

# Supporting Debates over Citizen Initiatives

Kishore Kattamuri<sup>†</sup>, Marius Silaghi<sup>†</sup>, Cem Kaner<sup>†</sup>, Ryan Stansifer<sup>†</sup>, Markus Zanker<sup>‡</sup>

<sup>†</sup>Florida Institute of Technology (FIT)

<sup>‡</sup>University Klagenfurt (UKLA)

{kattamuk,msilaghi,ckaner,ryan}@fit.edu, markus@ifit.uni-klu.ac.at

Citizen/popular initiatives provide a way for the inclusion of constitutional or statutory proposals on the ballot (e.g., at an election) if enough signatures are collected in support of the proposal [1, 2, 3, 4]. Once citizens are enabled to digitally sign such initiatives remotely, the next challenge will be to provide support for verified eligible citizens to debate on running initiatives. Intelligent ways of structuring information for easy access and cooperation is a major research interest in computer science, with results like WWW, Semantic Web, Forums, Blogs, Slashdot. We propose here a new interaction paradigm for debates in the setting where participants are verified for eligibility and have equal weight. The estimation of the popular support for proposed initiatives and emerging comments (justifications) forms a basis (and a by-product) of such debates. This paradigm can find additional applications in supporting debates of shareholders for decision making, as well as for debates of working groups and committees, or for the administration of other entities like towns and counties.

To illustrate the functionality of our system, we use an example of statutory initiative for the State of Florida. Our paradigm is coherent with regular popular initiatives. A few features, consisting of non-legally-binding interactions, are added to improve the civic discourse. To improve scoring of comments attached to initiatives we propose to stress their intent by revealing if the authors/supporters have signed the corresponding initiative. To make things clear, when a comment is submitted the author is asked to state his current position by either signing the initiative (a *pass* signature), or explicitly delaying to sign (a *fail* or a *borderline* signature). This improves the truth incentiviveness of the debate in the sense that it discourages political comments trying to please some or all parties without having substance. Privacy concerns and solutions are described in [5].

Another relevant feature is a help to bootstrap the initiative processes: matchmaking to help citizens reach the threshold required by state constitutions for starting the signature gathering (7, 20, or more initial signatures, function of the state/country). Our paradigm of interaction can be

Permission to make digital or hard copies of all or part of this work for personal or classroom use is granted without fee provided that copies are not made or distributed for profit or commercial advantage and that copies bear this notice and the full citation on the first page. To copy otherwise, to republish, to post on servers or to redistribute to lists, requires prior specific permission and/or a fee.

Atlanta dg.o2005

Copyright 200X ACM X-XXXXX-XX-X/XX/XX ...\$5.00.

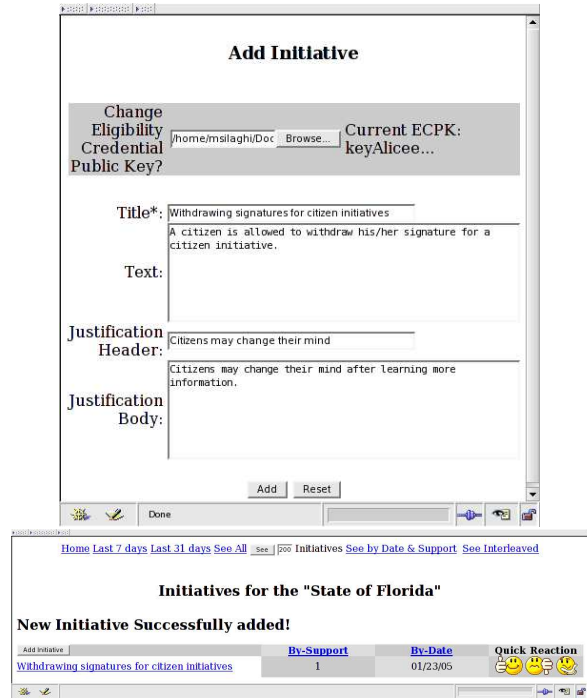


Figure 1: Alice starts an initiative with a comment.

used here, where proposals accumulating this first threshold of support are subject to the legally established procedure of the corresponding state and upon success are transferred to the signature gathering stage.

Let citizen Alice have a new initiative: "Citizens should be allowed to withdraw their signatures for citizen initiatives!". To promote this idea she initiates the following process.



Figure 2: Bob supports the initiative.

1. Alice formulates the proposal: "A citizen is allowed to withdraw his/her signature for a citizen initiative." Alice surfs the Web to the Citizen Initiative Website of

Add Citizen Initiative	By-Support	By-Date	Quick Reaction
<a href="#">Withdrawing signatures for citizen initiatives</a>	2	01/23/05	😊😊😊😊😊😊
<a href="#">Withdrawing electronic signatures for initiatives</a>	1	01/23/05	😊😊😊😊😊😊

Figure 3: Carol starts a competing initiative.

React to This Initiative: Favorable Negative Neutral

Proposed Alternatives: [Withdrawing electronic signatures for initiatives](#)

Justifications For Prior Reactions

2 Minds change and democracy is priceless. Citizens may change their mind

1 Expensive to change manually cast signatures

Figure 4: David comments and Alice changes.

the state of Florida, opens the submission module for initiatives, and types in her proposal. Simultaneously, Alice can specify a comment justifying the initiative: "Citizens may change their mind after learning more information" (see Figure 1).

- Alice submits the proposal using the web application, and her locally stored credentials are used for completing the task (also verifying her eligibility). The proposed idea is published on the website together with a *pass* signature, referencing Alice's comment. The initiative has score 1 (number of supporting signatures). The new proposal appears at the top of the list of new proposals and also appears at the bottom of a second list of proposals, ordered by the number/ratio of positive signatures received in the prior week (however that listing does not offer any visibility to this proposal).
- Another Florida citizen, Bob, sees it. He likes the idea and its explanatory comment and supports it with a *pass* signature. Bob likes and references Alice's comment, which is scored 2 (number of positive signatures referring it, see Figure 2).
- A third Florida citizen, Carol, does not like the idea and submits a *fail* signature with a comment showing what she perceives as a weakness of Alice's proposal: "It is expensive to withdraw the manually cast signatures". Carol's comment is shown separately in a list of failing comments for Alice's initiative and is threaded (i.e., linked) to Alice's comment. Following the *Have better idea?* link (see Figures 3, 4) Carol submits a competing initiative that is threaded to Alice's initiative: "Citizens are allowed to withdraw their signatures for citizen initiatives, if they sign electronically."
- David likes Alice's initiative and signs it submitting a *pass* signature with a comment that answers Carol's critique: "Democracy and fairness are priceless! Any citizen may change his/her mind after learning more information". His comment appears after Alice's comment since so far it is referred to by only one signature. However, Carol's comment is also associated with a

link threading it toward David's comment. Other comments answering Carol will be added to Carol's comment sorted by their type, *pass/fail*, and ordered by the number of signatures referring them (see Figure 4).

- If Alice returns and reads the continuation of the discussion, she can abandon her own initial comment and support David's more complete comment for her signature. David's comment score will be increased, placing his comment before Alice's initial comment, referred to now only by Bob – Figure 4).

Three types of signatures are supported: *pass*, *fail*, and *borderline*. While *fail* and *borderline* signatures have no legal effect and no equivalent in current initiative systems, they help commenters to clarify their position and in our implementation help to check that each user has equal weight in scoring comments and initiatives. It is also an incentive to correctly classify one's comment: A positive comment means that the author really signed the initiative and a negative one means that the author really did not sign it. The difference between *fail* and *borderline* signatures is less important and is meant to better convey the impact. In particular, *borderline* signature allows a citizen to add his/her unique comment without either signing or undermining the initiative. As it can be noticed from the example, our system allows participants to submit/confirm at most one comment in association with their signature. The limit is set as part of an ongoing experiment searching ways to minimize the verbosity and to help focus the debates on fewer, more complete and better written comments.

In conclusion, here we propose an interaction paradigm for debates on citizen initiatives when participants can be verified for eligibility. Ways of structuring information for easy access and cooperation is a major research interest in computer science (WWW, Semantic Web, Forums). An idea central to our approach (akin to Slashdot [6]) is to use voting for visibility and visibility for voting. Novelty lies in the generalization of this concept to a second layer, namely to comments, and in a methodology exploiting that participants can be given equal weight as a by-product of the eligibility verification. An implementation of the system described above is available at <http://tibles.cs.fit.edu/initiatives>.

## 1. REFERENCES

- J.-L. Abbet. Projet pilote neuchatelois, 2004.
- E. Greenwood. Focus on ..- citizen initiatives. <http://focus.at.org/direct-democracy/citizen-initiatives>, 2004.
- P. K. Jameson and M. Hosack. Citizen initiative in Florida: An analysis of Florida's constitutional initiative process, issues, and statutory initiative alternatives. *Law Review*, 23(2), 1996.
- T. Scottish-Parliament, N. University, ITC, and B. Scotland. <http://epetitions.scottish.parliament.uk>.
- M. C. Silaghi and K. R. Kattamuri. Publicly verifiable private credentials for citizen initiatives. Technical Report TR-FIT-2/2005, Florida Institute of Technology, Melbourne, FL, January 2005.
- Slashdot. Slashdot faq - comments and moderation. <http://slashdot.org/faq/com-mod.shtml#cm703>, December 2002.