Submitter: Seth Woolley

On Behalf Of: Portland Green Party

Committee: House Committee On Rules

Measure, Appointment or Topic: HB3392

The Secretary of State's office may believe that it is unable to requisition software changes implementing campaign finance reform in time to implement rules. I've heard that there is a theory that software would need to wait until after the rules are finalized before even starting the bidding process. This way of managing software projects is called "waterfall" methodology and it is inappropriate in this case. Projects with limited resource constraints such as time or money use what's known as an "agile" methodology where instead of strictly sequencing development in hard phases, engineering is done iteratively on smaller projects until the project is complete. In this case, what the statutes require is already clear and that is the minimum viable project. As rules are finalized, the project is scoped larger for later phases until the work is done.

This is totally normal.

As a software engineer and software architect with decades of experience in accounting and marketplace management software, and database system patents in complex spatial analysis, I have observed Portland and Multnomah County implement campaign finance rules as well as a much more sophisticated a public funding program in Portland using an agile development process akin to how Silicon Valley and Silicon Forest software engineering startups (and big companies) work. I was thus shocked by the idea that software can't be built while rules are being finalized. It's totally false.

Furthermore, the actual rules in a software system are usually the smallest part of a software system. Once rules are finalized, the software team may already be done and tested with the software, since there has to be some time for publication before they go into effect. A software team should only need about two weeks to implement a final ruleset barring an exceptionally complicated last minute change. Perhaps 4 weeks at most complex with the scope involved here. But note that the rules are supposed to be enabled by statute. As part of the bid request it is easy to specify the statute to be implemented and the rules, and the bidders can add in a factor to assume some unknown work of statutorily limited scope may be needed.

In fact, having a software team chosen may help you determine how easy it is to have certain rules versus others. The Secretary of State should find value in working with an engineering firm capable of agile development. For example if the team says it would take ten weeks (to be extreme) for a hard change instead of two, you can perhaps delay one part of the rules for a few more weeks. There is no need to have

all the rules you might want when you only need to have the statute's minimum requirements implemented.

Some rules could even be implemented manually if the coders are a little behind. The perfect need not be the enemy of badly needed reform. Our democracy is at stake every day this is delayed.

But there is no need to overcomplicate what is happening here. Orestar isn't complicated software. It's just a set of simple database applications with some simple constraints. Elementary database stuff.

The 'waterfall' methodology of writing software where all specifications are up front and development happens from a full specification and is optimized only for those specifications is probably how we ended up with so many disasters in Oregon's history of software programs. From our health care exchange to our unemployment system, the administrators in Salem do appear to have some difficulty hiring competent firms using this methodology. Just request agile methodology experience, and these problems largely solve themselves.

I am happy to assist in any way I can, and we can totally find skilled people in Portland capable of helping administrators in Salem work through any concerns they may have.

Seth Woolley
3403 NE Stanton St
Portland, OR 97212