

# **Outreach, education, and marketing for the next generation of internet architecture**

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## **Title:**

Outreach, education, and marketing for the next generation of internet architecture

## **Describe your project:**

Facebook, Twitter, and other social giants control the news experience for a huge number of Americans. These companies' business models is to sell advertisements. As long as these two facts are true, achieving serious innovation in overall information accuracy is impossible. "Clickbait" content and bona fide journalism are identical from the perspective of algorithms trained to maximize impressions from "highly engaged" users.

The solution is developing standardized software protocols for how social publishing software should behave. Application developers can implement these standards to provide users vastly greater control over their news experience, and (most importantly) allowing users to easily port data between applications. This vastly reduces the power of corporations dependent on walled gardens and complicated export functionality to retain user data. If Facebook refuses to change its news distribution algorithm, a competing company can offer a separate news feed algorithm (or entirely new user interface) without the user having to rebuild their social graph -- loved ones, favorite publications, old friends -- from scratch.

Several such standards are currently being developed. Solid (MIT), Camlistore (Google), IPFS, Upspin (also Google), and many others are developing protocols, competing platforms, and tool suites which level the playing field between social media companies and well-meaning developers. There are many of these groups; I'm currently tracking 112 separate initiatives developing various decentralized alternatives to pieces of traditional social technology (and that's the tip of the iceberg).

Truth be told, almost any of these initiatives could work to build the next generation of news software. The problem is getting developers to agree on which one. My project is building a huge catalogue of various approaches to decentralized publishing, providing concerned developers (and savvy individuals) with up-to-date information on best practices for self-publishing in an environment increasingly hostile to free information and civic values.

## **What problem are you trying to solve?:**

Suppose you're a journalist, and you have 10,000 followers on Twitter. This is the primary distribution channel for articles you write. Let's imagine some not-unlikely

scenarios:

- 1) 10% of your followers are harassed off of Twitter by trolls, abusers, or otherwise malicious agents.
- 2) Twitter begins shadow-banning 10% of your well-meaning followers in an attempt to curb harassing behavior, but their algorithm overshoot and starts banning peaceful users.
- 3) Twitter changes its algorithm to prioritize certain kinds of content, because they believe it will make advertisers more happy, but causes your tweets to be viewed less.
- 4) Twitter bans a major journalist, suspected of inciting malicious behavior, who takes most of their followers to another platform. Your reach is diminished.
- 5) Twitter changes its UI to eliminate a core feature you used to interact with followers.

You can imagine any number of scenarios (the above have all occurred already in some form). To be fair, these aren't Twitter's fault -- it's the byproduct of having one centralized hub that decides the UX, moderation policy, identity network, database implementation, etc., that everyone uses to have political discourse in the US.

The problem is: How do you switch off of Twitter? Your whole network is embedded in the system. All of your followers, follows, past tweets, and private messages are trapped in a data model that makes it extremely difficult to port to another platform. If you want to switch platforms, you have to painstakingly rebuild your network from scratch, which is untenable. And because Twitter makes money from the number of engaged users on its platform, it will never make the process easy for you.

**Who will be impacted by your project and how do you understand their needs?:**

Designers, developers, and savvy individuals interested in solving this problem. The good news is, there are many smart groups working on pieces of this problem over the last several years. But let's look at a few:

- GNU Social / Mastodon (GNU) -- Built off of the Ostatus protocol, these are social network that utilize protocols such as WebFinger, Atom, Pubsubhubbub, ActivityStreams, and Salmon to build federated social networks.
- Solid (MIT) -- Spearheaded by Tim Berners-Lee (founder of WWW), this MIT group is building on W3C specifications such as RDF, WebID, the FOAF vocabulary, using the Cert Ontology to handle authentication...
- Camlistore (Google) -- Camlistore (Content-Addressable, Multi-Layer, Indexed Storage) is standardizing distributed file / asset storage, which stores "blobs", publishes via "permanodes", on which you can make "claims"...

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...As you can see, there is a large soup of rather complicated vocabularies at the heart of these next-generation application protocols. There are actually hundreds of groups like this, each with specialized terminology to describe the cutting-edge infrastructure needed to circumvent drawbacks of current centralized software applications.

It's not just laymen who have trouble understanding this. Social software is extremely complicated to build, and new protocols are notoriously hard to understand and work with, even for smart application designers. If you're an ordinary developer wanting to contribute to these initiatives, you're presented with a daunting slew of protocols, initiatives, and poorly written documentation.

Even worse, it's very hard to tell which groups have traction or are worth investing your time into. These are mostly non-profit initiatives, so they have very few resources to dedicate to documentation, education, and developer outreach. That's where I come in. I am collecting statistics, making videos, providing educational deep-dives, building communities, and providing general evangelization to project owners wishing to increase interest and adoption of their work.

**Please list team members and their qualifications:**

Chris Johnson, project lead:

- Web software engineer for 7 years
- Current video engineer for Twitch.tv
- Studying decentralization software for 5 years

I submitted a similar proposal for the Knight News Challenge back in early 2014: <https://www.newschallenge.org/challenge/2014/submissions/stop-letting-facebook-own-your-data-web-applications-should-ask-you-for-your-data-not-the-other-way-around>

Since then, I've been implementing decentralized applications, tracking projects, and building a community of interested and knowledgeable peers in the space. Over the last two months, I've been fully engaged in off-hours working on this project, and will transition to full-time in six months regardless of whether I obtain external funding.

**What progress, if any, have you made on this project?:**

I've already built the first version of the Decentralized Index, a web application listing the top projects attempting to solve the collaborative social software problem (similar to what Crunchbase does for regular startups). Phase 1 is building out the list, collecting all available metadata on each project (including links to the project's vision, resources to help developers contribute, and major updates demonstrating overall momentum). Once this is completed, I want project founders to report usage statistics, including # of developers engaged on the initiative, # of end users using downstream applications of the product, and hopefully provide more "official" product updates. This will require lots of outreach

work. Ultimately, the willingness of founders to provide traction statistics will determine their seriousness in terms of demonstrating to the community that they are ready to productively use developer energy to solve real problems.

If I got funding, I could immediately begin doing a deep-dive effort on flushing out materials for the top initiatives. I will do design work, video production, custom educational content, development work, and full-stack engineering for both the above developer outreach programs and also direct work for projects that need it. In addition, cataloguing the real applications that people will ultimately use is an important part of the overall outreach goal.

I've already compiled some 5000 lines of research, tracking over 100 initiatives, planning conferences, writing essays, & growing contacts of people either already engaged or interested in alternative publishing and distribution software. Still, this is all only with two month's work and in my free time; with funding, I could substantially accelerate the timelines for the above projects. Finally, putting actual applications in the hands of journalists and news consumers is the ultimate goal, which will greatly benefit from you choosing to accept this application.

**Organization:**

Principled Technology Group

**Website:**

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**City:**

San Francisco

**State:**

California

**Which of the following best describes your organization?:**

Non-profit

**I confirm that I am 18 years of age or older::**

true