

On Jan 25, 2011, KeyesLabs conducted the first in a series of live experiments to determine how users interact with mobile devices while watching television. Our goal was simple and targeted - create an application that would enhance the experience of watching the 2011 State of the Union Address, and measure how users interacted with the app during the live address. Click here, to see an interactive replay of the experiment

. You can also read the details about what we discovered...

We wrote an Android application that provided users the ability to anonymously register their sentiment of what was being said in real time. Users could see the average sentiment of all other users, categorized by Democrat, Republican, and Independent/Other party affiliations. Additionally, we provided relevant "factoids" that were synchronized to what was currently being discussed in the speech.

The application back end was developed using Google App Engine. We didn't announce the application until about 24 hours before the address, as we did not want to overload the GAE back-end infrastructure. It turned out that this was a wise decision, as our quick implementation wasn't particularly efficient. Over the course of one hour, a mere 333 users racked up a bill of \$10 in CPU time, which is a whole crap-load of cycles. We clearly need to optimize our server code.

