiring, pursuant to needs of the company

03. Phase 3

Public token sale (ICO)
Addition of essential features
Implementation of partnerships for the Keyvian Wallet
Group chat customization for group admins and users
Wallet tracking interface (graphic visualization of the funds in an address)

04. Phase 4

Alpha release
Implementation of KYC
Peer to Peer currency sending
Desktop version of mobile app
Market study: additional features desired by users

05. Phase 5

Beta release
New features (as discovered in the market study)
Improved UI and app ergonomics

06. Phase 6 and beyond

Version 1 release
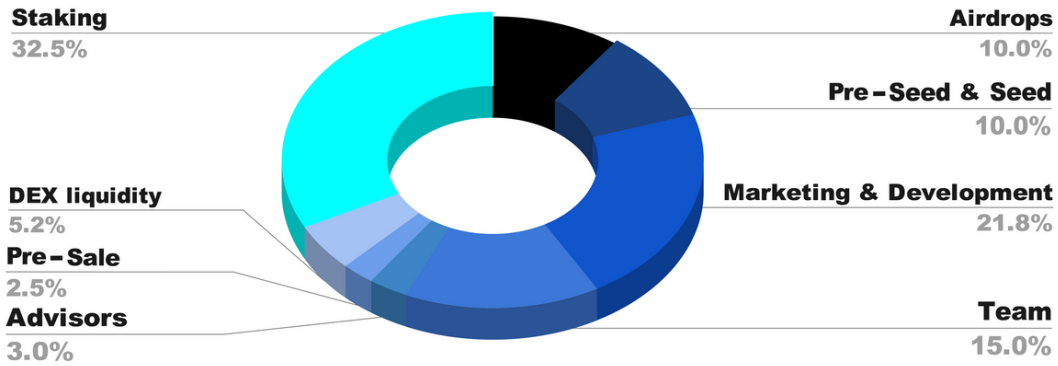Implementation of token staking

TOKENOMICS

Staking 32.5%	**Airdrops** 10.0%
	Pre-Seed & Seed 10.0%
DEX liquidity 5.2%	**Marketing & Development** 21.8%
Pre-Sale 2.5%	
Advisors 3.0%	**Team** 15.0%

Figure 3: Vesting schedule
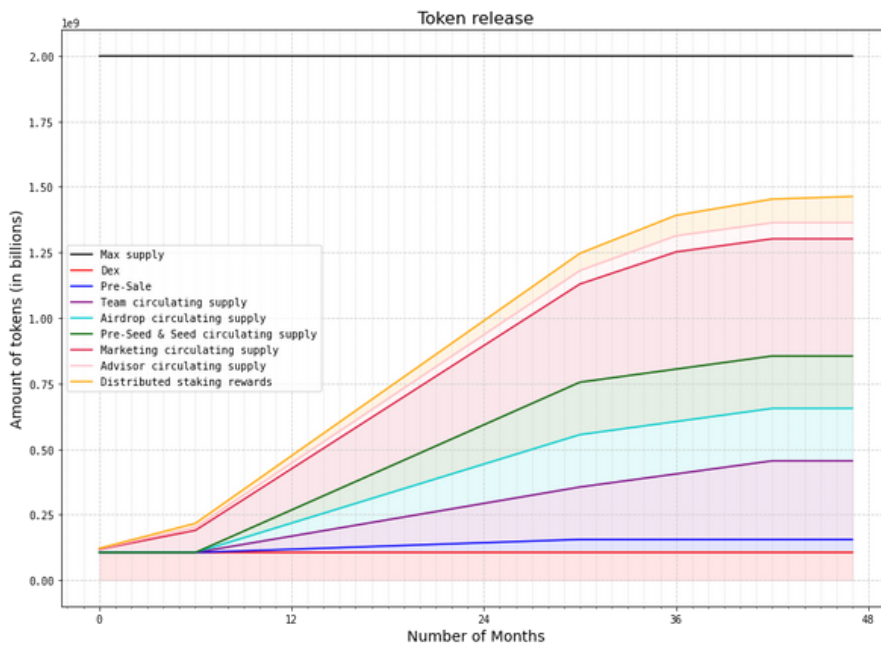
2,000,000,000 $KVN
Total supply

Allocation	Locking Schedule
Pre-Seed & Seed	6 months cliff 4.16% per month
Marketing & Development	5% launch 3.95% per month
Team	5% launch 6 months cooldown 2.63% per month
Advisors	5% launch 3.95% per month
Pre-Sale	6 months cliff 4.16% monthly
DEX Liquidity	100%
Staking	1% launch Deflationary distribution over 50 years
Airdrops	2% launch 2.04% per month

In addition to the APY generated by $KVN staking, Keyvian will further enrich token stakers with a profit-sharing program. Each quarter, Keyvian will use 5% to 20% of its net profit to buy back $KVN tokens and add them to the token totals of $KVN stakers. The amount given to each holder will be proportionate to the number of tokens the user holds. This process enables us to reward our token holders and give them a piece of the project's financial success.

0.014$ Token Price at Pre-Seed raise valuation

0.015$ Token Price at Seed raise valuation

0.019$ Token Price at Pre-Sale valuation

0.021$ Token Price at Launch

TEAM

CEO and Co-Founder	Nicolas Filimonov
COO and Co-Founder	Allan Abela
CTO	Imane Seghrouchni
Business Analyst	Kenny Frisella
Social Media Manager	Philibert Wind
Machine Learning Developer	Lucas Brunschwig
Contact Email address	contact@keyvian-app.com

ADVISORS

01

Entrepreneur Club :

The Entrepreneur Club was created in 2019 with the mission to build a community that connects, engages and empowers students to create startups. Their main goal is fostering an active community of student entrepreneurs studying at EPFL or UNIL, and empowering them to exchange ideas, meet up and collaborate. They showcase our projects and help us in our first steps towards building a successful business.

02

EPFL Blaze Accelerator :

Blaze is an EPFL Accelerator for fast-deploying startups. The program is designed to guide leading student startups to a successful market launch. Being selected from the many candidates in the program is both an honor and a huge opportunity.

03

Petru.M :

Petru is consultant for Aleia Digital Agency, specializing in digital marketing and communication. Having worked in the banking sector and with a background in data science, he provides key experience to the Keyvian team.

04

Sacha L. :

Sacha is a computer science student and has been passionate about blockchain for many years. He wrote his first paper on the topic in 2019 and has already supervised the launch of several DeFi projects.

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