

# ChimeCMS: Civic Tech Stack Strategy

Part of [Undertaking Chime](#), a product of Cynthia & Mike

## What We Were Trying To Do

For several years, there has been a conversation at Code for America about the importance of a civic technology stack. Sometimes this has been misunderstood as an artifact, a “Civic Tech Stack,” as if it were one definable set of technologies that could solve the problems of government. Code for America has at various times developed strategic initiatives to create a stronger articulation of the civic tech stack concept and to identify possible vendors or partners.

Against this backdrop, CfA launched the Digital Front Door initiative in 2014 to improve how city websites could work by and for their citizens. One early discovery was the lack of an effective CMS to support city websites and encourage open and extensible technology solutions that played nicely together. The decision of Code for America to build ChimeCMS was not based on a desire to simply insert another CMS in an already crowded market. ChimeCMS was about creating a solid foundational technology as the basis of a civic tech stack specifically for city governments. Using ChimeCMS as the foundation, additional technology could be effectively built or delivered by building on or plugging in to ChimeCMS.

Through our work on ChimeCMS, we learned that shifting website ownership from IT to the communications department required deep understanding of the specific end user/citizen needs as well as the content creator/govt worker needs. It required an understanding of other software or systems used or considered by government communications, web or IT teams. We discovered what services were universally important (ability for multiple content contributors, writing tools that could improve the content quality, etc) and what services needed to be available without being required (payment systems, survey tools, online forms, etc).

Once the decision was made to stop development of ChimeCMS, the team wanted Code for America to retain the important learning gained in this project. Specific to a civic stack, we believe it is critical to consider what is important about civic tech stacks generally, and to think about how to build a stack for a specific city or department.

## What You Should Do Next

The idea of a civic technology stack is a constant background hum at CfA: it's implicit in language like "government as platform," and explicit in the desires of certain funders and supporters. CfA will be continuously asked to address the possibility of a stack.

In the private sector, we have seen a historic shift away from central IT toward high-quality, consumer-based services that beat centralized ones in price, quality, and reliability. Because of this change, CfA must advocate for better digital government services.

There will never be a "civic stack" in the sense of a canned, city-in-a-box web solution that can be created independent of a particular city. You can't create a good tool without a specific audience in mind. John Gall noticed this about complex systems in 1975:

*A complex system that works is invariably found to have evolved from a simple system that worked. A complex system designed from scratch never works and cannot be patched up to make it work. You have to start over with a working simple system.*

Any given civic stack that is created has to be developed in reference to a particular city's needs. It's dangerous to work on a generic "city.gov" approach. Success requires that we work in public with the citizens who use and interact with city services.

We believe Code for America can use the conversation about the stack to push back against assumptions that technology belongs to IT departments. At this historical moment, the proper site for any civic tech stack is within and under the departments that deliver services: revenue, communications, or health.

As core services go digital, a technology stack must live within the department that owns the service, not within central IT. This ownership will define the base of the stack and its placement. Communications should own a content management system, finance should own financial records management, and so on. The stack is a strategy and a set of choices about service delivery and management. The stability of the stack can only be judged in hindsight, based on whether it has helped users and delivered services. If it supports nothing, it's just a heap.

Stability and tedium are tightly related.

The ideal stack for a department must be boring above all. It should be safe, tested, and uninteresting technology with thousands of available contractors and firms supporting it. This is the heart of Gall's observation. In the rarefied air of app creation, Code for America often loses sight of conditions on the ground: we don't have hundreds of staff who can work in parallel, we can't work unilaterally, once we're inside we need continued backing, and if we get kicked out the tech left behind must be useful, usable and supportable.

By advocating for civic tech stacks that are defined and owned by a department or service, Code for America improves the function of government. We must know the market, be able to articulate choices and options for success, and support the creation of a workable civic stack within each given circumstance and location. Avoid reinforcing the idea of a single civic tech stack, and refuse requests to define one on behalf of 21st Century government. The work of engaging users where they are and giving them the language and tools to define their own civic tech stack is actually the more difficult, and more rewarding, task.