



Polkadot OpenGov

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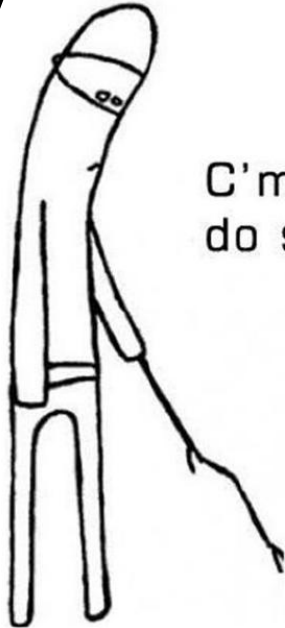
Content

- Most Governance Models
 - hard forks
 - no point for resilience without on-chain gov
- OpenGov main characteristics
- Node, Runtime, Forkless upgrades
- OpenGov mechanics (tracks, origins, voting, etc.)
- Lessons learned so far
- Future ahead



Most Govs

Community



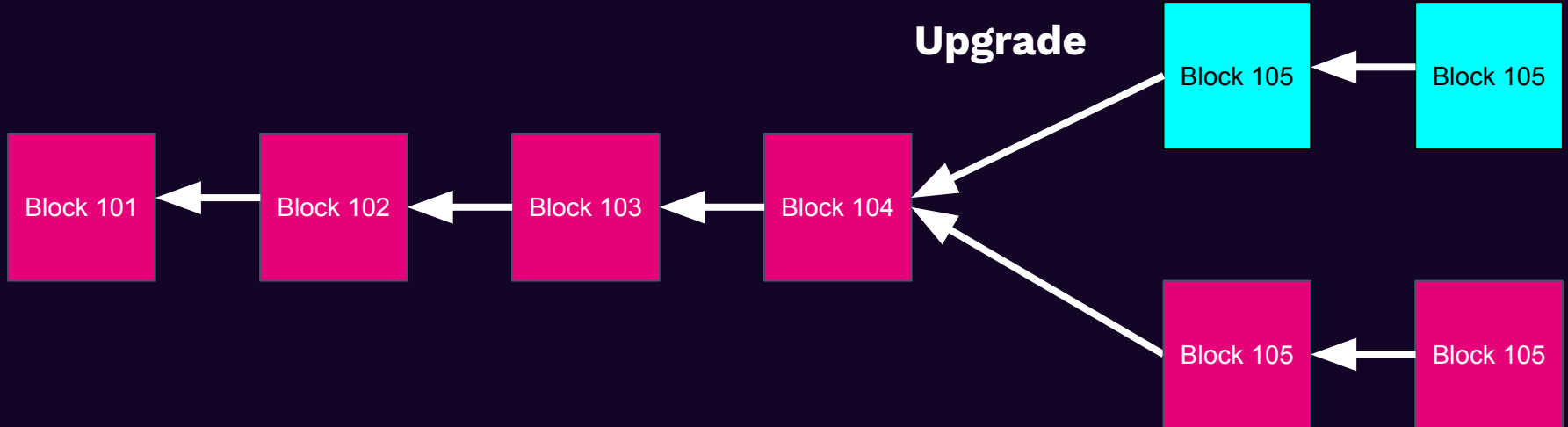
C'mon,
do something...



Devs



Hard Forks





Hard Forks

Chain	Fork	Description
BTC	BCH (2017)	Disagreement over block size. BCH supporters wanted larger blocks (8 MB+) for higher transaction throughput, BTC stayed with 1 MB + SegWit + off-chain scaling (Lightning).
ETH	ETC (2016)	DAO Hack: \$60M stolen (at the time) due to a smart contract exploit. Ethereum community chose to reverse the hack via a hard fork. A minority opposed “code is law”, continued as Ethereum Classic (ETC).



What if we have a very resilient, decentralized system, but every time a decision has to be made it takes a long time to settle on an outcome and there is a high chance of forking the network?



Coordinated Efforts

The more a system is decentralized (and consequently resilient) the more we need a way to easily coordinate decision-making, make participants accountable for their decisions, and ensure and enforce certain and seamless execution of outcomes



Governance and upgradeability

- Building blockchains in the context of DAOs, where no central entity steers decision-making
- Need for democratized decision making process
- Governance is easy, “trustless” upgradeability is not
- We need accountability and certainty of execution depending on voting outcomes



OpenGov

- Trustless: coded, enforced by consensus rules and cryptoeconomics, no politician or CEO can override rules that are on-chain
- Permissionless: anyone can propose and vote

Efficient, fairer and more resilient than traditional governance models



Trustless

Trustless \neq “no trust at all”

- You don't need to trust a single person, company, or government
- You trust mathematics, cryptography, and consensus rules enforced by cryptoeconomics and that everyone can verify



Permissionless

Permissionless \neq “chaos”

- Anyone can participate (vote, submit proposals, run validators) without asking for approval
- No gatekeepers deciding “who is allowed in”. In Polkadot, any DOT holder can make a governance proposal



How can we trust a trustless system?

- We don't trust people, we verify the rules
- The system is transparent, open-source, enforced by consensus
- In Polkadot governance, every vote, tally, and decision is visible and verifiable by anyone



Node and Runtime



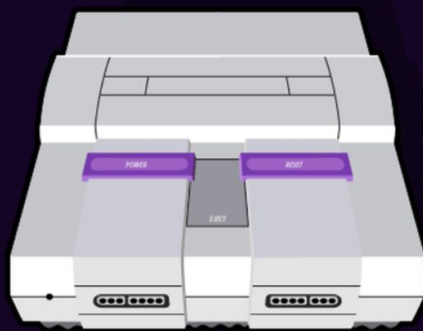
Node



Runtime



Node or Client



- Native Binary
- Executes the Wasm runtime
- Everything else: Database, Networking, Mempool, Consensus, etc.

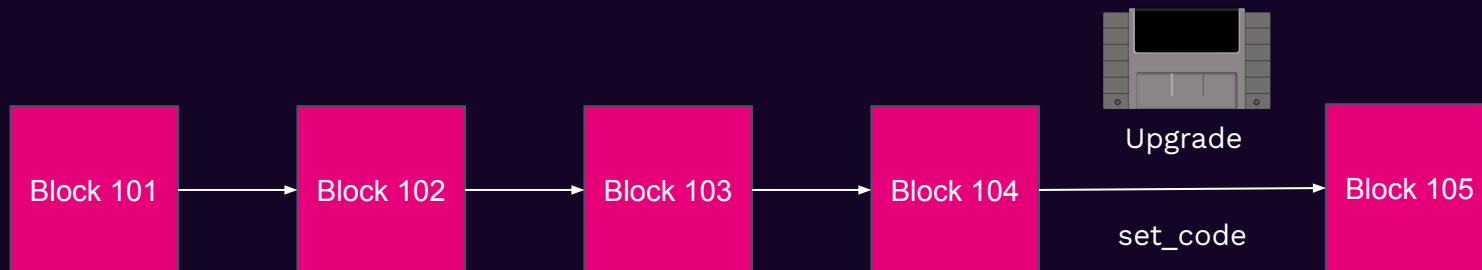
Runtime



- Application logic aka. How we execute block
- Stored as a part of your chain state as a WASM Blob
- Upgradeable
- Also known as State Transition Function (STF)



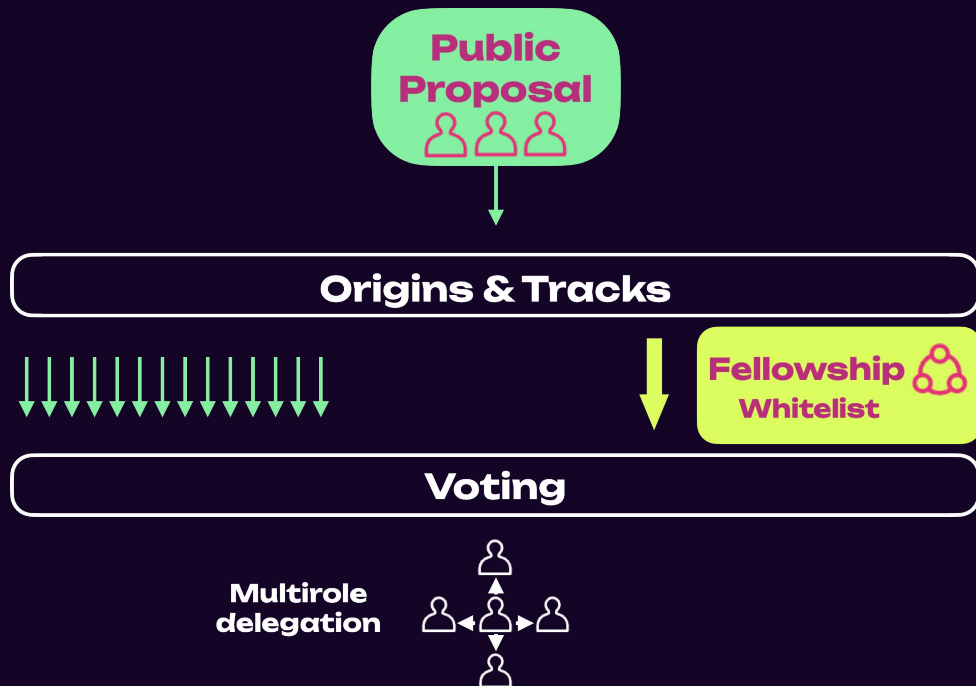
Go Forkless



- Referendum, if it passes, governance authorizes a call to `system.set_code(new_wasm)`
- New Wasm runtime blob directly in the chain's on-chain state
- Validators fetch the runtime Wasm code from the chain's state. They swap their in-memory runtime module with the new Wasm code.



OpenGov Mechanics





Referendum track



Origin

Track

Root



Small Tipper



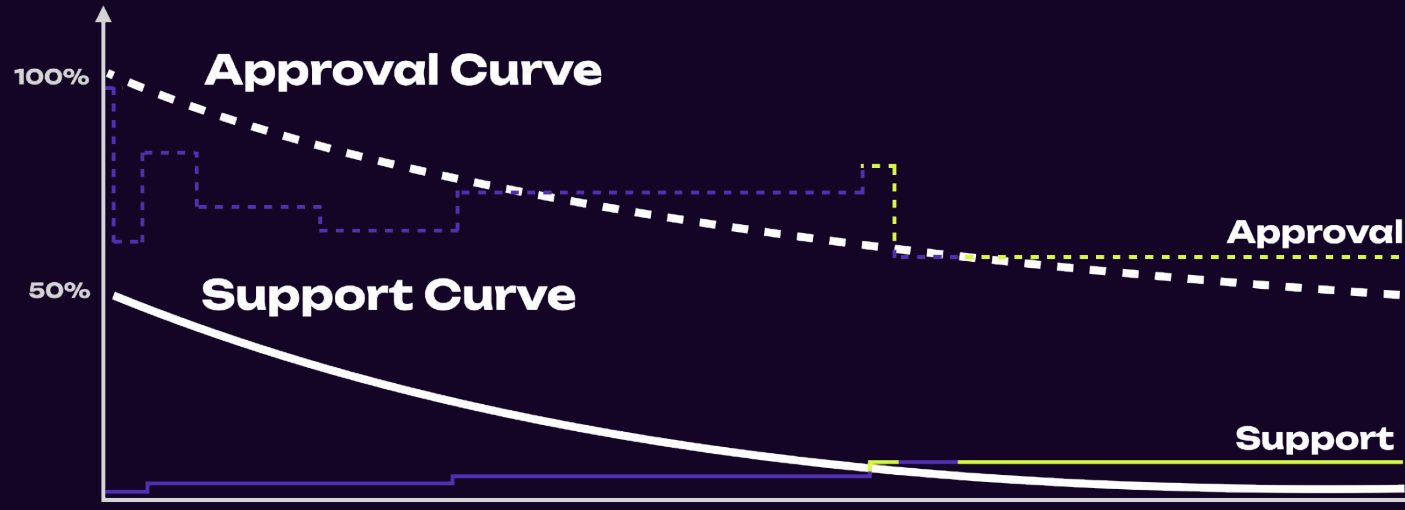


OpenGov Origins

ID	Origin	Max Deciding	Decision Deposit	Prepare Period	Decision Period	Confirm Period
0	Root	1	100000 DOT	2 Hours	28 Days	1 Day
1	Whitelisted Caller	100	10000 DOT	30 Minutes	28 Days	10 Minutes
2	Wish For Change	10	20000 DOT	2 Hours	28 Days	1 Day
10	Staking Admin	10	5000 DOT	2 Hours	28 Days	3 Hours
11	Treasurer	10	1000 DOT	2 Hours	28 Days	7 Days



Approval & Support

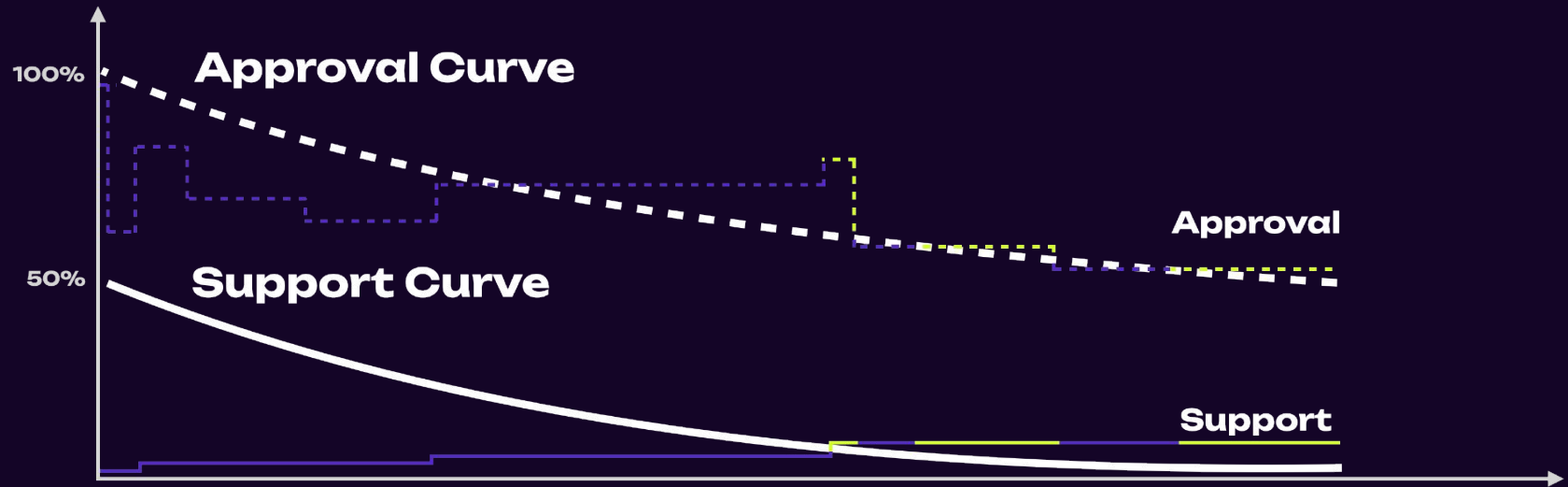


Decision

Confirmation



Approval & Support



Decision

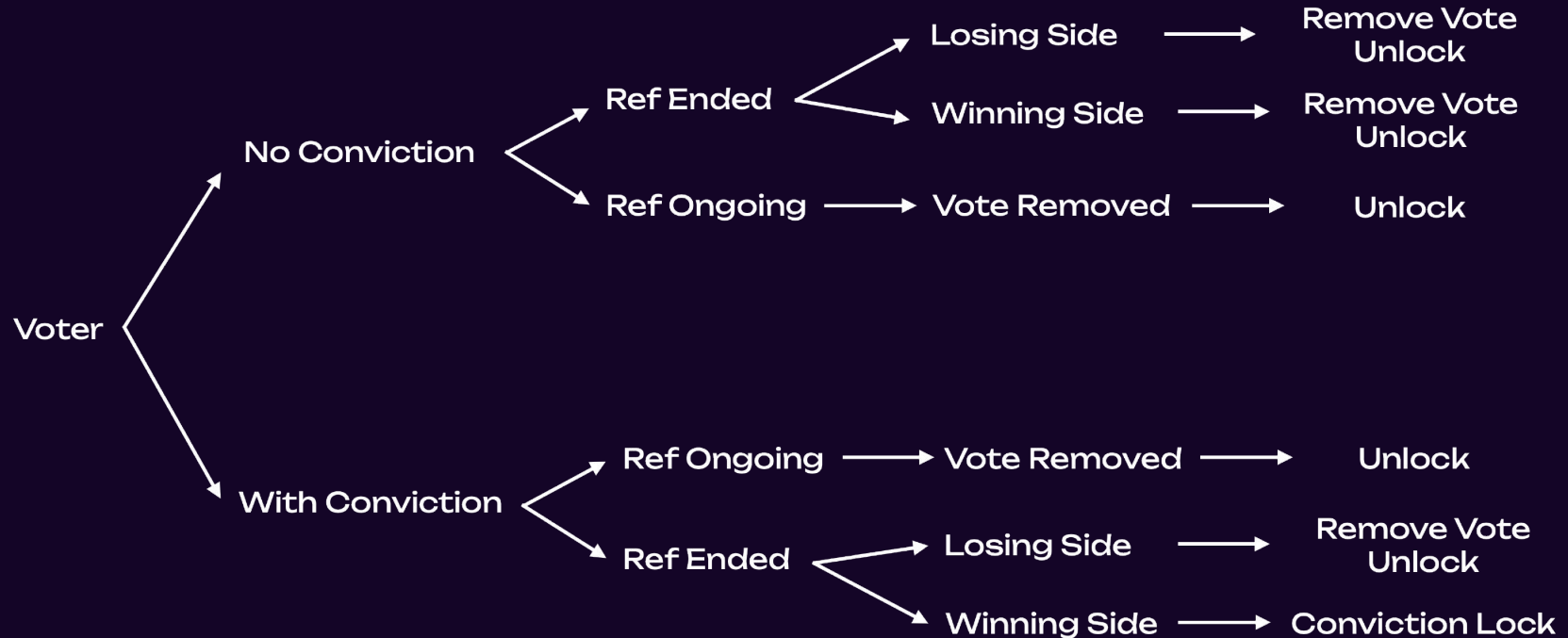


Conviction Voting

Lock Periods	Vote Multiplier	Length in Days
0	0.1	0
1	1	7
2	2	14
4	3	28
8	4	56
16	5	112
32	6	224

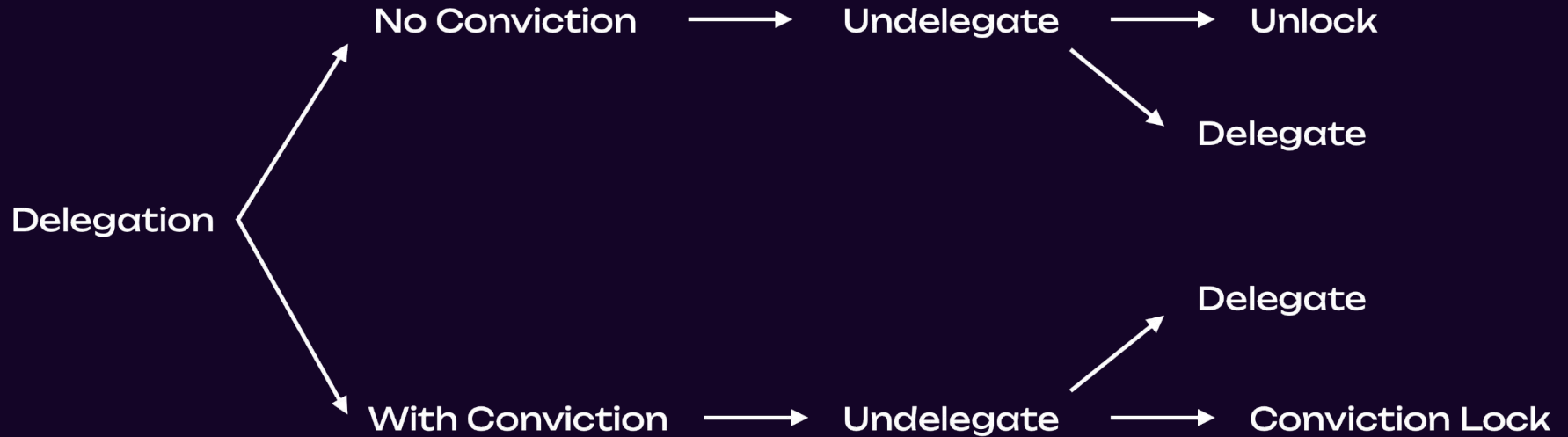


Voting Mechanics



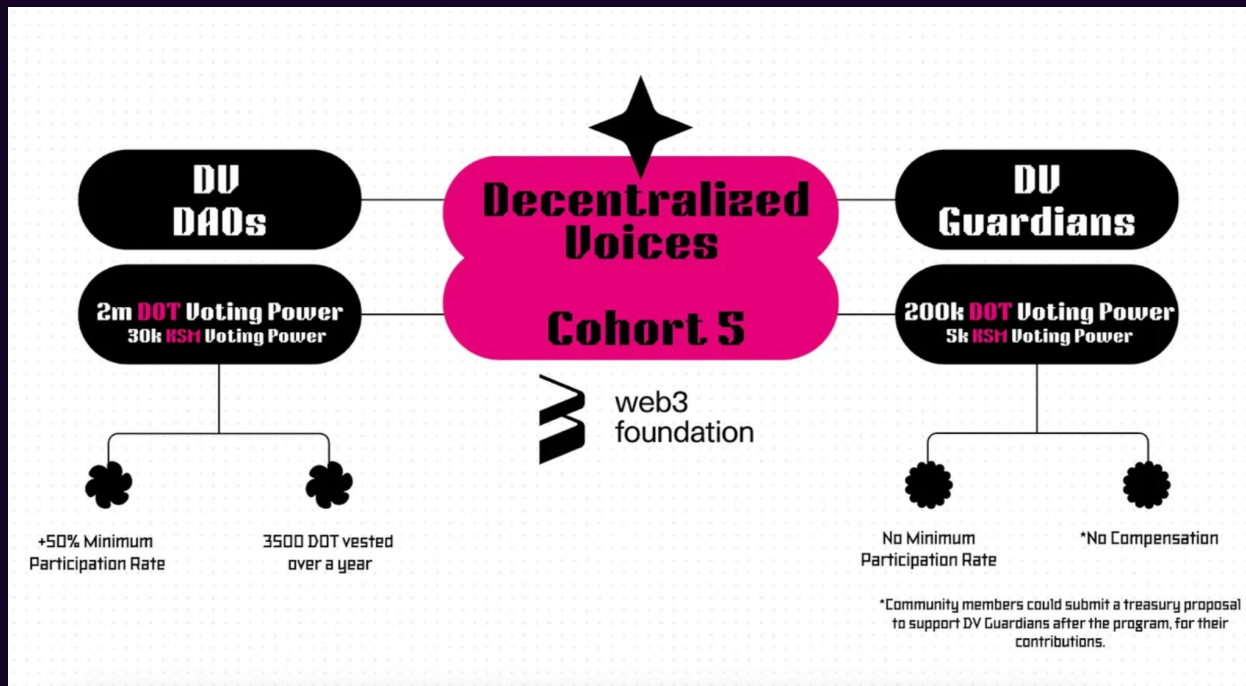


Delegating





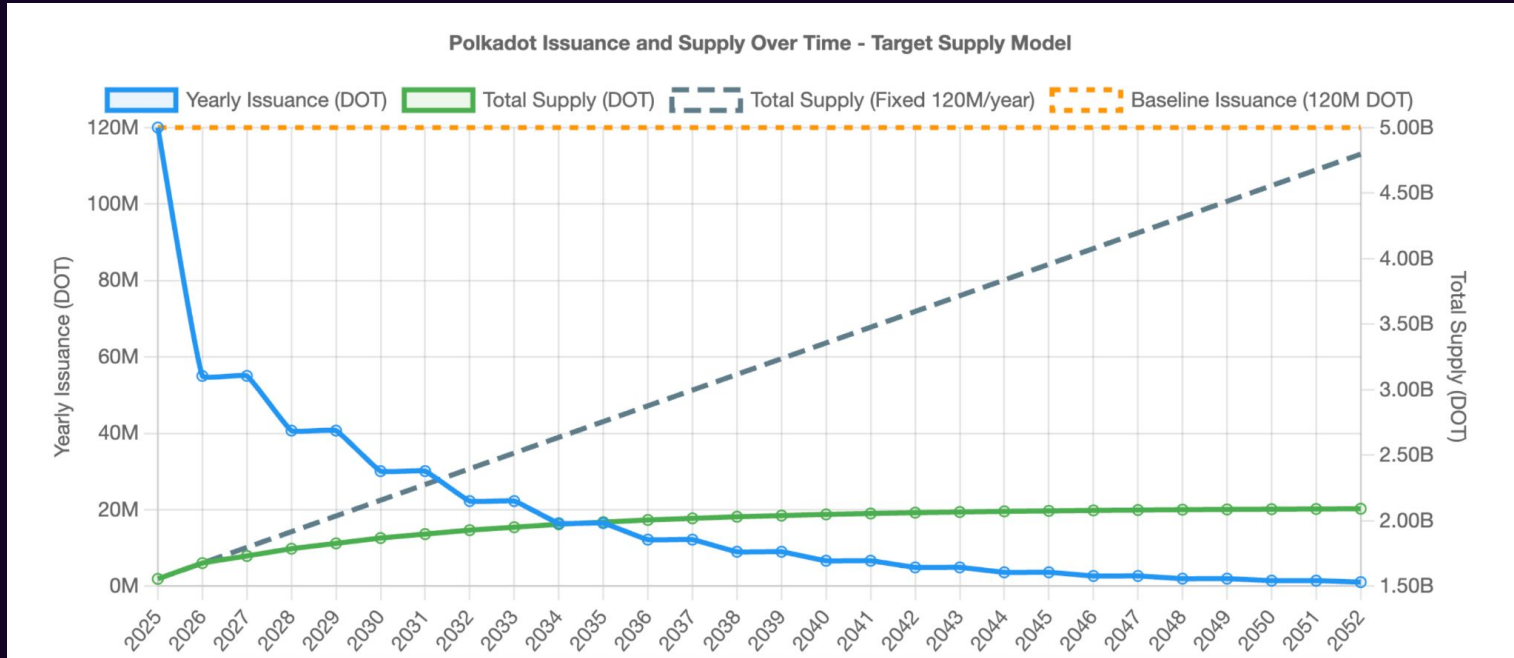
Decentralized Voices





Capped Supply Proposal

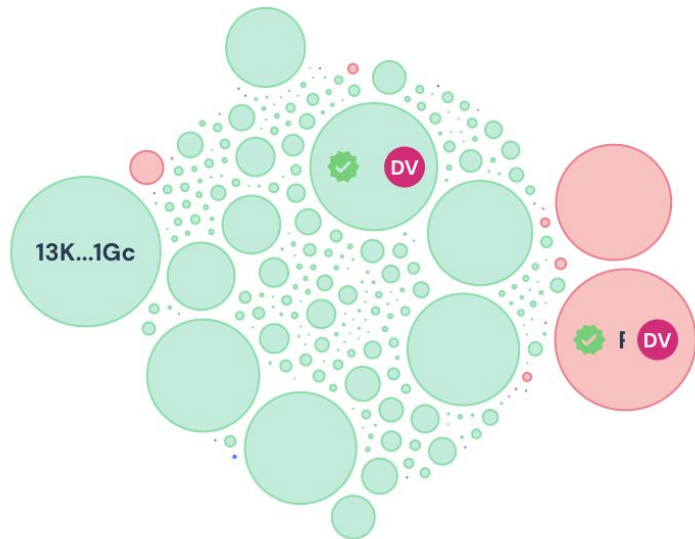
Wish for Change Origin





Capped Supply Proposal

Wish for Change Origin



Summary

78.3%

Aye



21.7%

Nay

Aye (257)

20.1M DOT

Nay (15)

5.6M DOT

Support

9.3M DOT

Issuance

1.6B DOT



PBA Bali Proposal

Big Spender Origin

revised proposalPolkadot Blockchain Academy, PBA Campus 7, The JAM Course launch, University pilot, ongoing PBA-X evolution, Alumni program.

PBA_TIM in Big Spender | 6 months ago | governance development polkadot jam Executed

Description

Onchain info

Analytics

✦ SUMMARISE

****This new proposal replaces referenda 1472, we are switching to USDT and a tranche based funds release schedule to ease pressure on treasury funds, everything else remains the same as 1472.****

The Future of Polkadot Depends on Talent

The Polkadot Blockchain Academy (PBA) is the single largest and most effective pipeline of talent into the...

Show More



2



Requested

Details

3.73M USDT

Proposal Passed



Summary

100.0%

Aye



0.0%

Nay

Comments (9)

✦ Comment Summary



Fellowship

Fellowship

Overview

Referenda (7)

members

99

members

<div><div></div><div><div>✓</div></div><div>GAV</div></div> <div>7</div> <div><div></div><div><div>✓</div></div><div>12MrP337a...</div></div> <div>6</div> <td><div><div></div><div><div>✓</div></div><div>BKCHR</div></div><div>6</div></td>	<div><div></div><div><div>✓</div></div><div>BKCHR</div></div> <div>6</div>	
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Expect Rationality

- What are the incentives? Some are clear some not.
- Burn social capital and run away with DOT



Don't Expect Rationality

- Some people are not rational
- In it for the LOLs, they are trolls
- Teams can be irrational because of ignorance
→ not claiming treasury funds



Complexity is the enemy

- We want anyone to use it
- Too complex for the average person
- Politics is complex, there are rules



Coordination is necessary

- In theory anything can happen on chain
- But we are still human taking decisions
- Discussion, coordination, channel of communication



1000:100:10:1 Rule

1 proposer, 10 voters, 100
commenters, 1000 will remain
silent but with (very strong)
opinions



Decentralization vs Effectiveness

- Coordinate a huge group of people
- In the short run might be difficult to be effective



Governance is messy

- Emotional, lot's of opinions publicly made
- Winner and losers
- Adversarial environment
- Is not gonna be perfect
- What are going to be the 2nd order effects of your decisions or implementation?



Way Forward

- Proof of Personhood
- People Chain (System) → fully dedicated to PoP
- Ongoing diversification of treasury
- Better oversight of the system
- Permanent votes, stick to some opinions





Thank You

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