Building Digital Capacity in Congress

Recommendations for the House Digital Service

By Reynold Schweickhardt and Zach Graves
GLOSSARY OF ACRONYMS

♦ GAO — The Government Accountability Office
♦ CRS — The Congressional Research Service (an office within the Library of Congress)
♦ GPO — The Government Publishing Office
♦ CBO — The Congressional Budget Office
♦ CAO — The Office of the Chief Administrative Officer in the U.S. House of Representatives
♦ HDS — The House Digital Service (a division of the CAO)
♦ GSA — The General Services Administration
♦ USDS — The U.S. Digital Service (an agency in the Executive Office of the President)
♦ 18F — A digital services agency in GSA
♦ DARPA — The Defense Advanced Research Projects Agency
♦ CRM — Constituent Relationship Management system
♦ CMS — Correspondence Management System
♦ CIO — Chief Information Officer
♦ CTO — Chief Technology Officer
TECHNOLOGY IN CONGRESS

Congress has been described as a nineteenth-century institution struggling to respond to twenty-first century problems. But over its history, new technologies have repeatedly transformed the institution of Congress—and the American people’s relationship with it.

Even in the nineteenth century, technology was reshaping the institution. The mid- to late 1800s brought the telegraph and then telephone, opening new ways for communicating with Congress. In its first few decades, the volume of calls processed by the Capitol telephone switchboards went from a few hundred to over 30,000 calls per day.

Not long after, radio and television would gradually democratize access to congressional activities. This was formalized by the reforms of the Legislative Reorganization Act of 1970, clearing the way for audio and visual broadcast of committee and floor proceedings. Ultimately, this allowed a broader number of citizens and interest groups to participate.

The 1970s and 1980s would bring new digital technologies to Congress, including internal email, a new electronic voting system in the House, and ubiquitous personal computers. Yet, even up to the early nineties, Congress was fundamentally still a “paper-based institution.”

Digital transformation efforts in the mid-nineties through early 2000s would bring rapid developments, including: an intranet in each chamber, congressional websites, the development of Correspondence Management Systems, the creation of THOMAS.gov (the precursor of Congress.gov), the bulk publication of structured legislative data, and more.

Despite these reforms, Congress struggled to keep up with the pace of technological change and the new burdens it brought. For instance, between 1995 and 2004, the volume of communications to Congress
increased fourfold. Today the House and Senate have to process over 50 million emails each year, in addition to having to keep up with social media, phone calls, and even faxes.

Because of its distributed governance, legislative branch IT operations must also contend with a greater number of coordination problems, inefficiencies, and vectors for process failure. This, combined with growing district sizes and constrained resources, has left Congress’s digital capacity far behind what it needs to keep up with emerging technology trends and support everyday Americans seeking to engage with their representatives.

We believe a key step in meeting this challenge is to establish and support an effective digital service for the legislative branch, following on the lessons of the executive branch’s digital transformation efforts.

**FORMATION OF THE HOUSE DIGITAL SERVICE**

In January 2022, House Chief Administrative Officer Catherine Szpindor announced the formation of the House Digital Service (HDS). This effort—inspired by the executive branch’s U.S. Digital Service, Defense Digital Service, and GSA’s 18F—is set to tackle a range of modernization challenges in its chamber.

Created without a specific authorization or rule, HDS is situated deeply within existing institutional structures, specifically under the office of the Chief Administrative Officer’s (CAO) House Information Resources office, which handles House-wide IT operations and support but does not manage the information pertaining to legislative processes. This location is in contrast with the original proposal for an independent and bicameral Congressional Digital Service, spearheaded by Reps. Kevin McCarthy and Steny Hoyer.
Since HDS is newly founded, without a specific charter, and has an ill-defined scope, there is a substantial risk it may stagnate within the constraints of its parent bureaucracy, institutional culture, and limited resources. Furthermore, it may not have sufficient authorities, ownership rights, or clarity of mission to maximize its effectiveness.

RECOMMENDATIONS

Below are specific recommendations to strengthen HDS, and set it on a path to effectively address Congress’s digital capacity challenges:

• **Incubate a more ambitious congressional digital service:**
  While HDS is less ambitious than the vision for a Congress-wide digital service, it could be set up to grow into that role in the future.

  ▶ **Structure.** The CAO handles a wide range of non-technical functions, from furniture to child care. A major challenge of building a digital service within this structure is that it risks getting lost in the shuffle. On the other hand, establishing HDS as an independent office could expose it to additional political pressures too early, as well as bureaucratic infighting over turf and resources. A middle path would be for the House Legislative Branch Appropriations Subcommittee to establish an appropriations line item and separate Congressional Budget Justification for HDS. This model would incubate HDS within CAO’s organizational structure, but also provide it with a significant measure of separation that would facilitate the expansion of its scope in the future.

  ▶ **Visibility.** A key challenge will be increasing visibility and promoting coordination across entities with ownership of legislative branch technology infrastructure. To this end, the Committee on House Administration should convene a hearing each year with House
technology leaders, including the CTO, CIO, Clerk, head of HDS, and others. This could also be coordinated as a joint hearing with the Senate Committee on Rules and Administration with a Congress-wide scope. Another approach would be to establish a new Joint Select Committee on Digital Transformation.

- **Charter and funding:** HDS should be chartered and codified through legislation, such as in the House Rules Package for the 118th Congress and the Fiscal Year 2024 appropriations bill, with a process set up for regular review of that charter.
  - **Funding.** The office should receive a direct appropriation as well as the authority to receive reimbursement for services. Personal offices should be permitted to use the Members’ Representational Allowance (MRA) to reimburse HDS for services or to share costs; as should committees with respect to the use of their allocations, leadership offices with respect to their funding, and other support offices and agencies throughout the legislative branch with respect to their appropriations.
  - **Structure.** With the goal of incubating a more expansive Congress-wide digital service, the House should consider elevating HDS within the CAO org chart and reporting structure,¹ and providing a clear charter with at least a chamber-wide scope.
  - **Advisory boards.** The formation of a congressional advisory board should be considered, similar to the board structure in the Congressional Digital Service Act of 2017. This could include House leadership, the Chair and Ranking Member of the Committee on House Administration, and the Chair and Ranking Member of the Legislative Branch Appropriations Subcommittee. The formation of an

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¹ The head of HDS currently reports to the CTO, who reports to the CIO (who leads the House Information Resources office); who reports to the CAO.
external expert advisory board, consisting of technologists and civil society leaders, should also be considered.

- **Access to technical talent:** Securing top technical talent is a challenge across the federal government, made more difficult by the uncommon expertise required to operate in the congressional space.
  
  - **Compensation:** HDS should be authorized to hire engineering, product, and design talent up to the top of the House pay schedule (HS-15). Similarly, pathways should be created to grow less-senior talent and provide them with sufficient remuneration and benefits to stay on with Congress. This should be codified into law, for example through an appropriations measure or as part of the Rules package.
  
  - **Hiring authority:** HDS (and other technology offices in the House) should be given specific hiring authorities necessary to secure and retain top talent. Congress should evaluate models from the executive branch, such as the Intergovernmental Personnel Act, public-private talent exchanges (such as those used by DARPA), or other direct hire authority for term-limited hires (such as at GSA or the National Science Foundation).
  
  - **Training:** A congressional digital academy or fellowship program should be established to develop new talent with specific institutional knowledge of Congress, particularly in the areas of product management and UX/UI design, with a pathway from fellowship to FTE hiring.

- **Development of tech tools and standards:** HDS should be encouraged to take a leading role in establishing and modernizing data management practices, building analytics tools, and creating protocols and standards across the House. Models for this role can be found in the work of the Legislative Branch XML Working Group, the Communicat-
ing with Congress initiative, and the Congressional Data Task Force.

- For example, HDS could develop an opt-in pilot program to test differential privacy/anonymization for select data from Member offices. This could provide valuable oversight and insight into challenges with existing IT systems, as well as interfaces with executive branch agencies (e.g., casework responsiveness and outcomes). In particular, this could include an API for Constituent Relationship Management (CRM) system providers.

- As another example, HDS could enhance the Quill system for electronically collecting Members’ signatures by building an API hand-off to executive agencies.

- When creating new tools, HDS should also look to leverage commercial technologies and open source.

- **Adapt digital service best practices:** HDS should adapt and pilot recommendations from the USDS Digital Services Playbook for the congressional ecosystem, with a pathway to scaling. They should also study and adapt approaches from GSA’s 18F, the Defense Digital Service, and international models such as the UK’s Government Digital Service.

- **Civil society engagement:** Like the Congressional Data Task Force, HDS and the CAO should create robust structures to engage and cooperate with civil society groups, including the open source community, as well as academic centers that may provide future talent.

- **Future scope expansion:** While it would be a logical step to create a bicameral legislative branch digital service (see the original Congressional Digital Service proposal in 2017), it will take significant time to converge practices across the House, Senate, their respective support offices, and bicameral support agencies. However, these sensitivities are less acute outside the chambers themselves. Therefore, HDS could be autho-
rized to provide coordination and support for shared legislative branch
support agencies, such as GAO, CBO, GPO, and CRS, and encouraged
to maintain open channels of communication with relevant counterparts
in the Senate.

- **Outside review:** Congress should instruct GAO and its Innovation
  Lab team to conduct a biannual assessment of legislative branch digital
  capabilities.

  - This should entail a gap analysis comparing the current state of digital
    services inside the legislative branch against an ideal state or goals,
    highlighting shortcomings and opportunities for improvement.
    Because such an analysis requires understanding unmet needs inside
    the legislative branch and with public stakeholders, as well as imagi-
    ning what could be done to meet those needs, GAO’s survey should
    include communicating with internal and external stakeholders.

  - The result of such an analysis should establish a maturity matrix, which
    would evaluate the level in each office or entity for the elements
    necessary to provide a useful roadmap for oversight and appropriation
    committees. Biannually reviewing the legislative branch’s digital modernization efforts would ensure that Congress makes progress over time and appropriately utilizes taxpayer dollars.

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