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Our Vision for Mercury Protocol



Our Vision: Create Social Networking 2.0

Social networking platforms are currently held back by flawed principles and monetization strategies. <u>Mercury Protocol</u> will allow social networks to move forward by creating a tokenized social economy that decentralizes user data, incentivizes meaningful user actions, and discourages "walled garden" monopolies.

To accomplish this, Mercury Protocol is built around the concept of **Global Messaging Token (GMT)**, which will allow applications to incentivize meaningful user behavior in unique ways. Users, meanwhile, can use those tokens to exchange for premium services across any application integrated with Mercury Protocol.

GMTs aren't locked into particular applications or subject to value fluctuations like currencies, so users can leverage GMT freely on any platform that uses them—sort of like tokens at an arcade.

This is exciting because the details of *what* those "behaviors" and "premium services" can be on any individual platform is completely open to innovation. Attaching value to positive engagement and content creation are the obvious use cases, but the most interesting applications have yet to be imagined.

Learn more about our token launch event here

Social Networking 1.0: Network Effects, Advertising, and Monopolies

The story of building a social network comes in many flavors.

For Facebook, it's an open platform to connect the world; for Twitter, it's a virtual space for real-time conversations; and for Instagram, it's a place to connect via visual storytelling.

Once a valuable product is up and running, the next step is to acquire early users. If these users find the product engaging, the growth process or "network effect" can continue until they've earned a sustainable marketshare.



It's only once the product has <mark>"matured" t</mark>hat things start to stagnate or head south:

1. Monetization via Ads

Data is valuable, mature social networks naturally gather a lot of it, and so it's only natural that most will use it as a monetization tool. Before long, advertising and a deluge of lowest-common-denominator content marketing becomes a problem for actual users.

2. Growth over utility

The bigger these networks get, the more their focus shifts to attracting even more users. This requires collecting more data, adding tangential features, and other practices that water down the quality of the original product.

3. Harassment and trolling

Large social platforms (think Twitter, Reddit, HackerNews) become more vulnerable to harassment and trolling due to the sheer volume of users. Trying to control harassment and trolling in a network at scale is like trying to repaint a house with a toothbrush: you might get somewhere, but you definitely won't finish the whole house. Twitter is a good example of how this problem can veer out of control. Long-time users have a choice between dropping a network they've invested significant time and content into, or staying on board in spite of the degraded communication quality.

4. Monopolization of user attention

The end result of all this is a "winner-takes-all" scenario that leads to massive market shares for a handful of companies.

When monopolies dominate these markets, it becomes nearly impossible for new products to enter the market. From a user's perspective, most new social networks are only slight variations on the older ones, and it take a lot of energy to re-invest in a new platform and build your personal circle from scratch.

We know this from our experience building <u>Dust</u>, a private and secure mobile messenger. We built <u>Dust</u> with the goal of making users feel as comfortable having digital conversations as they do in person. Unlike other platforms that store data on hard disk, <u>Dust</u> temporarily stores all messages in-memory (RAM), leaving them unrecoverable once deleted.

Competing with existing messaging giants like Messenger, and WhatsApp is difficult. Our product may be superior, but there's little space for smaller players to exist alongside the giants whose network effects are already entrenched in the market.

We at Dust are not alone. There are hundreds of smaller, nimbler players building meaningful products that never get noticed.

The problems with Social Networking 1.0

The status quo for social networks is built on some fundamental flaws:

- The application owns and controls user data
- The model is monopolistic
- "Walled garden" ecosystems are the norm
- The quality of the user community is undermined by scalability
- The business model is based on the <u>monetization of proprietary</u> <u>user data</u>

Our mission with Mercury Protocol is to disrupt the current status quo by introducing a new model of social networking.

How will we do this?

We believe that building out a tokenized social economy on the Ethereum blockchain will enable the next great leap forward for social networks and communication platforms.

The Mercury Protocol is the basis for an alternative form of a public social network that works against the monetization of proprietary user data, thereby giving newer platforms a better chance of survival. This tokenized social economy allows applications to pool their user bases and grow with the network, thus significantly increasing their chances of success against the giants.

How Mercury gets us from Social Networking 1.0 to Social Networking 2.0

Let's look closer at how Mercury Protocol addresses the problems that plague today's social networks.

PROBLEM: Application owns and controls user data

SOLUTION: Ownerless content

Having a single entity own all user data is ethically questionable. It forces users to trust a single entity with their data and gives them no control over how that data is used. With Mercury Protocol, user data and content is not owned by any single application. In essence, it's "ownerless".

For a real-world example, let's say a user creates a new post within an application that's integrated with the protocol. That content is tied to her **pseudonymous identity** (i.e. Ethereum address) and is secured and stored by a decentralized network of nodes. Any other application that builds on top of the protocol can simply make use of the user's identity (i.e. Ethereum address) and associated data without taking ownership of it.

Depending on the type of content being stored, some of this data will reside on the blockchain, and some will reside off the blockchain, either in a decentralized storage solution (e.g. IPFS or Swarm) or offline via Oracles.

TLDR: No single application built on the Mercury Protocol has ownership over user data.

PROBLEM: Network effects encourage monopolies

SOLUTION: Shared user network

Mercury Protocol isn't restricted to a single application. Any communications application can integrate with the protocol, regardless of whether it's centralized or decentralized, mobile or desktop, messaging or social media, established or burgeoning. Each user that is part of an application that integrates with the protocol becomes a member of the network. This allows applications on the protocol to pool their user bases, significantly boosting network effects compared to an isolated application.

Just as a music artist could tap into the Spotify network when they're releasing a new album, we want up-and-coming nimble applications to tap into the Mercury network when bootstrapping their applications.

TLDR: All applications built on Mercury Protocol pool their user bases.

PROBLEM: Walled gardens are the norm

SOLUTION: Authenticated communication across applications

Any application that integrates with the Mercury Protocol can send authenticated messages, transactions or content to any other application on the protocol, securely and seamlessly. For example, a user can publish a signed and encrypted employment agreement in one application (e.g. RockerLawyer). Another application on the protocol (e.g. user's personal Dropbox) might then listen to this event and automatically download and save it to its drive.

This opens up massive synergies across any communications application built on top.



Ethereum Blockchain

Just like you aren't restricted to communicating only with Gmail users if you have a Gmail domain, or only with other Yahoo mail users if you have a Yahoo domain, we believe that users of social applications should not be restricted to communicating only within their network. If two different applications can communicate, this will create interesting versions of use cases. In other words, cross-network communication allows for cross-pollination of uses. TLDR: Any application on the protocol can communicate with another application on the protocol.

PROBLEM: Quality of community undermined by scalability

SOLUTION: Reputation

In most social networking platforms today, users are, for the most part, not held accountable for their actions. The result is a high likelihood of uncontrollable harassment and trolling. Part of the reason this is so difficult to manage is that community moderation is next to impossible in a closed and scaled network.

With the Mercury Protocol, every user has a reputation score that serves as metric of network participation quality. This built-in accountability system economically guarantees that "bad" users are disincentivized from participating in the platform. The reputation score impacts the user cost of paid services on various applications integrated with the protocol—basically, if they "behave," they will have easier access to applications.

We believe that making users pay for their negative behavior will reinforce a sustainable ecosystem based on quality content, which will boost positive engagement and retention of the primary user base.

TLDR: An accountability system across applications that's tied to a user's identity will encourage positive behavior, similar to the credit score system in finance.

PROBLEM: Business model based on the monetization of user data

SOLUTION: Tokenization

Instead of collecting user data in exchange for a service, applications that use the Mercury Protocol can provide services that utilize Global

Messaging Tokens (GMT). When a user wants to use a service, they give some amount of GMT to the application.

In this model, some tokens are given to application developers, and some are given to users for their time and attention. The rest are directed towards a "user growth pool." The idea behind this user growth pool is that it encourages application developers to reinvest in their platform by awarding active users from the pool. Applications that integrate the protocol can choose what application-specific actions and contributions users should be rewarded for, as well as how much they get.

You can think of this as "credit card points for your social interactions."

We believe that a shared tokenized social ecosystem incentivizes application developers to:

1) Build meaningful interactions that users are willing to spend tokens on rather than just maximizing clicks.

2) Encourage positive interactions that can reward users with tokens.

3) Incentivize early adoption of the platform by awarding tokens to early adopters of the platform.

As more users join the platform, and more applications accept tokens for services, the token utility will increase, and the cost of services will drop. This progression creates an incentive for early adopters to join and remain active in a growing network, instead of encouraging a system focused on grabbing attention for meaningless interactions.



Creating a token system that can be shared by many applications allows the token value to accrue for every application and every feature that integrates GMT, thus creating a multiplying network effect.

TLDR: Mercury Protocol has a built-in token system that applications can use to (1) incentivize users to participate in their platforms and (2) build meaningful services that users are willing to spend tokens on.

Conclusion: Mercury Protocol is Social Networking 2.0

We believe that the future of social networking and communications should exist as a decentralized, shared, and trustless network based on a tokenized ecosystem. This is why we're building Mercury Protocol on the Ethereum blockchain, where the existing networks and smart contract infrastructure is primed to jump start the protocol.

Economies thrive only when new entrants are able to enter the marketplace and compete with established companies. We hope that Mercury Protocol paves the way for a new kind of social application that no longer relies on network size and instead thrives on a given application's merits, service, and methods of integrating with the underlying shared networks.