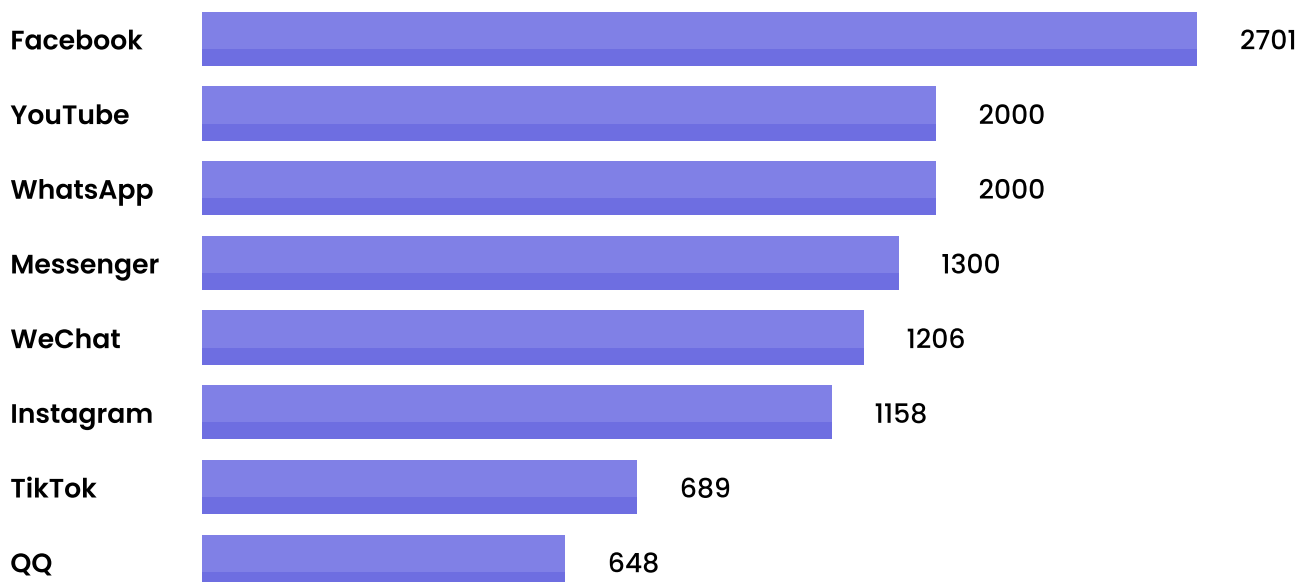# Droplet

Whitepaper

Executive Summary

Since the 1990s, the social media industry gained rapid growth in correlation to technological innovations such as the smartphone. However, with social media increasing its involvement into various aspects of the daily lives of users, privacy and security is now more important than ever. With incidents of privacy breaches and oppressive controls on freedom of speech, there has been increasing number of users seeking out for decentralized platforms for social networking without any central authority.

Droplet is a social networking service built on blockchain. From messaging to content sharing, Droplet aims for a complete decentralization. Droplet Social is envisioning an inclusive, complete social networking platform that provides an all-in-one solution from users switching between different applications with its own uniqueness: instant messaging, photo sharting, article writing, and job search.

This whitepaper is to showcase Droplet Social, a decentralized social networking platform built on a scalable, secure public blockchain platform Solana.

Platform	Users
Facebook	2701
YouTube	2000
WhatsApp	2000
Messenger	1300
WeChat	1206
Instagram	1158
TikTok	689
QQ	648

Number of active users in millions

Background

Previously, there have been changes in the online platform market landscape. Market dominance of the media platforms have changed in accordance to technological development. Platforms with better user experience, interface, and functionalities began to exponentially gain users and maintain its market dominance.

There is yet a major change to happen within the social networking market with blockchain technology constantly improving. Previously, blockchain platforms like Ethereum were not able to host platforms as massive as Facebook because of the 'outdated' consensus algorithm and lack of transaction speed. However, with increasing number of blockchain platforms providing better scalability and security the opportunities for platform providers are increasing.

At the core of social networking, there are users. Users' organic content and diverse networking drives platform growth. However, with existing centralized social networking platforms, the revenue model is lopsided with platforms consistently growing without returning incentives.

With Droplet Social being built on Solana blockchain, the scalability issue of onboarding millions of users are resolved. In theory, if Reddit were to be operated completely on blockchain, an average transaction speed of 250 transactions per second would be required.

As well the at most concern with all existing popular social media platforms is that they track each and every user activity. The platforms platforms sell the aggregated information for advertisers to help them to run targeted ads for marketing purposes. Since all platforms such as Facebook, Whatsapp, Twitter, and others are centralized, they very well exploit the user's content.

List of features	Solana	Ethereum	EOS	Cardano	Tezos	Stellar
Transaction Throughput	59,000 tps	17 tps	3900 tps	~250 tps	50 tps	~2000 tps
Transaction Fee	$0.00001	~$2	Free	~$0.02	$0.00232	$0.000001
Transaction Finality	0.4 sec (1 block)	5 mins (35 blocks)	2.5 mins 2/3 of BPs	~2 mins	30 mins	4 sec
Consensus Mechanism	Proof of Stake	Proof of Work	Delegated Proof of Stake	Ouroboros Proof of Stake	Liquid Proof of Stake	Federated Byzantine Agreement

Ethereum Average Gas Price Chart (in Gwei)
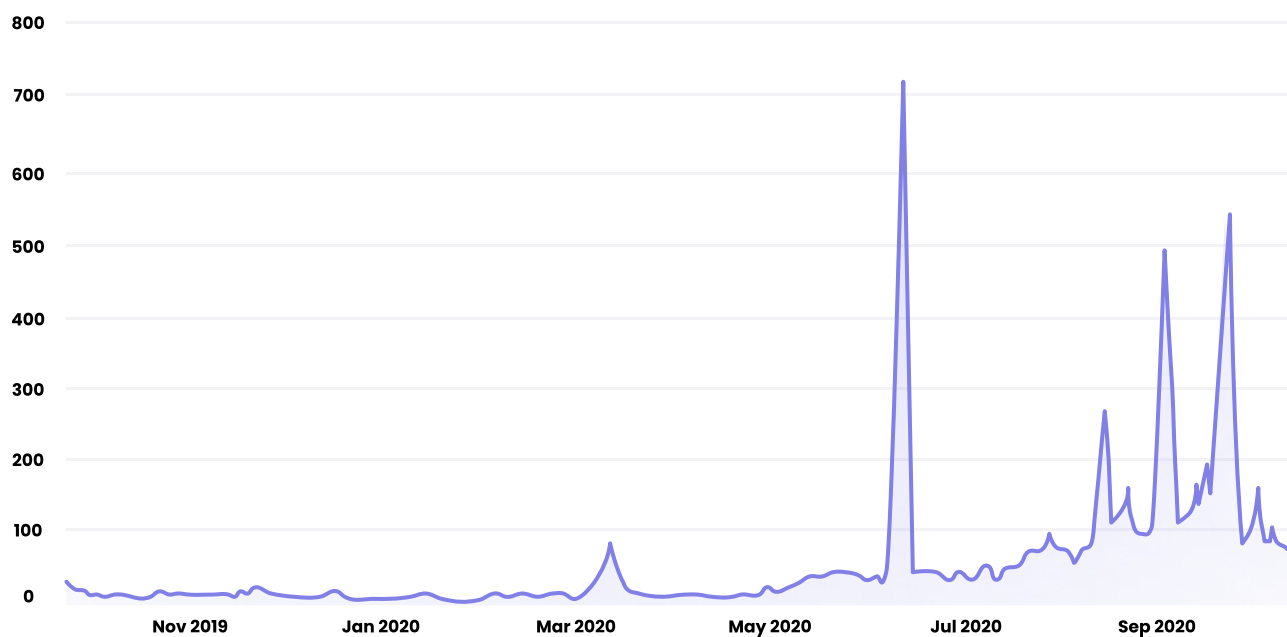
While Ethereum maintains its traction within the cryptocurrency space with the second largest market cap, the public blockchain does not have the capacity to host a public application that can onboard millions of users. Especially with increasing gas fees as shown in the figure above, social networking applications like Droplet Social cannot be hosted on the Ethereum blockchain.

59,086

SNT Locked

0

SNT Burned

6,804,870,175

Circulating Supply

Transaction History (14 Days)

Platforms and projects like Status.im also have been struggling to lead mass adoption. According to Status analytics, compared to the circulating supply of SNT tokens and the transactions and lock supply, users know that Status is failing to maintain traction. However, this failure to lead mass adoption has cause in the roots of the issue: scalability.

Platform

Droplet Social is a social networking platform powered by blockchain technology and token incentives. As we envision an all-in-one inclusive social networking platform to compete with the likes of Facebook, LinkedIn, Telegram, Droplet Social focuses on the various USPs (Unique Selling Propositions) provided by blockchain implementation.

Droplet Social has completed its alpha development of the peer-to-peer messaging application powered by Solana blockchain. Users are able to create accounts and interact with users that have accounts on Droplet Social.

In the next coming months, Droplet is to release its next versions of the platform with market-go-to strategy implemented within the platform development.

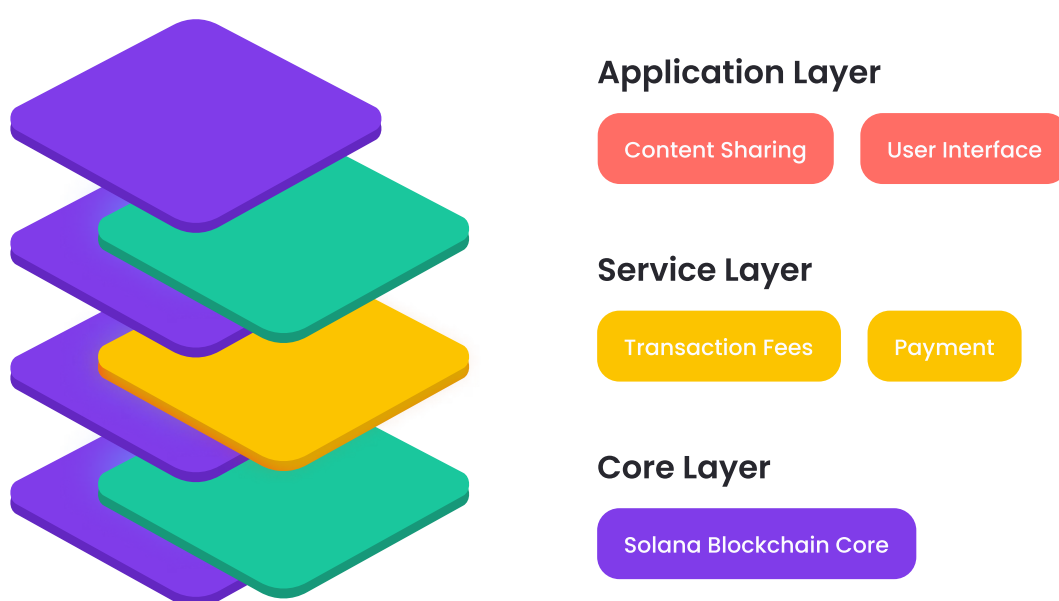|	Droplet	Status.lm	Telegram	Facebook	Signal
Blockchain Implementation	✓	✓			
Decentralization	✓	✓			
Pseudo-anonymous Account Generation	✓	✓			
Scalability	✓		✓	✓	✓
Wallet Implementation	✓	✓			
Open-Source	✓	✓			✓
User-Incentives	✓	✓			

Technology
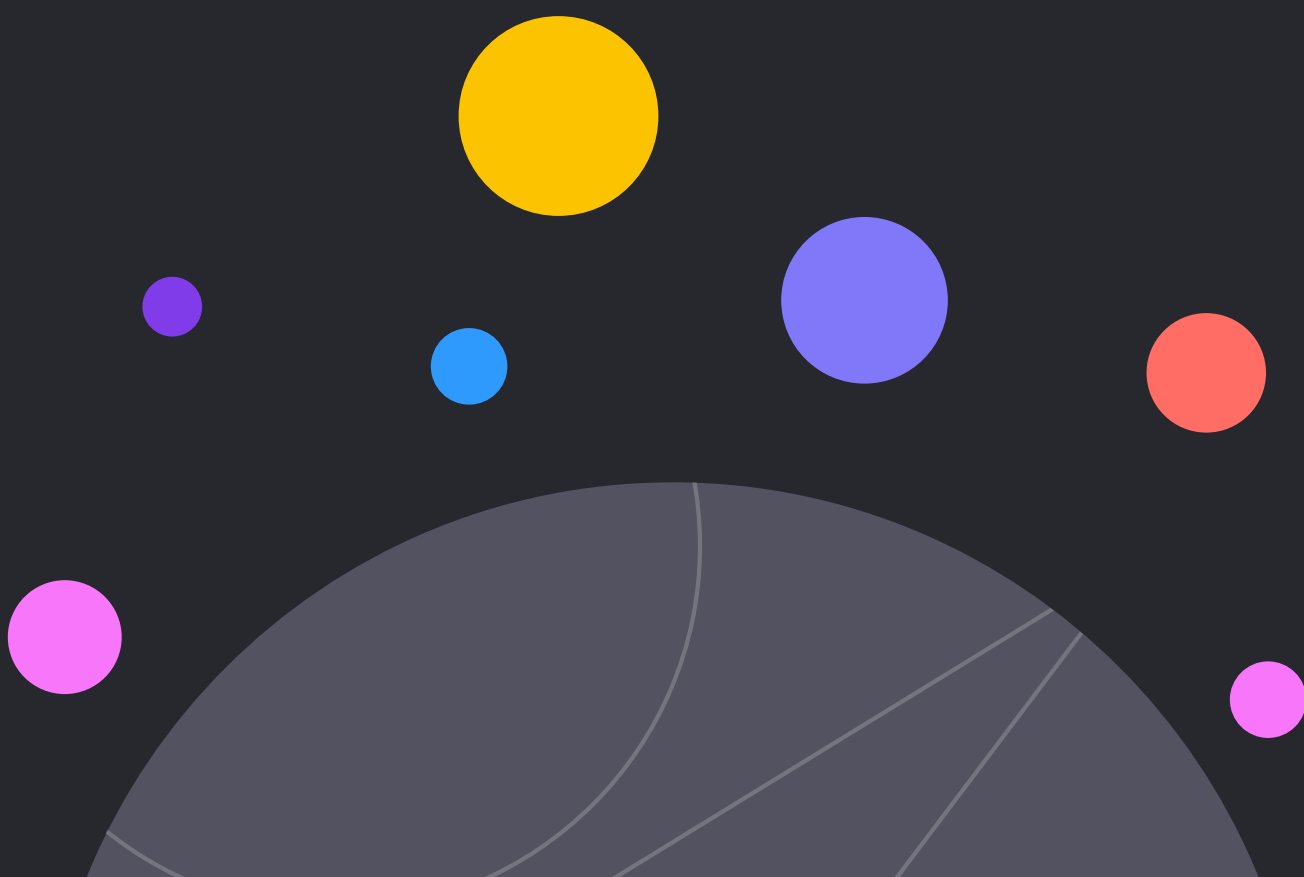
Blockchain

Blockchain is a decentralized online ledger recording all transactions in accordance to time. Blockchain technology enables for transparency and security. Users are not only able to view all transactions but cannot modify a transaction once the transaction is recorded on the blockchain.

Smart Contract

Smart contract is a set of code programmable on-chain to self-conduct pre-programmed agreements. Using smart contract, users are able to create blockchain-powered applications (dApps: decentralized application) which offer security and transparency to the users. The benefit of an application utilizing smart contract is the immutable nature and lack of central authority tampering.

Central Server

Internet

Devices

Decentralized Databases

Before

After
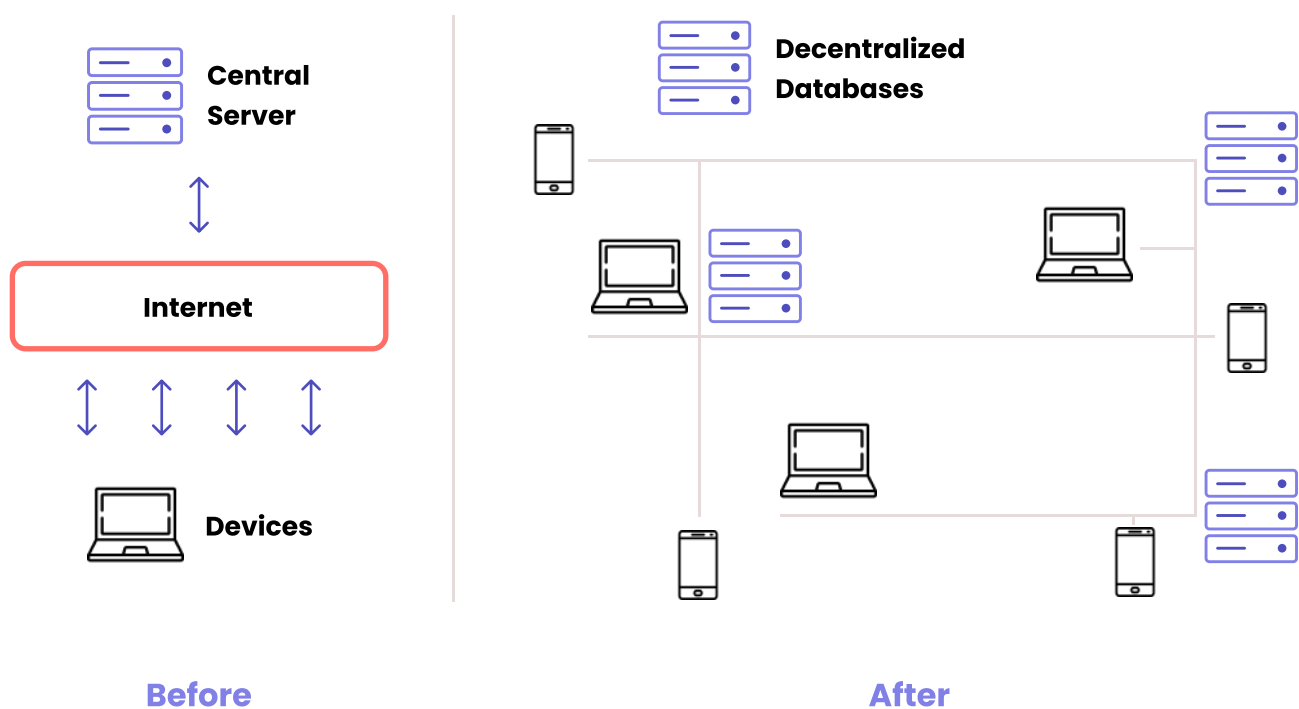
As shown in figure above, the core to a blockchain platform is its platform architecture of relying on peer-to-peer networks. With 'peers' or nodes validating blocks (data) prior to uploading onchain, reliability increases for the data.

Application Layer

Content Sharing   User Interface

Service Layer

Transaction Fees   Payment

Core Layer

Solana Blockchain Core

Droplet Social aims for a complete decentralized social networking platform powered by blockchain technology. Many dApps that provide services for the users have aspects of centralization. With such platform architecture, users on Droplet Social can worry less about censorship, privacy breach, and data leaks.

On Droplet Social platform, there are three different layers to the platform: application, service, and core. The different layers of the platform manage different activities on the platform. On the application layer of the platform, which manages user activities on the front-end of the application for content sharing, messaging, and user activities. The service layer of the application manages transaction fees and payments between the users. The core layer which powers all of the platform is based on the Solana blockchain.

Application
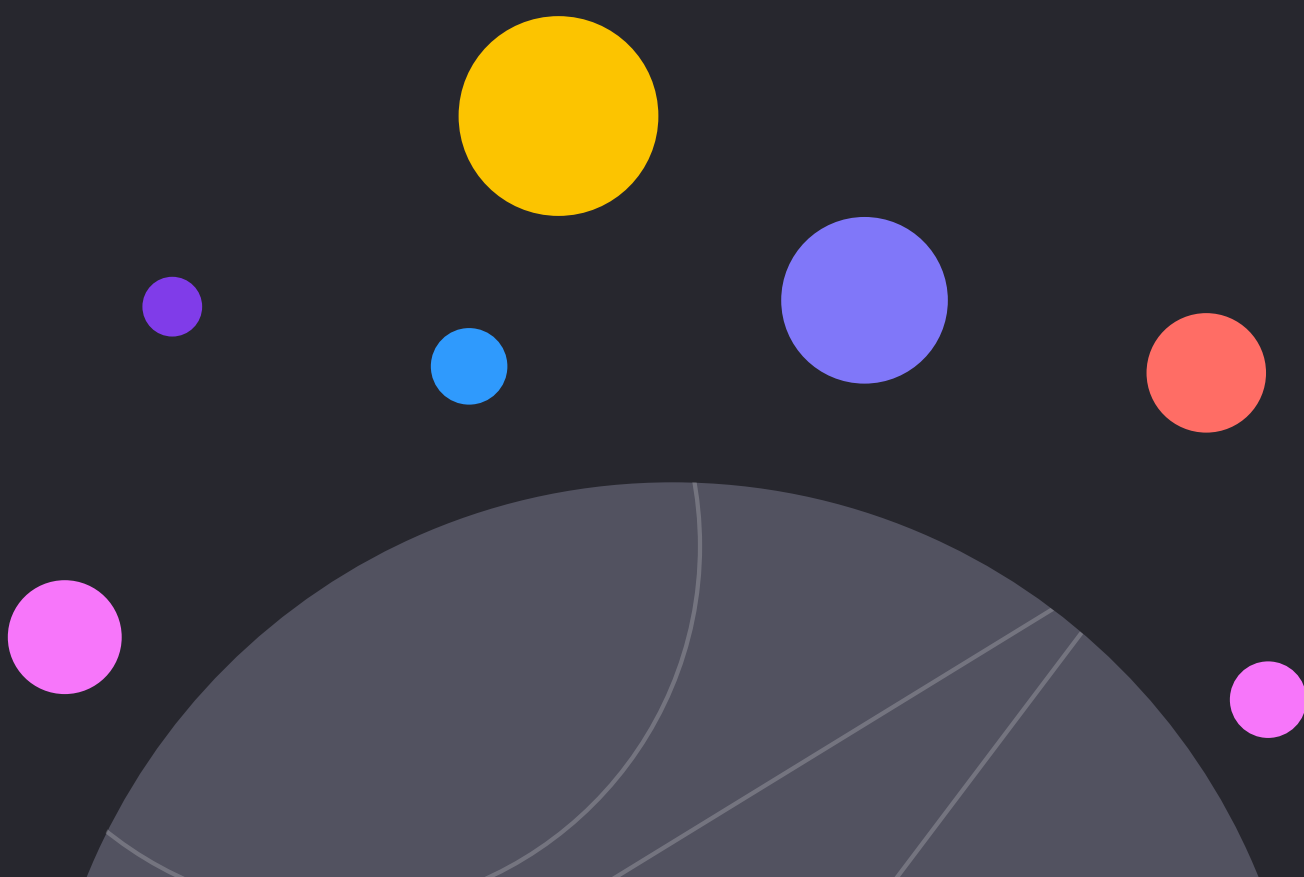
Most blockchain-based applications fail to lead mass adoption for several reasons: usability, user experience, and scalability. Droplet Social team conducted extensive research on existing messaging applications within and out of the blockchain industry.

List of features	Alpha	MVP	Full App	Viber	Telegram	Whatsapp	Messenger
Login with a secret key	✓	✓	✓				
Account Generation: Address + Bio + Avatar	✓	✓	✓				
Create groups		✓	✓	✓	✓	✓	✓
Stickers	✓	✓	✓	✓	✓	✓	✓
Custom Stickers	✓	✓	✓	✓	✓	✓	✓
Channels + Folder for them		✓	✓	✓	✓		
Favourites			✓	✓	✓	✓	✓
Chats archives			✓	✓	✓	✓	✓
Admin for groups		✓	✓	✓	✓	✓	✓
Calendar			✓		✓		
Build in browser			✓		✓		✓
Stories			✓			✓	
Delete message for both			✓		✓		
Share current location			✓	✓	✓	✓	
Current location in real time			✓		✓	✓	
Black list			✓	✓	✓	✓	✓
Secret Chat			✓	✓	✓	✓	✓
Comments			✓		✓		
Emoji reaction		✓	✓		✓		✓

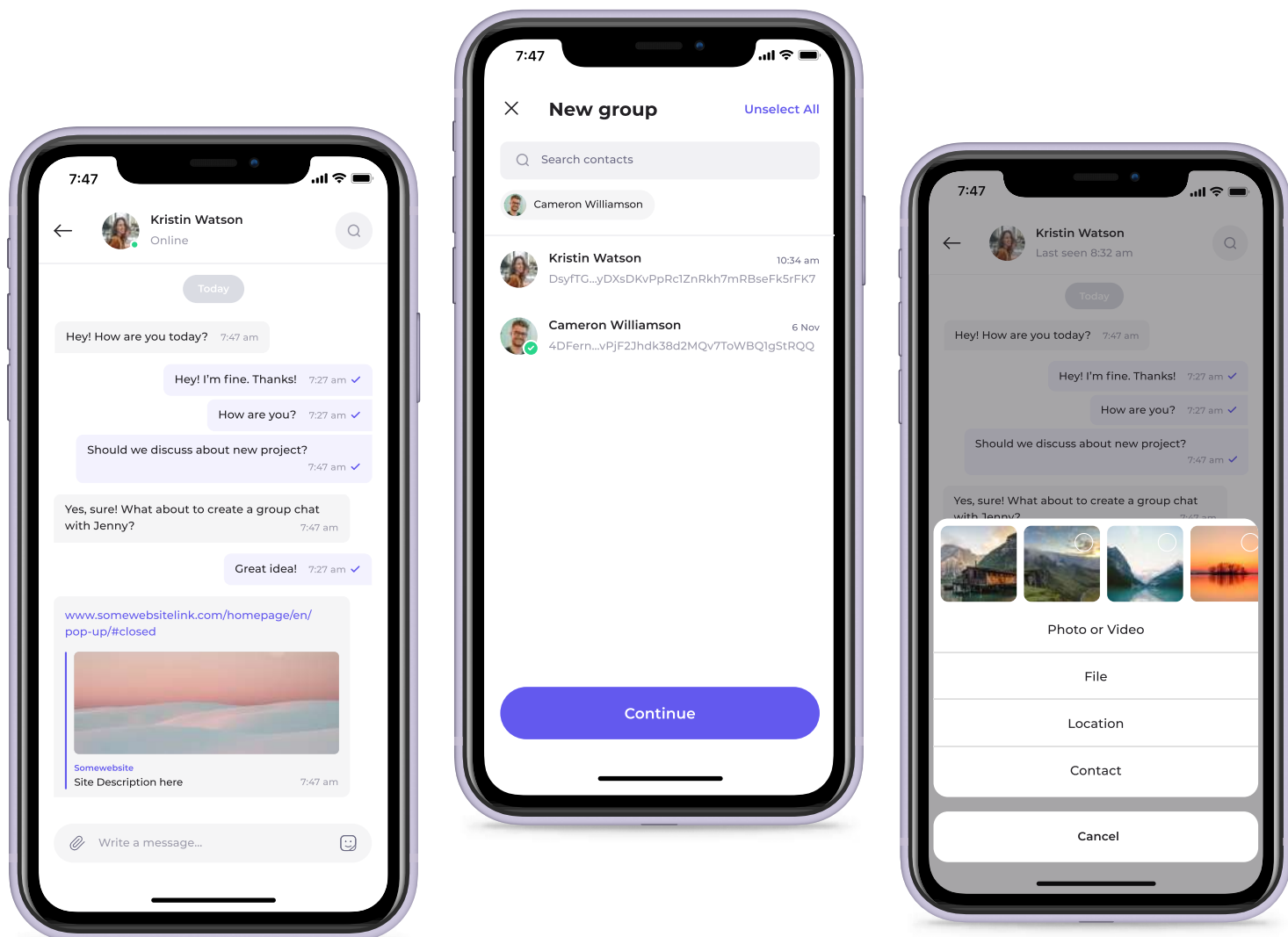# Decentralized Content Sharing Platform

Droplet aims for a complete, decentralized social networking platform that is censorship-free and has no authoritative-tampering. Due to this platform philosophy, Droplet will have no method of centralized monitoring of the contents uploaded onto public channels of the platform.

Limitations of the Blockchain

Security and freedom is correlated, often there is a choice needed to sacrifice one or the other. Centralized authorities are often bound to keep a balance between security and freedom. By decentralizing content publishing, security and freedom is at stake. While central tampering of content can be avoided, certain individuals may be at risk with abusive or illegal content. Without the centralized aspect to the platform, with all content uploaded on-chain, there is also the issue of immutability. The platform itself cannot hide or delete any content uploaded on chain once the transaction (content publishing) is generated.

Another limitation of implementing blockchain technology for a media-sharing platform is the issue of storing files while maintaining decentralization. To achieve complete decentralization such as the likes of Steemit, a separate protocol needs to be designed for storing media.

Droplet Social is researching and developing a hybrid platform architecture of implementing IPFS (Interplanetary File System) together with Solana blockchain. Users' media will be stored on the IPFS and the hash associated with the Solana blockchain

Solana blockchain is a scalable public blockchain that boasts high throughput for transactions. To best utilize the benefits and features of the Solana blockchain, user activities such as voting, comments, and likes will be recorded on the Solana blockchain.

Governance-based Content Management

To maintain a safe environment for the users, as aforementioned there is a need to monitor and manage content published onto the platform. Droplet will implement decentralized governance to monitor and manage content. When a user reports a content to be malicious, illegal, or abusive the content will be automatically hidden and pushed for review.

Review of the content will take place within the Droplet Board, which will be composed of select 'Drop Jurors'. Any user can participate in becoming a juror by staking 10,000 DROPS to the platform. For each review, at least ten juror must participate in the review. For a content to be hidden from the platform, at least 60% of the jurors must agree that the content is abusive to the platform. If the content publisher disagrees to the results of the review. Publisher can dispute against the review with a price of 5,000 DROPS. A new committee of jurors of at least 15 will be selected to review the dispute. The arbitration costs will be distributed towards the jurors.

Decentralized Messaging
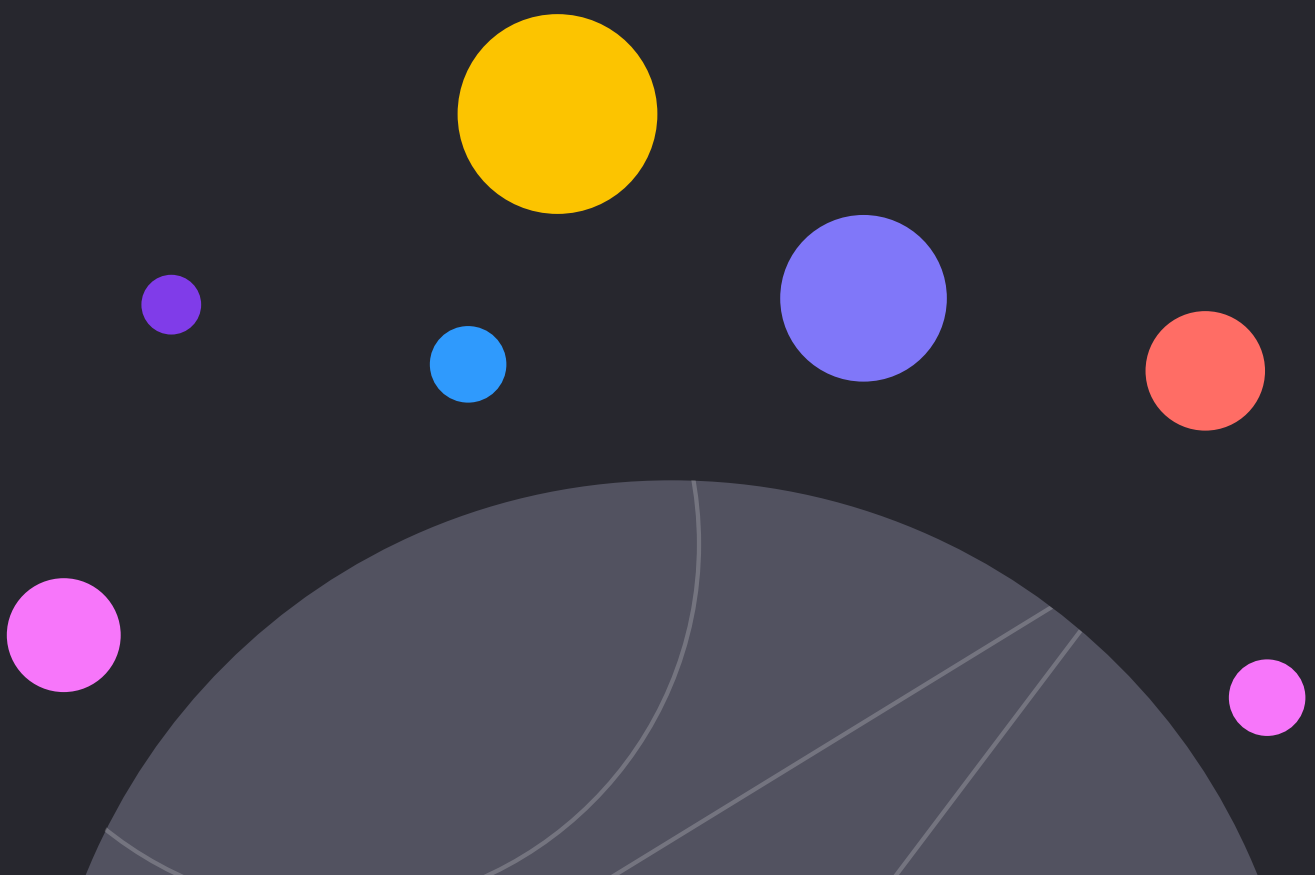
The user privacy on social media platforms are a growing concern as it is governed and monitored by centralized corporations. Having an account on these platforms means you are giving away your privacy rights in their hands.

Droplet Social's alpha application is a peer-to-peer messaging application powered by blockchain technology. Using Solana's scalable blockchain platform, all messages are encrypted from end-to-end between accounts that are generated in pseudo-anonymous manner. Decentralized communication between accounts enable for high-level account security and
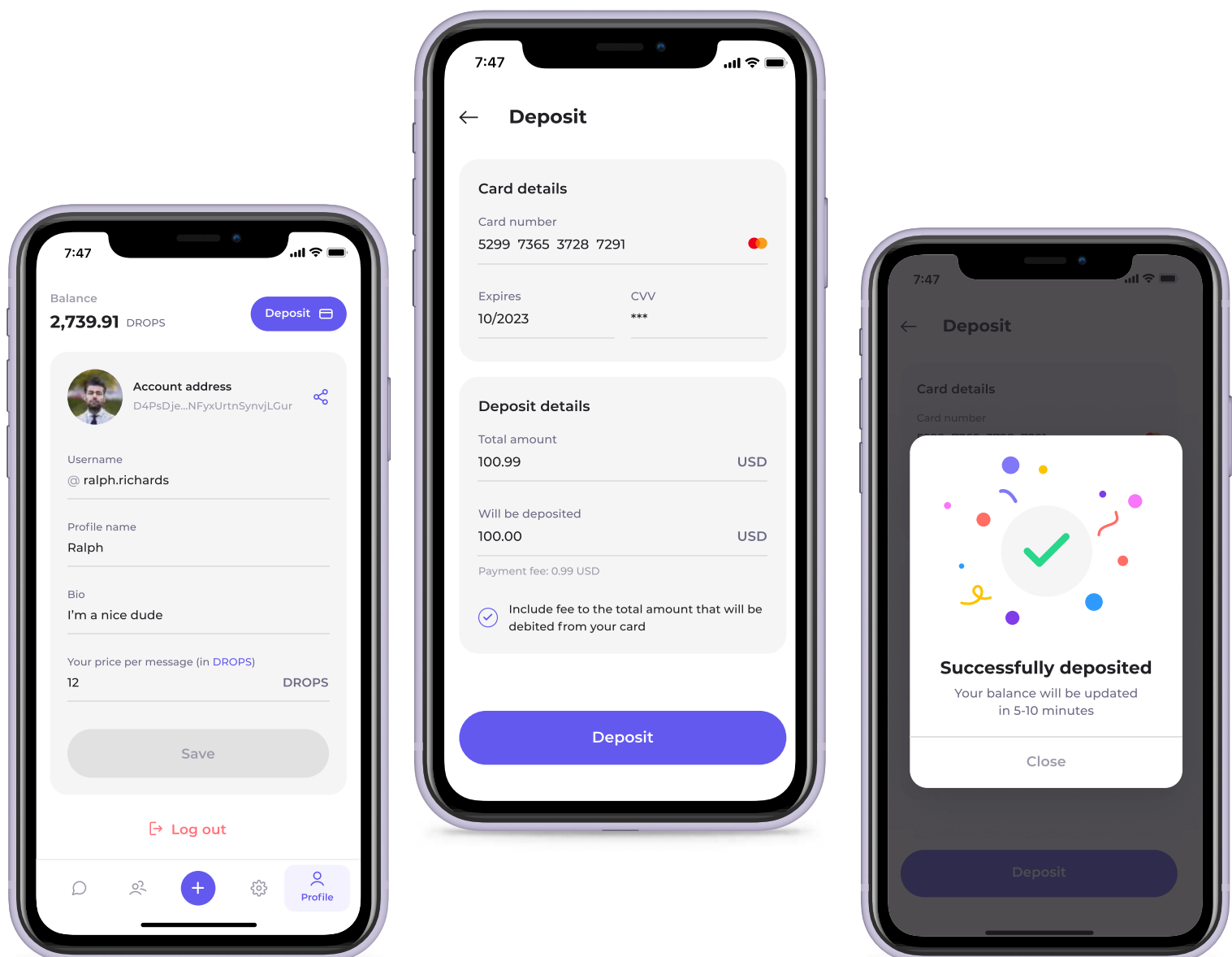
Decentralized Wallet
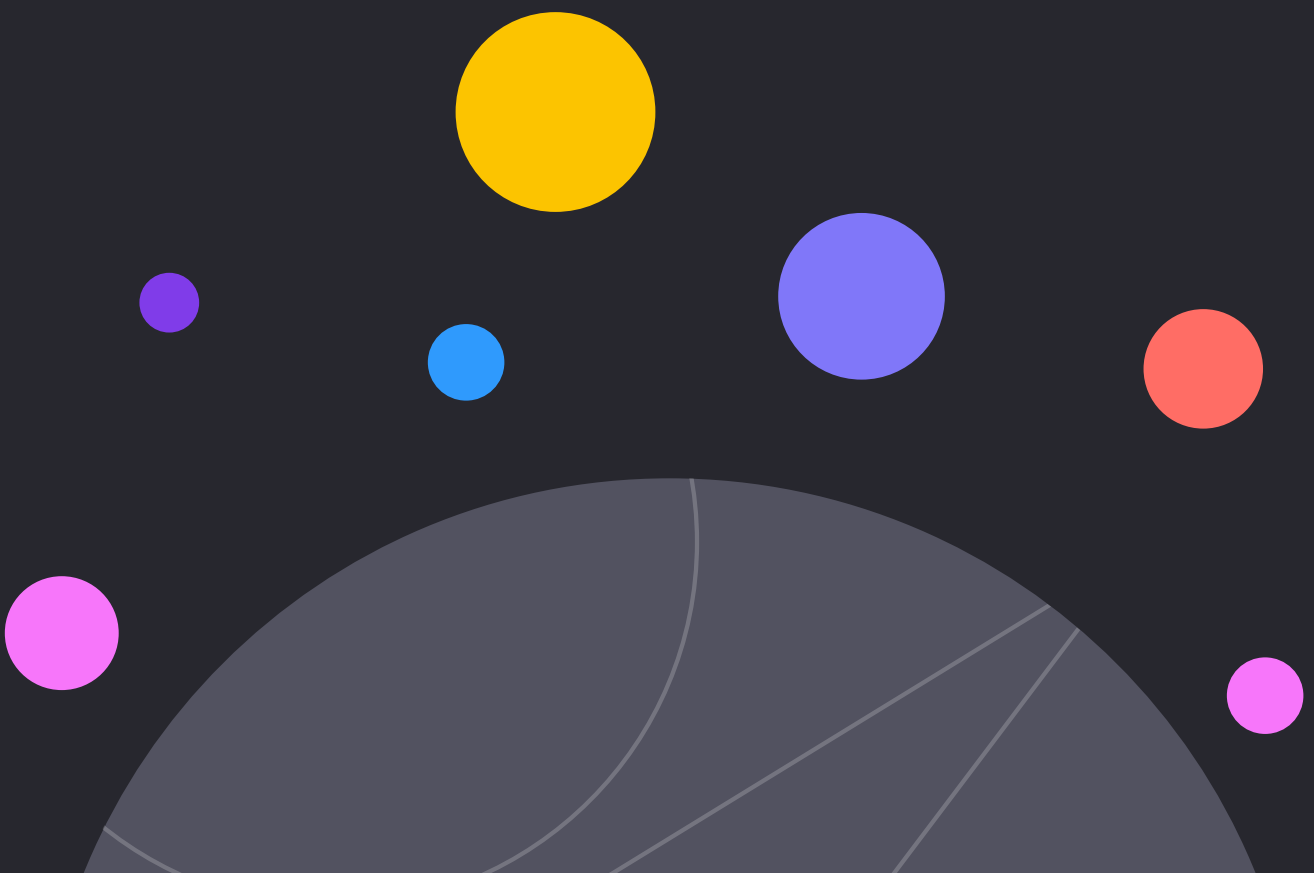
Droplet Social's application provides a secure, non-custodial, and decentralized wallet to the users. Without a centralized aspect to the wallet, users have complete control of the private keys and funds. To increase the functionality of the wallet, Droplet will provide support for BTC and ETH based crypto assets. However, as Droplet Social does not have a centralized aspect to the application, inter-blockchain communication is not possible. Transactions within the application will utilize Droplet's native utility token: DROPS.
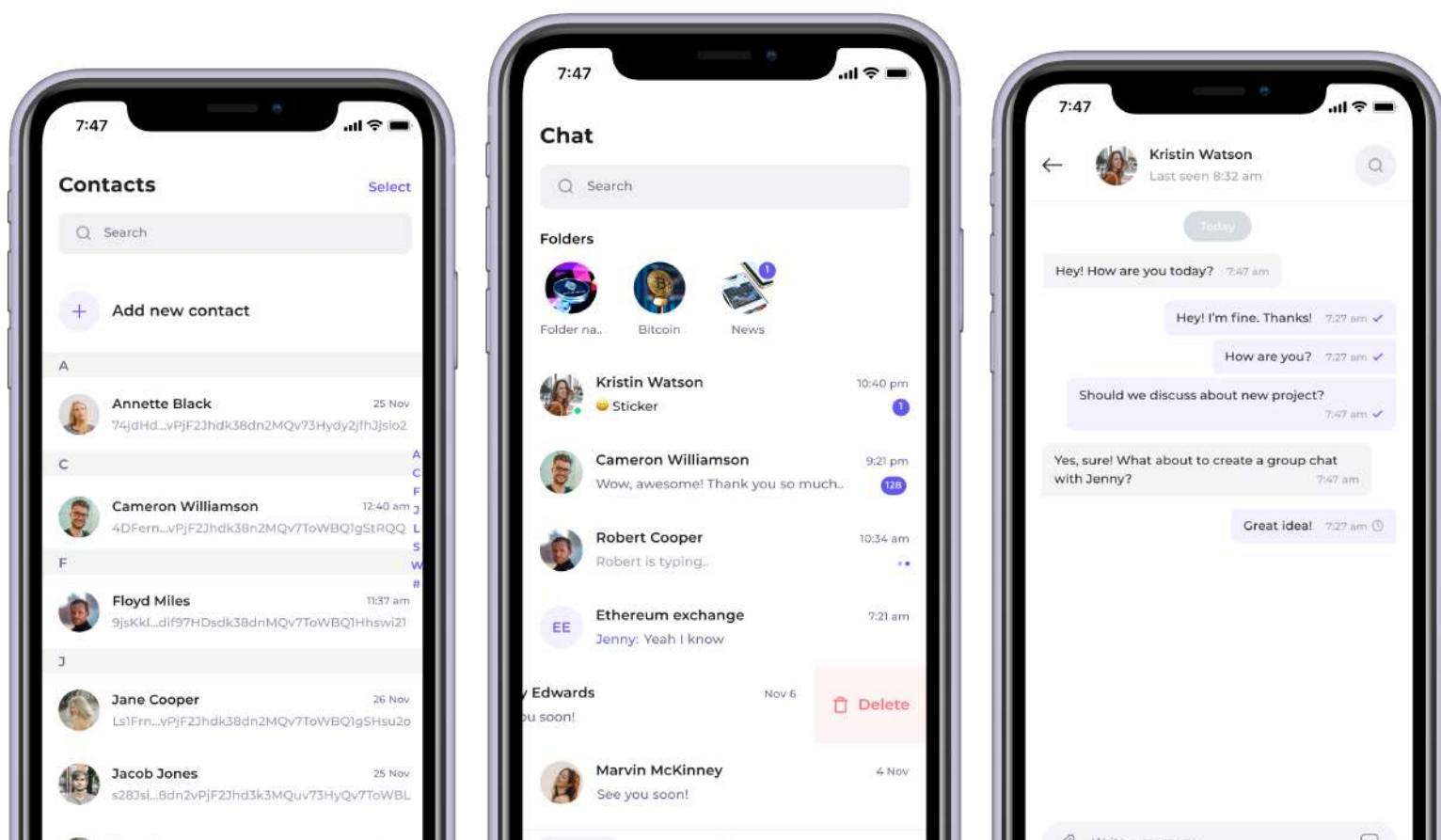
ETH, BTC, SOL

Bordeless Payments

Security-Prioritized

Noncustodial Wallet

NFT Marketplace

Any user (illustrator, artist, doodler) can create and sell stickers on the decentralized sticker market. However, for rare digital art works, users can quickly create a NFT token for the work to be limited in use, traded for value, and shared for royalty use.
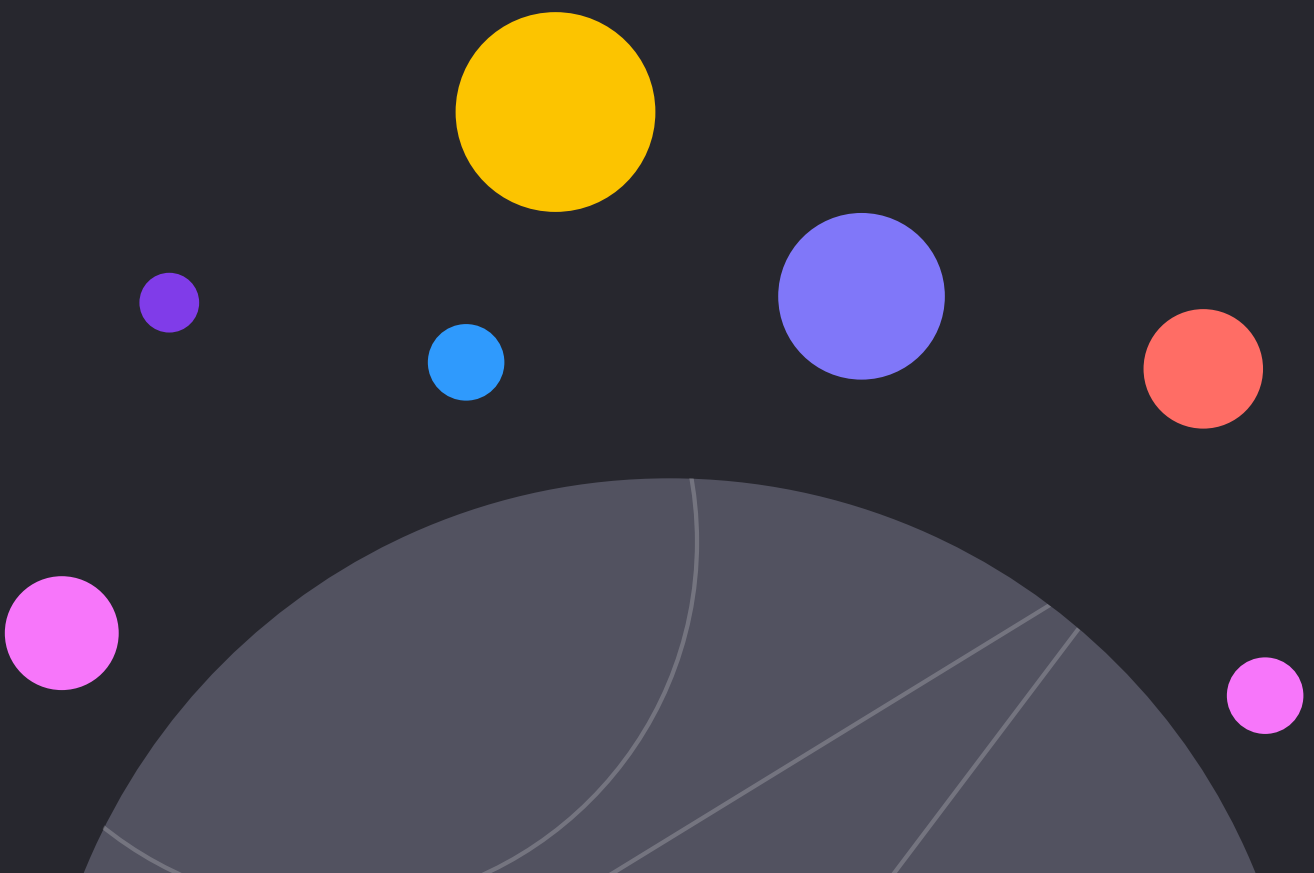
With centralized social networking services, users lack the incentive to convert digital art to public items without any monetary benefits. There are also times of centralized platforms abusing their market monopoly to prevent from individual artists to generate revenue.
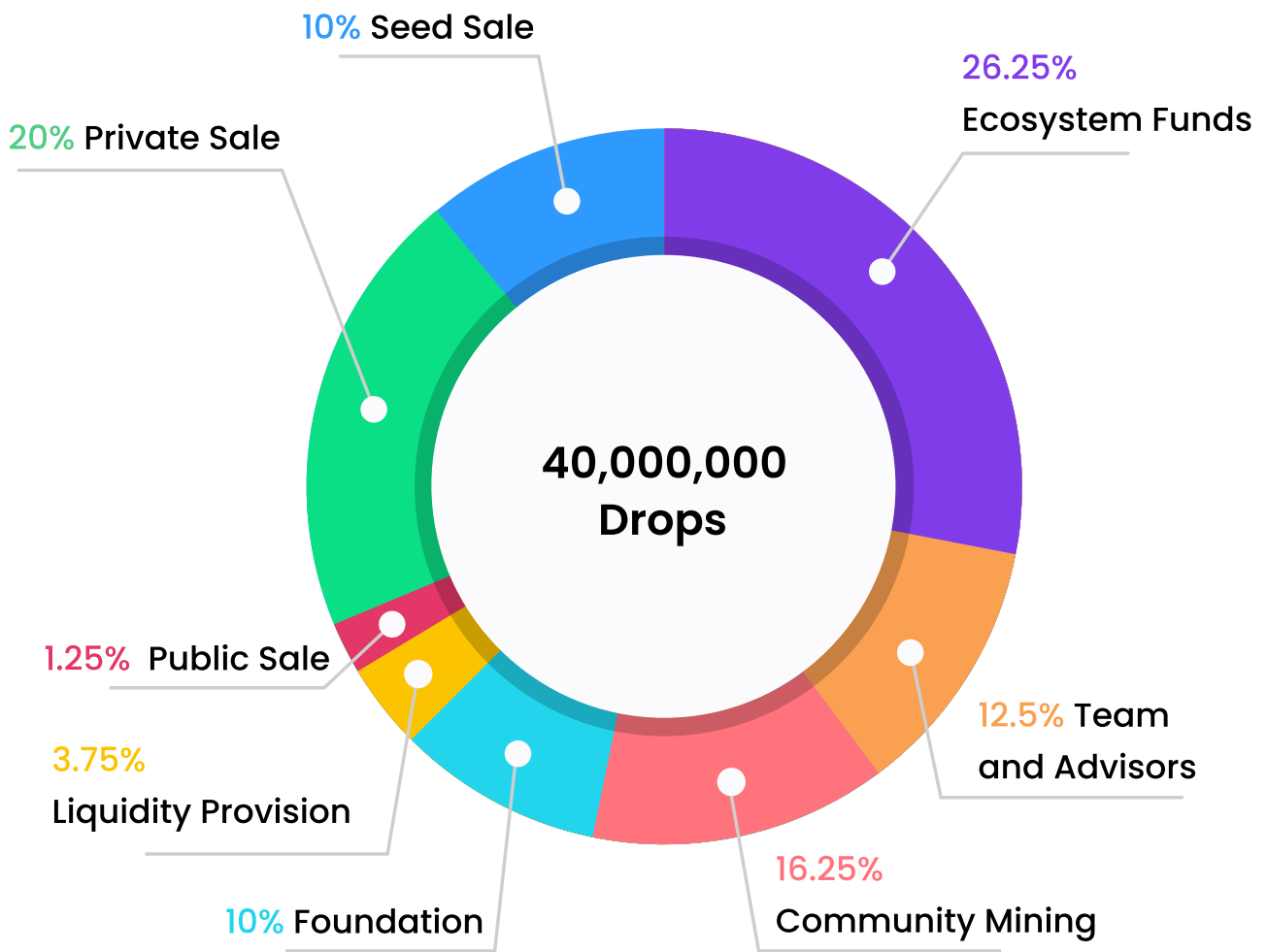
Droplet Social's main focus is providing a seamless user experience for users without the experience of blockchain technology. Therefore, the key priority for the illustrators is providing a seamless process of converting digital artworks for NFT.

The alpha version of the NFT marketplace will be available to the users by the end of first quarter of 2021.
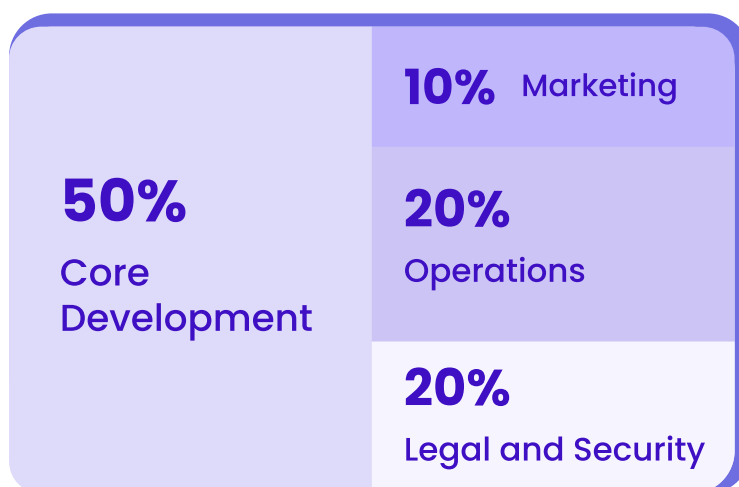
Drops Token

10% Seed Sale

20% Private Sale

26.25%
Ecosystem Funds

**40,000,000
Drops**

1.25% Public Sale

3.75%
Liquidity Provision

12.5% Team
and Advisors

10% Foundation

16.25%
Community Mining

Funds Allocation

10% Marketing

50%
Core
Development

20%
Operations

20%
Legal and Security

25.

Funds Allocation

The funds raised through the different rounds of sale will be used for the development of Droplet Social. We have a structured plan for the usage of funds which will reduce the impacts of cryptocurrencies' price volatility to achieve our long term objectives and goals.

While Droplet Social's alpha version is live, we have further development plans to Our first step in progress is that we have already made our Alpha version of the Droplet live. With the total raise quoted, and if we are able to secure the funding. In this scenario, given the volatility of ETH and SOL, Droplet will be hedging up to 50% of the funds raised into a Stable token such as USDC to provide a 20 month smooth runway for our goals to be achieved

Token Utility

Droplet Social has a native utility token based on the Solana Program Library. The DROPS token will increase its use case as more users onboard to the platform. Users of the application will use DROPS token for borderless payments, purchases, and governance.

Roadmap
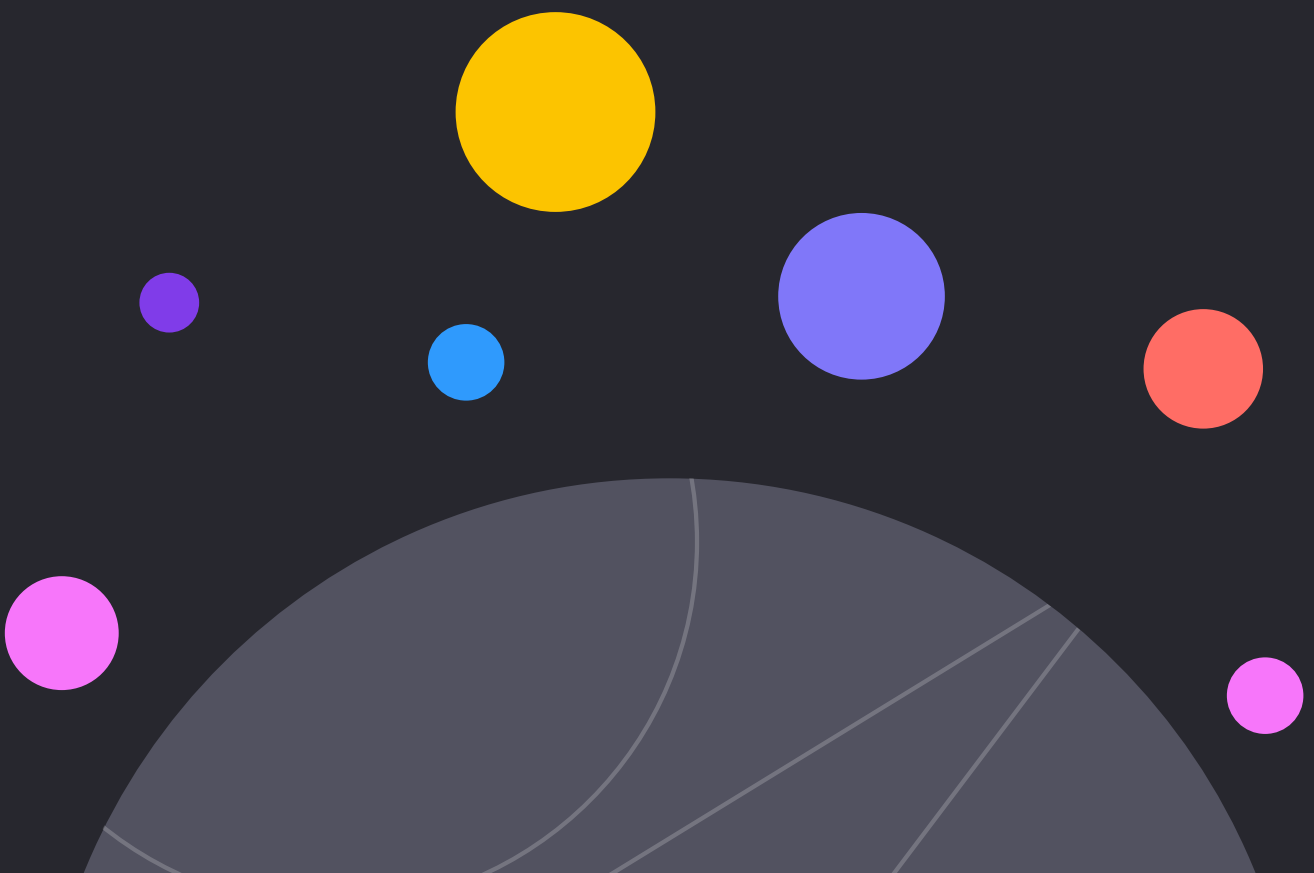
2020 October

- Market Research
- Platform Design

2020 December

- Alpha Release of Droplet Chat

2021 Q1

- Token Sale of DROPS
- Drop Chat Mobile App Release
- Droplet NFT Marketplace

2021 Q2

- Governance Implementation
- Telegram Integration

2021 Q3

- Multi Language Support
- Themes for the Chat Screen
- Tokenized Permissioned Chat Groups

2021 Q4

- Instant Token Swaps
- Portfolio Tracker
- Crypto Chat Bots

28.

Team

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Designer

Disclaimer

This whitepaper serves the purpose to present an overview of Droplet Social. The information presented on this whitepaper is not comprehensive and should not be relied upon as the sole source of knowledge.

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Droplet

Whitepaper

v. 1.0