Modular Governance:

Structuring DAO Infrastructure with the Web3 Stack Protocol

Summary

DAO tooling is often scattered, inconsistent, and difficult to scale. The Web3 Stack Protocol introduces a structured, layered approach to build and maintain DAOs in a way that is **modular, composable, and protocol-aligned.**

This research outlines how each governance function can be placed within the stack :

from wallet to decision logic

to enable flexible and resilient DAO architectures.

Governance Layers in Web3 Stack Protocol

Layer	DAO Function	Tools
Wallet & Identity	Defines participant identity and access	Smart Accounts, ERC-725/735
Proposal Layer	Manages ideas and decision flows	Snapshot, DAOhaus, JokeDAO
Execution Layer	Enacts decisions and treasury control	Gnosis Safe, Zodiac Modules
Reputation Layer	Tracks contributions and voting weights	Coordinape, Karma, Otterspace
Governance Interface	Displays DAO data & facilitates interaction	Tally, Boardroom, custom frontends

iBLOOMING DAO Use-Case

iBLOOMING's vision of participatory education governance can use the stack to:

01

Link Soulbound IDs to learner/mentor roles

02

Use off-chain voting (Snapshot) + on-chain treasury (Gnosis Safe)

03

Track contributor activity via NFT-based reputation

04

Display governance participation via public dashboards

Benefits of Stack-Aligned DAO Design

Modularity

Swap components (e.g. Snapshot → Tally) without redoing architecture

Resilience

Failures in one layer don't compromise the whole DAO

Composable Participation

DAOs can interoperate or delegate to other DAOs with clarity

Challenges and Responses

Challenge	Stack Solution
Too many scattered tools	Use stack blueprints for tool selection
Poor documentation and user onboarding	Standardize with stack-based training layers
Inflexible governance models	Encourage protocol upgrades and role modularity

Stack Blueprint for iBLOOMING DAO

Identity

Soulbound NFT using ERC-725 + role-based schema

Voting

Snapshot + token-weighted with optional reputation override

Execution

Gnosis Safe + module for conditional transfers

Interface

Custom dashboard with learning outcomes + vote history

Upgradability

Layered governance to propose tooling changes

The DAO of the future is
not built monolithically *it's stacked*

The Web3 Stack Protocol offers a way to orchestrate governance tools, reduce risk, and promote transparency in a modular and scalable framework. iBLOOMING has the potential to become its flagship use-case in education.