The committee met, pursuant to call, at 9:02 a.m., in Room 210, Cannon House Office Building, Hon. Derek Kilmer [chairman of the committee] presiding.

Present: Representatives Kilmer, Cleaver, Perlmutter, Phillips, Williams, Timmons, and Davis.
The Chairman. Okay. The committee will come to order.

Without objection, the chair is authorized to declare a recess of the committee at any time. I now recognize myself for an opening statement for 5 minutes, probably shorter.

So a few weeks ago at our hearing on pathways to service, there was some interesting discussion around the concept of small wins. There is a natural tendency in Congress to focus on hitting legislative home runs, but small wins can provide a sense of great accomplishment, and over time, they can accumulate into big wins.

Let me give an example. In the 116th Congress, this committee recognized a need for a specialized group of technologists, designers, and others to support the House's internal and public-facing operations. And we recommended establishing the Congressional Digital Services Task Force. Passing the recommendation was a small win. The next step was demonstrating its worth. Leading by example and practicing what we preach is a big part of this committee's ethos. There is real value in showing that it is possible to actually do the things that we are recommending, and this is why the committee decided to pilot the first ever Congressional Digital Service Program.

In the spring of 2020, the committee brought on board four digital service fellows and appointed them to various House offices to help with existing efforts to modernize Congress. The fellows successfully contributed to a number of modernization projects, including digital signatures, the eHopper, and various constituent management systems. These small wins resulted in the creation of an official House Digital Service earlier this year. I would certainly classify this first of its kind effort in Congress as a big win.

There are a couple of reasons for sharing this story. The first is that it is a great example of how it is entirely possible to accomplish big things by taking a small-wins
approach. That is especially important when it comes to IT modernization. Incremental improvements made consistently over time can lead to transformational change.

The second is that it demonstrates Congress' desire and willingness to address its own institutional shortcomings. We know that Congress has a lot of catching up to do when it comes to technological innovation. These issues are complicated and require the kind of expertise that Congress has traditionally lacked. The House Digital Service will help identify pain points and develop solutions so that Members and staff can better serve the American people.

This is an especially important point to keep in mind as we discuss various IT challenges today. There is a tendency to view Congress' technological shortcomings as insurmountable, but they are not.

And the third is that it proves what is possible when outreach and listening are built into the process. The committee didn't develop the idea of the House Digital Service out of thin air. We spent a lot of time listening to Members and staff talk about their IT challenges and a lot of time listening to institutional and technology experts talk about solutions.

So I think that kind of example matters, and I am thrilled that the CAO's office has built outreach into its process for standing up the House Digital Service. They are meeting with digital directors to better understand what the technology trends, challenges, and needs are across the House, and they are doing listening sessions with Member offices to learn more about common IT obstacles.

I look forward to hearing what recommendations the experts joining us today have for ensuring that Congress is equipped to take full advantage of the latest technological innovations. And given the process I just described, I am also really
interested in hearing your thoughts on strategies for getting Congress focused on tech modernization.

So, with that, let me welcome if Vice Chair Timmons has an opening statement.

[The statement of Chairman Kilmer follows:]
Mr. Timmons. Thank you, Mr. Chairman.

We have been doing this for 3.5 years, and I cannot believe you didn't use your line that Congress is an 18th century institution using 20th century technology to solve 21st century problems. This might be the only hearing he didn't use that in the opening. So I think it is a very appropriate hearing to mention that.

I have been here 3.5 years. One of the first hearings we had on the Modernization Committee I brought my pager. Literally they gave me a pager when I got sworn in. I still have it in my office. Apparently, we have to pay for it, and I guess I have been paying for it for 3.5 years. We have got to look into that. I am not sure if I actually have to pay for that; but if I do, we might have to give it back. I don't think anybody uses the pagers these days.

Mr. Dwyer, your apps you have created are incredible. Dome Watch is awesome. Dome Directory is fantastic. Before we started the hearing, I was mentioning to him that I literally was working with an app development company to try to create Dome Directory. And then I happened upon it I guess shortly after it came out, and I was like, that is a great idea. I had it first but couldn't actually implement it. So I can't wait to hear other things you are working on and other things that you think we can do to make this place more efficient.

I spend a lot of time thinking about the calendar and the schedule and overlapping obligations while we are here, and I do think that creating a committee calendar that deconflicts or at least just shows committee chairmen and chairwomen what the conflicts are to create at least an option that would have the least conflicts possible, maybe including some kind of block scheduling to allow different committees to deconflict. That involves us being here more. We can't be here 65 days in a year and be able to get
all of our work done. It inherently overlaps, and then we only spend 5 minutes in committees reading things that have been prepared for us as opposed to learning from one another's ideas and collaborating and legislating.

So I do want you all to touch on time and things that you think we can use technology to become more efficient.

I think the Dome Directory app facilitates relationship building, and I just want to point that out. Generally speaking, it is really hard to know your colleagues when you have 435 of them. It is just challenging to know who everybody is and what committees they serve on, and it has been very helpful.

I use Congress in Your Pocket, which is $500 out of your MRA, and your entire team gets to use it. And I have found that that has been very helpful in understanding who serves on what committees, what their position is on the dais, and just -- it makes you more competent as a legislator because you know your colleagues and you can easily assess where they are from and what they are working on.

So technology has the ability to make us better at our job, and I look forward to hearing your thoughts on things that we can recommend to make this place work better. And thanks for being here.

With that, I yield back.

[The statement of Mr. Timmons follows:]

******** COMMITTEE INSERT ********
The Chairman. I know I missed some of the formal technical stuff I was supposed to read. So, with that, the committee will use its rules that allow for more flexible hearing format that encourages discussion and the civil exchange of ideas and opinion. In accordance with clause 2(j) of House rule XI, we will allow up to 30 minutes of extended questioning per witness. And, without objection, time will not be strictly segregated between the witnesses which will allow for extended back-and-forth exchanges between members and the witnesses.

Vice Chair Timmons, I will manage the time to ensure that every member has equal opportunity to participate. Additionally, members who wish to claim their individual 5 minutes to question each witness pursuant to clause 2(j)(2) of rule XI will be permitted to do so following the period of extended questions.

Okay. So, with that, I would like to welcome our three witnesses who are here to share with us their expertise on technology in Congress. Witnesses are reminded your written statements will be made part of the record.

Our first witness is Stephen Dwyer. Mr. Dwyer serves as senior advisor to House Majority Leader Steny Hoyer. He will be focused on technology policy and digital strategy. He is the chief architect and manager of Dome Watch and Dome Directory, the popular apps used to closely follow the House floor and identify Members of Congress.

Mr. Dwyer, you are now recognized for 5 minutes.
STATEMENTS OF MR. STEPHEN DWYER, SENIOR ADVISOR, HOUSE MAJORITY LEADER
STENY HOYER, WASHINGTON, DC; MR. REYNOLD SCHWEICKHARDT, SENIOR ADVISOR,
LINCOLN NETWORK, WASHINGTON, DC; AND MS. MELISSA DARGAN, CO-FOUNDER &
CEO, TOURTRACKR, SEATTLE, WA ]

STATEMENT OF STEPHEN DWYER

Mr. Dwyer. Thank you, Chair Kilmer and Vice Chair Timmons, for the opportunity to testify today.

I have had the honor of working for Majority Leader Steny Hoyer for nearly 20 years. I have always focused on technology, tech policy, digital comms and, most uniquely, working on civic technology.

Leader Hoyer, through his leadership budgets and staff, has always prioritized digital tools that benefit Members, staff, and the institution of Congress. This often has had the added benefit of making Congress more open and transparent. I have been fortunate to have had Leader Hoyer's trust in leading many of these efforts.

Our biggest success is the Dome Watch app, which has been installed on over 100,000 devices over 7 years. It is heavily used by Members, staff, and others who closely follow the House. We have another app called Dome Directory.

We also run a private intranet for Democratic staff called DemCom that has been in heavy use for 14 years. It does many things that we saw lacking in Congress, like a resume bank, staff directory, and a database for internal documents.

We built other custom systems, including ones for whipping votes and measuring Members' reach on social media.
We have co-hosted, along with Republican Leaders Cantor and McCarthy, four official Congressional Hackathons over the past 10 years. These events have helped foster a community of people on and off the Hill who are interested in the digital infrastructure of Congress.

My top recommendation is simply that Congress should better prioritize digital technologies across the board. I commend the Modernization Committee for doing exactly that over the past few years and the institutional offices that have accelerated progress of late.

Like we did with C-SPAN in the eighties, websites in the nineties, social media in the early 21st century, we need to adopt modern digital tools to improve the functions of Congress. This is happening everywhere. Stores and restaurants all have online ordering systems. Children's soccer teams use apps to manage schedules and messages. But in Congress, interactions with the public have improved only incrementally.

Most businesses today hire programmers, designers, and data specialists either directly in-house or through contractors. We need to hire more in Congress, and we need to recognize the higher pay required for these in-demand skills. This is especially true for Congress' work since Congress' work product is digital. It is information, laws that greatly impact the world and people's lives.

Congress is decentralized which helps for generating innovation. Each office should be encouraged to innovate to improve their operations, and the centralized offices, like the CAO, should help facilitate and scale any innovation.

One downside of the decentralized structure is silos. There should be more collaboration across the legislative branch. Just as the AOC oversees all the physical infrastructure of Congress, some or one group should have authority over all the digital infrastructure in Congress, something that is currently lacking. One possibility is the
Congressional Data Task Force, which formerly was called the Bulk Data Task Force, a recommendation from the Modernization Committee to change their name, which was great. I have worked closely with them over the years, and they have been very successful at getting different silos to work together on foundational issues of improving Congress' digital infrastructure. I recommend that they be given more direct authority to lead Congress in these areas.

My other suggestion is the newly created House Digital Service that Chairman Kilmer mentioned in his opening remarks. It should have a broad mandate to allow it to expand as it matures, eventually working on transformative projects that transcend the legislative branch, not just in the CAO.

Hackathons could also help with collaboration. The hackathons we have hosted have been more idea-a-thons than nontechnical staff, but institutional offices could host more traditional hackathons with coders from across the leg branch.

We should also better coordinate with the Senate. There is significant duplication of efforts between the two Chambers on things that would not threaten the independence of each Chamber. For example, legislative drafting systems could be better aligned or combined.

We should continue to open congressional data. I commend the Library of Congress for just this week announcing public access to the congress -- the Congress.gov API, which should happen later this year. More congressional sites like clerk.house.gov should follow suit.

We should do an assessment of mission critical systems that have been developed in committee and leadership offices and make sure that they be can be supported in the event of a change of vendor or leadership of the office. I believe that that should include our Dome Watch app and DemCom intranet, as well as other systems I am aware
of like the GOP Cloak Room site and the Rules Committee and NDAA amendment systems.

   All custom systems that are made for the House like those systems should be open source by default.  This would help other State and international legislatures reuse our work and collaborate on shared challenges, and it would also ensure that we are not locked into a single vendor, saving long-term costs.

   The House cloud approval should be revamped.  It is too slow and inflexible, in my opinion.  For example, my co-witness today built an app specializing and managing the congressional tour process, but the approval process took too many months and was opaque.  We should welcome innovators like her.

   We should also create a new process to accept unsolicited technology proposals.  I often get meeting requests from companies that believe their technology is a good fit for Congress, but they don't know how or who to present it to.

   Finally, my final recommendation is we should modernize constituent communications.  This is more of a big idea which I was asked to come up with, think of big ideas.  So currently, the public can only send an email to their Member of Congress, which usually results in a generic response.  This hasn't changed in my nearly 20 years here in Congress.  Most people would prefer to have their message posted publicly, like on social media or an online petition.

   We should build an open platform for constructive discussion of bills before Congress.  Users could post public opinions of bills before Congress.  Advocacy groups could post en masse.  There could be up voting and down voting functions.  There would have to be content moderation, like with any open online platform, but the goal would be respectful civic dialogue.

   Thank you again for the opportunity to testify today.
[The statement of Mr. Dwyer follows:]

******* COMMITTEE INSERT *******
The Chairman. Thanks, Mr. Dwyer.

Our next witness is Reynold Schweickhardt. Mr. Schweickhardt is a senior advisor at Lincoln Network. Previously he served as senior technology advisor at the General Services Administration. He has also served as the director of technology policy for the Committee on House Administration, the strategic advisor on technology and cybersecurity for the House's Chief Administrative Officer, and as the chief technology officer at the U.S. Government Printing Office.

Mr. Schweickhardt, you are now recognized for 5 minutes.
STATEMENT OF REYNOLD SCHWEICKHARDT

Mr. Schweickhardt.  Can I get a light here?  Hopefully I am smart enough to use the technology.

Chair Kilmer, Vice Chair Timmons, and members of the committee, I am pleased to appear today to testify about ways to improve the digital capacity of the House of Representatives. I will be speaking to structural issues that raise the cost of implementing digital initiatives to serve Members, staff, civil society groups, and last but certainly not least, their constituents.

Let me give the committee a kudos for another successful recommendation with the fully funding of the Modernization Fund by the appropriators earlier this week.

In over 20 years supporting the House and the legislative branch, I have collaborated with stakeholders across the House of Representatives and the legislative branch, built working relationships with executive branch agencies, members of civil society, academics, and businesses to increase the transparency, effectiveness, and resilience of the House.

Three key areas to consider are: One, how should technology be governed and funded in the House and across the legislative branch? There is not a single overwhelming problem but, rather, a series of smaller and medium-size issues which cumulatively increase costs and impede the pace of technological change.

A critical step would be creating a method for House-wide prioritization of projects to avoid the added costs and delays of technologists juggling as many as 10 different projects at the same time. Other improvements would include clearly chartering the House's technology organizations, consolidating control over
infrastructure, and allowing for innovative acquisition strategies to improve the onboarding of new technologies.

Secondly, what technology products or improved processes should be mandated to improve the digital experience of all stakeholders? We are thinking automating time-consuming and expensive manual processes can improve transparency while freeing up funding to continue modernization.

Regarding the creation of committee hearing documents, we estimate that $4 million could be freed up by the automation of automatically creating hearing documents.

Further, I recommend extending the Clerk’s Legislative Information Management System, or LIMS, to include internal committee legislative workflows. The standardized processes improve resilience and reduce the number of so-called cuff apps supporting committee processes.

Third, how should the tensions between creativity and stability be managed? The use of open source software can be a proxy for this discussion, where and when, how should it be used. There is also attention between standardization and diversity of tools; when should workflows be part of the centralized products, such as LIMS; and when is having a variety of choices important.

The House has used open source software for many years. In my written testimony, I discuss the different aspects of open source utilization and how to structure its use with a full range of House tools.

There is an understandably high standard for the reliability and resilience of the legislative process. The use of open source should be incorporated into that development process using the recommended acquisition flexibilities for core House tools.
On the other hand, consider the oversight process in a typical committee where each side and individual Members seek a competitive advantage for their views or Steve Dwyer's intranet to support Democratic members. A robust strategy to encourage innovation in competing tools allows Members to pick the best tools for their individual needs.

Both ethics concerns and regulations regarding the use of the Members' representational allowance, or MRA, can limit the use of open source software. For example, Members using the MRA to create open source software can't supplement other Members' MRAs by releasing it for general use. This is a problem which could be addressed.

In summary, these are complex issues with many nuances and interdependencies. I am happy to respond to questions or participate in further discussions as needed. I look forward to working with this committee and continue progress on these important issues.

Thank you, Chair Kilmer. I yield back.

[The statement of Mr. Schweickhardt follows:]

******** COMMITTEE INSERT ********
The Chairman. Thank you, Mr. Schweickhardt.

And last but not least, we are joined virtually by Melissa Dargan. Ms. Dargan is the cofounder of AppMy, LLC, a company that builds digital platforms for government, such as TourTrackr.com. She previously served as a staffer for Congressman Ed Royce and the House Foreign Affairs Committee. She also helped launch the Congressional App Challenge, a nationwide initiative that works with Members of Congress to develop district-specific challenges for students who are interested in technology.

Ms. Dargan, you are now recognized for 5 minutes.
Ms. Dargan. Thank you.

Chair Kilmer, Vice Chair Timmons, and members of the select committee, I am honored today to testify.

Customer-focused innovative technologies have advanced, yet many everyday congressional constituent services are managed manually. Member offices can benefit from facilitating a more transparent and welcoming tech startup ecosystem on Capitol Hill for new tech products.

Like many in this room, I came to Washington, D.C., over a decade ago to make a difference. Prior to launching TourTrackr, the tour management platform that has helped book over 124,000 tours and that is used by nearly a hundred Member offices to digitally organize constituent tour requests, I started my career as a staffer on Capitol Hill, first working for Representative Ed Royce's D.C. personal office and then the Committee on Foreign Affairs.

Next, I co-launched the Congressional App Challenge, a districtwide competition for middle school and high school students that encourages them to learn to code, and inspires them to pursue careers in computer science.

Based on my experience as a former staffer and now tech entrepreneur, I am uniquely positioned to identify the challenges and opportunities of growth related to tech innovation in Congress.

When I first started on Capitol Hill as a staff assistant, I remember processing many constituent services manually. From constituent tour requests to flown flag purchases, these important responsibilities were tracked using printouts, binders, Excel
spreadsheets. It was fragmented and inefficient. At the time, there were no digital alternatives that the House offices were approved to use. So while these tasks seemed easy, they were tedious, repetitive, and time-consuming.

Fast-forward to nearly a decade later, despite the advancements made in commercial technology, most House offices were still processing administrative work such as tours and flags manually, pretty much the same way I was doing it years prior. So seeing this market opportunity, I set out to create a product that I wish existed during my time, a platform that would simplify and digitize the congressional tour process.

Planning D.C. tours is a great constituent service that allows you as Members to connect directly with the people you serve when they fly into our Nation's Capital. By developing a tech solution, my goal was to allow staffers to improve the quality of constituent engagement while minimizing administrative tasks, which took an average of about 12 to 20 hours a week. Thus, staffers would then be freed up to do what they came to Washington, D.C., to do -- effect change.

Working on a new startup company already faces hurdles. The added House complexities, such as the lack of new vendor support and lack of information on navigating how to even sell to a congressional office, made establishing a needed tech product very difficult, even for someone like me who understands how Congress operates. The closed nature of the House creates restrictive barriers that ultimately decrease competition and prevent new technologies from ever succeeding.

I respect and understand that the House has high standards for new tech approval. Protecting security and personal identifiable information are critical to ensure the integrity of the institution. That said, upholding these priorities and creating a welcoming environment for new tech products can be done simultaneously.

Through my experience, some opportunities for change the select committee can
investigate include: In the category of transparency, for instance, to eliminate information asymmetry, there should be a clearly defined process, including feedback and tracking, along with outlined requirements that provide a roadmap for new tech submissions while maintaining security protocols and structures.

Then in the category of support, to reduce any confusion, the House should designate a point of contact for these new tech submissions so that submitting entities know where they are in the process.

Lastly, in the category of streamlining, to maximize efficiency, the House may want to consider working with the Senate to align their approval standards and processes for new vendors and especially ones that are already approved in either Chamber.

Thank you for all the work the select committee has done to bring innovation to the Halls of Congress. It is my hope that these suggestions pave the way for more efficient, creative, and innovative solutions that make a difference ultimately to improve a Member office operation and constituent services. I look forward to answering your questions and to continuing the discussion with the select committee.

Thank you, and I yield back my time.

[The statement of Ms. Dargan follows:]

******* COMMITTEE INSERT *******
The Chairman. Thank you, Ms. Dargan.

And I now recognize myself and Vice Chair Timmons to begin a period of extended questioning of the witnesses. Any member who wishes to speak should just signal their request to either myself or to Vice Chair Timmons.

Let me kick things off. I have one kind of broad question that at least two of you spoke to, and then I have one super specific question just because it is something that bugs me.

On the broad question, both Mr. Dwyer and Ms. Dargan mentioned some of the challenges onboarding new technology and working with outside vendors. I am just hoping you can give us some counsel as to -- so is there a difference in how the House and the Senate approach this? And how does the executive branch approach this? Any lessons we can learn in terms of potential reforms we might propose that would make this process easier in the House?

Mr. Dwyer. I can start on that. And, Melissa, if you want, you can jump in as well.

I would say the way the House and the Senate deal with outside technology vendors is very different. I would say the House is actually significantly more open. So my personal opinion is that the House should take steps to be further open. But if compared to the Senate, we are actually in pretty good shape.

They, for example, have been very hesitant towards cloud technologies, which the House was hesitant for a while but lately has been more embracing. And, you know, thank goodness we did before COVID because we have been using cloud technologies a lot.

But, you know, the executive branch, it is mostly the FedRAMP program which we
rely upon. You know, Zoom, for example, they had to go through and have a FedRAMP version, which is approved by the executive branch, and that makes it easy for us in the House to say, okay, well, we can approve that as well pretty quickly. But there are still, as Melissa was talking to, many challenges in the House trying to adopt new technologies.

And my overall top recommendation is that we shouldn't treat all, they call it cloud services, the same because they are just very different. Some are like Melissa's, very specifically made for Congress. And so I think those should be given extra attention because they are built for us. And then some are just, you know, general use applications from companies that don't really know or care much about Congress, and so those should maybe -- especially when they don't have much PII, personally identifiable information, perhaps they don't need to have as much scrutiny.

But those are my thoughts. I am not sure if Melissa has additional thoughts.

Ms. Dargan. Yes. Thanks for addressing the question. I do echo what Steve had mentioned initially.

I will say in terms of the difference between the House and the Senate, openness was one that I had noticed with the House in even entertaining, initially, cloud services.

What I will say is some of the similarities with processes where it first goes to security, assessment, and then approval and authorization by the committee is similar in both Chambers. The difference I had experienced was in time of the approval process. So what was interesting was, while the Senate was less open initially to cloud services, they only took 2.5 months, about 7 weeks, to approve TourTrackr, where in the House, it took about 34 weeks, 8 months.

And that is just something I wanted to be able to call out, because in a timeframe like that with a small company like mine, it could be very difficult for a company who is trying to get set up if they have to wait 8 months before even being able to have the
allowance of operation.

The other thing I wanted to note in terms of what the executive branch does, so some of the agencies, they also have programs that support small businesses. They have an office like within the SBA where small businesses, women-owned businesses, underrepresented businesses can have a support to help them through the process to understand how to get through and get approved.

And in the executive branch they also have, I believe it is SAM.gov, where there is a list of requested contracts that they are hoping to get built or get done that these businesses now can refer to and submit proposals for.

So that may be something to consider on the House side, if there are open reqs of items that offices are hoping to be built or need help to be built, that companies can submit proposals for in order to then be reviewed. And that is just something I wanted to make sure I focused on where on the executive side they do provide support. There is a whole website for small businesses to onramp and onboard, and that may be something where small businesses and startups can be put together where they have support from Congress.

The Chairman. I think that is really helpful, something we should take a closer look at.

The other -- if my colleagues will indulge me asking the specific question that bugs me. You know, one of the challenges we have in this place is we are sort of 435 independent contractors, each with our own operations, each using often different technologies, although there are some similarities.

You know, where this is particularly problematic is where we have failings identifying common themes across the offices. So just as an example, during COVID, you know, we were getting a lot of calls about postal disruption. And when I was on the
floor, I would talk to my colleagues and say, man, we are really -- phones are ringing off the hook about postal disruptions. And they would say, oh, yeah, me -- our office too. Right? And right now, we may have our caseworkers work that issue, but there is no way to feed it into any sort of institutional learning.

You know, same thing around challenges with the VA or, right now, I mean, I think all of our offices are getting overrun with combination of visas and passports. And, you know, to me there would be value in exploring some way to use probably -- I mean, almost assuredly, anonymized data that comes from our constituent management systems to spot and address trends in the casework so the institution can solve some of these problems that usually rest at the agencies.

So I wanted to just take your temperature on that. Good idea, bad idea, something our committee should recommend?

Go ahead.

Mr. Schweickhardt. Absolutely. I have given a little bit of thought to that issue. The data is held at different CMS vendors, and I think that a process where that data is extracted and anonymized into a larger pool that could be subject to analysis or looking at trends both for constituent service and themes for oversight would be very valuable to the institution.

Mr. Dwyer. Yeah. I think it is a great idea, and I think it is something that I -- I know a lot of the companies that run the constituent databases as well, and I think it is something they probably would be excited about. You know, I think offices could maybe opt in. You know, it wouldn't have to be mandatory, and certainly anonymize the data, but I think it would -- you know, I think we neglect all the information that we get from our constituents. If you take it as a whole, I mean, we get millions of emails every week from people all across the country and, you know, many thousands of
casework problems with the Federal Government. And, of course, we individually deal with them, but I think there should be some more collective action, and I think it is a great idea.

The **Chairman.** Vice Chair Timmons.

**Mr. Timmons.** Thank you, Mr. Chairman.

**Mr. Dwyer,** what is your new fancy app you are working on? What is your new piece of technology that you are working on?

**Mr. Dwyer.** Well, our newest one is -- we haven't sent the press release on it yet, but Dome Directory 2.0 is live as of a few weeks ago, and --

**Mr. Timmons.** What is the difference?

**Mr. Dwyer.** We added a number of new features. A number of them were requested by Mr. Hoyer himself, but he also hears from other Members on the floor a lot about it.

We added -- you used to only be able to look at the whole Dem Caucus or Republican Caucus. Now you can look by committee. You can also look by major caucus, which I think is somewhat unique to the app. A lot of people don't have good data on, you know, which are the major caucuses and the different roles and leadership roles.

We added a search box right at the top because you used to only be able to quiz yourself, but now you can -- now you can just go find a particular Member. Mr. Hoyer wanted that because he often just wants to pull up a person.

We added three or four different bios for every Member. The issue I am most excited about is we added defining votes from this Congress, so we picked four or five of the most consequential votes for this Congress and we listed them for every Member.

**Mr. Timmons.** I mean, who owns Dome Directory and Dome Watch? Hoyer's
leadership?

Mr. Dwyer. Yeah, the Office of the Majority Leader.

Mr. Timmons. Okay. And he will give it to whomever if he ever does leave Congress?

Mr. Dwyer. I assume that is the case, yes.

Mr. Timmons. Okay. That is very interesting.

The Chairman. I am sorry to interrupt. Can I interrupt real quick?

Mr. Timmons. Yes, sir.

The Chairman. Mr. Schweickhardt, you said something that if you use your MRA to develop an app, you can't share it, so how do you guys get around that?

Mr. Schweickhardt. They are not using MRA. They are using leadership funds.

The Chairman. Okay. Thanks. Sorry to interrupt.

Mr. Timmons. So the 59th recommendation we made last Congress was to create a common committee calendar portal to help with scheduling and reduce conflicts.

I think this is something that could make a big impact on this institution, and we are having a tough time getting traction, other -- it is being worked on.

Do you all have any thoughts on what we can do to maybe move a little quicker?

Mr. Schweickhardt. One of the challenges with technology in committees is there is not a clear LA button to push. It is bifurcated between the clerk and the CAO and the committees themselves. So I think one of the recommendations is to clearly focus who is responsible for legislative product so there is an accountable owner.

I think the other challenge that I alluded to is there is no gatekeeper for scheduling projects. So in the CAO, they may -- teams may be working on 5 to 10 projects, so they tell you they are working on your project and they are, but they are sort of shuffling things back and forth versus a program management kind of functionality that
says, what are the three things we want to accomplish in the next couple of months; let's knock them out, and then let's figure out what the next set of important things are.

Mr. Timmons. With the additional resources we got in the modernization account, could we use those to speed it along?

Mr. Schweickhardt. Absolutely.

Mr. Timmons. Mr. Dwyer, what do you think?

Mr. Dwyer. I think the building foundation has been laid. Seven or eight years ago now, there was the creation of something called docstyles.gov, which is not widely used by the public, but it is used internally a lot. I know Reynold worked on that. I know the Bulk Data Task Force worked on that a lot.

For the first time ever, all committees are required to post all hearings in one place, and that is where they post it. They are also required to post all testimony and documents related to every hearing. So --

Mr. Timmons. Is that done in House rules?

Mr. Dwyer. I believe that is in House rules is what required that and the creation of it.

Mr. Schweickhardt. Yeah.

Mr. Dwyer. And, you know, that is another example where the House is ahead of the Senate. I hear that their committee schedules is not all in one place and their videos -- or all the committees are not in one place. So I commend the House for that.

So I think that is the foundation. But I think, you know, amplifying that, you know, making a more consumer-friendly version of that so you can at least see all the conflicts, I mean, that is sort of the first step, and I think that could be a project for the Modernization Fund.

Mr. Timmons. Ms. Dargan, what are your thoughts?
Ms. Dargan. Yes.

Mr. Timmons. I was asking about trying to deconflict to the committee calendar. We made a recommendation to do a common committee calendar, and we are still working on it. So do you have any thoughts on what could move it along?

Ms. Dargan. I think both of the panelists who have addressed that question have covered it in terms of how to get that. And just having worked on the Foreign Affairs Committee prior, I will say that that would be a very helpful tool moving forward. So whatever the Modernization Committee can do to push that, whether it is recommendations or freeing up, you know, certain funds to be able to create something like that, would be very helpful.

Mr. Timmons. Okay. One quick last question. This could save millions of trees in this institution. I rarely use the materials that are printed out. I mean, every time I go to Financial Services, there is a stack that thick.

Mr. Perlmutter. Some of us still use paper.

Mr. Timmons. Well, we can make it optional. We can make it optional. But, I mean, how challenging would it be to go paperless as the default, and if somebody wanted paper, they could get it?

Mr. Dwyer. I wholeheartedly agree. We have certainly reduced the amount of paper quite a bit. I am sure there is a lot more to be done. Now, my expert here worked for a long time with the GPO who probably has more strong thoughts on this.

Mr. Schweickhardt. So I think that, for example, the recommendation about automating the production of the committee hearing document from docs.house.gov, so extending that allows for the creation of electronic document. I think that a lot of the costs that are incurred are in the creation of that first copy, and then the printing becomes pretty incremental. And as Members have become more digitally savvy, I
think it is a much more practical alternative, with exceptions.

It is interesting you mentioned the pager in some random desk drawer. There was a huge controversy at the time when we tried to replace it because there was an equity issue that Members needed to have exactly the same notice of a floor vote, and if it was coming through email or some other mechanism, somebody might be 3 minutes delayed. It was like a horrible thing. And as people became more accustomed to how the digital world worked, that issue went away, and the pager is rightfully in the back of the desk drawer.

Mr. Timmons. Thank you. Mr. Chairman, I yield back.

The Chairman. Mr. Phillips.

Mr. Phillips. Thank you, Mr. Chairman.

It is clear there is a bias against change in this institution. But, Mr. Dwyer, I will start with you. In your estimation, where is the ideas bottleneck? Is it House Admin? Is it leadership offices? Is it the various agencies? But, like, what is the crux of this? Who needs to champion at least employing technological improvements?

Mr. Dwyer. Yeah, that is a great question. I think there is a lot of ideas out there. I think we need to do a better job of sort of collecting them. I think the Modernization Committee deserves a lot of credit for collecting all these ideas, but I think there needs to be more of a permanent institutional sort of way to collect these ideas and to properly evaluate them and elevate and prioritize them.

But, yeah, I think we just need to create the processes to collect those. I think, again, the Modernization Committee shows that, you know, once you create that process, you get a whole lot of very good ideas. So I think at every level, Member office, committee level, leadership, institutional offices, I think there is a lot of good ideas.

I would say, on the institutional offices, I think there is a lot of ideas, but they
often are afraid to share them. They are just more risk averse. And so I think if we could somehow give them a little more authority to sort of improve things, rather than I think often they feel that their job is just to keep the status quo flowing.

Mr. Phillips. But who is the "we"? Is it the Speaker of the House? Is it majority leaders, minority leaders? Is it the chair of House Admin? Who needs to kind of inspire it other than the ModCom?

Mr. Dwyer. I think in technology, unfortunately, there isn't much of a lead. I mean, I think House Administration provides leadership, as does individual leadership offices. But I think a lot of it goes to the different institutional offices for a lot of the technologies here on the Hill, and they are just very sort of disjointed, you know, where you have got the CAO, you have got the Clerk, you have got the Library. And I think we really need more authority across all of them.

In my prepared testimony, I recommend the Bulk Data Task Force, which is now the Congressional Data Task Force, which I think is -- if they had more authority, they could sort of do more good things. But I do think it is a lack of leadership, that is correct.

Mr. Phillips. If I could just ask one more of you too. I loved your recommendation about an open public discussion forum for bills. Take us through just quickly, if you would, you know, how that might -- how that would work, you know, from inceptionalization to actual implementation, based on the status quo. You know, how could we approach that?

Mr. Dwyer. Sure. Thank you. It is just that, you know, right now, as was largely the case when I started in Congress nearly 20 years ago, if you want to weigh in on legislation before Congress, you just have to send your Member an email, and then you might get a response, often weeks later, and it is usually kind of canned, and so that is sort of a frustrating process often; not always but often.
And the idea is just that, nowadays, when people take time to write an opinion on something, they usually want it posted publicly. I mean, that is just what they expect in the age of social media. And so I think because we haven't created a system like this -- so the system I envision is just an open platform of all bills, try to structure the conversation, try to keep it focused on legislation and policy.

There would -- of course, like any open online system, there would need to be content moderation, which is difficult. But I still think, you know, you could have simple functions like up voting and down voting. It wouldn't have to always be messages. It could just be support or nonsupport on different bills and stuff. And I just think it could -- it would be a large project, but I think it could be very constructive in the long run.
Mr. Phillips. Could it be attached to congress.gov or something -- is that --

Mr. Dwyer. That is what I imagine, yes.

Mr. Phillips. Okay.

Mr. Dwyer. I certainly would use the database --

Mr. Phillips. Yeah.

Mr. Dwyer. -- for congress.gov for all the current bills to try to structure the conversation.

Mr. Phillips. All right. I yield back. Thanks for your -- oh, yeah. Please, Mr. Schweickhardt.

Mr. Schweickhardt. In terms of what is limiting progress, I think that I would -- with the many silos comes turf --

Mr. Phillips. Uh-huh.

Mr. Schweickhardt. -- and there is a tendency to negotiate around those sort of perceived immovable objects.

When docs.house.gov was mandated in House rules, one of my jobs at House Administration was to manage the implementation and the creation of it, and there was a committee that didn't think that they would be subject to those rules, not to get into oversight versus appropriations differences. And with the support of the Speaker's Office and negotiation to understand the business process in appropriations, managed to create an all-encompassing solution.

And so I think that I would point to the silos and someone or some organization that could be House Administration, could be the leadership, really arbitrate those
differences --

     Mr. Phillips.  Okay.

     Mr. Schweickhardt.  -- and say, I understand that is in your turf or in your charter, but we are going to look at this from an institutionwide perspective and make a better solution.

     Mr. Phillips.  I appreciate it.  Thank you both.

     The Chairman.  Mr. Davis.

     Mr. Perlmutter.  He just got here.

     The Chairman.  Sorry.  Did you have a question?

     Mr. Perlmutter.  No.

     The Chairman.  Okay.

     Mr. Davis.  You know, Ed --

     The Chairman.  We call --

     Mr. Davis.  -- seniority on this, even this select committee matters, and I --

     The Chairman.  Perlmutter is the ideas bottleneck actually.

     Mr. Davis.  He clearly is.  I call it Bronco's fan --

     Mr. Cleaver.  Yeah.

     Mr. Davis.  -- inertia.

     Quit triggering me, Ed.  Quit triggering me.

     Anyway, look, I want to thank Chairman Kilmer and Vice Chair Timmons for recognizing me before Mr. Perlmutter today.

     Reynold, I don't want to ruin your reputation by saying this, but you have been a longtime friend of mine, and I have just appreciated the work that you have done to make this institution as technologically limited advanced as we are today.  I mean, that is like moving a Herculean effort forward trying to get an institution to change, and you have
been part of that process to make that happen.

Mr. Schweickhardt. Thank you.

Mr. Davis. But -- and it is great to see you back here in the House office buildings again, and I certainly hope you don't go away.

He is the guy, if you want to know any institutional technologic -- technology issues, he is the one to turn to.

And then also -- and this is where my questions are, Reynold -- is you mentioned the newly launched House Digital Service, and you mentioned -- you recommended its expansion, right? I wasn't here earlier. Have you already gone over that process at all?

Mr. Schweickhardt. [Nonverbal response.]

Mr. Davis. Okay. You also highlight the House's institutional issue of not having a central body to prioritize those technology products. That was something Mr. Dwyer just mentioned.

I actually happen to think House Administration should be the clearinghouse for solving those problems, but -- and I was reminiscing with former Chairman Harper just about an hour and a half ago about how it was awesome to make sure we dealt with furniture issues, transparency issues when it came to spending.

And now House Administration is dealing with H.R. 1. We are dealing with more legislative issues. This has become a more of a legislatively or leadership-appointed authorizing committee. And that, to me, is a big change. And, frankly, I think it puts what this ModCom committee is trying to accomplish by making the House as an institution move forward -- I think it puts that on the back burner. And that has to change, in my opinion.

Do you see that, Reynold, and do you have any recommendations for what we
should do going into the future on House Administration?

Mr. Schweickhardt. So certainly as a longtime House Administration Committee staffer, I have to support the role of House Administration in these processes. If you look to the Canadian Parliament, they have a long-serving chief technology officer. He -- I think he is getting ready to retire. And so there was continuity in a technology strategy and a technology roadmap.

And so my testimony, I talked about the difference between sort of stability and innovation and how to manage that tension. And I think that there is a role to sort of herd the cats in terms of keeping the innovation from disrupting the institution.

We need more innovation. By the way, that is not a, you know, keep the door shut. But, you know, how to manage that in an effective way.

I think some of the listening sessions that have taken place to understand what are the needs of different job roles; what is a legislative counsel versus a staff assistant versus a scheduler; you know, what are their challenges in, you know, supporting the Member and the institution --

Mr. Davis. Well, you --

Mr. Schweickhardt. -- are important.

Mr. Davis. Your time on House Administration mirrored my time as a staffer too for Congressman Shimkus, and I can tell you, today, the access to training, the access to products, the access to technology is much, much more ubiquitous than it was when I started in the nineties and worked throughout the early 2000s.

But we have got a -- we have got a problem and an issue that this committee, I know, has debated and House Administration has not debated enough. What is your suggestion on how do we find that balance between the House and the CAO trying to develop technology when there might be that technology that we could get off the shelf
and maybe work it into our security apparatus?  What is that fine line?

Mr. Schweickhardt.  So I think that -- so there is two kinds of technology, right? There is the -- everyone in the world needs Zoom, and the House needs to use Zoom as well.  So what are those nonproprietary technologies or nonlegislative-specific?  And then there is the, what do we need to have developed, like Melissa's application, that no one else in the world needs to use?

I think one of the missing pieces is how to leverage the energy and the enthusiasm of the civic tech community.  There is a lot of people who want to support the legislative process, that want to strengthen the first branch of government.  And some of the ethics concerns, some of the acquisition concerns prevent that from happening.

If you look at the executive branch with challenge.gov, they have different statutory authority to use contests and challenges.  You know, build me a better airplane, and I will give the one who builds the best airplane the contract and the money.  It speaks to some of these issues that were discussed earlier in terms of having a defined process that is open and transparent in terms of how we do that.

So I think, going back to acquisition and competition, I mean, one of the problems, I think -- you know, my opinion today with challenges is, if you have a contest and you -- you know, we will give you a dollar for the winner, you get into, you know, ethics concerns and so on.

The Library of Congress has authority to provide funding, which they have used to work on congress.gov.  But the House seems to lack that same authority to say, I will give you $5,000 for the world's best, you know, constituent communication widget.

And Steve, I think, may have some thoughts.

Mr. Dwyer.  Yeah.  If I could just say it is a good point, sir, that you made on, like, whether to build or buy.  And I think you certainly want to buy if you can, if there is
a -- you know, there is no reason to build something that already exists. But I think we are somewhat unique.

Now, we are not entirely unique. You know, there is a -- a bunch of other State legislatures that do a lot of the same things we do and international. But, yeah, the TourTrackr app is a good example.

Another good example is, you know, the Senate recently developed in-house a really nice, clean, new app for -- it is called Quill. It is for managing letters and signatures. And that saved -- I mean, our office, that saved us so much time this appropriations season compared to previous seasons. Great efficiency gain.

Mr. Davis. Did you say the Senate developed something before the House?

Mr. Dwyer. Yeah. And it is --

Mr. Davis. Interesting.

Mr. Dwyer. -- very rare that a tool is being -- a bicameral tool is now in use in both Chambers in the same way.

Mr. Davis. That is great.

Mr. Dwyer. It is a great example of nobody else really has the same letter, signature problem that we do with 535 signatures that we always have to, you know, jumble on different letters, so --

Mr. Davis. Well, I appreciate your testimony, both of you.

Thank you, Chair Kilmer. And I would seriously like to sit down. This is a very leadership-driven operation here.

Mr. Perlmutter. Bingo.

Mr. Davis. And I have -- you know, I was very supportive of the legislative branch modernization fund, but I have some big concerns with how that money is being utilized right now with an overwhelming amount going to the Approps Committee and to the
CAO. And I would love to sit down with you and your boss to talk about some of these concerns, if that would work out too.

Mr. Dwyer. Of course.

Mr. Davis. Thank you.

Thanks. I yield back.

The Chairman. Thank you.

Mr. Cleaver.

Mr. Cleaver. Thank you, Mr. Chairman. Just this whole issue of technology is one that I am -- I appreciate the committee leadership bringing to us.

I want technology to be my servant, my -- but there seems to be an effort for -- you know, afoot to make it our god, and -- not at this committee hearing. But, I mean, you know, I have a 6-year-old grandson who is constantly trying to teach me, you know, how to use this phone app that I had no business getting, because all the stuff on here, I don't -- my 6-year-old knows everything.

So I have some apprehensiveness about just going all the way in as it relates to technology. However, every office probably has a contract with a technology person, somebody that -- IT comes in and they -- the computers go down, the printers go down. And I am just -- and we probably pay, you know, maybe as much as -- we all probably have contracts, you know, probably 20 to 50 may be the range, maybe even more than that.

And so if we are spending that kind of money, technology is, in some ways, becoming, you know, ahead of us -- you know, it changes every night. I get mad at this phone, because it says essentially, stupid, I told you I am not going to function unless you update me, and, you know, but -- but do you -- at least those of you who were around -- have been around here, believe that maybe each office needs to have not just a
contract, but somebody in there, just like a LA or regular member of our staffs at all times, who not only could, you know, help with the, you know, problems in the office, but also next-step technologies?

I mean, we -- you know, here in Congress, we are in a situation where we have to catch up. This is not like making a decision about, you know, just another move. We are talking about catching up.

So given -- what -- if we had the dollars in our MRA, do you think that this would be -- it would be a good idea for Members of Congress to have a technology person in-house?

Mr. Dwyer. I certainly think so, sir. I think it is a great idea. I think that is happening more and more. I think there is just so much more that they need to do, even versus 5, 10 years ago when I was in the congressional office.

You know, a lot of that is in digital communications. Every office needs to, you know, not just take a bunch of pictures and post them on Twitter and Facebook, but they have to do more technical Facebook Lives. They have got to take their boss live. And there is a lot of technical tasks that didn't exist many years ago.

And so I think, you know, we have been recommending, within the Democratic Caucus, you know, the use of the title "digital," so digital aide or digital manager. And those people should be technical people, so not just communications specialists online, but also are competent with many different technical tasks.

I think data is also critical for every office.

Mr. Cleaver. Uh-huh.

Mr. Dwyer. Every office, when they communicate with their constituents, they are using complicated databases in targeting and such. And those are technical tasks that require -- and I think having someone in-house is good, because they can sort of do
all sorts of these different tasks for you, including more basic IT support as well.

And so I think that is absolutely needed, that we can't just think of traditional congressional staff of, you know, political science and history majors, but also more technical staff, I think, are helpful all around.

Mr. Schweickhardt. If I could add, sir, I agree with Steve's comments. A complementary aspect of that is to continue to standardize core IT so the person you are paying for doesn't -- isn't figuring out how to make the computer get updated but, rather, that is something that the CAO should manage, so that the space where you have a technical advisor or digital advisor is, as Steve said, on communications. And I think on analytics, increasingly, you know, what did the executive branch or the industry or the trade association, they provide you a set of information to support their positions, there is many resources, but I think someone in the office who is in support of, you know, your positions to do data analytics and say, this is true, this isn't, you ought to ask them this question because, would be very helpful.

Mr. Cleaver. Ms. Dargan?

Ms. Dargan. I will add to that. For individual offices -- and this is touched upon earlier -- silos, right? So if each individual office has their own staffers and they come up with innovative solutions that other offices could benefit from, this is where it is going to be important to also have something that is a way in which these digital individuals can all communicate, because I know from personal experience, one issue that an office can experience, other offices have experienced in the past as well.

And if everybody is coming up with their own way in which to tackle it starting from scratch, it is -- it can be inefficient and ineffective. And I would say, if the office decides to have an individual digital person, there should also -- the House should find a way to be able to bridge these silos so that one issue that gets resolved in one office,
there can be an easy way to implement that in others.

And I -- whether that is an open forum, whether that is a way that they can all communicate, I think there should be a way to bring these silos together as well on a holistic level, because that will help close some of these gaps.

Mr. Cleaver. Thank you.

The Chairman. Mr. Perlmutter.

Mr. Perlmutter. So that sort of leads into the question that I was going to have, starting with you, Ms. Dargan. Just listening to this, it is sort of an age old problem of centralized versus decentralized. And, you know, you call us silos, but we are offices. We are individual offices and we kind of do things on our own.

But we need to have better networking and conversation. And it could be about technology. It certainly could be -- you know, we did a big veterans pinning thing for, you know, Vietnam vets, and we started it, and nobody really knew about it, but then it -- the word spread. I mean, there are good things that any offices could use. So we have to have a better networking process, I think.

But my question is a broader one, which is sort of a procurement/acquisition kind of issue. When you are a small business and you want to, you know, introduce your product to my office or to the Congress as a whole, to the CAO, what is the process? I don't even know. I mean, I am going to show my ignorance right here.

Ms. Dargan. Well, thank you for posing the question. It -- in the House side, the way that a startup would pitch even a product would be the Member office would have to support and turn in a document into the CAO asking for that startup and that product to be reviewed.

This was something, when I initially first started in actually getting approval, didn't even realize myself, because there was no information publicly known of how I could
even get approved or that I needed approval in the beginning.

And so a Member office would have to support a startup or a vendor and submit documentation to the CAO. The CAO security team will then review the product to ensure that security assessment and risk assessment is done appropriately and that the technology is safe and secure for Member offices to use.

Once that is approved in the CAO side, it gets sent to CHA, where then CHA then does the final authorization. And if it -- and if the product or company gets authorized at the end, then it can be approved on an approval list where Member offices can now use this technology.

So there are multiple steps, and it all starts with a Member office needing to submit a company to be reviewed initially. There is no open proposal where I could submit something myself and say, Hey, I know that this is a problem. I have spoken to other offices. Can I submit TourTrackr, for instance, to be reviewed by the CAO directly? I would have to first get a Member office to support me, and then have them submit that -- that documentation and information in order for me to be reviewed or even looked at.

Mr. Perlmutter. So you can’t go straight to the CAO?

Ms. Dargan. Currently, I was unable to, and I don’t believe there was a process to do that, because I was told I needed a Member office to support and turn in the documentation to even get me through the door.

Mr. Perlmutter. Is that the same for the Senate?

Ms. Dargan. In the Senate, a Senate office had to also champion a vendor. And for them, though, their process is a Senate office sends a risk assessment to be reviewed by the Senate Sergeant of Arms. Then the Senate Sergeant of Arms reviews the risk assessment, provides their assessment to the Rules Committee. And then the Senate
office also has to write a letter to the Rules Committee asking to use official funds, assuming that the risk assessment was approved and passed.

So it is very similar in that it has to go through, first, a risk assessment on both Chambers, and then it also has to go through approval by a committee. On the House side, it is CHA, and on the Senate side, it is Rules.

Mr. Perlmutter. Thank you.

Mr. Timmons. Just want to mention that we --

Ms. Dargan. Thank you.

Mr. Timmons. [Presiding.] If we had a common committee calendar, then the chairman would still be here, and he wouldn’t have to be out. I will --

Mr. Phillips. Just saying.

Mr. Timmons. Mr. Phillips?

Mr. Phillips. Thank you, Mr. Chair.

My question is about tech talent. I know that Congress is not exactly a hotbed of tech talent right now. For all of you, do you see a way that we can become a little bit more of an attractive institution for that kind of talent? I know it can be hard to compete economically with compensation, but how might we reposition ourselves and actually make it cool to serve the country with tech skills in Congress?

Mr. Schweickhardt?

Mr. Schweickhardt. Yes, sir. I think that -- you know, I had an opportunity to speak with a group of tech Congress fellows and, you know, they are very impressive. They are very accomplished. And so I think, from a rotational method, that there are people who are concerned about democracy in this institution who will step away from higher salaries and contribute.

What is lacking is building kind of that core capability. You know, people like
Steve are kind of unique of having, you know, led technology strategy for Mr. Hoyer --

Mr. Phillips. Uh-huh.

Mr. Schweickhardt. -- for 20 years.

I would just say, I think that money is certainly part of it, but it is also the ability to get something done. You know, these are motivated people. If you hired -- you know, if you had a Formula One driver fellow and you give her a golf cart, she is not going to go as fast and far as she does around the track, probably not going to stay very long, because it is not very satisfying to be here.

So I think that whole ecosystem are -- you know, am I using modern tools? Are there modern methods? Is there the political will or the process to be effective and make change, all contribute to making the place, I think, more attractive.


Mr. Dwyer?

Mr. Dwyer. Sure. I think it is a great question. I think we could look to the executive branch for some inspiration. I think, you know, this is something that President Obama worked on and something that President Trump continued through their initiatives like the U.S. Digital Service and 18F at GSA. They created different flexible employment models like they did -- yeah, I think they started with like 6 month and 12 months tour of duty. You know, say you are a Silicone Valley engineer but you are a little tired with your job and -- but you want to help your country, you want to serve your country.

Mr. Phillips. Like a sabbatical.

Mr. Dwyer. Yeah, a sabbatical sort of thing. And I think they realized that those -- those were often pretty short, because a lot of these -- even the smaller projects, you know, you have really got to dive into for perhaps longer than a year. So I think
they have expanded to 2- and 4-year tours of duty.

But they also found that a lot of those people ended up staying. You know, a lot of those people really do love more of a mission-focused work and get excited by the work and then -- so after their tour of duty ends, they actually are able to work inside the agency.

So I think that is a good model that we should look to --

Mr. Phillips. Appreciate that.

Mr. Dwyer. -- in the legislative branch.

Mr. Phillips. Ms. Dargan?

Ms. Dargan. I -- I would echo that. Like, the innovation fellows were part of the executive branch's initiative where it was a short stint at first, and then what you could do is either elongate, but it gave these individuals who possibly had an interest in civic public service a taste of what it is like. And what is great is they have the tech background. Getting them in for maybe a 6-month, a year, 2-year stint gives them the ability to at least give back.

And in a number of cases -- I mean, I know a number of innovation fellows. They ended up staying in government and transitioned away from the private sector because they felt that this was a fulfilling mission. They were put on projects that had end dates and deliverables and actual results. So, to them, it was also fulfilling because they delivered something that was used by the government at the end.

So I would say, if you think about it a little bit, it is like the Teach for America model, right? But it is, Hey, come, take that sabbatical, work in Congress for a year or two. It gives them the ability to get a little bit of a flavor of what it is like to work in public service, especially if they were curious.

Mr. Phillips. Uh-huh.
Ms. Dargan. But it wouldn't be necessarily such a huge shift and change if they wanted to go back.

The other part of it, I would say, is recruiting, because when I went to business school, I remember a number of these programs and organizations would come to our recruiting events. If something like this were to be, you know, launched within Congress, it would be important to get the word out and be able to recruit these individuals who you would want to target to come over, whether that is the companies and going to them and pitching this kind of idea, or going off to like engineering programs in the various schools to let them know about this opportunity. The biggest thing in the pipeline as well is making sure you get the word out and recruiting the right people.

Mr. Phillips. Great recommendations.

Mr. Schweickhardt. I am glad to --

Mr. Phillips. Yes, sir?

Mr. Schweickhardt. One thought, sir.

Mr. Phillips. Yes.

Mr. Schweickhardt. Today, the General Services Administration is recruiting a chief technology officer for a limited term appointment, exactly in this model. Dave Shive, the CIO, is engaged in extensive social media outreach. I think they have a session next week where they are going to have an open meeting for anyone who is considering applying for the position.

So sort of following up on Melissa's comments, they are very intentionally building an entire recruitment -- advertising and recruitment campaign to bring in a world-class technologist for GSA.


The Chairman. [Presiding.] I wanted to ask about the use of open source.
Can you speak a bit about the benefits of requiring new technology created for the House to be open source? Have you seen any examples of government or congressional tools being built using open source?

And I guess I also want to get a sense of, are there ethics concerns under current ethics rules when it comes to individuals within the House using open source code and problem posting forums like GitHub?

Mr. Schweickhardt. Yeah. If I could start. You know, in my written testimony, it talked about a couple different use cases here, and I talk about the Congressional Art Competition, where there is not a lot of concern about the makers of Tempura, Inc., or something, you know, having -- using art competition as a leverage point into Congress.

When we set up the Congressional App Challenge, when I was at House Administration, the Ethics Committee was very -- at that time, the staff of the Ethics Committee was very concerned about sort of undo influence of big tech and, you know, how to limit those -- limit that impact. They provided some verbal guidance about the use of open source, but never, to my knowledge, issued anything in writing to sort of lay out that process.

And so, you know, the House has been a longtime user of sort of generic open source technology bringing -- you know, making -- sort of incorporating those functions. I think that an acquisition -- one of the reasons I suggest an acquisition authority is you can explicitly have a sort of market-based competition that recruits open source developers.

I think the more -- the point that would be very useful, if we could get to it, is how to have an ongoing kind of codevelopment collaboration with civic technologists, you know, maybe through the congressional -- sorry -- the House Data Task Force. It is still sort of burned into my brain, the old name. -- but some mechanism that arbitrates or
sets up a framework. "Arbitrate" is not the right word. Sets up a framework for that kind of participation.

The Chairman. Is there something that impedes that right now?

Mr. Schweickhardt. I think it is inertia, and I think there is ethics concerns about that.

One of those concerns is about the tasking of outside entities. So it is like, you know, you have -- Steve, you know, this product he wrote, this Dome product, is really great, but we need these 27 enhancements to it, and he does it for free, and the institution uses it for free. Is that an appropriate scenario?

So a lot of these things are fact based, you know, the fact pattern. But there are those fact patterns that would raise issues, I think.

The Chairman. Go ahead, Mr. Dwyer.

Mr. Dwyer. Sure. I think it is a good question. I think, you know, the House uses lots of open source software. I mean, most -- a good example is most House websites that are run by the CAO are done in a system called Drupal, which is a very worldwide, popular, open source website software for managing websites and creating websites.

And the way it works at being open source software is that all that code is available for free on the internet, and it creates a very healthy feedback loop where lots of people are making fixes to the code and lots of people are suggesting fixes to the code and bugs with the code and reporting bugs. And so it is just a large online community that sort of works on a group project, which is just a system of code that makes good websites.

I think the Ethics Committee concerns, in my opinion, are a little overblown. I -- I have seen an Ethics paper on this from probably 4 or 5 years ago. I don't think that they
are actively working on it. I could be wrong. I don't know. But I think that there was some concern that, you know, through that open feedback loop, where people do just ask for things, like, hey, it would be great if this -- if your feature that you made had these features, and they often do it. But they do that not just for Congress, they do that for anyone. If they just think it is a good idea, they do it.

So I think, you know, Ethics is worried that this could be some loophole for big tech to come in and see the needs for us and give us a large gift by making a bunch of software, but I don't think that that is much of a risk. I think the traditional use of open source is just a collaborative something, and I don't think that violates the spirit of the gift rule, which is what Ethics was concerned with.

The Chairman. Ms. Dargan, do you want to take a swing at that pitch or --

Ms. Dargan. I believe my fellow panelists have covered most of it, and I agree in terms of what they say with the ethics concerns. I also think, with open source, prior when I was on the Hill, there was this notion that it would, you know, affect, like, risk assessment or what that would mean.

But what I will say is, when you have looked at open source examples, the building of extra features, if there was a concern of any risk, this is where, in the House side, the CAO would come -- come up and have the ability to review any additional pieces that were built off to ensure that it is safe for any Member office to use. And that would just be a process that would also be needed to put in -- to be established.

The Chairman. Let me hit one final topic on my end. I don't know if any of my colleagues have any additional questions.

Mr. Schweickhardt, you actually spoke to the issue around sort of the siloing of technology development across the Congress. There are different support offices involved, like CAO and AOC and the Office of the Clerk. So how do we encourage more
collaboration in technology development, and how do we encourage the CBO and the GAO and the GPO technology development teams to collaborate as well?

Mr. Schweickhardt. So I think that, you know, my recommendation has been to look at the scope and chartering of those existing technology organizations. I mean, to be clear, they collaborate today but just has friction as part of that process, so they are a little less productive. It is one of a death of a thousand cuts.

The House is unique, as far as I know, in national parliaments in having multiple institutional IT organizations in a single chamber. Some organizations, like the UK Parliament, in fact, has a single CIO for both the House of Lords and the House of Commons, but that is probably a bridge too far for us.

So I think that looking at consolidating that institutional IT into a single organization would have the most impact but is the most difficult. If that is not possible, consolidating into the Clerk's IT organization for legislative functions. So, you know, House Office of Leg Counsel, you know, has some IT functions -- they are relatively small -- both for the efficiency of putting them together, but also from a charter point of view, you know, Clerk owns all legislative IT regardless of where it is, so you know who is responsible for it.

Mr. Dwyer. Yeah. I think it is a good question. I think it is a problem that there isn't authority over all these different -- because these different silos do very large things. I mean, you have to -- the CAO manages all the communications with the public and all the websites of Members of Congress. The Clerk handles all the voting and the internal operations of the floor and the websites related to that. The Library and GPO handle more of like the historical records. And nobody's really in charge of how they all interact.

So I want to go back to the Congressional Data Task Force. It is one of the few
areas where I have seen them interact very well, and that -- you know, it is now 10 years
now they have been working together. But I do think, you know, like the UK model, like
of having a single person that had authority over them or -- that is just my remarks. You
know, maybe the task force has authority over all of them to sort of embolden them to
make some more large changes and deal with the silo problem.

Mr. Schweickhardt. We -- one of the things -- one of the things we did at House
Administration, working with the Appropriations Committee, was try to create a
single -- a process for the cybersecurity initiatives of the different IT organizations and to
create a common assessment, so that the appropriators could look on an
apples-to-apples basis on the level of IT risk in the different organizations across the leg
branch, which really all -- many -- most of those organizations, except for the AOC, are
part of the legislative workflow. They are part of that supply chain to get a bill to the
President’s desk.

That was a very intensive effort. So I think that, you know, solving that -- one of
the broader aspects of those different IT organizations is worthwhile, but it is one of
those things where incremental progress is probably more achievable than a -- you know,
than a grand solution.

Mr. Dwyer. Can I just add, the -- back to the task force model, it was unique that
the House rules that created it said that they must meet regularly and they must, like at
least once a year, I believe, you know, meet with the public to discuss their progress.
And so I think just -- so having some structure, force the silos to meet with each other
regularly, just to make rules about that, and to meet with the public, the users of this
information at the end of the day, I think is a --

The Chairman. Is that the place to do it? Is the task force the place to do it
rather than having a position, right, like CIO with dotted line relationships to all the
technologists in these various agencies?

Mr. Dwyer. I think either is possible, but I think the authority kind of -- it doesn't exist right now, but should be created and either a person or a group like the task force.

Mr. Schweickhardt. I would agree with that.

The Chairman. Ms. Dargan is nodding her head. I don't know if you have anything else you want to add.

Ms. Dargan. [Nonverbal response.]

The Chairman. Okay. Any other questions from my colleagues?

Go ahead, Mr. Cleaver.

Mr. Cleaver. One kind of parochial -- maybe a question. What -- if you guys will take a guess. What would be an entry level salary for a technologist in -- considering you guys are probably familiar with how the pay is over here, but just a guess.

Mr. Dwyer. Yeah. I would say I have some experience in this -- in the House Democratic Caucus pushing a digital specialist, for example, who, you know, aren't necessarily coders or designers or engineers, which is more technical and have higher-level degrees that are more in demand. But, you know, I think because it is a new position in a lot of offices, it often is pretty junior, but I still think it is a great start. And so I think, you know, most of the staffers with "digital" in their title are being hired, you know, above the normal staff assistant type position but not much above. But I think, you know, if they are able to prove their worth, I think they often have their salaries rise pretty quickly within offices, that I have seen.

Mr. Cleaver. Okay. Thank you.

Mr. Chairman, I just realized we have four members of this committee on Financial Services, including Mr. Timmons, and we have Jay Powell today, so that is why I think some of it -- where a couple of members are going.
The Chairman. Well, I am glad you are here. I am glad you are both here.

So, with that, I would like to thank our witnesses in particular for being here, and for their testimony today, and thank our committee members for their participation, even with Financial Services conflicts.

As always, I want to thank our staff for putting together a terrific hearing. I think the insights we got here definitely sort of cohere to some specific recommendations that our committee can make, so thank you for that.

And to our stenographer, thanks for -- I am sorry we talked so fast.

Without objection, all members will have 5 legislative days within which to submit additional written questions for the witnesses to the chair which will be forwarded to the witnesses for their response. I ask our witnesses to please respond as promptly as you are able.

Without objection, all members will have 5 legislative days within which to submit extraneous materials to the chair for inclusion in the record.

And, with that, this hearing is adjourned.

Thanks, everybody.

[Whereupon, at 10:26 a.m., the committee was adjourned.]