# Existing Resources and Innovations Needed to Replace Legacy IT and Save Taxpayer Dollars

Statement of Dave Zvenyach Director, Technology Transformation Services Deputy Commissioner, Federal Acquisition Service

**U.S. General Services Administration** 

## Before the Senate Committee on Homeland Security and Governmental Affairs Subcommittee on Emerging Threats and Spending Oversights

September 28, 2021

Chairwoman Hassan, Ranking Member Paul, and members of the subcommittee, my name is Dave Zvenyach and I am the Director of Technology Transformation Services (TTS) and Deputy Commissioner of the Federal Acquisition Service (FAS) at the U.S. General Services Administration (GSA). I am pleased to be here today to discuss the important role that GSA plays in the replacement of the federal government's legacy technology systems.

As you know, digital technologies have fundamentally transformed the way that individuals interact in every sector, with corresponding changes in social norms and expectations. The public sector, too, has made strides over the years to take advantage of innovative solutions and emerging technologies to improve digital services.

The federal government is expected to spend nearly \$100 billion on information technology projects in fiscal year 2022. And yet, a significant portion of those funds are spent each year on maintaining legacy systems that are outdated, vulnerable to

attack, or fail to meet mission needs - all with an ever increasing price tag for service.

GSA, along with our colleagues at the Office of Management and Budget, is proud to play a critical role in delivering on all aspects of technology modernization and an improved, easy, and efficient procurement environment for federal agencies. At TTS, we stand ready to partner directly with agencies on their modernization journey.

### Understanding Why Legacy Systems Exist and What to Do About Them

Perhaps the biggest challenge we have in the government technology space is recognizing that we need to shift how we talk about--and how we deliver software. In today's environment, we need to understand that software delivery is never "done." There's a belief that modern systems are those recently created and that they eventually age to become legacy systems that have to be replaced. But technology that is properly developed, maintained and continuously focused on meeting user needs etc may never become "legacy"; *all systems*, regardless of vintage, should be focused on meeting our users' needs and we should be prioritizing our work to maximize services delivery for the public. We need to shift the government toward an expectation that every system in production should be continuously improved, so that there is no such thing as a legacy system and no such thing as "done."

A commitment to user-centered design, agile principles, security, accessibility, and a clear product vision are essential to excellence in software delivery. This must be true for every system in government.

Unfortunately, when we talk about government legacy systems, we are almost always referring to the ones where the stakes are the highest, and where the perceived risk of failure is least acceptable. Under these conditions, organizations

2

tend to adopt an inherently risk-averse culture, where innovation is implicitly or explicitly discouraged.

Organizations with risk-averse cultures often build technology systems that are resistant to the continuous improvement approach. This should be pretty self-evident; if your culture is hostile to innovation, it would be pretty remarkable for your technology to be innovative. Too often, bureaucracies create systems that comply with all of the various rules, policies and regulations, but fail to meet users' needs or provide the optimal user experience. In such environments, technology and service delivery, is disconnected from mission delivery, and no one is encouraged or incentivized to pursue innovation or change.

Innovation is, of course, not just valuable for its own sake. Any software engineer in TTS will tell you that the "technology is never the hard part." Instead, because software is never done, and because systems must change over time, the government needs to embrace resilience, adaptation, and evolution in our systems. In most cases, this requires both long-term cultural change within organizations and intentionality around future system design.

Making the decision not to maintain legacy systems can also require humility and courage. When they were first created, many legacy systems met real users' needs. Over time, though, other systems -- or components of those systems -- came along that more effectively served the needs of those users. That is part of the natural evolution of technology.

As the government looks to ensure that we are best serving the needs of the public, we must prioritize those efforts that are core to our missions, and find ways to decommission or consolidate those legacy systems that no longer need to be maintained separately.

3

#### **Technology Transformation Services**

At the core of TTS' mission to design and deliver a digital government with and for the public is the modernization and security of the government's technology infrastructure and making it more efficient, and effective with modern applications, best practices, platforms, methodologies, expertise, and shared software solutions, all with the goal of improving the public's experience with the government.

Additionally, one of TTS' "superpowers" is that we have a range of programs and services that agencies can reuse for their digital services efforts, allowing the government to quickly scale modern technology practices, reduce duplication of effort, and save money. For example, FedRAMP helps agencies adopt secure cloud technologies, through a "do once, use many" security approach. Similarly, the U.S. Web Design System provides a more consistent and accessible experience across agencies and across sites. Data.gov provides a unified public view of the government's open data assets, and assists agencies with maintaining government open data standards. We even provide opportunities for practitioners to share best practices and learnings through communities of practice on our digital.gov platform.

In addition, to best serve the wide-ranging needs of the public and our government, TTS insists on diversity, equity, inclusion, and accessibility in our teams and in our services. This is particularly essential for developing, implementing, and responsibly scaling adoption of technology that works for everyone. TTS recognizes that the most effective teams are cross-functional and have diverse backgrounds, experiences, and skills — with high levels of cultural competency and inclusivity. By prioritizing an equity-focused, people-centered approach to our design practices, we can proactively reduce negative impacts and improve usability and accessibility of our products and for the public.

## **TTS Impact**

TTS has partnered with many agencies since our inception, and the Office of Personnel Management's (OPM) journey is a great example of a collaboration striving to fundamentally change the way services are delivered to employees, federal agencies, and the public.

A longtime partner of GSA, OPM was looking at their health and benefits, retirement, and employee (human resources solutions) systems challenges and realized that expertise in understanding the entire landscape was needed. This required technology and data analysis and creation of an acquisition strategy, facing challenges like the impending loss of contracted support, lack of a data asset inventory, and lack of acquisition expertise. As mentioned by my colleagues from OMB and USDS, TTS' Centers of Excellence played a critical role in the recovery and modernization of OPM's mainframe. Focusing on the agency's key data assets provided insight at an enterprise level that was critical to transition OPM from disaster recovery to service continuity.

The seamless collaboration across GSA to quickly negotiate and implement a procurement solution that met our partner's needs, while also looking at the long-term needs of our partner's customers (in this case employees of the entire federal government) created a long-term and sustainable customer journey to a better experience. This meant aligning technology (from an infrastructure and data perspective), to people (with respect to change management and training), and implementation (related to the discovery, design, acquisition, and delivery of technology procurement). This sort of partnership is at the core of much of our work within TTS, and is exemplary of both the challenges associated with moving away

from legacy systems and the opportunity to sustainably foster better service delivery.

TTS has been honored to be a part of OPM's technology modernization journey by helping to bring improved trust and security to its systems. For example, Login.gov, a shared digital service for public authentication and another example of collaborative development with the US Digital Service, has been helping the public securely authenticate to USAJOBS since 2017. USAJOBS was an early adopter of Login.gov and brought multi-factor authentication to the federal government's primary job-listing website. Login.gov continues to support OPM in its adoption of zero-trust architecture across its public-facing properties. To date, Login.gov has helped over 15M users access and apply for federal job postings.

## Conclusion

The next few years will bring increasingly complex challenges, and GSA, with our ability to implement cross-government solutions, is uniquely positioned to help agencies address them. GSA will continue its mission to deliver innovative and secure technology practices to help improve government efficiency.

By shifting how we think about building and maintaining technology, focusing on the impact on mission and customers, and looking to expertise and innovation in government and in collaboration with our industry partners, we can significantly improve federal technology and, ultimately, how agencies serve the public.

Thank you for the opportunity to appear before you today to discuss GSA's role in modernizing technology systems. I look forward to answering any questions you have.