

Online voting for grassroots initiatives in California: electronic signature collection

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Summary

This article discusses the process of online collection of signatures for legislative proposals, taking as a starting point the current process for popular initiative in California. It describes how online signature of popular initiative petitions would work, as well as security issues and other objections to the collection of signatures via the internet could be addressed and, finally, the pros and cons of applying this method of collecting signatures to popular initiatives.

Keywords: online collection of signatures; popular initiatives; California; United States.



A. INTRODUCTION

Any resemblance between the process of popular initiative as initially conceived by Californian progressives in the early 20th century and its current conformation is purely coincidental. Rather than providing ordinary citizens with a way to make their voices heard, this process turned into just another avenue for advancing the interest group agenda. In such circumstances, an “industrial complex of popular initiatives”¹ emerged, through the birth of a big business alongside the voting process. Today there are companies for collecting signatures, lawyers responsible for preparing petitions for popular initiatives for their well-off clients and political consultants who act in favor of the approval or rejection of proposed measures. It would be reasonable to call this industry a fourth branch of state government were it not for the lack of a system of checks and balances applicable to the other three branches. It should come as no surprise, therefore, to learn that the days when a grassroots initiative was enabled through a purely voluntary effort are long gone. While, on the one hand, obtaining signatures is aimed at showing that an initiative has a broad base of popular support, the qualification of the initiative [qualification], in practice, depends fundamentally on how much money is spent by proponents on paid services for circulating information. initiatives to collect voter signatures. As described by the former columnist. One way to balance the influence of economic power in enabling popular initiatives could be to allow voters to sign petitions on a computer and transmit them over the internet so that they are counted in the verification of the total number of required signatures, provided that they are followed security procedures and proper authentication. This

could help offset the difficulties of lower-income groups by mobilizing support via the Internet, rather than paying for initiative circulation services, which currently cost two dollars or more per subscription. Signing initiatives online could also raise the level of public debate on voting proposals through online comments and discussions.

There are those who raise objections to the online collection of signatures on the grounds that: unprotected computers or communication links could lead to large-scale fraud in the signature of popular initiative petitions; voters without computers and Internet access would be at a disadvantage; and, signing online would greatly simplify enabling initiatives and thereby burden voters with many more measures put to the vote in each election. This article discusses the electronic signature collection process for legislative proposals, taking as a starting point the current process for popular initiative in California. It describes how the online signature of popular initiative petitions would work, how security issues and other objections to internet signature collection could be addressed and, finally, the pros and cons of applying this method of collecting signatures. Subscriptions to popular initiatives. Proponents of a popular initiative for a law or amendment to the state Constitution must first submit tentative text of the measure to the California Attorney General. The Attorney General then assigns a title and summary to the initiative (the "official summary"), which are sent to the proponents, the legislature and the Secretary of State. The official summary is posted on the Secretary of State's website (www.sos.ca.gov) and the Secretary of State assumes responsibility for determining whether or not the proposed initiative will be eligible for a vote. collect the required number of signatures.⁴ The state of California requires a number of signatures equivalent to 5% of the votes in the last gubernatorial election for legislative initiatives and 8% for initiatives to amend the state Constitution. Based on the 8,679,416 votes recorded in the 2006 elections, the required number for the following quadrennium was 433,971 and 694,354, respectively.⁵ Signature licenses are granted to registered voters in the county where the proposed initiative is in circulation.

Although, in principle, anyone eligible to vote in California can circulate petitions for signature, the vast majority of signatures are obtained by paid professionals working for commercial companies. They can go door-to-door, asking registered voters to sign an initiative petition; or, more commonly, such professionals are installed at tables in front of supermarkets, stores, cinemas and other places that are usually frequented by voters. Once signatures have been collected, proposers file them with the corresponding county election officer, who reports to the Secretary of State the total number of signatures submitted in his county. If from this initial count [raw count] of signatures, in total, the required number of signatures is not reached, the Secretary of State declares that the initiative has not been qualified [failed to qualify], closing the process. However, if the initial count is equal to or greater than the required number of signatures, the Secretary of State notifies election officials to review a random sample of signatures and compare them to signatures deposited on the county's voter registration roll. Each county must verify 3% of the filed signatures or 500 signatures, whichever is greater. County election officials then apply the results of the random sampling analysis to estimate the total number of signatures filed in the county. The online signature of initiative proposals would allow registered voters to affix their signatures on computers and transmit them over the Internet to calculate the required total, provided measures are taken to guarantee security and authentication procedures. The online

signature would complement, rather than replace, traditional methods of collecting handwritten signatures.

Popular initiative petitions would continue to be prepared by their proponents, summarized by the Attorney General and the official summaries posted on the Secretariat of State's website, following current practice. For an online initiative to be signed, a certain voter registered in his/her electoral domicile would access the text of the initiative on the website of the Secretariat of State and would sign it, using a "digital signature" approved by the Secretary of State accompanied by an identifier separate single sent by the Secretary of State to the voter.

the term used for electronically marking and signing documents. It denotes a technical procedure to assess whether a given online transaction, similar to what happens with the purchase of a car or the signing of a proposal for an initiative, is electronically "signed" by someone previously authorized to carry out the transaction.⁶ Signatures Digital encryption uses robust mathematical methods of cryptography known as "public key cryptography", supported by a "public key infrastructure" (PKI) to guarantee the integrity of electronic signatures and data transmitted by the Internet. digital signature would contain the voter's handwritten signature, which would remain on file. The voter would be assigned by the Secretary of State, or by a private "Certification Authority" contracted by the Secretary of State, a single pair of private and public encrypted keys, each consisting of a large set of numbers.⁹ The certification authority would maintain the directory of voters' ICP and would process secure transactions using the voters' public and private keys (one key is used to encrypt the message and the other to decrypt it). The private key would be installed on the voter's computer while the public key would remain under the certification authority's control. It is important that the second identifier be sent to the voter through a different information channel (eg, by mail). Thus, the private key used for his digital signature and the second identifier would not be stored on the voter's personal computer, which would make it possible for a hacker to obtain it. While digital signatures are of central importance to ensuring that an electronic signature is associated with a single private key assigned to an individual voter, it is possible for a third party to use the voter's computer or the private key improperly obtained from the voter's computer to sign popular initiative petitions. This is the rationale for requiring a second unique identifier that was not stored on the voter's computer.¹⁰ In order to reduce the costs of sending separate letters, the Secretariat of State could print the unique identifier in the Information Manual [Voter Information Guide] mailed to each voter prior to each state general election.

B. LITERATURE REVIEW

Objections to the online initiative proposal signing process are often based on possible security risks and vulnerabilities. For example, the Secretariat of State's website, where initiatives are made available, can be altered, defrauded, or taken offline for long periods of time. Even more problematic, personal computers are notoriously insecure and private keys, which are commonly protected by passwords, can easily be found or exposed. Consequently, a voter's private key

could be accidentally given to someone else or remotely obtained by a more sophisticated attacker, who could then use it to sign petitions. Such vulnerabilities are similar to those identified in other reports and discussions on Internet voting, including the final January 2000 report of the California Internet Voting Task Force established by the Secretary of State.¹³ This force -task came to the conclusion that “technological threats to the security, integrity and secrecy of internet voting are significant” and pose risks of “automatic fraud”. She opined against implementing remote voting via the internet from the voter's home or work computers. Although the Task Force “did not consider the signing of petitions via the internet”. While such objections should not be overlooked, the authentication process described above, using a unique identifier not stored on the voter's computer, considerably reduces the possibilities of “automatic fraud”. That is, an individual or group of individuals intent on committing large-scale fraud would not only have to break into a large number of voter computers to obtain ICP private keys, but would also have to simultaneously obtain their unique identifiers that were printed and they were sent to them by post. It would be very difficult to implement this on a large scale without the fact being detected. There is certainly the potential for fraud or abuse by individuals in online signatures, just as there is for handwritten signatures, voting by people outside the precinct, or other methods of voting. Certain voters could be coerced into signing up to an online initiative or they could sell their subscriptions online. There is, however, no reason to believe that the problems of coercion or signature selling would be more general for online signatures as compared to the process of collecting handwritten signatures on petitions circulating door-to-door or in shopping malls. Coercion and signature selling are crimes under California law¹⁶ and it is relevant and relatively simple to make clear that such laws apply both to handwritten signatures and those made over the internet. Furthermore, the penalties applied to the sale of subscriptions could be aggravated and civil penalties could also be applied.

Even more important than what has been said so far, signing petitions online poses a much lower risk than that experienced in online voting. In this, the identity of the voter is intentionally disconnected from the voting register so that it is not possible to reconstruct, after the vote, who voted for which candidates or proposals. On the contrary, the signing of popular initiative online petitions deliberately maintains the link between the signer and the signature, so that the signatures can be verified against voter registrations when processing the vote count. In transactional language, a valid vote does not depend on a subsequent investigation of the relevance between the voter and his vote, that is, it is not linked to a specific voter, but makes up the total number of votes, relying on the verification of the voter status of the voter. moment of the vote and detaching itself from the voter for the purpose of counting [non-reputable], while the signature of petitions of initiative maintains this necessary link of verifying the validity of the signature, through the identification of the voter, being possible to annul a vote if there is a violation of electoral law or procedures. The political risks are also considerably lower for the signing of popular initiative petitions, when compared to voting itself, with little incentive to practice corruption and obstruction maneuvers in the case of signing petitions. As an additional

security measure, in addition to the confirmation electronic message sent to the signatories of the online petition, a questionnaire could be sent by mail to the address in the register of a sample of subscribers, asking them to .

confirm , in response, by mail or telephone, that they have effectively signed the petition in question. If a voter did not confirm that he had signed the petition, his signature would not count. If a considerable set of queries resulted in a denial of signature or lack of confirmation, this fact could alert the Secretary of State to possible fraud, triggering further audits and investigations. Furthermore, if the voter surveyed communicated to the authority that he had not signed the petition in question, his signature should be annulled and those responsible for counting alerted to the occurrence of possible fraud. Another security issue concerns the period of validity of voters' digital credentials for signing popular initiative petitions. The Technical Committee of the California Task Force on Internet Voting has expressed its concern that It is emphasized that the requirement for dual authentication of both the digital signature and a separate unique identifier greatly reduces the possibilities of mass fraud scale. A plausible response to the criticism of the danger of assigning digital accreditation without a final term is to attribute indefinite validity to the voter's private key for digital signatures (except in cases of cancellation, loss or leakage of information), but, on the other hand, limit the validity of the unique printed voter identifier to two-year cycles. Prior to each general election, a new unique identifier would be mailed to the voter along with the Voter Information Handbook. Another criticism of the online petition signature system states that it would impose more disadvantages on low-income individuals, the elderly, the disabled, among others who do not have easy access to computers and the internet. Collecting signatures online, the critic continues, would favor wealthy, college-educated voters who already have access to Internet connections at home and at work.

C. METHOD

For many people, accessing the internet has become a daily activity. More than 70% of Americans have access to computers and are Internet users according to research conducted by the Pew Internet & American Life Project.¹⁸ Women and men now access the Internet in equal numbers. However, income, education, race, ethnicity and – especially – age are still significant factors in defining the degree of internet use. In April 2006, only 32% of Americans aged sixty-five or older reported having accessed the Internet compared to 88% of those aged 18-49. Equity thus requires that voters be able to sign petitions of initiative online using computers available at designated public bodies and facilities, such as libraries, Department of Motor Vehicle (DMV)] and other county or state offices. This requires the use of single-session PKI digital signatures that were not previously stored on the public computer, such as those used today in Canada to fill in online census forms.¹⁹ Voters should also having to take with you, in printed form, your unique identifier for access via public computer, thus enabling the signature of popular initiatives. The

costs of implementing online petition signatures are relatively low, starting from similar two-part authentication procedures for e-commerce and e-government purposes. The biggest expenses would be incurred when installing and maintaining the PKI infrastructure for issuing digital credentials, printing and mailing unique identifiers, and managing the online signature process via the Secretariat of State's website. For one million voters equipped with digital credentials, each of whom signed an average of three petitions of initiative in each two-year election cycle, the cost is estimated to be approximately two to three million dollars over two years, or one to one and a half dollars a year per user.²⁰ The unit cost per user would decrease as the scale of voters requesting digital credentials increases.

The costs arising from the issuance of digital credentials could also be shared with other e-government activities, such as filling out forms by companies and private associations before the commercial legal entities section of the Secretariat of State, filling out tax returns before California state agencies that require them (Franchise Tax Board and Employment Development Department), change of voter registration address, as well as certain procedures performed at the Department of Motor Vehicles. The use of digital signatures in such e-government applications would be based on the same PKI infrastructure and would effectively lower the cost of handling online petition signatures. Still, an additional advantage in the adoption of digital signatures is the fact that it would no longer be necessary to use procedures for verifying votes by means of random sampling or raw data counting. The Help America Vote Act²¹ mandates that voter registration be maintained with the state's electoral authority. In fact, should the electronic signature procedure be adopted, only voters on the official register would be able to electronically sign a proposal submitted for voting on the Secretariat of State's website. All digital signatures, rather than just a sample of them, would be checked when decrypted for the purpose of verifying correspondence between the signature and voter registration, as well as for attesting that the voter had not previously voted for the same initiative. Thus, 100% authentication of voters would be achieved. By requiring the voter to go to the Secretariat of State website to confirm the reading of the official summary of a popular initiative, it will be guaranteed that the voter has actually been able to read what he is signing. Paid signature collection services sometimes camouflage the actual content of the petition they were tasked with collecting signatures. In the case of the digital signature, the voter would first see the official summary and title of the initiative defined by the California Attorney General. With this, a direct link to the full text of the measure would be created if the voter wanted to read it in full. There would also be links to the websites of opponents and supporters of the measure. The Secretary of State website could also contain links to interactive discussions regarding each proposed initiative hosted there and moderated by non-partisan organizations such as the Center for Governmental Studies, the California Voter Foundation, Common Cause and the League of Women Voters. In this sense, the online signature is able to provide better electoral information and encourage more deliberative discussions on proposed initiatives, when compared to the current method of collecting handwritten signatures.

D. CONCLUSION

Another important consideration is whether signing petitions online would result in the enabling of a significantly greater number of initiatives for popular vote, when compared to the number of initiatives enabled by the current method of gathering signatures in person. Many participants and observers of the California political scene understand that the grassroots initiative process has already reached alarming heights, with too many initiatives on too many topics presented to voters in each statewide general election. For example, 16 initiatives were enabled for the November 2004 elections out of a total of 45 initially in circulation. By lowering the costs of signature collection by bidders, it is to be expected that online signature will result in more election-enabled initiatives, if the signature requirements remain in the same mold as currently required. For this reason, advocates of online petition signing should heed the recommendation to increase the total number of signatures required to enable an initiative. One way to strike a balance would be to double the current percentage on the number of votes cast in the last gubernatorial election from 5% (for law initiatives) and 8% (for initiatives to amend the Constitution) to 10% and 16%, respectively.²² A second way of tackling the issue would be to apply the current percentages to the number of voters registered as eligible to vote in the last state election, rather than having as a basis the number of voters who actually voted in the last race. for governor.²³ Another possibility would be to reduce the period for enabling an initiative from 150 days to 90 days. Even so, the consequence – at least in the short term – would likely be an increase in the number of measures put to vote by voters. Californians would then have to decide whether further democratization of a process heavily controlled by monetary interests is worthwhile . One reform worth mentioning here is that of authorizing the return of the indirect initiative in California.²⁴ Greater involvement of legislators in the initiative process would likely reduce the number of initiatives put to the vote. At the very least, it would be necessary to hold public hearings, making room for their broadcast and scrutiny by voters. The legislative body would even have the possibility of approving the measure, eliminating the need to submit it to a referendum during state elections.

In the long run, however, the solution to the problem lies in making the representative system work better. The ultimate goal is to rescue the time when the popular initiative for voting in general elections served as an escape valve used in rare cases when the legislator fell inert. For the representative system to work better, systemic state government reforms would be needed to ensure that our representatives are responsive to the public interest and concerns of ordinary citizens. Such reforms should include campaign finance reform and a fair process of redistribution of electoral districts. Ironically, these same reforms would likely have to come about using the direct voting process.

REFERENCES

1. Adams, A. (1762). Remember the ladies . The Book of Abigail and John: Selected Letters of the Adams Family, 1784, 120-121.
2. Adams, J. (1850). The works of John Adams, second president of the United States: with a life of the author, notes and illustrations (Vol. 2). Little, Brown.
3. Adams, J. (1875). Familiar Letters of John Adams and His Wife Abigail Adams: During the Revolution. With a Memoir of Mrs. Adams. Hurd and Houghton.
4. Allen, JA (1999). Women Theorists on Society and Politics. Canadian Journal of History, 34(3), 508.
5. Armitage, D. (2014). Three Concepts of Atlantic History. História Unisinos, 18(2), 206 ..
6. Boylan, AM (1990). Women and politics in the era before Seneca Falls. Journal of the Early Republic, 10(3), 363-382.
7. Creswel, JW (2010). Research Design: Qualitative, Quantitative, and Mixed Methods Approaches. Los Angeles: University of Nebraska–Lincoln.
8. Creswell, JW, & Creswell, JD (2017). Research Design: Qualitative, Quantitative, and Mixed Methods Approaches. London: Sage Publications.
9. Davies, K. (2006). Revolutionary Correspondence: Reading Catharine Macaulay and Mercy Otis Warren. Women's Writing, 13(1), 73-97.
10. Davies, K., Macaulay, C., & Warren, MO (2005). The Revolutionary Atlantic and the Politics of Gender.
11. Eger, E. (1998). The Nine Living Muses of Great Britain: women, reason and literary community in eighteenth-century Britain (Doctoral dissertation, University of Cambridge).
12. Good, CA (2012). Friendly relations: Situating friendships between men and women in the early American Republic, 1780–1830. Gender & History, 24(1), 18-34.
13. Greene, JD, Greene, JP, & Morgan, PD (Eds.). (2008). Atlantic history: a critical appraisal. OUP USA.
14. Greene, JP (1998). Empire and identity from the Glorious Revolution to the American Revolution. The Oxford history of the British empire , 2, 208-230.
15. Hancock, D. (1997). Citizens of the world: London merchants and the integration of the British Atlantic community, 1735-1785. Cambridge University Press.
16. Hay, CH (1993). Catharine Macaulay and the American Revolution . The Historian, 56(2), 301-316.
17. Hill, B. (1992). The Republican Virago: The Life and Times of Catharine Macaulay. Oxford University Press, USA.
18. James, F. (2012). Writing Female Biography: Mary Hays and the life writing of religious dissent. In Women's Life Writing, 1700–1850 (pp. 117-132). Palgrave Macmillan, London.
19. Katz, WJ (2007). The Mirror of Antiquity: American Women and the Classical Tradition, 1750–1900. American Studies, 48(3), 148-149.
20. Lasa-Alvarez, B. (2016). Two women writers as transatlantic travelers in Mary Hays's Female Biography (1803). In Gender Studies: Transatlantic Visions (pp. 173-186). Fundamentals.