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Digital Democracy: Making Government More Transparent

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The Gap in Government Transparency in California and other States

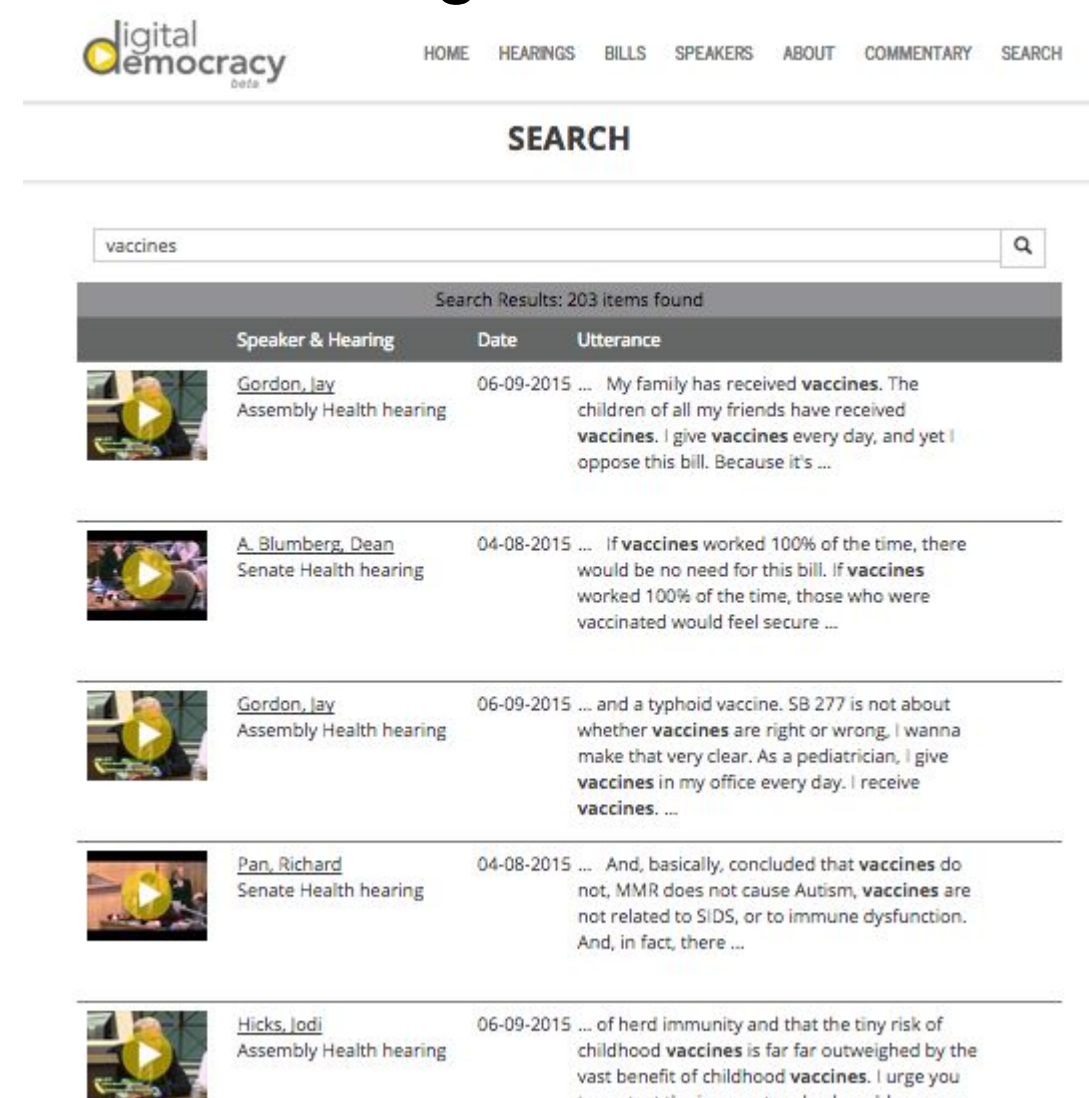
California is the most populous U.S. State. Its economy is larger than that of Australia, India and Canada, with diverse industries such as high technology, agriculture, entertainment and transportation. Thus, it is surprising that almost all proceedings of California's bicameral legislature are not transcribed and made available to citizens. While the text of bills and votes are recorded, there is no official record of any committee or floor discussions about them. There is not even a record of who was in the meetings be they legislators or lobbyists. Only videos broadcast on a cable TV network (The California Channel) are available.

This situation is pervasive in many other states in America. As a result, it is very difficult for the average citizen to affect the debate conducted by their own elected officials. The traditional press corps is shrinking in size and coverage. Attending the proceedings in person is not practical. Watching the videos and scanning for relevant discussions is an option, but prohibitively costly for average citizens or grassroots activists. For them the major obstacle is identifying the time, place and people involved in the important decisions.

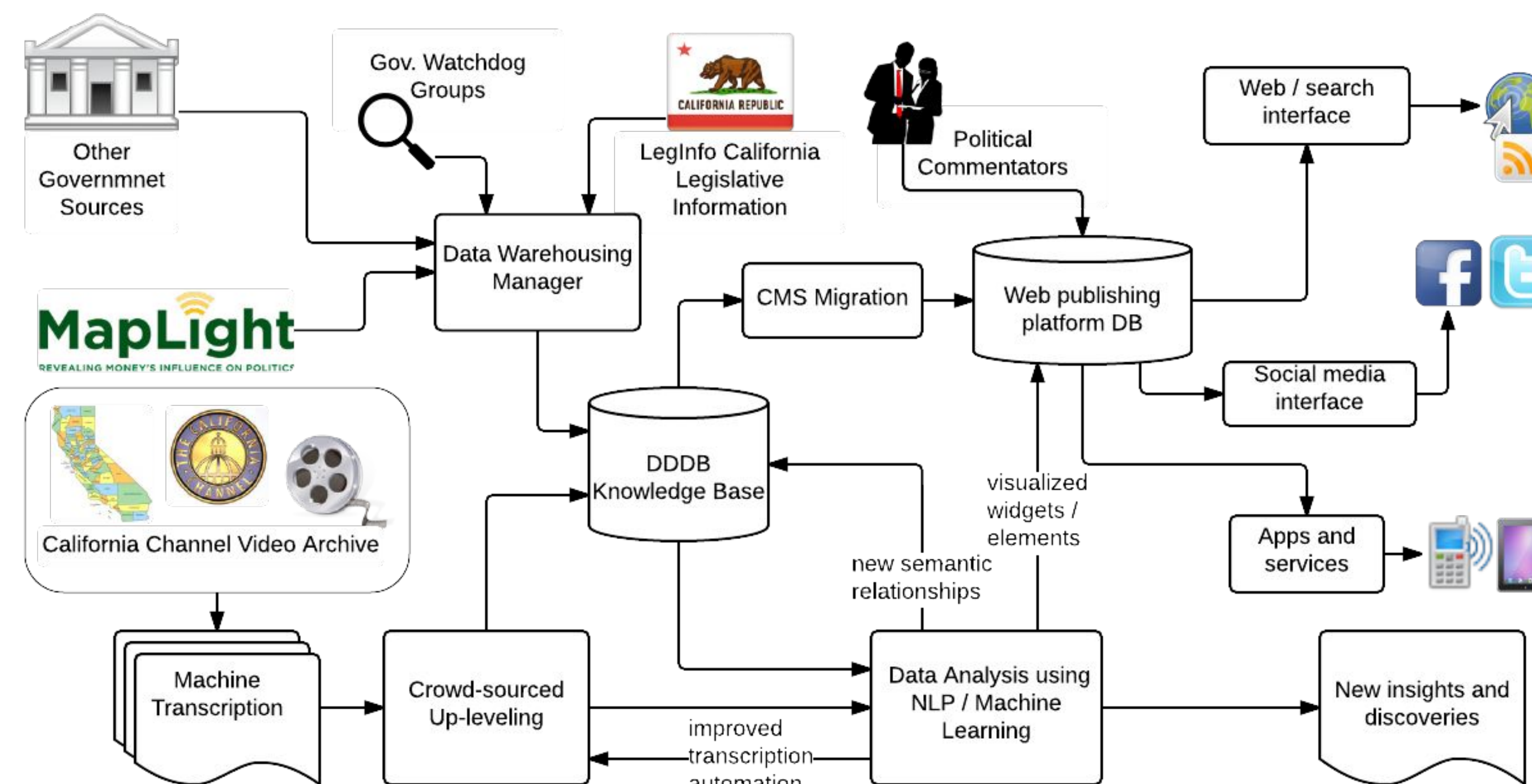
The Digital Democracy Solution

Digital Democracy is a project of the nonprofit Institute for Advanced Technology and Public Policy at the California Polytechnic State University (Cal Poly). The project, publicly launched in 2015, aims to provide Californians with a solution to the transparency gap. The first phase of the project transcribes and indexes publicly available videos of the legislative proceedings in Sacramento. Using the portal website www.digitaldemocracy.org anyone can use a Google-like search interface to find and study any legislative hearings that discuss the topics of interest.

Users can enter search terms, and receive search results in the form of relevant utterance, hearing name/date and a link back to the instance in the video. Hearings can be viewed from any point and the transcript is provided for all utterances in the video. The website auto-advances utterances synchronized with the video. It also displays relevant interesting information during the playback of the hearings.

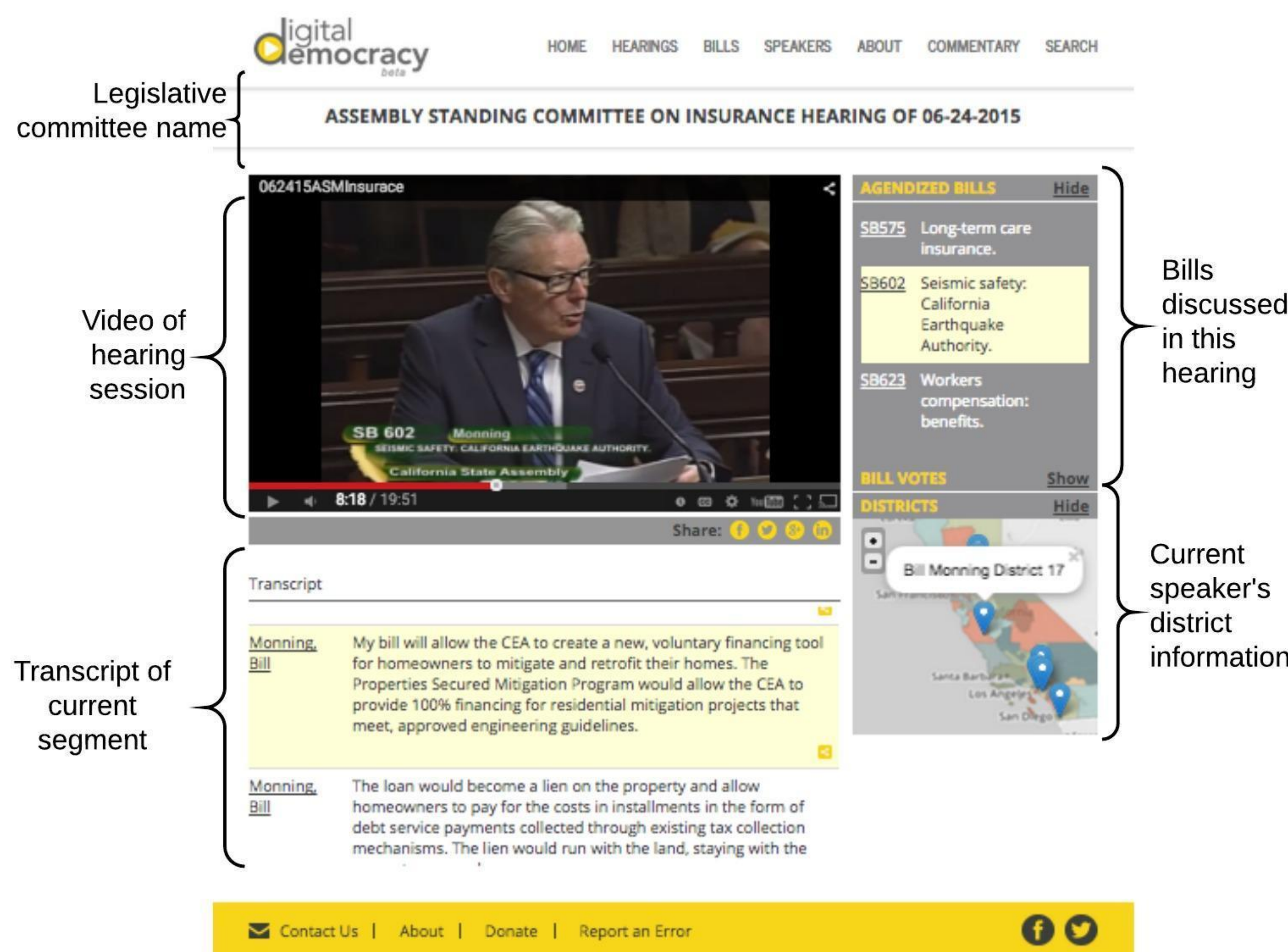


Typical search output screen at digitaldemocracy.org

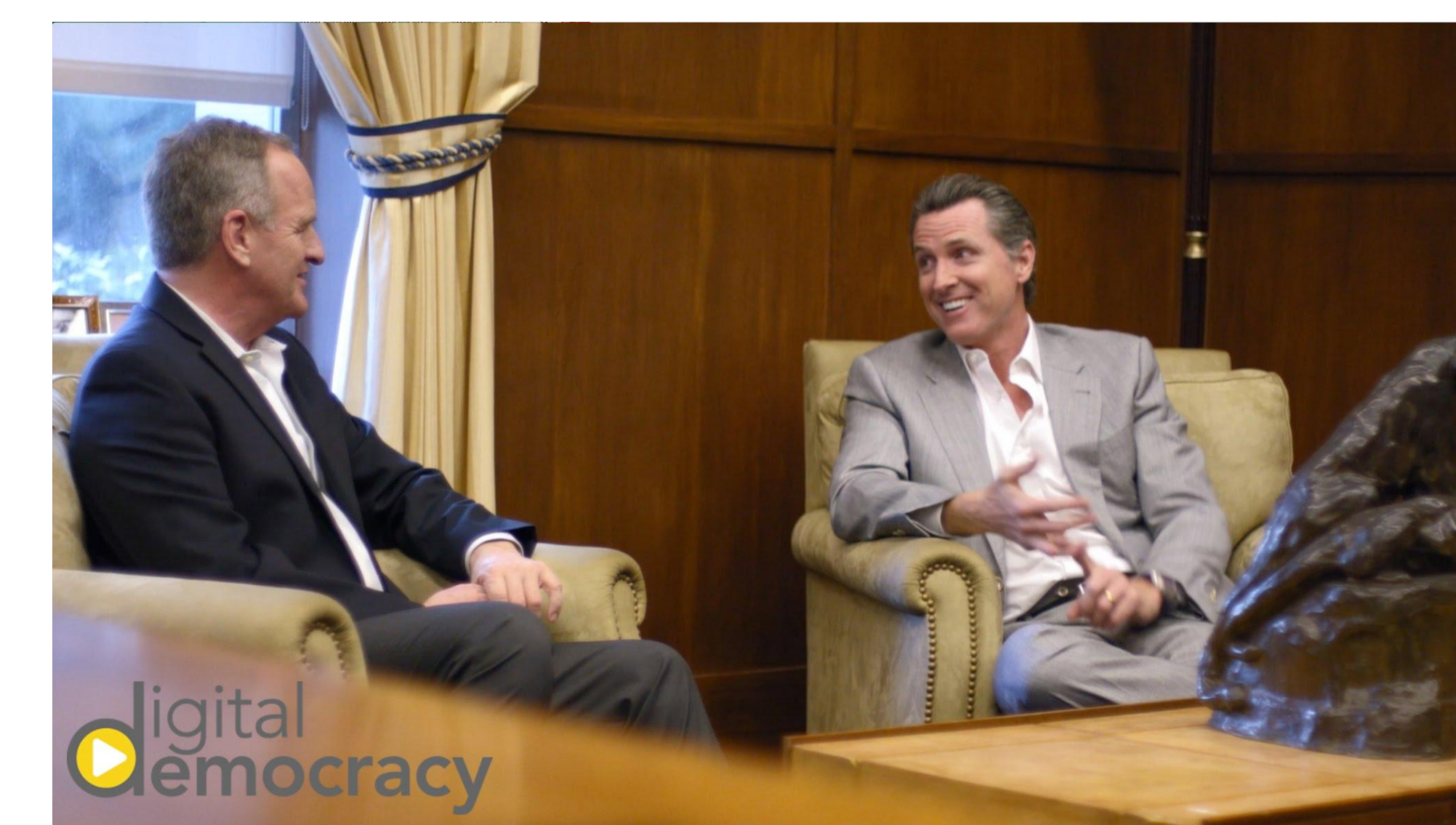


Technology

Three major technological challenges are transcription, speaker identification and video indexing. No commercially available speech to text solutions are good enough to produce quality transcriptions. Existing video search systems are designed to work with imperfect transcriptions. Digital Democracy relies on a commercial voice recognition solution which is then up-leveled through an in-house process involving human editors, but with automated voice diarization, face detection, Natural Language Processing (NLP) features as well as crowdsourcing designed to increase accuracy and reduce reliance on dedicated human editors.



A hearing screen at digitaldemocracy.org



Former California State Senator and IATPP founder Dr. Sam Blakeslee (left) with California Lt. Governor Gavin Newsom, Project Advisor

Media Coverage

- POLITICO** - [New Digital Platform for California Legislature](#)
Adam Sneed - 5/8/15
"The ambition is to peel back the curtain on that state legislature's often opaque operations — including through facial and voice recognition of lobbyists and others trying to shape bills."
- The Sacramento Bee** - [Transparency at the Capitol, online at last](#)
Editorial - 5/8/15
- CAFWO** - [New digital transparency tool cracks open lawmaking for Californians](#)
Alexandra Bjerg - 5/8/15
- Los Angeles Times** - [Making democracy more accessible to millennials and everyone else](#)
Editorial - 5/8/15
"You can tell that millennials had a hand in designing Digital Democracy because it has the kind of functionality and interactivity that younger users expect. For example, a Google-type search that actually works...For those of us interested in the goings on in the Capitol, it's pretty fabulous."
- San Francisco Chronicle** - [New online tool will help public easily see lobbyist connections to bills](#)
Melody Gutierrez - 5/6/15
"The site will also open up the world of lobbying in a way not seen before by identifying their comments at legislative hearings, tracking them back to their employers and showing who their clients are."
- USA TODAY** - [Gavin Newsom launches Google-like engine for lawmaking](#)
Marco della Cava - 5/6/15
"Digital Democracy, a new website launched Wednesday by California Lt. Gov. Gavin Newsom, presents citizens with the opportunity to search and surface interactive video clips of state legislative sessions. The hope is that such access will increase citizen engagement and perhaps lead to greater voter participation."

Future Work

Features scheduled to be released later in 2015 include hosting commentaries, embedding of hearings, search API, video clipping and alerting. After the 2015 legislative session, more behavioral / textual analysis of individual speakers will be published as background material to be displayed on hearing and profile pages. Longer term plans include expansion to more U.S. States and integration of more external information.

Acknowledgements

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