

how to create successful digital services in the public sector





executive summary

In today's digital age, we can buy almost any good or service from the private sector with the click of a mouse or the touch of a finger. Increasingly, citizens are demanding the same type of ease and convenience from the government, too.

Federal agencies are heeding the signs and working to make more offerings available in digital formats and through self-service channels. Case in point: people can sign up for health insurance through HealthCare.gov or buy postage stamps via the U.S. Postal Service's (USPS) website. And President Obama's 2016 budget includes \$105 million to create Digital Service branches at 25 major agencies to help them improve public-facing web services, as well as internal applications.

Every day, agencies must come up with new ways to meet their missions of delivering services digitally in order to stay relevant and keep constituents happy. But providing digital services involves more than just design, development and implementation. Digital services need to be tracked, maintained and updated frequently—all of which requires a solid digital services strategy and an expert team to execute that strategy.

Federal agencies have options when creating their digital services strategy and putting the digital services team together: creating the team in-house, partnering with

an outside company or creating a hybrid of those two.

While both options are worth consideration—and are discussed below—partnering with an outside company may offer the most consistency and least amount of risk, as it may be difficult to train existing or find and retain personnel with leading edge digital-services skills. It may also be difficult to scale seamlessly up and back according to constituent needs, from both a logistical and budgetary perspective.

Bringing in a partner—particularly one with experience in the federal space—will ensure the digital services team has expertise with the most up-to-date digital technologies and best practices. It also means the team is already highly familiar with government rules and regulations, has a referenceable track record, and has the flexibility to scale up or back based on agency needs.

To get a better sense of what's happening with digital services in the federal space, GovLoop partnered with Aquilent, a leading solutions provider of digital services, for this industry perspective. We spoke with Kimberley Hodges, a Principal User Experience Consultant at the company, about how agencies are partnering with them to enhance their digital services posture and, as a result, provide leading-edge services to citizens.

USDS digital services playbook

Here's a closer look at the 13 plays of the U.S. Digital Services playbook

1 Understand what people need.

This means putting people, not technology or process, first. In practice, it means studying current and prospective users and testing prototypes of solutions.

2 Address the whole experience, from start to finish.

Figure out how users will interact with the digital service and whether it will be online or via a mobile device. Metrics that measure how well the service meets user needs can help here.

3 Make it simple & intuitive.

Users should be able to get what they need the first time they try and without a government worker's help. To do this, agencies should consider using U.S. Web Design Standards, following accessibility practices and using clear, familiar language.

4 Build the service using agile & iterative practices.

This gets working software into users' hands as quickly as possible, and lets the design and development teams adjust the services quickly based on feedback. This involves running frequent usability tests.

5 Structure budgets & contracts to support delivery.

Whether an agency handles digital services in-house or through a contractor, it should use best practices such as evaluating open-source alternatives.

6 Assign one leader & hold that person accountable.

A single product owner can assign tasks and make decisions – and be held responsible for how well the digital services meet users' needs.



how digital services transform government

To understand the role of digital services, we first must understand what the term means. In the government arena, “digital services really are any service that’s delivered around the internet or an agency’s intranet,” Hodges said. “It can be anything that’s transactional, informational, interactive—any kind of web-site tool or application.”

The goal of these internet-delivered services is to empower people to engage with the government efficiently and easily. Examples include applying for a small-business loan or taking advantage of Social Security benefits online.

“Constituents’ expectations include being able to enroll in services online, so they don’t necessarily have to be there in person,” Hodges said. “More and more the expectation will be that citizens can enroll and participate in ... government services digitally. Few people do anything on paper anymore.”

Although they’re growing, digital services have actually been around for many years. For instance, the National Institutes of Health (NIH) has long been offering information online on diseases and on how to care for people with specific ailments such as Parkinson’s. In fact, the agency is so com-

mitted to digital services, it held a Digital Summit in October 2015 to find out how agencies and others use digital services to communicate health information.

Today, other digital services are making headlines—usually those that involve the exchange of money or personal information. HealthCare.gov continues to grab attention, most recently because of a Government Accountability Office (GAO) report that found data security lacking. But that website’s troubled debut led the government to make lemonade of its lemons by bringing to light the importance and evolution of digital services. In 2014, the White House launched the U.S. Digital Service (USDS), an arm of the Office of Management and Budget that consults with agencies on digital services. It also brought forth 18F, the General Services Administration agency that helps agencies build digital services.

Out of the gate, USDS issued the Digital Services playbook with 13 plays for agencies to use for developing, implementing and maintaining digital services. The plays are based on successful practices from the public and private sectors, both of which have much to learn from the other, as we’ll see.

7 Bring in experienced teams.

In-house teams should be paired with contractors who can build and deliver effective digital services. These workers should have experience with high-traffic digital services, automated testing frameworks and securing digital services.

8 Choose a modern technology stack.

Avoid vendor lock-in by considering open-source, cloud-based and commodity solutions. Also, ensure that software can be deployed on a variety of commodity hardware types.

9 Deploy in a flexible hosting environment.

Deploy a flexible infrastructure that can be scaled in real time to meet demand, and avoid hosting digital services in data centers that require direct management and maintenance.

10 Automate testing & deployment.

Automation provides consistent, reliable protection against unintentional regressions and lets developers release frequent updates to the service.

11 Manage security & privacy through reusable processes.

Security should be part of initial discussions about a service and it should remain part of the project throughout its lifecycle. Agencies should consider what data they collect, how they collect it, how they store it and how they use it.

12 Use data to drive decisions.

Metrics are crucial. Agencies must measure how well services work for users. To do this, they must monitor use and performance in real time and create automated alerts based on the monitoring, for example.

13 Default to open.

Building services openly and publishing open data improves citizen engagement and transparency by enabling users to report bugs and problems or by letting them use datasets to create their own applications.



options for creating a digital team

USDS's playbook is invaluable, but only if there's a team in place to implement and oversee it. But getting the right team in place can be a challenge. As we mentioned, there are two options: creating the team in-house or partnering with an outside company.

Build approach: In-house challenges

One of the biggest concerns when considering setting up an in-house digital services team is cost of labor. Depending on the size of the agency, it may not be possible to bring in the number of full-time employees needed for the team – or, as the team grows and scales, it may not be able to keep up. Likewise, it may not be necessary to staff a fully dedicated team in-house on Day One. The approach must be agile and have the ability to scale based on need, but that is difficult to do given the structure of the government hiring process.

Another challenge is making sure the agency is aware of federal guidelines, such as the USDS playbook, and aligning projects with them.

"If you're building a team, make sure that you've got people who are dedicated to maintaining awareness of what those federal policies are and what those design guidelines are, whether or not the guidelines are mandates," Hodges said. Keeping up with all that is a job unto itself.

Finally, adaptability is challenging – the team is a fixed set of resources once they are hired, so it's difficult to bring in new expertise quickly and adapt to the changing technologies and needs of constituents.

Partner approach: Lowest risk/highest quality

Hiring a contractor to handle digital services brings many benefits. For one, it may give you access to centers of excellence around digital services, Hodges said. Contractors have teams dedicated to each aspect of the job. One is dedicated solely to your constituents' needs, for instance.

Additionally, "you've got a team of people focused solely on branding around visual designs, so their goal is to make sure they understand the existing style guide and brand at a particular agency, and then they're

paying attention to what the guidelines are at a federal level," Hodges said. "You've got a group of content strategists, so their goal is to make sure that they're analyzing your content, that they're looking at trends in how we can share that content across the agency overall. The same holds true for all of the functional disciplines ranging from creative to development, infrastructure and hosting. Most importantly, there is no silo. At Aquilent, our disciplines are closely integrated throughout the lifecycle of a project. It helps create the right perspective and develop those centers of excellence."

What's more, each group can draw on the others' experiences and not only stay current, but also on top of future trends.

"It's really hard to do that if you're siloed at a particular agency," Hodges said. "Partnering with somebody like Aquilent gives you a much broader perspective and a much deeper, richer set of experiences than you would get if you were a lone developer or designer not in a position to brainstorm with other people who have learned from working with other agencies. I think the other thing that you get is our expertise around working in an Agile environment and our ability to work quickly [to] iteratively, design, develop, test, make recommendations and revise."

In short, a partner can provide experiences and lessons from projects done for many other agencies; offer extensive private-sector experience, expertise in emerging technologies, and experience with the latest best practices; and build teams that can easily and quickly scale up and down as needs arise.

However, if an agency becomes 100% reliant on contractors it may lose the internal expertise needed to work efficiently with them. So as you build your team, it is important to properly equip internal staff as well.

But if an agency decides to move forward with a partnership, it should ask potential contractors some key questions before choosing one, Hodges said.

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Kimberly Hodges, Principal User Experience Consultant, Aquilent

Here are some other key questions to ask:

- How do you work in an Agile environment?
- Do you use DevOps, and if so, how do you use it?
- Do you provide cloud services, and if so, what are they?
- How do you collaborate with us? If we have a partial team in place, how do you work with us?

“Those are the kinds of things I’d want to understand,” Hodges said. “Show me where in the process you understand that integration and collaboration is really important. Not only is it important for us to be really tightly integrated – our functional groups, our disciplines – and to understand what all of those touch points are [so] that we don’t go off on our own silos, but [it’s important] to collaborate with you, the agency.”

To that end, Aquilent always asks “Do we understand the mission, the goal, the objective? That’s one of the first things we make sure we understand and internalize. Your mission is our mission. We document it and socialize it throughout our team. Everything we do drives towards that goal.” Hodges said.

One additional recommendation to ensure success is both teams should be comfortable with Agile and DevOps methodologies and use the same terminology to avoid confusion.

For example, with process, “you can have three or four paths that go off and hope that they converge at some point, or you can sort of work like a [braided] rope up front,” she said. And with language, the agency might say “product owner” while the contractor says “business owner.”

US postal service

When USPS wanted to revamp and streamline its website from disjointed informational sites to a single transaction-based platform, it turned to Aquilent for help. The result has been more than \$900 million in cumulative savings and a 143 percent increase in average monthly transactions. So how did it happen?

First, USPS and Aquilent coordinated on the creation of web-based organization-wide solutions that served key customer needs, supported the agency’s goals and fit with best practices. To do this, Aquilent provided USPS management, content owners and information technology teams with data, measurements and analysis of the performance and effectiveness of the USPS website. The company also handled design and the information architecture, including creating a style guide. Lastly, it tested usability regularly and used web analytics and surveys to study traffic and get feedback. The contractor worked with USPS management, content owners and IT to develop, refine, implement and attain measurable goals.





how Aquilent can help

Why Aquilent? Because of its exclusive focus on the federal government—all Aquilent customers are federal agencies, making the company uniquely positioned to help other agencies based on its track record of success.

When it comes to how agencies can get to the point of delivering good digital services, Hodges said Aquilent has plenty of ideas. Specifically, Aquilent recommends agency digital services teams are:



Collaborative

interdisciplinary teams continuously and transparently engage with stakeholders



User-Focused

passionate about user and agency goals and never lose focus



Comprehensive

complete design, delivery, and development teams provide support from start to finish



Iterative

use short design and development cycles for frequent feedback and guiding ongoing priorities and improvements



Scalable

use a flexible approach to build your digital service team or support existing ones



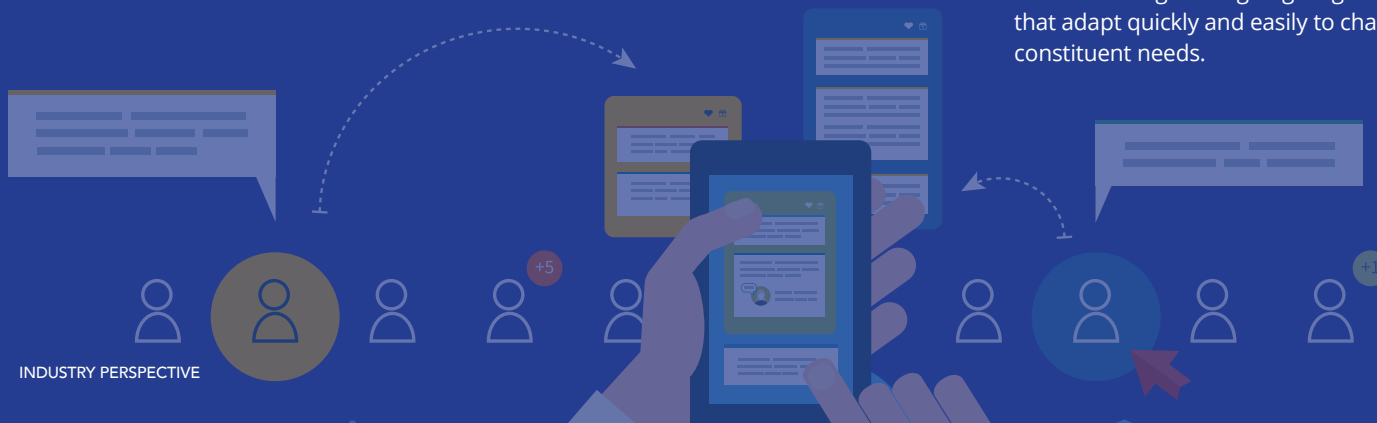
conclusion

Every day agencies are faced with the challenge of delivering mission-critical digital services to meet the needs of constituents. Whether it's providing health care to millions of Americans, delivering medical services to veterans or ensuring the quality of our food supply and environment, the expectation is for rapidly delivered, powerful and useful digital services.

Clearly, to stay competitive and relevant, government agencies must provide services digitally—they must have a game plan and a team in place.

For some agencies, the right team exists in-house, but most agencies need to outsource some or all of their digital services development and management. That's where the partner approaches come into play. The right partner enables agencies to deliver the full set of digital services to constituents through providing full-service, self-contained, digital services teams composed of people with the right skills available at the right time.

By partnering with the right company for digital services teams, agencies can maintain focus on the mission, while at the same time delivering leading-edge digital services that adapt quickly and easily to changing constituent needs.





about Aquilent

Innovation moves the world forward. Aquilent innovation moves government ahead.

Aquilent puts innovation to work for your organization as the leading solution provider of Digital Services, DevOps and Cloud Services exclusively for the federal government. We leverage the best technologies available to deliver quality results that exceed your expectations. As your trusted advisor, we take total project ownership, so you can focus on your core mission with confidence and accomplish more than you thought possible—and our solutions are easily accessible through our wide variety of procurement options.



about GovLoop

GovLoop's mission is to “connect government to improve government.” We aim to inspire public-sector professionals by serving as the knowledge network for government. GovLoop connects more than 250,000 members, fostering cross-government collaboration, solving common problems and advancing government careers. GovLoop is headquartered in Washington, D.C., with a team of dedicated professionals who share a commitment to connect and improve government.

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