

Desmos Network Project Plan

IMPORTANT: This document is under active development. Your feedback is appreciated.

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1. Executive Summary

Due to their business model, centralized social networks (“CSNs”) need to treat their users as products. This creates problems which include privacy breach and unreasonable censorship. To change this, we need to change the business model of social networks from the ground up.

By building the social networks based on tokenomics, the users will be incentivized to become responsible owners of their social networks. Ultimately, this will change the dynamics between various parties and bring us a more open, liberal and censorship-resistant social network.

To achieve this goal, we introduce Desmos, which is a native blockchain specifically designed for supporting user-centric social networks. Its flagship feature is Desmos Profiles which will serve as a cross-chain social identity. It is similar to Keybase, Google Login or Facebook Login, but decentralized. Desmos Profiles will first serve the blockchains which have enabled inter-blockchain communication (IBC) connectivity such as Cosmos Hub, IRISnet, Crypto.com chain, Persistence, Osmosis, Akash, Sentinel, Regen Networks and of course Desmos chain.

As an active player in the IBC ecosystem, we will utilize the features of other projects such as Band Protocol, Akash, Oasis, Osmosis and Cosmos Hub to bring synergy and create more exciting use cases.

The initial contributor of Desmos is Forbole. Forbole is a well-established builder, validator and marketer in crypto space. In particular, it is an active validator on over 20 blockchains in various ecosystems. As of 31 July 2021, the market value of the digital assets staked with us exceeded \$700M. The teammates of Forbole also have extensive experience in digital marketing and social networks which are crucial to the success of Desmos.

We will actively promote and support the use of Desmos to build censorship-resistant social networks & communication tools that can interoperate with each other securely and reliably. Desmos aims to be the key driver to enable the OAuth authentication medium for the internet of blockchains.

2. Solving the world's problem

2.1. Censorship and data misappropriation

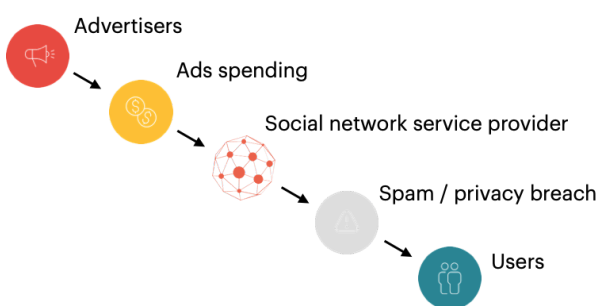
CSNs are operated in an obscure, opaque and autocratic manner. They censor contents or even ban users that they think are against their own interests. The censorship by CSNs has never become so bad since 2019 due to the pandemics and political tensions globally.

When this censorship is imposed by a centralized authority based on a wrong goal alignment between that authority and the users, the problem will become disastrous. This goal misalignment is inborn: the business model of CSNs is solely built on utilizing (aka. misappropriating) users' data and comforting advertisers so as to maximize the profitability of the CSNs. We conclude that the root cause of this problem is the broken relationship between different parties. Desmos is a project to fix this broken relationship.

2.2. Solution - An Overview

The above broken relationship can be simplified in this lifecycle:

1. A CSN is launched to serve some needs of the users.
2. The CSN gets some traction and raises some money.
3. The CSN builds better products, does more marketing and acquires more users.
4. The CSN gets more traction and raises more money.
5. The CSN reaches the critical mass and creates a stronger network effect.
6. The CSN reaps the value of users by misappropriating the users' data.
7. Most users would choose to stay due to the network effect and switching cost.
8. Repeat stage 2 to stage 7. Repeat and repeat again.
9. The CSN creates a huge fortune for its owners through an exit.
10. The CSN needs to keep fulfilling the profit expectations of the owners post-exit by misappropriating the users' data more vigorously.



[existing model of CSNs which serves as the intermediary between advertisers and users]



[Desmos' model to make users and advertisers become the social network by eliminating the need for a centralized intermediary]

Desmos will redesign this lifecycle through an improved economic model such that we can achieve the network growth required for a self-sustainable social network without the need for the centralized intermediaries. Both the seller of attention (the general user) and the consumer of attention (the advertiser) can reach an equilibrium without the intermediaries taking the unfair advantage from the information asymmetry, permission-based entry barrier and capital.

Desmos will provide the backbone to build user-centric social networks while DSM is the native staking token for Desmos.

3. Tokenomics of Desmos

3.1. Economic value of DSM

The value of DSM will reflect the network value on Desmos. Famously demonstrated by Metcalfe's law¹, network value is proportional to the square of the number of connected users of the network. The economic value of this network can then be further quantified by its advertising value. The advertising value is a function of attention spent on the network which can be valued through parameters such as the number of views and cost per thousand impressions ("CPM").

Here is a simplified example. If 1 million users consume 20 posts every day, there will be 7.3 billion views a year. Assuming a CPM of \$20, the advertising value will be \$146 million a year. CPM is determined by the market.

If a consumer of attention thinks that she can make more goal conversions (example of

¹ https://en.wikipedia.org/wiki/Metcalfe's_law

goals: followers for a celebrity, a consumer for a product, an applicant for a job vacancy) through the network, she will be willing to pay a higher CPM. Here is an example. If she knows she is willing to pay \$100 for every goal conversion and she also knows she can make 2 goal conversions for every 1,000 times her message is seen, she will be willing to pay \$200 CPM.

Desmos acts like an open, decentralized and users-driven marketplace of attention. It tokenizes CPM which is manipulated in an opaque way by CSNs. DSM stakers secure Desmos to earn transaction fees and staking rewards. Transaction fees are related to the activities level on Desmos. Staking incentivizes early commitment to the network. As Desmos will serve the IBC-enabled blockchains, DSM will capture the attention economy of the internet of blockchains.

3.2. Network effect and staking

In the context of social networks, network effects mean that every new user added to the network makes the network more valuable for your next user². This is the reason why social networks use a significant portion of their investors' money to acquire users. After they have acquired more users, they use the improved metrics to raise more funds which will then be used to acquire more users. The social networks that can repeat the above cycle as many times as possible until the marginal benefit outweighs the marginal cost of acquiring the user will become the winners. This is the reason why centralized CNs need to treat their users as products and rely on a corrupted business model as described in earlier sections (see [Solving the world's problem](#)).

By providing staking rewards to incentivize early participation, we may change this.

3.3. “Borrow the growth from the future”

The social network is basically a marketplace of sellers and buyers of attention. Instead of relying on investors' money to acquire new users, what if we rely more on users to acquire new users by word-of-mouth and quality contents? By tokenizing quality user engagements which can lead to a more robust network effect, we can borrow the growth from the future to replace the heavy need for capital immaturely. Greg Osuri, the Founder of Akash Network, has elaborated on this idea precisely in his blogpost³:

“For a market that relies on network effects to unlock value, it's critical to sustain demand or supply until equilibrium is achieved.”

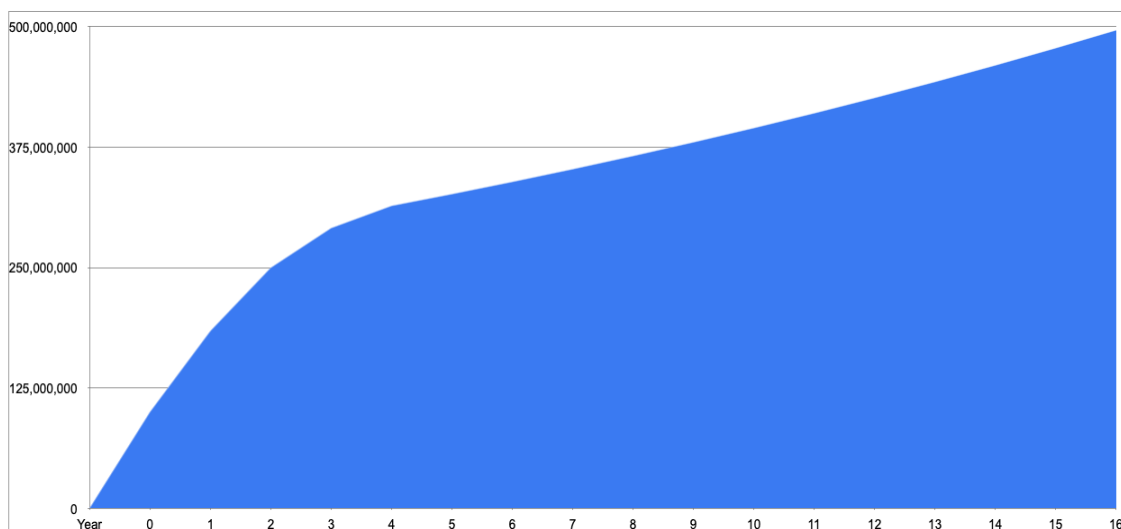
² <https://www.hustlefund.vc/busting-a-big--fundraising-myth>

³ <https://akash.network/blog/bootstrapping-a-free-market-by-borrowing-from-the-future/>

We are inspired by the inflation model of Akash which plans to bootstrap a free market by subsidizing supply. In their case, this supply is cloud compute. The same holds true for Desmos with a different supply: attention. We subsidize engaging users who can bring new users to the network.

3.4. Inflation rate

To incentivize early adopters to join Desmos, we will use a relatively high initial inflation ranging from 40% to 80% annually. Then it will be halved every year until it reaches 2.5% to 5%. It will stay there until the maximum supply of 500M DSM is reached. We estimated the maximum supply will be reached in 16 years:



4. Initial Token Distribution and Lock-up

The initial supply of DSM is 100,000,000 while the maximum supply is 500,000,000 which, according to our estimation, will be reached in 16 years. The allocation of initial supply is planned as follows⁴:

- **Angel and seed investors (14.2%)**

They are the 150+ investors who have joined our fundraising from Feb 2020 to Apr 2021. They are not venture capitals or other institutional investors. They include early supporters of Bitcoin, Ethereum and Cosmos, investors of Forbole and Desmos validators.

⁴ please note that the allocation has been changed from the previous version after the directors have reassessed the plan to reflect the change of tokenomic model and fundraising plan

- **Pre-mainnet Rewards (2.3%)**

This is the rewards for the participants of various incentivized testnets and campaigns we have completed before the mainnet.

- **User Acquisition Fund, or “UAF” (15%)**

As a social network project, gaining new users is very important. Before the contents and features of the social networks on Desmos are mature enough to create a self-sustaining network effect, we should aggressively incentivize the onboarding of new users. To ensure an efficient execution of this, we allocate 15% to this UAF which is managed by the core team but will be used for direct reward to new users and marketing campaigns. The use of UAF will be reported quarterly and publicly.

- **Desmos Foundation (12.5%)**

In contrast to UAF which focuses on marketing and growth-hacking, Desmos Foundation will focus on the technology development related to democratizing social media which will include social networks, digital advertising, attention economy, privacy-first AI, etc.

- **Forbole Ventures (12.5%)**

Forbole has planned to spin-off its portfolio to become Forbole Ventures (“FV”), which will be a for-profit investment arm to invest in IBC ecosystem projects which will use Desmos Profile as their users profiles. As of 31 July 2021, this portfolio has a market value of over \$26M.

According to our experiences in the industry, the traditional non-profit foundation entities are too slow and bureaucratic to invest in ecosystem projects. With FV, we have more flexibility to invest in promising Desmos ecosystem projects.

- **Team and Advisors (9%); Early Supporters (3.5%)**

9% of token will be allotted to the employees and advisors (both full-time and part-time) as part of the salary and incentives for their services during the time before the launch of mainnet (beta). They include the two co-founders (as the earliest employees) and the staff of Forbole who are involved directly or indirectly in Desmos.

3.5% of tokens will be allotted to the early supporters of Desmos who are the external investors of Forbole.

- **Liquidity provisioning (3%) and yield for bonded LP tokens (6%)**

With Osmosis and the upcoming Gravity Dex, we are interested in bootstrapping the public liquidity of DSM through DEX instead of CEX. To prepare for these, we allocate a maximum of 3% for liquidity provisioning. To encourage more people to become liquidity providers (LP), we also allocate a maximum of 6% to provide extra yield for people who bonded their LP tokens.

The final amount for these two purposes may vary as the case may be. If we have decided to provide a lesser amount for these purposes, the unutilized amount will be moved to “Future Sale / Swap / Burn” as described below.

- **Desmos Foundation - Future Sale / Swap / Burn (22%)**

Although we are not backed by institutional investors currently, we do not exclude the possibility of future institutional sale which we think can be beneficial to the development of Desmos. We are also open to the idea of doing token swap with other promising projects which Desmos can have synergy with. This pool of 22% genesis DSM supply serves these two purposes.

But we will also set a timeframe for this to protect the interest of DSM stakeholders. We will burn the DSM in this pool by the end of every month. The amount to burn will be approximately the new DSM minted from inflation. We estimate that this pool will be burned completely within the first six months after mainnet launch.

Please note that the burn of these DSM may change the estimated time to meet the maximum supply of DSM.

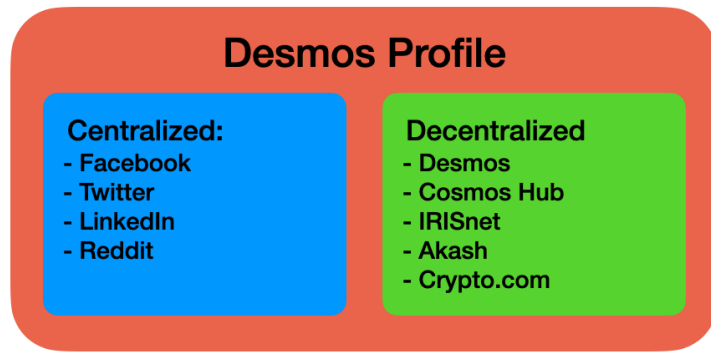
Lock-up conditions of DSM allocated at genesis:

Allocations	% of supply	Lock-up
Angel & Seed	14.2%	Vested 33% at end of 12th month; 5.58% x 12 each of the following month
Pre-mainnet rewards	2.3%	Vested 33% at end of 12th month; 5.58% x 12 each of the following month
User Acquisition Fund	15.0%	Vested 4.16% x 24 each of the following month from mainnet launch
Desmos Foundation	12.5%	Vested in the 4th year: 25% at end of 39th, 42th, 45th and 48th month
Forbole Ventures	12.5%	Vested in the 4th year: 25% at end of 39th, 42th, 45th and 48th month
Forbole Team and Advisors	9.0%	Vested 50% at end of 24th month; 2.08% x 24 each of the following month
Early Supporters	3.5%	Vested 50% at end of 24th month; 2.08% x 24 each of the following month
Liquidity Provisioning	3.0%	no lock-up
Yield farming	6.0%	no lock-up
Desmos Foundation - Future Sale / Swap / Burn	22.0%	no lock-up at genesis; transfer to vested account as the case may be

5. Flagship feature: Desmos Profiles

5.1. As a cross-platform proof of identity

In decentralized social networks, end users can hide their identities and become pseudo-anonymous. However, they will also make different communities to become silos of which the user engagement efforts on a community is not transferable to another community. Desmos Profile aims to provide proof of identity by linking users' identities from centralized SNs and different "proof of X" blockchains.



Proof of identity cross the centralized and decentralized worlds

5.2. Achieve decentralized proof of identity

Desmos incorporates IBC connectivities which enable other IBC-enabled blockchains to send account signatures directly on Desmos and save the linkage between a Desmos Profile and addresses on other chains. In this case, the proof of X from different networks can be linked with Desmos Profile.

To make the proof of identity more decentralized, we decided to offload this verification process from Desmos validators. Validators on Desmos will continue to verify the user engagements on end users have been applying on dapps. The Desmos Profile link verifications will be offered by Band Protocol, a blockchain protocol serving as oracle which is secured by professional PoS validators with around US\$200M assets.

In order to link Desmos Profile with centralized social networks accounts and other non-Cosmos blockchains, we developed Themis, which is a set of APIs and oracle scripts running on Band Protocol. To link up Desmos Profile with a centralized social network account and an account on a non-Cosmos blockchain, a user can post a signature on the social network or the blockchain. Then requests Band Protocol to run the oracle scripts to verify the signatures posted publicly on the social networks or transactions on blockchains against the public key the user provides. Once the signatures are verified by the validators on Band Protocol, the results will be recorded on Band. As such, Desmos can retrieve the proof to confirm the links between Desmos Profile and the accounts on centralized SNs or blockchains.

5.3. Early use case

As blockchain space is blooming, there are more validators, block explorers and wallets working on several blockchains. They have to set up their profiles in every chain, including their monikers, communication channels, bio, terms and conditions, etc. This is

time-consuming and will easily lead to errors.

Desmos Profile can solve this pain point. It can be used as a decentralized social identity for the interchain across different block explorers, wallets, as well as Desmos specific social networking dapps with customized tokenomics powered by CosmWASM smart contracts. Desmos profile will become a common reference of a user profile. Validators, block explorers and wallets can retrieve the information directly from the decentralized profile.

6. Go-to market strategy

We believe acquiring the hardcore superfans as the early adopters are crucial to our success. So we will focus on leveraging our competitive advantage to grow our user base at an early stage. This will be divided into two phases.

- **Phase (1): Integrate Desmos into our existing projects**

We plan to first integrate Desmos into Big Dipper, which is an award-winning block explorer built by us. It is currently supporting over 10 blockchains from Cosmos, Celo and Flow ecosystems. As an open-source project, it has been forked 140 times by teams all over the world.

We will also integrate Desmos into Forbole X, which is an upcoming crypto wallet we are developing. By doing this, we can combine social networking with DeFi. We see Forbole X as an upgrade of the current business model of Forbole. We think the existing followers and delegators of Forbole are a good source of early adopters for Desmos.

- **Phase (2a): Integrated Desmos into other IBC-enabled projects**

Examples in this category include Akash (the decentralized “Airbnb” of cloud computes) and LikeCoin (decentralized content publishing). This phase may take longer to succeed as this involves other project teams. But we think if we have enough tractions from Phase (1) and Phase (2b), Phase (2a) will become easier.

- **Phase (2b): Integrated into centralized platforms**

Examples include discussion forums, directory websites, classified advertisement portals. This is a critical phase to drive main-stream adoptions. Instead of targeting a vast global market, we believe we should go local and find an audience which we are most familiar with and are ready to adopt decentralized social networks.

We have found this group: Hong Kong people. This is an ideal market for us because:

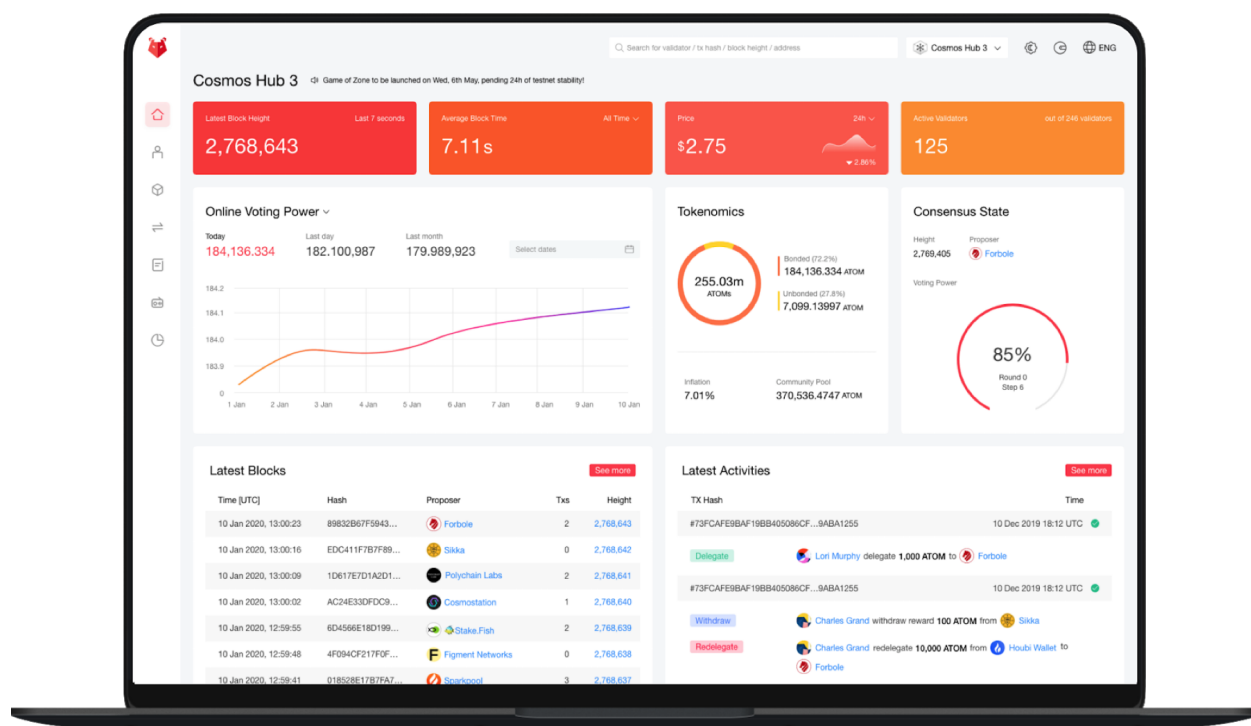
- It is where most of our teammates come from.
- It has undergone a drastic change in economic and political environment. People in Hong Kong have become more aware of the importance of a censorship-resistant internet. The adoptions of VPN and Signal have grown tremendously recently in Hong Kong.
- Hong Kong is a rich international financial center

7. Progress and other related developments

7.1. Big Dipper 2.0

We have revamped the codebase and design of Big Dipper. We have soft-launched this Big Dipper 2.0 with the current Desmos testnet.

We will push forward Big Dipper to become the “block explorer for the interchain”. This will be an information hub for the IBC ecosystem with social network features for the crypto communities.



7.2. Forbole X

We are developing Forbole X, which is an all-round crypto management tool for general users. We see Forbole X as an upgrade of our current business model which combines all our experiences in validator operation, block explorer, blockchain development and community building. We will adopt gamification, education and community engagement design in Forbole X to drive mass adoption of crypto.

We plan to soft-launch Forbole X to support DSM at Desmos mainnet. We will then support other tokens in Cosmos, Solana and Flow ecosystems at an early stage.



7.3. Mooncake

Mooncake is a “decentralized Twitter” we built on Desmos testnet. We see this as an not-yet-successful attempt. We concluded we should provide real economic incentives for the use of Mooncake if we would like to gain meaningful insights. Furthermore, this may not be a wise move to mimic existing centralized SNs directly. We should target a niche audience which is ready and eager to change their user behaviour.

We plan to revamp this to become a discussion forum and integrate it with Forbole X and Big Dipper 2.0 so that we can convert our existing users and fans into early adopters of Desmos. (see [Go-to market strategy](#))

7.4. Other related developments

We keep developing open-source tools for Desmos and the wider crypto community. These include:

- Themis ([GitHub](#)):
It is a set of APIs and oracle scripts we developed on Band Protocol for users to verify their accounts on CSNs such as Facebook and Twitter.
- Juno ([GitHub](#)):
It is a universal chain parser for any IBC compatible Cosmos based chains originally developed by Interchain engineer Aleksandr Bezobuchuk. This service

is similar to The Graph and Vulcanize, two popular tools that target the EVM. We are funded by ICF to push the development of Juno's codebase further.

- Tank ([GitHub](#)):
Tank is a privacy-first personality AI model trainer we built on Oasis Protocol. It is the 2nd runner up of Oasis Foundation's Quest for ROSE hackathon.
- Cosmos Rust Wallet ([GitHub](#)):
It is a set of packages that sign transactions on Cosmos SDK-based chains on multiple platforms.
- Desmos Account Manager ([GitHub](#)):
It is a wallet that supports Linux, macOS, iOS, Android and Windows that manages Desmos Profile utilizing Cosmos Rust Wallet.

For more about the progress of our tech development, please visit our [GitHub](#).

For our updates, please refer to [our blog](#).

8. Our Team

The initial contributor of Desmos is Forbole. Forbole is a well-established builder, validator and marketer in crypto space. In particular, it is an active validator on over 20 blockchains in various ecosystems such as Cosmos, Solana, Flow, Polkadot, Oasis, Cardano, Elrond and V.Systems. As of 30 June 2021, the market value of the digital assets staked with us exceeded \$450M. The teammates of Forbole also have extensive experience in digital marketing and social networks which are crucial to the success of Desmos.

Currently, we are a team of 23 people. You can find the team members of Forbole [here](#).

9. History and Roadmap

Time	Milestones completed / to-do	Team size*
Oct 2017	<ul style="list-style-type: none"> Kwun and Terence founded Forbole Limited with \$25K investment from 3 family & friends 	2
Apr 2018	<ul style="list-style-type: none"> Joined the testnet of Cosmos Hub 	2
Sept 2018	<ul style="list-style-type: none"> Launched Big Dipper and won second place in HackAtom 3 	2
Feb 2019	<ul style="list-style-type: none"> One of the top 27 winners of Game of Stakes 	2
Mar 2019	<ul style="list-style-type: none"> Joined mainnet of Cosmos Hub as genesis validator 	2
Jun 2019	<ul style="list-style-type: none"> Completed AppWorks Accelerator Program 	2
Jul 2019	<ul style="list-style-type: none"> Built a prototype of decentralized messaging and won a prize in HackAtom Seoul Made our first early-stage investments: Solana and Kava 	2
Dec 2019	<ul style="list-style-type: none"> Forbole confirmed the last external investment. Since Oct 2017, Forbole has received \$450K from 22 family & friends. 	7
Jan 2020	<ul style="list-style-type: none"> Modified the prototype we built in HackAtom Seoul to become Desmos and launched the first Desmos testnet 	7
Aug 2020	<ul style="list-style-type: none"> Desmos raised \$237K (started in Feb 2020) 	10
Apr 2021	<ul style="list-style-type: none"> Desmos raised \$2.7M Launched the 8th version of testnet. 180+ validators joined. 	17
Aug 2021	<ul style="list-style-type: none"> To launch Desmos Mainnet 	25
Aug - Oct 2021	<ul style="list-style-type: none"> To announce Forbole Ventures To complete reorganization and improve operations To execute growth hacking campaigns 	30
Dec 2021	<ul style="list-style-type: none"> To launch Community event on Osmosis or Cosmos Hub (Gravity DEX) 	40+

* Included co-founders and only counts full-time staff

10. Follow Us

Website: [Desmos](#), [Forbole](#), [Big Dipper](#)
Blog: [Desmos](#)
GitHub: [Desmos](#), [Forbole](#)
LinkedIn: [Forbole](#) ([teammates' profiles](#))
Twitter: [Desmos](#), [Forbole](#)
Discord: [Desmos](#)

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