



**Viblos**

Video Blog Society

## **A Next-Generation Tokenized Social Interaction Platform**

Whitepaper Version 1.0

June 2021

## Executive Summary

Over the last ten years, mainstream social media platforms such as Facebook, Instagram, and Twitter have evolved, from simple entertainment venues to become the cornerstone in the way of life of the communities. Right now these sites are owned by a handful of major platforms that completely dominate the online world. While there is no doubt that these platforms provide reasonable services to consumers, these benefits come at extremely high costs that most users are not even properly informed about. And this is because the vast majority of users do not carefully read all the terms and conditions that they automatically accept when subscribing to a social network. Besides disregarding users' privacy, their algorithms and political orientation are biased when rating contents, the main social network platforms have entered into a dynamic that is dangerous for our freedom of expression.

Nor should we forget that many platforms are increasingly facing sanctions from different governments. At Viblos, we believe that a mixed model of centralization and decentralization with the use of Blockchain is the key to solve the problems that traditional social networks currently have.

Viblos is a tokenized mixed social network that supports social interactions and community creation based on democracy and freedom of expression. Of course, there are limits that should not be exceeded but Viblos will never demonetize or censor anyone for having a different opinion. That is unfortunately the path that most of the big platforms have decided to take.

Our platform not only combines concepts from the major social networks but has introduced a new business model and pioneering privacy policies in the social networking arena further reinforcing this with its Blockchain, which allows users to share and monetize their contents in a transparent, secure, and verifiable way. The engine of the Viblos ecosystem will be the Viblo token. Users can use these tokens, send and receive payments for their creative contents.

We are convinced that Viblos is going to show the way, not only in terms of a totally novel business model where the passive user can also make an economic profit but most importantly, in terms of privacy policies, which are not oriented to targetize and steal the user's privacy.



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## 1.0 Introduction

Sharing is an essential human experience, and the growth of social networks has opened unprecedented avenues for achieving this experience. The past ten years have witnessed a massive increase in social networks' membership because of the personal experiences they offer. According to DataReportal, there are 4.33 billion active social media users around the world as of 2021<sup>1</sup>.

This translates to over 55% of the world's population and more than 90% of global active internet users<sup>2</sup>. In addition, recent statistics show that an average user spends more than two hours and 25 minutes on social networks in 2020, up from two hours and 22 minutes the previous year<sup>3</sup>.

At the same time, approximately 67% of the world's population has mobile phones, with smartphones accounting for more than 75% of all mobile devices in use. Moreover, the proliferation of mobile devices has further fueled the growth of social networking social networks, since most mobile phone users use them to access these platforms.

The increasing amount of time spent on these networks has created new opportunities for marketers and other campaigns while also providing valuable insights into user behaviors. When social networks launched, their revenue model was largely hinged on advertising and sales.

To remain sustainable, these platforms started by gathering personal data to help them learn about different user tastes and preferences. However, offering the platform for users to watch content was not enough. As such, the social media platforms evolved

by motivating producers to generate creative content that marketers can use for advertising.

Their strategy was very simple: drive advertising buyers to the channels that had the most views. Unfortunately, only a few can generate relevant revenue through content creation.

The business model of many of these platforms does not meet the wealth generation expectations of the vast majority of users. The following section explores what were the challenges of conventional social networking platforms.

1 "Global Social Media Stats — DataReportal — Global Digital Insights," accessed June 6, 2021, <https://datareportal.com/social-media-users>

2 "Digital Around the World — DataReportal — Global Digital Insights," accessed June 6, 2021, <https://datareportal.com/global-digital-overview>

3 "Daily Social Media Usage Worldwide," Statista, accessed June 6, 2021, <https://www.statista.com/statistics/433871/daily-social-media-usage-worldwide/>

## 1.1 Challenges of Traditional Social Media Platforms

Five primary hurdles are facing conventional social media networks including:

- Unequal monetization strategy
- Privacy concerns
- Government censorship
- Security
- Proliferation of fake content

### 1.1.1 Lack of Monetization

Entertainment platforms such as Netflix, YouTube, and SoundCloud incentivized content producers while at the same time controlling the way users consumed this content.

Unfortunately, this was not the case for platforms such as Facebook, Instagram, or Twitter, which have achieved a massive membership and content consumption without users being able to monetize their content<sup>4</sup>.

According to Social Media Examiner, about 3,500 advertising impressions (CPM) represent a meager US\$8.75 per month for the content creator<sup>5</sup>. In addition, some platforms do not compensate creators at all, or worse, they stop monetizing them simply because they share opinions that are not in line with the political orientation held by the platforms. In 2017, for example, Barack Obama created the most liked tweet that trended for months but received no incentive for doing so.<sup>6</sup>

Similarly, Helen Green —a famed artist—created a GIF about David Bowie upon his passing, which had millions of views. Unfortunately, Helen ended up losing all credit for this GIF when the file then began circulating among multiple users on Instagram and Tumblr.

Numerous creators of conservative-leaning content have been penalized by losing monetization or even having their account closed, even though they did not actually violate any rules, they were demonetized or canceled simply because their opinions do not fit with the monolithic vision of many of these companies. The platforms hide behind the argument that they are private companies and that users accept their terms and

conditions. At Viblos we believe that this argument is very fragile since the existence of all these platforms basically depends on the expression of users and we think that this is a fundamental right that should not be violated. In other words, social platforms could not exist without the expression of their users. Wanting to take advantage of them without giving them the right to financial compensation is already unethical in itself, but if on top of that some content creators will be punished or demonetized, just because Mr. Zuckerberg or whatever the head of the platform is called does not like to hear opinions that he does not share, we are entering a spiral of censorship that is not in accordance with one of the fundamental pillars of freedom and this is none other than freedom of expression.

Viblos does not defend nor represent any political tendency but we seek to defend and protect something that we consider a right of every human being: Freedom of expression.

4 "Facebook: Annual Revenue," Statista, accessed June 6, 2021, <https://www.statista.com/statistics/268604/annual-revenue-of-facebook/>

5 by, "How to Monetize Your Facebook Video With Facebook Ad Breaks : Social Media Examiner," Social Media Examiner | Social Media Marketing (blog), accessed June 6, 2021, <https://www.socialmediaexaminer.com/how-to-monetize-facebook-video-facebook-ad-breaks/>

6 "Obama's Charlottesville Tweet Is Most Liked in Twitter History – CNNPolitics," accessed June 6, 2021, <https://edition.cnn.com/2017/08/15/politics/obamas-charlottesville-tweet/index.html>

## 1.1.2 Privacy Concerns

In recent years, privacy concerns about social media platforms have spiked. Incidences of data breaches are increasing by the day, forcing users to rethink their relationships with the platforms and their data security.

While most networks provide settings where users can control how their information gets shared with third parties, it is not enough to guarantee privacy. This problem gets compounded by weak user passwords that hackers and companies can easily exploit.

According to Pew Research, almost four in ten users on social media platforms use the same password across different accounts<sup>8</sup>. The Cambridge Analytica scandal, where over 50 million users were exploited to influence the U.S. presidential election in 2016, is a textbook example of how social media companies can interfere with user privacy<sup>9</sup>.

This case also illustrates the lengths to which social media platforms are willing to go to maximize profits by interfering with users' privacy. It also shows how weak the centralized platforms are in terms of safeguarding user data.



7 Valley Voices, "How The Blockchain Can Solve Social Media's Biggest Problems," Forbes, accessed June 6, 2021, <https://www.forbes.com/sites/valleyvoices/2018/02/28/how-the-blockchain-can-solve-social-medias-biggest-problems/>

8 "Americans, Password Management and Mobile Security | Pew Research Center," accessed June 6, 2021, <https://www.pewresearch.org/internet/2017/01/26/2-pass-word-management-and-mobile-security/>

9 "Cambridge Analytica and Facebook: The Scandal and the Fallout So Far - The New York Times," accessed June 6, 2021, <https://www.nytimes.com/2018/04/04/us/politics/cambridge-analytica-scandal-fallout.html>

### 1.1.3 Government Censorships

Social networks have emerged as de facto public squares in most countries, and governments are adopting various approaches to regulate them. Censorship is one such approach that some governments have taken.

Although users can use virtual private networks (VPNs) to navigate restrictions, some governments crackdown on VPN services, rendering access to social media content impossible. Without social media, users in these countries get disenfranchised as they cannot interact with their peers.

### 1.1.4 Security

Cybercriminals often target social media platforms because they are major points of vulnerability in many businesses. The most common forms of attacks that can compromise security in conventional social media platforms include denial of service (DOS) attacks, malware, phishing, and ransomware.

In the recent past, leaked data from these platforms have ended up on the dark web leading to a spike in crimes such as credential stuffing.

### 1.1.5 Lack of the right to erasure mechanisms

Mainstream social networks collect data directly from users (about themselves) and indirectly when other users post data regarding their friends on the network. As a result, these networks end up sharing information that those users would never choose to share about themselves.

Once shared, this information becomes instantly accessible to millions of users. Various regulatory agencies such as the European Union (EU)'s General Data Protection Regulations (GDPR) have formulated the "right to be forgotten" rules to resolve this challenge. However, interpretation challenges have clouded its implementation, leaving users at the mercy of social media giants.

### 1.1.6 Proliferation of Fake Content

Sharing authentic information on social media platforms without evaluating its credibility is a big challenge for users. For example, in January 2020, many myths began swirling around on Facebook and WhatsApp about the supposed treatment for the coronavirus pandemic that was later debunked.

Besides harming public discourse, fake content can lead to misinformed decisions regarding users' well-being. While most platforms provide fact-checking options to verify the authenticity of the content on their sites, it is not enough to curb fake news because of information overload.

## 1.2 Problem Statement

Mainstream social networks provide decent services at extremely high costs to users and creators. Unequal monetization strategies, privacy concerns, government censorship, security concerns, and proliferation of fake content are some of the problems bedeviling these networks.

This is possible because social networks are centralized and have monopolies. For example, because Facebook has a monopoly over a friend's network, a user cannot leave it because everyone is on the platform. Similarly, switching to a different platform is costly because it involves creating a new account and rebuilding the new network, which is problematic.

At Viblos, we believe the solution to these problems lies in a decentralized social network that is encrypted at rest. When social media users have the keys to encrypt and decrypt their own data, they have complete control and can grant and revoke access to third parties.

Blockchain can create such an environment that monetizes content creation and use and safeguards against government censorship. Such an environment would also ensure users' data remain secure and private and content shared is authentic.





## 1.3 Mission and Vision

Our vision is to democratize social media networks to drive businesses and wealth creation for consumers and content creators. We will push forward this vision by accomplishing the following tasks:

- Granting ownership of content to creators.
- Incentivizing creators to generate authentic content.
- Eliminating fake news via a verifiable and transparent system of content production and consumption.
- Implementing the right to erasure to allow individuals to choose whether they want their content to remain on Viblos or not.

Our mission is to bring together people's interests and do business via an open and decentralized social network. Furthermore, we want to give value to any creative content, allowing users to develop their talents while creating a direct connection between the public and content producers in a completely decentralized way.

Viblos also intends to establish a common thread and communication channel between celebrities and influencers and their network to empower and develop their businesses. Put simply, we are a go-to platform where your wishes and dreams can come true, from being a singer to creating your own business. Our mantra is: one minute is enough; everything is possible within Viblos.

## 2.0 Genesis of Blockchain Application in Social Networks

Blockchain is the main technology underpinning Viblos and resolves two primary concerns in mainstream social media networks: consolidated central ownership and equal monetization strategies. This section explores what Blockchain is, how it can be used in social media networks, and its advantages.

### 2.1 What Is Blockchain?

Blockchain is a kind of decentralized database<sup>10</sup>. It is decentralized because all users have access to an exact copy of the database and can even modify it. This is compared to databases such as Oracle or MySQL, which only have one copy stored on a centralized server.

The other key difference is the way Blockchains store data. Blockchains store data in blocks then use cryptography to link the blocks together. Once the data is stored, it is immutable, meaning it is permanent and cannot be updated or changed.

Centralized databases are not immutable and do not use blocks for storage. In fact, data stored in relational databases can be easily updated. As data gets posted to the ledger on a Blockchain for storage, it goes into a new block.

When the block gets filled with data, the block is verified and then chained to the previous block of data in chronological order hence the name, Blockchain. When a new block is verified and chained, the block includes a cryptographic hash of the previous block, which consists of all previously confirmed blocks in the chain.

Think of hashing as a process or function that takes an input string (of any length) and converts it into a fixed-length output. In the context of Blockchain, this involves using a hashing algorithm to convert transactions (which can be of any length) that get stored as fixed-length strings<sup>11</sup>.

10 "A Michael Nofer et al., "Blockchain," Business & Information Systems Engineering 59, no. 3 (2017): 183–87.

11 Marc Pilkington, "Blockchain Technology: Principles and Applications," in Research Handbook on Digital Transformations (Edward Elgar Publishing, 2016)

If an attempt is made to change any of the previously chained blocks, the hashing algorithm recognizes the change, and the verification process will fail. This built-in security feature makes it almost impossible to successfully hack, change, or corrupt any previously verified blocks.

Blockchains are decentralized, meaning that a single organization or central authority does not control the data stored in Blockchains. In contrast, centralized databases are controlled by an enterprise or organization that can easily change or manipulate the records.

Blockchain does not rely on a centralized entity to validate transactions because it has its own rules enforced in a consensus algorithm. All the nodes must agree on the transaction's validity in a consensus-based system to be appended on a particular block. In instances where majority nodes fail to reach consensus, the transaction is rejected.

The primary objective of any consensus mechanism is to ensure that the status of the ledger remains intact. Each Blockchain

has its own consensus rules. Some popular examples of consensus algorithms include<sup>12</sup>:

- **Proof-of-work (PoW).** PoW is the underlying consensus algorithm for Bitcoin. In a PoW-enabled consensus, any node has a chance to validate transactions and append them to the block. However, before confirming such transactions, the nodes must compete against each other using computational resources such as CPU or GPU to solve a complex cryptographic problem. In the case of Bitcoin protocol, this process can take roughly 10 minutes. A node that successfully solves the computational problem gets incentivized in the form of coins or tokens. While PoW secures most Blockchains such as Bitcoin and Ethereum, it is computationally intensive and not environmentally sustainable. It is also vulnerable to 51% attacks in instances where there is heavy mining centralization.
- **Proof-of-stake (PoS).** PoS is the underlying consensus protocol for most Blockchains, including Polkadot, EOS, and Cardano. Unlike PoW-enabled consensus that require nodes to solve the complex mathematical problem via computation resources, PoS allows miners with the highest stake in the system to validate transactions. Under this framework, only nodes with the highest number of coins can validate transactions.

- **Proof-of-burn (PoB).** As the name suggests, PoB requires validators to “burn” their coins as a condition for earning a random privilege to mine on the ecosystem. Validators who burn their coins automatically make a long-term commitment to validating blocks in exchange for their short-term loss. Slim coin is one example of Blockchain that uses PoB.
- **Proof-of-elapsed-time (PoET).** PoET is by far the fairest of all the consensus protocols. Rather than using computational power or a staking method, PoET gives all the nodes in the ecosystem a fair chance to participate in mining. All the nodes wait for a random amount of time and additional proof of their waiting in the block. A node with the least timer value in the proof part becomes the validator. PoET is widely used in permissioned Blockchains like HyperLedger Sawtooth.

Not all Blockchains are the same. While Blockchains may have variable features, “openness” and level of permissions distinguish various Blockchains. Concerning openness, there are two categories of Blockchains: public and private<sup>13</sup>.

1. **Public Blockchains.** Public Blockchains are open networks. Their records are publicly available, and any user can read or write on the ledger. No entity has control over access and storage of data on public Blockchains. Bitcoin is by far the most popular public Blockchain. In this Blockchain, the data is the entire history of all the transactions stored on the ledger. If one node has an error, the system can use thousands of other nodes to adjust itself. Ethereum is also a public Blockchain with its own virtual currency, called Ether (ETH).

12 Leo Maxim Bach, Branko Mihaljevic, and Mario Zagar, “Comparative Analysis of Blockchain Consensus Algorithms,” in 2018 41st International Convention on Information and Communication Technology, Electronics and Microelectronics (MIPRO) (IEEE, 2018), 1545–50.

2. Private Blockchains. Private Blockchains—also called enterprise or permissioned Blockchains—allow only a select group to access and modify the ledger. This is unlike Public Blockchains, where any node can access and even append transactions to the block. Popular examples of private Blockchains include Corda, HyperLedger Fabric, HyperLedger Sawtooth, and Quorum.

13 Pilkington, "Blockchain Technology."

## 2.2 Blockchain Use in Social Networks

The technology behind mainstream social networks and their commercial applications is already established. However, for Blockchain-based social networks, a class of platforms has emerged to offer new governance structures and economic incentives. In this context, Blockchain has four inherent features that can allow such a network to thrive:

- Openness
- Immutability
- Tokenization
- Public reputation system

### 2.2.1 Openness

Blockchains are open-source systems that can allow any user to create, curate, and consume multimedia content. Creating an account on the platform is free—anyone can create an account regardless of gender, age, ethnicity, or social background.

Similarly, creating and accessing content is free, provided the user has enough tokens on the platform. Additionally, users

can access the back-end components of a Blockchain-powered social media network if they have sufficient tokens.

### 2.2.2 Immutability

Transactions are irreversible once they get validated and added to a block. Any user can always access such content and audit it for its authenticities.

### 2.2.3 Tokenization

Blockchain uses decentralized incentivization mechanisms that compute the value of each token holder in the ecosystem. Using a framework like this allows the platform to reward users with tokens, allowing producers to monetize their content while incentivizing users to promote good behavior. Token holders can use tokens on the platform to send encrypted content, share it, and receive payments.

### 2.2.4 Public reputational system

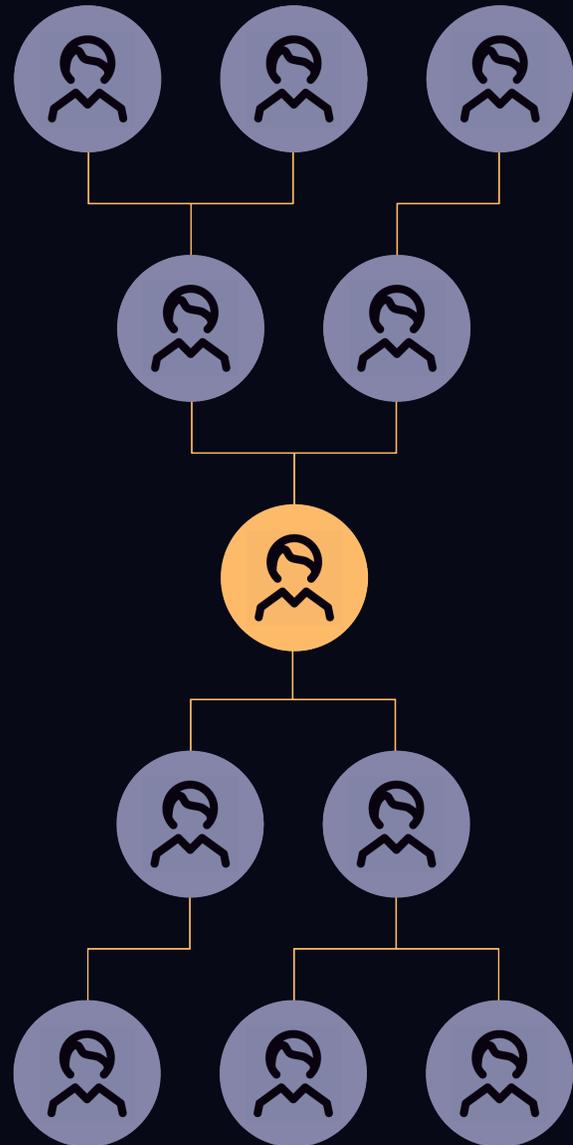
Tokenization can encourage users to openly and transparently evaluate each other's actions. Users can then earn tokens when they create and curate quality content. A reputational system like the Karma protocol can promote fairness and transparency by incentivizing members who contribute positively<sup>14</sup>.

14 Vivek Vishnumurthy, Sangeeth Chandrakumar, and Emin Gun Sirer, "Karma: A Secure Economic Framework for Peer-to-Peer Resource Sharing," in Workshop on Economics of Peer-to-Peer Systems, vol. 35, 2003.

## 2.3 Benefits of Blockchain Use in Social Media Networks

A Blockchain-powered social media network has numerous benefits. Below are a few of them:

- **Enhanced privacy.** User privacy on most mainstream social media sites is challenging because the platforms are monolithic and centrally governed. This makes them vulnerable to privacy infringements and government controls. A Blockchain-enabled social media network, on the other hand, allows peer-to-peer (P2P) sharing of information where only twoparties know about the transaction.
- **Users can permanently store their content.** Mainstream social media networks are centralized, meaning users' content can be edited or deleted without their consent. With a Blockchain-powered social network, users can store their content permanently because of the immutability property.
- **Creators get paid for their content.** Users gain complete control over how their content gets distributed on a Blockchain-enabled platform. This distribution capability allows them to profit from their work. Additionally, users also get rewarded for sharing the content.
- **Users can access quality content.** Blockchain function services such as personal verification and content authentication can be integrated into social media networks to ensure quality content. Besides verifying IDs and posts, Blockchain can also make data collection on these platforms easier.



### 3.0 Viblos Ecosystem

Viblos falls into the Internet of Things (IoT) and the internet of people (IoP) categories. We are implementing this platform to allow content creators to make an honest living by giving value to their talents and various social interactions.

#### 3.1 IoT and IoP

Current social media networks are infrastructure-centric and cannot cope with the emerging demands of contemporary society. We are radically reengineering the whole concept of cyber-physical convergence to enhance tighter social interactions via an open, transparent, verifiable, and secure platform.

Viblos is a paradigm shift in how humans and their devices connect to generate value from their data. Through Viblos, we are introducing a new concept called “value of people” or simply VoP by showcasing talents from an artistic and entrepreneurial perspective.

The platform will use decentralized entities to measure users’ reputations and rank them via a tokenization mechanism. We believe a decentralized reputational mechanism can foster the growth of the social network instead of the current centralized social networks that are monolithic and opaque.

In this regard, decentralization can allow artists and entrepreneurs to validate their arts or projects before putting them into the marketplace. This ensures a high degree of confidence that their content is worthwhile and can succeed. In addition, entrepreneurs, celebrities, and influencers will also

have an opportunity to increase their sales via publicity and promotion within the Viblos ecosystem.

Users will also benefit from VoP when they establish relationships that favor the connection of common interests. These forms of relationships can generate new forms of business and generate revenue for users.

#### 3.2 Viblos Stakeholders

The diagram below summarizes various stakeholders in the Viblos ecosystem:



Figure 1: Viblos stakeholders

### 3.2.1 General users

Mainstream social network users get flooded with numerous advertising services that affect their personal lives. Their navigation habits are meticulously tracked and monetized without their knowledge. Viblos will create value for its users by creating a tokenized social media network that incentivizes them.

Because of Blockchain's openness and immutability characteristics, Viblos will also promote creative expression and censorship-resistant freedom of speech currently lacking on mainstream social media networks.

### 3.2.2 Content creators

The unveiling of the internet was supposed to usher in a revolutionary ecosystem for creatives of every kind. This is because it provides new tools, specific formats, and channels that any content producer can leverage to create powerful content that gets monetized across multiple platforms.

While content creators create compelling content, they have little to no control of how this content gets published and monetized. In the recent past, centralized social networks have been shifting goalposts that disenfranchise content creators. For example, in 2018, YouTube controversially changed its monetization policies that disappointed many content producers<sup>15</sup>.

Viblos is implementing a disintermediated and decentralized platform based on direct revenues for its content producers. The platform will also allow content producers to validate their works before putting them on the marketplace via a tokenization

model. In addition, enabling content producers to test-drive their works proves that their content is monetizable.

15 Julia Alexander, "YouTube's New Monetization Rules Are Controversial, Painful and Necessary," Polygon (blog), January 18, 2018, <https://www.polygon.com/2018/1/18/16906036/youtube-monetization-small-creators-top-creators-changes>

### 3.2.3 Marketers

Social networks have emerged as the primary go-to platforms where advertisers can market their products because they have many users. But the private data that these platforms collect about their users turn away most individuals, which affects advertising initiatives for most marketers.

According to MarketingDive, 40% of users do not trust traditional social media advertising initiatives. A disintermediated and decentralized social network can mitigate these challenges and make social media marketing thrive for marketers' benefit.

Viblos is one such platform that will allow marketers and entrepreneurs to engage with organic communities, thanks to its algorithmic transparency and tokenization model.

## 3.3 Viblos Features

Viblos uses the concepts learned from traditional social media platforms and decentralized platforms to create a transparent platform that allows users to create and monetize their content.

### 3.3.1 User profiles

Viblos will leverage cryptography to create secure user profiles. Each Viblos user will have a public/private key pair that identifies their identity on the social network. The public/private key pair will form the basis for all forms of social interaction on the platform, including tokenization aspects.

The platform will integrate with various crypto exchanges to allow users to exchange fiat into Viblo tokens to participate on the network. Equally, users will also convert their Viblo tokens into fiat currency

### 3.3.2 Friending and following

The platform will allow users to befriend one another. Befriending a user on Viblos establishes a shared secret (symmetric key) with them to facilitate encrypted communication. It also allows one to refer to the friend as a way of public recognition. Following a user on the platform will entail periodically reading their profiles.

### 3.4 Viblos groups

In the Viblos ecosystem, each user can create a unique group and key for each audience they want to publish to. Once the group gets created, a user can add and remove users as they deem fit.



### 3.5 Sharing content

Sharing content is a core tenet of the Viblos platform. The platform will allow users to broadcast curated content to their connections, groups, or specific users. In addition, Viblos will incentivize general users who share curated content by allocating them some Viblo tokens. Sharing content will also generate brand awareness for marketers who want to use the platform for advertising their products.

### 3.6 Messages, comments, and other posts

The primary method of sharing content on the Viblos ecosystem is via messages, comments, and other posts. Users can create and share videos, text, and any multimedia content on the platform openly and transparently.

### 4.0 Technical Specifications

For Viblos users to truly own their data, they must determine who has access to their data and profile with fine granularity. The platform must also encrypt each post once created and grant the users the permissions to access it.



## 4.1 Binance Smart Chain

Viblos will be implemented on top of the Binance Smart Chain (BSC) as an underlying Blockchain. Like Ethereum, BSC boasts of smart contract functionality. It is also Ethereum Virtual Machine (EVM)-compatible which means its BEP-20 standard extends Ethereum's ERC-20<sup>16</sup>.

Because BSC is EVM-compatible, it also supports a rich universe of Ethereum's ERC-20 token standards, which has many decentralized applications (DApps). Theoretically, developers can port their BEP-20 token-based projects over from Ethereum and vice-versa. Users can also use Ethereum applications like MetaMask to configure BSC wallets.

BSC has gained popularity in recent times to become a strong contender to Ethereum because it has higher throughput. For example, it can achieve an average of three seconds block time compared to Ethereum's current 13.22 seconds<sup>17</sup>. This is because it leverages a proof-of-staked authority (PoSA) consensus algorithm, which is faster than PoW and PoS.

BSC can enhance both transaction speeds and scalability that other Blockchains like Ethereum cannot achieve when used in social networks. And because Binance Chain (BC) and BSC share the same token ecosystem, users can seamlessly circulate the same token in both networks via cross-chain communication.

<sup>16</sup> "An Introduction to Binance Smart Chain (BSC)," Binance Academy, accessed June 9, 2021, <https://academy.binance.com/en/articles/an-introduction-to-binance-smart-chain-bsc>

<sup>17</sup> "Ethereum Average Block Time," accessed June 9, 2021, [https://ycharts.com/indicators/ethereum\\_average\\_block\\_time](https://ycharts.com/indicators/ethereum_average_block_time)

## 4.2 Viblo Token

A Viblo token (Viblo) is the fundamental unit of account on the Viblos network. It is a native BSC-compatible BEP-20 token that we have explicitly designed to facilitate transactions on the Viblos platform. As a native token, Viblo can be purchased or sold on major cryptocurrency exchanges.

Since the BEP-20 token standard is compatible with ERC-20, we believe Viblos will become a standardized, decentralized social media platform. As such, users can seamlessly interact and transfer tokens from other ERC-20 platforms. Examples of incentivized activities that Viblo will facilitate include:

- Sending Viblo to other users. Users can transfer their Viblo to other users on the platform.
- Buying licenses for content. A user can buy licenses for various content such as videos and photos on the platform.
- Exchanging Viblo for fiat. Users can exchange Viblo for fiat or other cryptos directly through their wallets.
- Earning rewards. General users can get rewarded via Viblo when they share content on the Viblos platform.



## 4.3 Network Architecture

The diagram below summarizes the architecture of the Viblos platform:

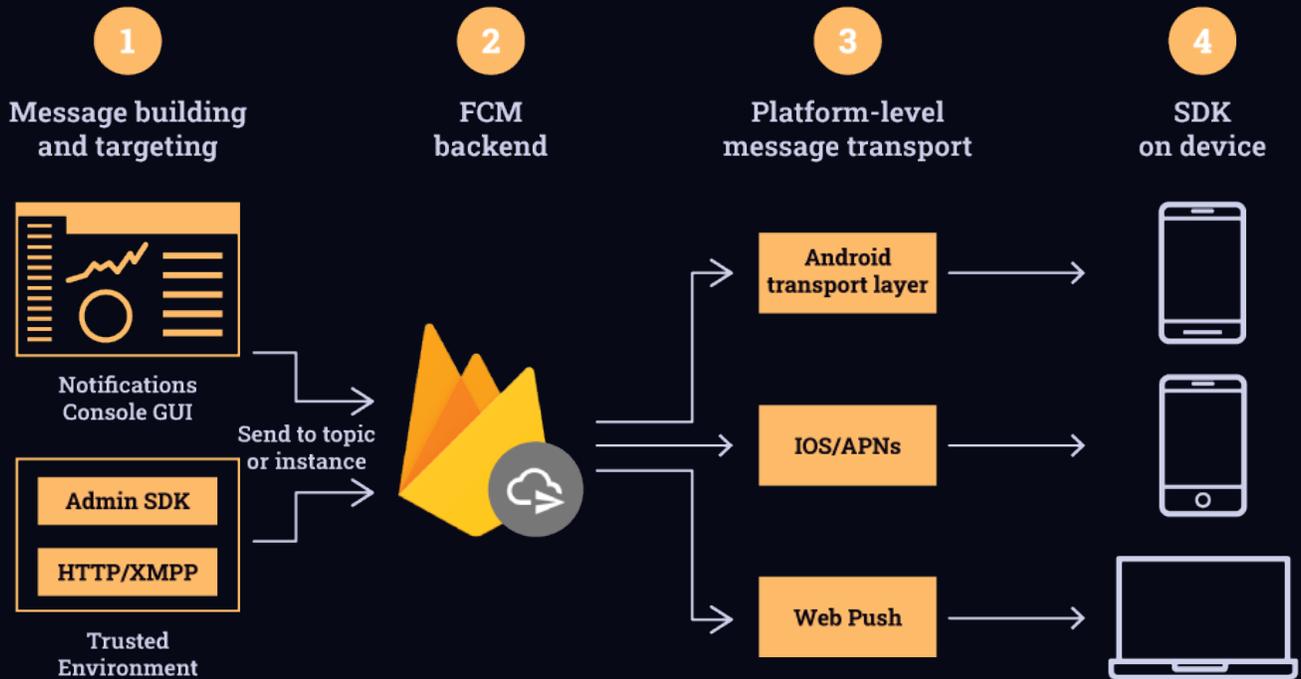


Figure 2: Viblos network architecture

### 4.3.1 Message building and targeting

Viblos will leverage cryptography to create secure user profiles. Each Viblos user will have a public/private key pair that identifies their identity on the social network. The public/private key pair will form the basis for all forms of social interaction on the platform, including tokenization aspects.

The platform will integrate with various crypto exchanges to allow users to exchange fiat into Viblo tokens to participate on the network. Equally, users will also convert their Viblo tokens into fiat currency.

Message building and targeting is the main module for the Viblos network. It is comprised of two primary components:

- **Notifications console.** It is a GUI-based platform that will be responsible for transmitting messages to users.
- **Admin SDK.** It allows users to perform administrative operations on chats, groups, and other settings for their accounts.

### 4.3.2 FCM Backend

The FCM Backend accepts message requests, converts them into consumable units such as topics, and generates metadata.

### 4.3.3 Platform-level message transport

It routes a message or post to a targeted device and handles the message transmissions. The platform-level message transport also applies various platform-specific configurations when necessary. The transport layer includes:

- Android transport layer (ATL), which handles Android-based devices.
- Apple Push Notification (APNs) service that handles iOS devices.
- Web push protocol that handles web applications.

### 4.3.4 SDK on a device

This is the last layer in the architecture of the Viblos platform. Once the message gets displayed, this layer handles it according to the application's foreground and background states.

## 5.0 Market Overview

Social networks have transformed the world, revolutionizing how users engage and changing marketing as we used to know it. In little more than a decade, their impacts have gone from just entertainment tools to a fully integrated fabric of society. Today, going by various studies, the market size for social networks is enormous.

According to ResearchandMarkets.com, the global social network market accounted for US\$41.31 billion in 2018. The study projects the market size to grow at a compound annual growth rate (CAGR) of 17.1% to reach US\$171.03 billion by 2027<sup>18</sup>.

A similar estimation by the Business Research Company shows that the global social media market size will grow at an average CAGR of 32% from US\$102.62 billion in 2021 to reach US\$ 308.96 billion by 2025. While social networks vary in popularity with different demographics, these studies show an evolving society increasingly reliant on social media to weave society into a single fabric.

Facebook tops the worldwide chart of all the social networks, accounting for over 2.85 billion monthly active users as of 2021, followed by YouTube with over 1.9 billion users. Similarly, Facebook also tops all the other social networks when it comes to annual revenues. Its revenue amounted to approximately US\$ 86 billion in 2020, up from US\$ 70.7 billion in 2019<sup>19</sup>.

18 Research and Markets, "Social Media Market Study 2020: Analysis by Type, Application, Region and Company," GlobeNewswire News Room, May 5, 2020, <https://www.globenewswire.com/news-release/2020/05/05/2027283/28124/en/Social-Media-Market-Study-2020-Analysis-by-Type-Application-Region-and-Company.html>  
19 "Facebook."

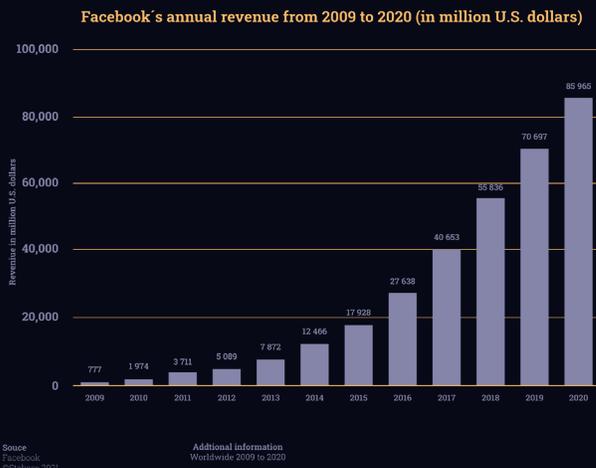


Figure 3: Facebook annual revenue

Some factors driving the growth of social media networks include the growing use of mobile phones. For example, nearly two-thirds of the world's population own mobile phones, with smartphones accounting for more than three-quarters of all the mobile devices in use.

The increasing popularity of social networking has created new opportunities for social media giants such as Facebook and Google, who have continued to exploit users' data for their own gains. Other issues such as lack of privacy mechanisms, lack of the right of erasure, and proliferation of fake content have heightened calls for open, transparent, and secure social networks.

For example, citing Facebook's push to monetize its data Steve Wozniak—Apple co-founder—announced in 2018 that he was leaving Facebook<sup>20</sup>. In announcing the withdrawal, Wozniak said that the platform had not realized its potential. In addition, other high profile personalities such as Donald Trump—former President of the United States—were banned from Facebook and Twitter.

<sup>20</sup> "Apple Co-Founder Steve Wozniak Says He's Leaving Facebook," accessed June 9, 2021, <https://www.usatoday.com/story/tech/2018/04/08/apple-co-founder-steve-wozniak-says-hes-leaving-facebook/497392002/>

These issues point to sector-wide problems that cannot be solved via fact-checking solutions or banning users entirely from the platforms. Viblos is combining the lessons from these networks to create a truly open, transparent, verifiable, and secure platform where users can create and share content. We believe Blockchain holds the promise of unlocking the challenges currently bedeviling mainstream social networks.

## 6.0 Tokenomics

This section describes the Viblos tokenomics aspects, including the Viblo token, token allocation, and emission logic.

### 6.1 Viblo Token

The Viblo Token (Viblo) is the main engine on the platform, powering various transactions such as:

- Transferring VIBLO's to other users.
- Buying licenses for content.
- Exchanging VIBLO's for fiat.
- Earning rewards.

### 6.2 Token Specifications

The table below summarizes Viblos IEO specifications

Feature	Specification
Blockchain	BSC
Token name	Viblo Token (VIBLO)
Token supply	3,000,000,000 VIBLOS
Issuance price	1 VIBLO = US\$0.0009
Supported Sessions	TBD
Decimal	18
Burnable	Yes

Table 1: Viblo Token sale specifications

### 6.3 Token Allocation

The IEO intends to raise 3,000,000,000 VIBLO. Out of these, 20% (600,000,000 VIBLO) will be reserved for the founders, 10% (300,000,000 VIBLO) for early contributors, 5% (150,000,000 VIBLO) for marketing and promotion, 5% (150,000,000 VIBLO) for advisors and team, and 60% (1,800,000,000 VIBLO) for liquidity and staking rewards. The presale will be in force as of September 1, 2021 ending as soon as the Viblo Token is listed on the first exchange. The table below summarizes the token allocation specifications:

Item	Allocation (%)
Founders	20
Early contributors	10
Marketing and promotion	5
Advisors and team	5
Liquidity and staking rewards	60

### Token Allocation

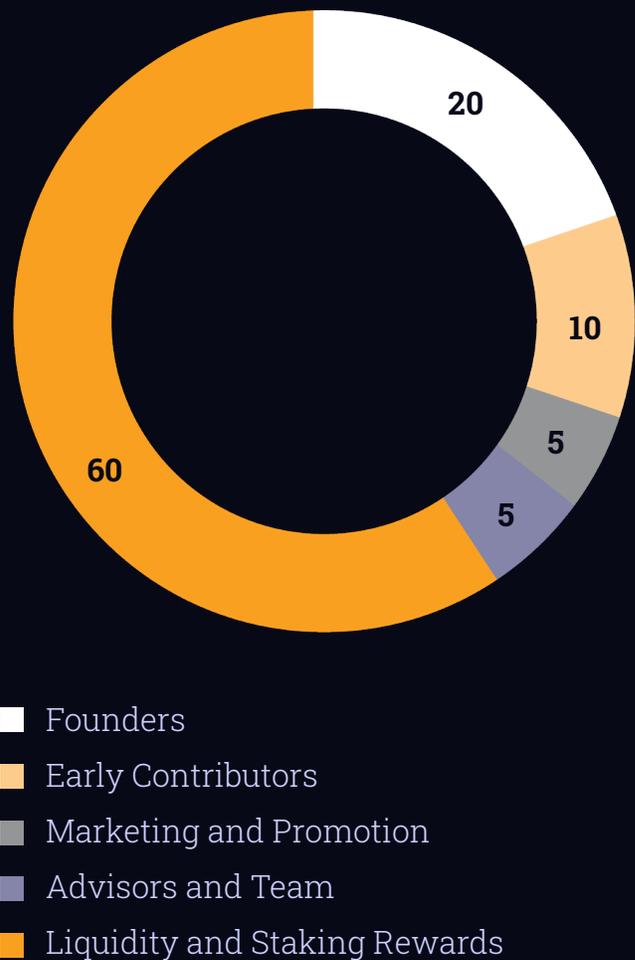


Figure 4: Token allocation

## 7.0 Roadmap

- Q3 2021**
  - Whitepaper
  - Project Kickoff
  - Hackathon
  - Prototype
  
- Q4 2021**
  - MVP Dev start
  - v 1.0
  - Catalog
  
- Q1 2022**
  - Closed Beta
  - Public Beta
  - PoC
  
- Q2 2022**
  - Go Live MVP
  - Open
  - Registration
  
- Q3 2022**
  - Go Live 1.0
  
- Q4 2022**
  - Token Integration
  
- Q1 2023**
  - Release 1.5



## 8.0 Team



**Daniel Schabron**

Business Developer\_Founder



**Carlos Pérez**

Founder and CEO of Viblos



**York Hovest**

CEO of Heroes Of The Sea



**Daniel Bauer**

COO Heroes Of The Sea



**Saskia Hovest**

PR of Heroes of the Sea



**Martina Diezi**

Public Relations



**Letizia Bucher**

Media Manager



**Dominique Manfredi**

Digital Business Development



**Miguel A. Pérez**

Finance Expert Consultant



**Héctor Bonet**

Law Expert

