

Political POEM

Organization:

University of Missouri – Kansas City
Department of Physics & Astronomy

Industry:

The intersection of social media and politics

Researcher:

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Status of Intellectual Property:

Copyright protection on source code.

Next Steps:

Security harden the application
Release the MVP for use
Test, test, test
Market the application
Add features

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Wanted

Web development and commercialization experience to move a social media innovation to market.

Customer Problem

Communicating your opinions to elected officials is time consuming, intimidating, and emotionally unfulfilling.

As a constituent, I want:

- (1) To communicate with my elected officials as easily as I can Tweet.
- (2) To not be afraid of others' (friends/family/employer) perception of me in light of my political opinions.
- (3) To know that my opinion has an impact.

The Political POEM grants these wishes.

Potential Market Uses

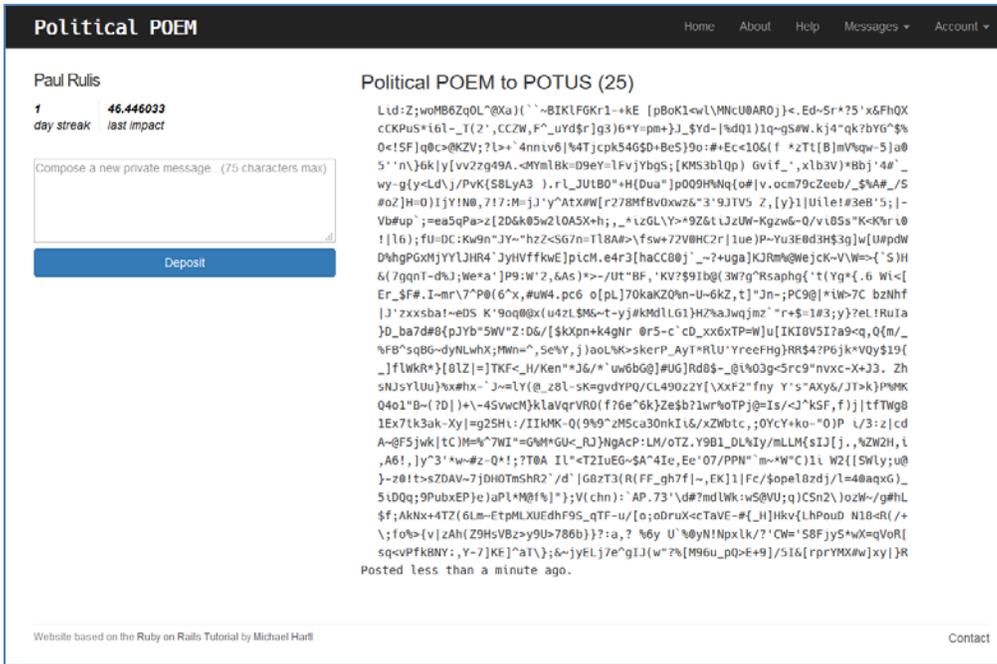
The Political POEM has a Twitter-like level of ease-of-use. It provides privacy, but it also throttles message posting and account creation to encourage a good signal to noise ratio. It helps you craft your message and it gives you immediate feedback about your impact. **In the market**, Political POEM is presently a traditional desktop-based web application, but it is transitioning into a mobile web app. **Likely customers include** politically interested persons that would like to express their opinions to their elected leader. **Use case:** Alice has an opinion about recent actions taken by POTUS. She goes to the Political POEM web site. She sees the current public message and then types her own private message. She is quickly told the impact that her message will have on the public message based on its similarity. The next day, she sees the newly created set of public messages, including the influence of her message and everyone else's. Then, the process repeats. **Alternative use case:** A corporation may want to allow employees to anonymously and collectively provide feedback to middle and executive management.

Market Size

In 2017, 75-80% of people in the United States used some social media (mostly on a daily basis). This percentage will continue to increase. A Pew Research survey indicated:

- (1) ~66% of Facebook/Twitter users see *some* or *a lot* of politics
- (2) ~80% of Facebook/Twitter users post *little* or *nothing* about politics
- (3) ~50% of users found political discussion to be angrier, less respectful, less civil and less likely to result in a resolution than via other media

There are a lot of people reading about politics but few people contributing. The Political POEM targets that market space. The question then is how many people are in that space and how many can be engaged and retained? Applying the above percentages to the 0.3×10^9 people yields $\sim 60 \times 10^6$ people at best. Probably only a fraction of those can be engaged and retained.



Innovation

The Political POEM provides a canvas for a large number of politically interested persons to come together as private individuals and produce a unified message to their public leader.

Contributors to the Political POEM deposit a private message into a database once per day. At the end of the day, the *cumulative impact* of the private messages is then used to modify a set of public messages to the public leader.

The modification takes the following form. Each message is compared against the current set

of 25 public messages for the public leader. A strong match between your message and one of the public messages is found and then your message is used to incrementally modify the contents of the matched public message.

If a user wants his or her message to have the most impact on the public leader, then they can study the current set of public messages and craft their next private message accordingly.

POEM is an acronym for **Public Opinion Evolutionary Machine**.

Stage of Development

MVP developed and deployed to a production environment. (Ready to start taking orders.)

MVP is presently useful only for communicating with one elected official: POTUS.

MVP is *not* extremely well-tested and the code is somewhat brittle. (Needs a pro's touch.)

Competitive Advantages

Competitors:

- (1) Twitter
- (2) Facebook
- (3) Other social media platforms

Advantages:

- (1) User accounts and message generation are throttled to reduce the number of sock-puppets and increase the signal-to-noise ratio. (One user per text-capable phone number and one message per user per day.)
- (2) Public message content is driven by a combination of direct user input and evolutionary algorithms applied according to the popularity of individual messages.
- (3) Impact score feedback is instantaneous as opposed to needing to wait for “retweets” or “likes”.
- (4) User messages are deposited privately so that otherwise intimidated people will feel free to share their opinion.
- (5) The public messages are constructed from the private user messages statistically. Therefore, the public messages are less likely to contain extreme expressions that are a turn-off to many people.
- (6) There is no “bubble” effect caused by being fed only the opinions of like-minded people.
- (7) There are no advertisements or other opinion skewing sources of interference.