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Mr. Pedro Nava, Chairman  
Little Hoover Commission  
925 L Street, Suite 805  
Sacramento, CA 95814

Dear Mr. Nava,

Thank you for the opportunity to contribute to the Little Hoover Commission's study of citizen-government interaction in California. As the head of user experience at Code for America, I believe that civic life is at its strongest when government services are designed to respect citizens' time, dignity, and abilities while encouraging full participation. I also believe that achieving this is possible with the right tools and techniques.

Since the late 1990s and the dawn of the commercial web, private-sector companies have competed to offer their customers the best online experiences. To do this, they have refined a set of disciplines based in human-computer interaction and cognitive science, used to measure and improve the value of interactions between people and systems. While the web, with its direct connection between customers and internal systems, initially spurred the broad use of these techniques, their applicability beyond digital systems quickly became clear and the subdiscipline of *service design* is now employed by many companies wishing to provide a consistent experience across multiple channels of interaction (web, phone, in-person, and social media, for example). The modern incarnations of these practices are generally known as *human-centered design (HCD)* or *user experience (UX)*. Companies may invest more or less in UX depending on their specific strategies, but in 2015 it would be very unusual for a consumer-facing company not to consider it a key component of product or service development.

As of 2015 most government agencies are not practicing HCD as a key component of developing their information and services. The difference for government is that citizens don't have the option of choosing a different provider if the experience doesn't work for them. This

could be an excuse not to worry about it, treating citizens as a captive audience, but I believe that the government's mandate to serve all the people creates a moral imperative to offer citizens efficient and respectful experiences.

Luckily, the disciplines employed by private sector companies are not difficult to transfer to the government space. At their core, they are neither high-tech nor expensive practices. They involve observing people's interactions with systems in order to understand their needs, giving those revealed needs significant weight in the design of systems, and continuing to test and improve systems based on user feedback. Major improvements begin with a commitment by leadership to make the experience of users paramount in making decisions about systems. (For government, "users" means citizens and the public servants who need to use back-end systems efficiently.) Once that commitment is made, the need to conduct user testing and act on the results influences all stages of the development process from vendor selection (vendors will need to be capable of responding to feedback from users) to rollout strategies (early pilots with time to adjust result in a better experience for broader groups of citizens at final launch). These techniques can be applied to the development of any type of service, from a website to a numbered waiting system at the counter in an office.

Forward-thinking government agencies are beginning to adopt the techniques of human-centered design with promising early success - see this report from Evagelia Tavoulareas of the VA Center for Innovation.

<https://medium.com/@VAInnovation/moving-toward-a-adc051331d5b>. The VA invested a few months of staff time and a small travel budget in first a pilot and then a broader study of veterans' needs, resulting in a much clearer set of priorities for investing their technology and design dollars as they revise their systems.

Members of the public are also working closely with local governments and civic foundations to make these techniques more accessible. For example, in Chicago, civic technologists working through their local Code for America Brigade and the Smart Chicago Collaborative pioneered a Civic User Testing Group, a method that recruits residents of all of Chicago's wards to participate in user experience research at community centers.

<http://www.smartchicagocollaborative.org/work/ecosystem/civic-user-testing-group/> Since 2013, they have conducted tests of 11 different civic applications and made the results completely public, allowing a continuing dialog between the users of those systems and the teams that own them.

For several years, a group at the US General Services Administration conducted a similar effort called GSA First Fridays. They recruited regular citizens to test public-facing government systems and assisted the system owners in interpreting and acting on the results of the tests. That effort has proven its value and evolved into the DigitalGov User Experience Program <http://www.usability.gov/how-to-and-tools/guidance/gsa-first-fridays-program.html> which encourages and assists federal agency teams in the practices of human-centered design.

At Code for America, we have also been inspired by the work of the Government Digital Service in the United Kingdom. Beginning in 2010, GDS has had great success in transforming the experience of UK citizens in interacting with their national government. GDS freely publishes its methods, which focus on human-centered design and iterative development. <https://www.gov.uk/design-principles> For an example of their work, see this piece on overhauling the system for booking visits to people in prison: <https://gds.blog.gov.uk/2014/07/08/making-prison-visits-easier-to-book/>.

While user experience and human centered design can be applied to many systems, not all of them technological, digital technology provides unique opportunities for government to both communicate with the public and deliver services. The Pew Internet and American Life project found that in January 2014, 90% of American adults had a mobile phone, and 80% had broadband internet access at home. Another 2014 study by the Knight Foundation showed that for a substantial minority of Americans, particularly economically disadvantaged Americans, smartphone internet is their primary means of online access. <http://www.knightfoundation.org/publications/narrowing-gaps-new-challenges> . For economically vulnerable citizens who may not have fixed addresses, being able to communicate and access services from a basic smartphone (or even a non-internet-enabled feature phone) is essential to participation in both services and civic life. We can imagine a world where someone who needs to register for a job training program can find information, delivered in plain language, from their phone and use a lightweight interaction such as text or a mobile webpage to act on the information they find and enroll in a first training. This is completely possible with technology that exists today, if government chooses to invest in serving that citizen need in the most accessible way.

Good experience does require investment of time and resources. In 2007, the Fremont-based Nielsen Norman Group studied the return-on-investment of good user experience for non-commercial websites (<http://www.nngroup.com/articles/government-non-profits-usability-roi/>), concluding that there are substantial benefits to both monetary and non-monetary goals (such as the wide dissemination of information). Note that this study was conducted before either smartphones or social media were in common use; those two developments have only increased the public's expectation that information and, increasingly, interaction and transactions will be available to them wherever they are.

Partly because the commercial web is highly visible, citizens in 2015 know that excellent digital experiences are possible. When they find less than excellent experiences, whether in the commercial, non-profit, or government realm, they assume that this is a choice by the entity they are interacting with. When experiences interacting with government don't live up to the private sector baseline, let alone the best the private sector offers, people assume that government is making a choice not to prioritize citizen needs in these systems. While this isn't

always true (and is rarely true at all at the level of individual public servants) the impression is unavoidable and it contributes to the level of distrust in government that exists today.

Academics are beginning to study the effects of good digital experiences, beyond the ROI calculations in the Nielsen Norman Group study referenced above. Ryan Buell of Harvard Business School looked at the effect on citizen trust of viewing The Daily Brief (a Code for America project developed with Chicago, showing the status of 311 requests by location, type, and request date). He found that a good interface with clear information increased trust (although one with a frighteningly long list of unaddressed requests decreased it no matter how good the interface was). [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2349801](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2349801)

I would like to highlight a particular example of Code for America's work on citizen experience. In 2013, we partnered with the city of Oakland, CA, to work on their public records request system. As the commissioners may remember, Oakland was a center of Occupy activity in 2012 and public distrust in the wake of those events was high. The city was fielding many requests for public records, particularly from the police department, and having difficulty meeting legal requirements for turnaround times. Members of the public were frustrated with the process and the government, and submitting repeated requests; the city did not have a system that allowed them to easily repeat a request delivery, or to provide status to requesters on the process.

Our Fellowship team redesigned the system completely after conducting research on the needs of both requesters and the public servants answering requests, who were situated in departments and agencies throughout the government. They created and tested a new system, RecordTrac, which is Oakland's records system today. <http://records.oaklandnet.com> Because they had identified needs in the public for transparency about the process and inside City Hall for clear routing of requests, status, and repeatability, and then tested again to understand whether their initial attempt met those needs, they delivered a system that has significantly improved response time as well as internal and external satisfaction. At the same time, the Oakland staff who partnered with our Fellows are now employing some of the HCD techniques they learned on other projects.

Many of our achievements have been smaller scale, or have not been integrated into a government's official online presence in the same way as RecordTrac. As we move forward, we hope to emulate the success of GDS in operationalizing HCD at an institutional level with the governments we work with.

While implementing human centered design throughout a government as large as California's is a major undertaking, there are some simple steps the state could take to make a difference in citizens' experience quickly.

One of the simplest would be to enforce the plain language statutes California already has on the books. (This article from 2003

<http://www.impact-information.com/impactinfo/newsletter/plwork05.htm> critiques the California government on its plain language compliance, and the same problems are rampant today; in the online space, text changes are some of the simplest and lowest risk changes to make.)

The government could also start to work with the major search engines (Google, Bing, Yahoo, and others) to ensure that internet searches for California government services return useful results. It is the business of these providers (several of which are headquartered in California) to return the best possible results to their users, and they spend substantial effort and investment on that; however, it is very likely that the state could do more to indicate to search engines which are the best of its pages to answer specific queries that relate to citizen needs. Even finding the location and hours for government offices could be much easier with a minor investment of effort. One axiom of user experience is that the user does not care about the organizational structure of the entity they are interacting with - they only care about getting their task done. So someone looking for job training programs in California is unlikely to prioritize finding out which department or agency offers those services; they simply want to be connected to a program appropriate to their location and desired skills as quickly as possible.

One thing that is not a quick win but that will become increasingly important is to make the state's online information and services accessible to people using mobile devices for internet access. In July of 2014, the administrators of the federal government's AIDS.gov site wrote a summary of two years of successful effort to do this:

<http://blog.aids.gov/2014/07/aids-gov-mobile-success-story.html>. In it they discuss the difference in behavior between users working from desktop browsers vs. mobile phones (in a nutshell, mobile devices are considered more personal and therefore people are more likely to use them to find information about private matters) and what the team changed in order to support mobile users. As more people gain access to smartphones and a substantial minority of people make those their primary method of communication (many people now have neither a landline phone nor an internet connected computer), the needs of mobile device users will have to be prioritized.

One interesting characteristic of human-centered design is that there is no real minimal level at which it must be practiced to be useful. Individual employees, taking time to listen to their clients and document their needs, can begin to make user-centered implementation decisions on their own. Things move faster when such practices are supported from the top levels of leadership - but the lesson UX practitioners often repeat is "just start". Start incorporating the needs of real people into the design and implementation of systems and you are almost guaranteed to make some level of positive difference. Take responsibility for the value of the experience your systems create and you begin to shift to a relationship of empathy and trust with your users (or in this case, citizens).

Because of this, I am heartened that the Commission is taking on this work, and highly optimistic that it will make a difference to many Californians.

I thank you for your consideration and am happy to answer your questions.

Best regards,

Cyd Harrell  
Product Director & UX Evangelist