

**Name:** DID Reputation Algorithm

**Background:** Social media currently suffers from a deluge of bots and disreputable behavior which can drown out actual content and lead to a toxic environment. Each social media company acts individually to track and ban accounts which duplicate the work across each platform. DIDs could provide a way to track reputation across domains in a censorship-resistant manner and allow users to filter activity by reputation. That reputation could account for a VC, crowdsourced or some combination.

**Description:** Build a reputation system/algorithm where a newly acquired DID always has the lowest reputation, and then over time and with favorable actions, that DID can build a reputation. Likewise, if the DID is being used to spam social media, the reputation can be downvoted, however, it would never be downvoted below a new DID, making it less practical for bots to switch identities by creating new ones.

Using a DID reputation anchored to a blockchain solves the problem of needing to trust a singular centralized authority to store reputation which may not act in a censorship-free or unbiased manner. Using a DID reputation system where all social media has access, the overhead of each platform needing to maintain separate reputation systems can be reduced. A reputation system built on DIDs could identify bots and spammers based on previous behavior.

Once a reputation has been established, the DID owner can choose to reveal their reputation to a social media user who restricts posts to their profile with a DID reputation threshold.

**Sticky Wicket:** Users should be able to retain their anonymity if they desire and also keep their reputation private, however, a social media user may wish to filter out bots, spam, and unsavory activity. Also, there are challenges to be explored around what happens if a DID is compromised and the reputation is artificially lowered.

**Distinction:** Censorship resistant reputation with a cross-domain application.