

V E T T A G E

Journalism, Decentralized

Abstract

Globally, journalism has continued to suffer an acute crisis: both in terms of credibility in the eyes of news consumers, and in terms of career and earnings sustainability for its practitioners. Journalism's ethical guidelines are increasingly supplanted by everything from propaganda to advertising and entertainment to outright political subversion, while newspapers are closing in record numbers and average salaries continue to plummet. Add to this the mere fact that no single news organization can cover everything, all the time, let alone with constant accuracy, and it becomes clear that the present advertising-based business models are no longer sustainable.

While some elements of a solution have appeared in many different startups to date (Civial, DNN, Oximity, WikiTribune, Userfeeds.io, Lunyr, Synereo, and Pramanika among others), no one combines all the advantages in a particular recipe which answers all the troubling issues currently plaguing the industry.

Yet since the advent of cryptocurrency farming, new ways to create value -- the very building block of money -- have grown, affording journalists (and especially freelancers) a new frontier for sustainability. Originally conceived in 2013 to be built using blockchain technology, **Vettage** was created to work in lock-step with this new innovation. It is a software-as-a-service solution, which allows media consumers ("Subscribers") to find and freely support news content by literally storing it (nonrepetitively) on their own hard drives, while the content itself is always economically incentivized toward newsworthiness, credibility, timeliness and visual appeal -- while completely free of advertising. Because of its use of (an as-of-yet undetermined cryptocurrency such as Mailsafe Coin or Filecoin), in a P2P content addressing protocol known as IPFS (Interplanetary File System), subscribers are paid to host the content -- and based on their rating of that content, will give some of their earnings to the journalists who produced it. At the same time, this model prevents censorship. IPFS content is permanent (unless, in an unlikely scenario, every machine on its nodal system is purged of that content). IPFS is also a verification tool, since a unique hash is generated for each piece of content uploaded onto the system. If one bit of that content changes, a different hash is generated. Finally, Vettage also affords journalists a way to be paid in a way which does not require revealing personally identifiable information, protecting the lives of journalists who would otherwise be harassed, imprisoned, or murdered. The rest of society also benefits from more stories critical in citizen-level decision making processes -- issues such as corporate malfeasance, public health, criminal enterprises, corruption and government misconduct. This begins with content accountability and credibility on its most basic level.

Value Proposition

We propose Vettage as a means to provide:

(1) Subscribers: direct ownership and control over the newsworthiness and credibility of the content they host on their very own computers, instead of editorial middlemen driven by corporate interest, advertising dollars, or worse yet, spin artists and outright falsehoods perpetuated by fact-resistant social media echo chambers;

(2) Raw Content Contributors (photographers, videographers, sound recordists): a chance to be paid for their work as invaluable local resources, to be rewarded directly by Subscribers, instead of merely giving away their content on Twitter or to CNN or BBC, or being paid bottom dollar by agencies and social media scrapers like Storyful (acquired by NewsCorp) or the non-decentralized Oximity, acquired by Scribd;

(3) Editors (writers, designers, programmers and others who shape various raw media elements into a final story): connection with and collection of relevant, already vetted raw content, to build the most credible news stories possible, and thus reputation — as well as rewards, directly from cryptocurrency earned by Subscriber by hosting the content, based on levels of their credibility, newsworthiness, timeliness and presentation; anonymity when needed, without sacrificing payment for their work.

Instead of 3rd-party editorial middlemen at centralized news organizations -- who are prone to influence by business interests instead of that of their audiences -- Vettage uses a decentralized user network of subscribers, and a cryptocurrency that pays them just for logging onto the network -- so they can be more free to reward journalists whose content they want to support. Vettage also allows subscribers to store content they support, as well as the exercise of its editorial control.

Additional features allow editors and raw content contributors to find each other and collaborate on stories, and finally share in the rewards from subscribers. This process, while inherently competitive, encourages quality for the subscribers, in addition to the control they have through the ratings system.

Content vs. Subscribers: A Solution to the Chicken & the Egg Dilemma

At its initial release, Vettage will appear as an IPFS storage application. However, options for microservices will also exist, such as an opportunity for users to register known bad actors (identifying them by their wallets) - and reject any action taken by people known to be bad actors. While inherently susceptible to abuse, those with good intentions will stand out -- not unlike the current IP blacklist/whitelist. Additionally, Vettage will act as an IPFS gateway to store documents on IPFS and validate them before storing them.

These microservices are elements inherent to the Vettage IPFS content ecosystem, and afford users valuable opportunities for their content, whether it be storage (and earning Madsafe coins as a result), or building their credibility as content suppliers -- or both. Once these services accumulate a user saturation point, Vettage will encourage collaboration on full-scale, multimedia news pieces, which subscribers can either share to view, or pay (host) to rate.

All aspects of Vettage are inherently supportive of credible, newsworthy content -- and adverse to and restrictive of bad content -- before it is even shared.

Beyond other microservices such as conversion of multimedia into hard-copy versions of reportage and syndication (of Vettage's original content, and of existing news stories into Vettage for additional ratings), additional users may be attracted by earnings afforded by mere cryptocurrency farming alone.

Advertising is Unsustainable, and Here is the Exponential Solution

Following the spectre of "fake news" and its impact on national elections, Facebook has taken steps to take the wind out of fake news advertising sails. Advertising on articles which Facebook finds to be in fact, fake (using its newly-appointed staff of thousands), will no longer be able to earn money through user clicks. However, this is merely another band-aid on an inherently unsustainable business model for journalism.

Without going into the [numerous cited reasons](#) why advertising is bad for journalism, the solution is worth mentioning as a real and developing possibility now before us. While conventional news sources -- even Twitter itself -- now lean toward the subscription model, in the face of common public assumption that we should get our news for free -- the tipping point is now revealed in Farming. Some cryptocurrencies -- convertible into any fiat currency either directly or through Bitcoin -- now reward users with more of it. [MaidSafe](#), for instance, not only allows its users to earn, but also affords even greater security than Bitcoin.

Regardless, technological innovation -- while forcing old business models out of business -- offers better business models more in line with journalism's intended purpose as a socially edifying enterprise. We can reap the benefits -- if we embrace it.

The growth of the freelance economy: Uber, Lyft, Airbnb, Upwork.com, Storyhunter, and a host of other examples show the infrastructure is naturally growing. Of course, traditional brands attempt to innovate and adapt, but there is increasingly little room for adaptation, when, as the problems currently plaguing the industry attest, a fully redesigned model for journalism at its very foundation is what's needed.

Vettage is that model.

User Payment Structure

Vettage is comprised of three types of users: the Subscriber, the Raw Content Contributor, and the Editor.

The life of a news story begins with the Raw Content Contributor, who shoots a video, makes an audio recording, takes a photograph, conducts and publishes statistical research, or otherwise creates some raw content element which an Editor can use to compose a finished news piece of relevance to the audience. The Editor finds these raw elements and their respective Contributors, and pulls them all into a final news piece that can take any form. In many cases, the Editor may also be a Raw Content Contributor. But the key is **collaboration**, unrestricted by allegiances dictated by news organizations, advertisers, or copyright -- because the Raw Content Contributors own the rights to their own work, and agree to share that copyright with the Editor they have agreed to collaborate with on Vettage.

Once that news piece is finished, it is pushed out on Vettage to its Subscribers, who in turn rate the story on four criteria: Newsworthiness, Credibility, Timeliness, and Presentation (style or appearance). Once the Rate button is clicked, Vettage retains its 5% of the subscriber's earnings as a service fee, and the rating, anywhere from a 4 (10%) to a 40 (100%), then directly determines how much of the subscriber's remaining earned cryptocurrency goes to support the Editor, who then shares the earnings with the Contributors on already agreed-upon percentages.

Because Editors are in a better position to compose more pieces than Raw Content Contributors can contribute geographically-based content, Contributors tend to earn more per piece, while Editors are limited to 20% of the total earnings for a given piece.

The money left over, retained by the subscriber, can be used as the subscriber wishes, or can default to being placed in a pot which is awarded at the end of the year to the team behind the best overall rated news piece.

Effects on News Diversity and Ethics

Vettage's decentralized collaborative content model, built on IPFS, encourages diversity of news sources independent of the "Big Six," rewards credible and relevant content -- while financially discouraging creators of fiction, propaganda, and advertising. The permanence of IPFS affords verifiable user ratings history and accountability (at least by username only); and subscriber ratings which dictate financial returns, instead of mere upvotes or downvotes, channel the immediate critical ferocity of internet forums like Reddit into financial rewards to the credible and relevant, and bankruptcy for the purveyors of clickbait, censorship and propaganda skills.

Because Vettage does not engage with advertisers, the [fraud](#) afforded by advertising, and perpetrated by clickbait articles that depend on ad clicks for revenue, is no longer an issue. Subscribers hold onto their money and decide what to reward, without being forced to before they even see what they are rating.

TECHNICAL NOTES

IPFS*

"IPFS is a distributed file system which synthesizes successful ideas from previous peer-to-peer systems, including DHTs, BitTorrent, Git, and SFS." - Juan Benet, IPFS White Paper

Compared with HTTP, IPFS was recognized as superior content sharing protocol for Vettage for the following reasons:

- (1) Decentralization: IPFS is more compatible with the emerging freelance economy, and removes the power and control consolidation which has magnified some voices over others, simply because the louder voices have more money. With IPFS, there are no more news organizations, only collaborative individuals who come together for each individual news piece, and are paid by their audience without editorial or corporate middlemen.
- (2) Permanence: the only way any content can be "censored" on Vettage, or IPFS, is if all the machines containing that content are destroyed, or if the content is deleted from each machine on the network

* Palo Alto Networks affords important security against malicious use of IPFS:
<https://unit42.paloaltonetworks.com/ipfs-used-maliciously/>

- (3) Verification: a unique hash is generated in the system for any given piece of content. If the smallest bit of that content changes, a different hash is generated, thus assuring authenticity of original content.
- (4) Efficiency and Low Cost: Aside from saving some 60% in bandwidth costs in video sharing due to its P2P file sharing, IPFS is also faster than HTTP because it collects pieces of content simultaneously from many different sources, instead of downloading from a single machine, often incurring limitations inherent in single-source bandwidth and servers.



Each file and all of the **blocks within it** are given a **unique fingerprint** called a **cryptographic hash**.



IPFS **removes duplications** across the network and tracks **version history** for every file.



Each **network node** stores only content it is interested in, and some indexing information that helps figure out who is storing what.

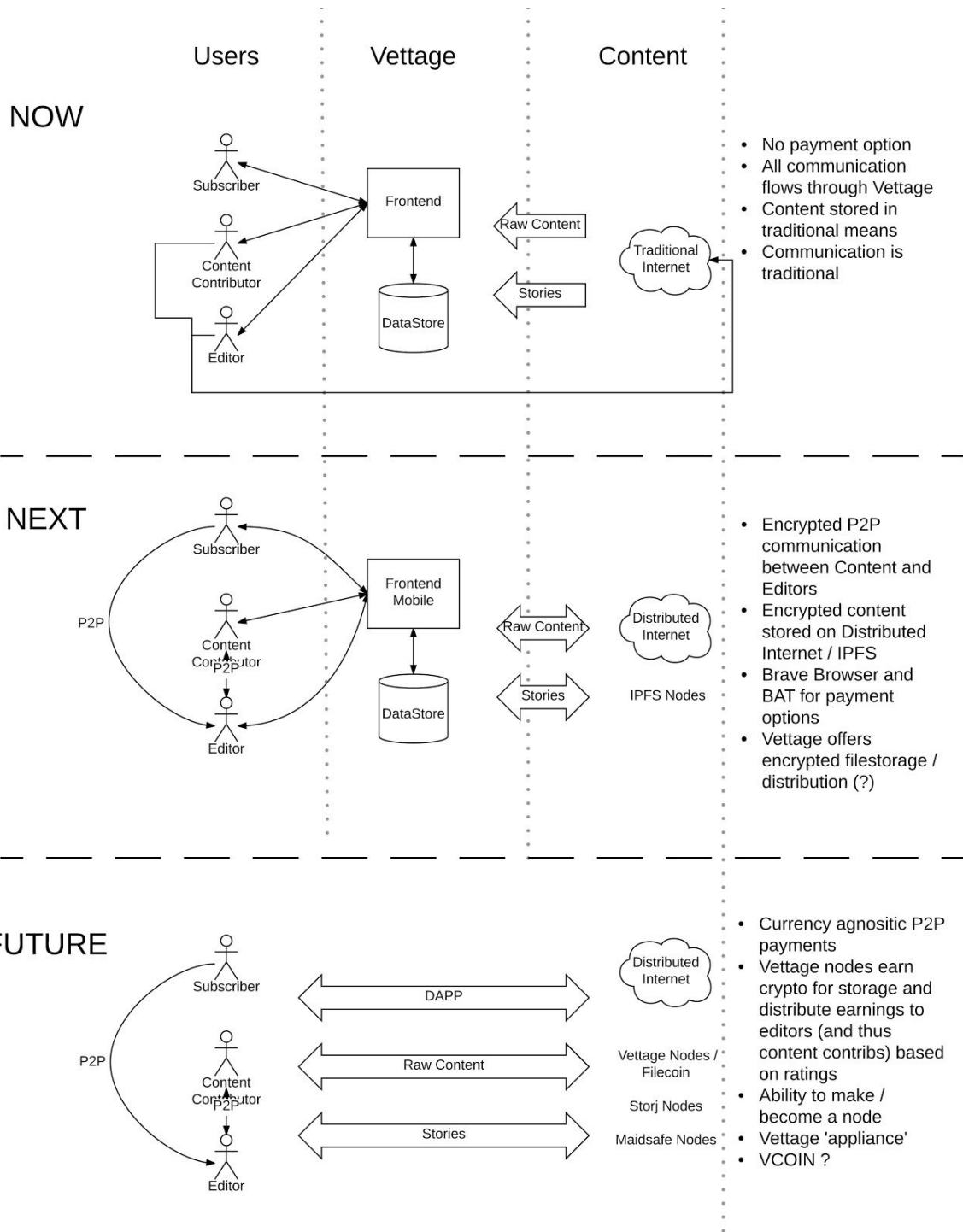


When **looking up files**, you're asking the network to find nodes storing the content behind a unique hash.



Every file can be found by **human-readable names** using a decentralized naming system called **IPNS**.

IPFS was also meant to be an encrypted file sharing system. (IPFS White Paper by Juan Benet, p.10) Cryptocurrencies in general enable more privacy than that afforded by conventional payment systems, which in all cases require identity verification -- an immediate danger to contributors sharing content under hazardous or repressive circumstances. Below is our current course of development:



Conclusion

As efforts continue from a myriad of endeavors to solve the diversity and ethics issues in journalism, the consensus is clear, that journalism is largely failing its mission. The environment being created around the unsustainable position of establishment news organizations make them increasingly impractical. Understandably, the spirit of self-preservation dictates that they will take steps to ensure survival, even if it means undergoing a complete transformation in methodology and presence, as *Newsweek* has demonstrated with its own evolution into *The Daily Beast*. However, little has changed in its basic organizational structure and logistical approach to news delivery. This will continue to pose a challenge for its success.

CNN's iReport is another example of the evident awareness of news organizations that they will need to adapt to the changing media environment in order to survive. This however does not mean that *journalism* has to adapt to survive, or that *journalism* is dying out.

Sourcewatch.com lists multiple examples of [new reporter bases developing globally](#). Some of them address credibility by a rating, others emphasize a variety of presentation styles, and a mix of them focus on a particular region. But all of them share one thing in common, and that is the desire to deliver important news with less emphasis on an unattainable "objectivity," a greater variety of sources and news pieces, and all with a greater degree of efficiency than existing news organizations -- something achievable through decentralization on an individual user basis, as Vettage proposes.