Judge Michelle T. Friedland

9th Circuit Court (CA) Judge

Political hack assigned to the appeal of President Donald Trump's executive order re. immigration

Age: 44, Stanford University

Serious Conflicts !!! Must recuse re. Canon 2

On Sep. 23, 2013, Judge candidate Friedland received **Letters of Recommendation** from:

Hillary Clinton, Clinton Foundation donors

- **Google**
- **Facebook**
- **Cisco**

Obama and Hillary sponsored
"The Eric Schmidt (Google) Project" on Apr. 15, 2014
That become the U.S. Digital Service to support Hillary for President 2016

September 23, 2013

DELIVERED BY EMAIL

Hon. Patrick J. Leahy, Chairman
United States Senate
Committee on the Judiciary
473 Russell Senate Office Building
Washington, D.C. 20510

Hon. Chuck Grassley, Ranking Member
United States Senate
Committee on the Judiciary
135 Hart Senate Office Building
Washington, D.C. 20510

Re: Nomination of Michelle Friedland as Circuit Judge of the U.S. Court of Appeals for the Ninth Circuit

Dear Chairman Leahy and Ranking Member Grassley:

We write to express our support for the nomination of Michelle Friedland to the U.S. Court of Appeals for the Ninth Circuit. We hope that the Committee will act promptly to send her nomination to the full Senate for confirmation.

We are General Counsels of a wide variety of American companies. Some of us have worked directly with Ms. Friedland, while others have seen or heard about her work from trusted colleagues. We all agree she would be an excellent addition to the bench.

Ms. Friedland has practiced for almost a decade at one of the top private law firms in the country. Her career has been marked by energy, integrity, and legal excellence. She has represented a broad spectrum of clients in both the private and public sectors. Without fail, she has shown a deep understanding of the legal and economic challenges that arise in both areas and the importance of the rule of law in addressing them. The careful, unbiased approach she would bring to the types of issues that arise before the Ninth Circuit are critical to our nation's values and to its economic health. We are confident that Ms. Friedland repeatedly has demonstrated the intellect and character necessary for the important judicial seat she would be filling.

She also has the right mix of experience. Before going into private practice, she served as a law clerk to Judge David Tatel on the D.C. Circuit and to Justice Sandra Day O'Connor on the Supreme Court. Since then, she has taught at both Stanford Law School and the University of Virginia School of Law.

Ms. Friedland has shown herself to be a deep legal thinker, an articulate advocate, an excellent writer, and a lawyer able to convey to her audience the important issues at stake in the matter at hand. All parties appearing before her, from individual litigants to small businesses to the nation's largest corporations, would be confident that she will adjudge their cases fairly and in accordance with the law.

We hope the Committee will move quickly to approve her nomination and send it to the floor of the Senate.

Respectfully,

Laura J. Schumacher
Executive Vice President, Business Development External Affairs and General Counsel
AbbVie Inc.

Mark Chandler
Senior Vice President and General Counsel
Cisco Systems, Inc.

J. Nathan Jensen
Vice President and General Counsel
Clean Energy Fuels Corp.

Robert L. Adler
Executive Vice President and General Counsel
Edison International

Colin Stretch
Vice President and General Counsel
Facebook, Inc.

Kent Walker
Senior Vice President and General Counsel
Google Inc.

Todd Molz
General Counsel and Managing Director
Oaktree Capital Management, L.P.

Jae Kim
Senior Vice President and General Counsel
Rambus Inc.

Allen Katz
Interim General Counsel
Transocean Offshore Deepwater Drilling Inc.

Secondary verification by google.com DKIM key

Fwd: 2016 thoughts

From:cheryl.mills@gmail.com

To: robbymook@gmail.com, john.podesta@gmail.com, daplouffe@icloud.com

Date: 2014-04-15 17:16

Subject: Fwd: 2016 thoughts

---------- Forwarded message ----------

From: Eric Schmidt <eschmidt@google.com>

Date: Tue, Apr 15, 2014 at 1:56 PM

Subject: 2016 thoughts

To: Cheryl Mills <cheryl.mills@gmail.com>

Cheryl, I have put together my thoughts on the campaign ideas and I have scheduled some meetings in the next few weeks for veterans of the campaign to tell me how to make these ideas better. This is simply a draft but do let me know if this is a helpful process for you all. Thanks !! Eric

****

Notes for a 2016 Democratic Campaign

Eric Schmidt

April 2014

DRAFT DRAFT DRAFT DRAFT

Here are some comments and observations based on what we saw in the 2012 campaign. If we get started soon, we will be in a very strong position to execute well for 2016.

1. Size, Structure and Timing

Lets assume a total budget of about $1.5Billion, with more than 5000 paid employees and million(s) of volunteers. The entire startup ceases operation four days after November 8, 2016. The structure includes a Chairman or Chairwoman who is the external face of the campaign and a President who is the executive in charge of objectives, measurements, systems and building and managing the organization.

Every day matters as our end date does not change. An official campaign right after midterm elections and a preparatory team assembled now is best.

2. Location

The campaign headquarters will have about a thousand people, mostly young and hardworking and enthusiastic. Its important to have a very large hiring pool (such as Chicago or NYC) from which to choose enthusiastic, smart and low paid permanent employees. DC is a poor choice as its full of distractions and interruptions. Moving the location from DC elsewhere guarantees visitors have taken the time to travel and to help.

The key is a large population of talented people who are dying to work for you. Any outer borough of NYC, Philadelphia, Atlanta, Boston are all good examples of a large, blue state city to base in.

Employees will relocate to participate in the campaign, and will find low cost temporary housing or live with campaign supporters on a donated basis. This worked well in Chicago and can work elsewhere.

The computers will be in the cloud and most likely on Amazon Web services (AWS). All the campaign needs are portable computers, tablets and smart phones along with credit card readers.

3. The pieces of a Campaign

a) The Field

Its important to have strong field leadership, with autonomy and empowerment. Operations talent needs to build the offices, set up the systems, hire the people, and administer what is about 5000 people. Initial modeling will show heavy hiring in the key battleground states. There is plenty of time to set these functions up and build the human systems. The field is about organizing people, voter contact, and get out the vote programs.

For organizing tools, build a simple way to link people and activities as a workflow and let the field manage the system, all cloud based. Build a simple organizing tool with a functioning back-end. Avoid deep integration as the benefits are not worth it. Build on the cloud. Organizing is really about sharing and linking people, and this tool would measure and track all of it.

There are many other crucial early investments needed in the field: determining the precise list of battleground states, doing early polling to confirm initial biases, and maintaining and extending voter protection programs at the state level.

b) The Voter

Key is the development of a single record for a voter that aggregates all that is known about them. In 2016 smart phones will be used to identify, meet, and update profiles on the voter. A dynamic volunteer can easily speak with a voter and, with their email or other digital handle, get the voter videos and other answers to areas they care about ("the benefits of ACA to you" etc.)

The scenario includes a volunteer on a walk list, encountering a potential voter, updating the records real time and deepening contact with the voter and the information we have to offer.

c) Digital

A large group of campaign employees will use digital marketing methods to connect to voters, to offer information, to use social networks to spread good news, and to raise money. Partners like Blue State Digital will do much of the fund raising. A key point is to convert BSD and other partners to pure cloud service offerings to handle the expected crush and load.

d) Media (paid), (earned) and (social), and polling

New tools should be developed to measure reach and impact of paid, earned and social media. The impact of press coverage should be measurable in reach and impact, and TV effectiveness measured by attention and other surveys.

Build tools that measure the rate and spread of stories and rumors, and model how it works and who has the biggest impact. Tools can tell us about the origin of stories and the impact of any venue, person or theme. Connect polling into this in some way.

Find a way to do polling online and not on phones.

e) Analytics and data science and modeling, polling and resource optimization tools

For each voter, a score is computed ranking probability of the right vote. Analytics can model demographics, social factors and many other attributes of the needed voters. Modeling will tell us what who we need to turn out and why, and studies of effectiveness will let us know what approaches work well. Machine intelligence across the data should identify the most important factors for turnout, and preference.

It should be possible to link the voter records in Van with upcoming databases from companies like Comcast and others for media measurement purposes.

The analytics tools can be built in house or partnered with a set of vendors.

f) Core engineering, voter database and contact with voters online

The database of voters (NGP Van) is a fine starting point for voter records and is maintained by the vendor (and needs to be converted to the cloud). The code developed for 2012 (Narwahl etc.) is unlikely to be used, and replaced by a model where the vendor data is kept in the Van database and intermediate databases are arranged with additional information for a voter.

Quite a bit of software is to be developed to match digital identities with the actual voter file with high confidence. The key unit of the campaign is a "voter", and each and every record is viewable and updatable by volunteers in search of more accurate information.

In the case where we can't identify the specific human, we can still have a partial digital voter id, for a person or "probable-person" with attributes that we can identify and use to target. As they respond we can eventually match to a registered voter in the main file. This digital key is eventually matched to a real person.

The Rules

Its important that all the player in the campaign work at cost and there be no special interests in the financing structure. This means that all vendors work at cost and there is a separate auditing function to ensure no one is profiting unfairly from the campaign. All investments and conflicts of interest would have to be publicly disclosed. The rules of the audit should include caps on individual salaries and no investor profits from the campaign function. (For example, this rule would apply to me.)

The KEY things

a) early build of an integrated development team and recognition that this is an entire system that has to be managed as such
b) decisions to exclusively use cloud solutions for scalability, and choice of vendors and any software from 2012 that will be reused.
c) the role of the smart phone in the hands of a volunteer. The smart phone manages the process, updates the database, informs the citizen, and allows fundraising and recruitment of volunteers (on android and iphone).
d) early and continued focus of qualifying fundraising dollars to build the field, and build all the tools. Outside money will be plentiful and

perfect for TV use. A smart media mix tool tells all we need to know about media placement, TV versus other media and digital media.

the WHITE HOUSE

Day One: Mikey Dickerson, U.S. Digital Service Administrator

AUGUST 20, 2014 AT 10:49 AM ET BY LINDSAY HOLST

Summary: Follow along as Mikey Dickerson, Administrator of the newly created U.S. Digital Service, makes his way through Day One on the job.

Ever wondered what a first day as a new employee at the White House looks like?

What about a first day as the very first employee of a brand-new government service designed to remake the way people and businesses interact with their government online?

From parking forms to press conferences, from orientation to setting a new BlackBerry password to meeting with senior advisors, follow along as Mikey Dickerson, Administrator of the newly created U.S. Digital Service, makes his way through Day One.

Take a look, and then pass this one on. https://youtu.be/ogDOS081axY

Formally launched by the Administration on August 11, the U.S. Digital Service is a small team of our country's brightest digital talent that will work with government agencies to find more effective ways to use technology to improve the service, information, and benefits they provide.

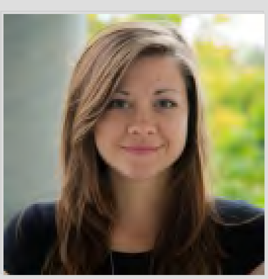
> *"For me, this whole government adventure started last October, when I got asked to be part of the group that worked on HealthCare.gov."*
>
> --Mikey Dickerson, U.S. Digital Service Administrator

Mikey Dickerson was first tapped by the Administration last fall, when he joined the team that helped fix HealthCare.gov.

And moving forward, he'll draw on 13 key "plays" drawn from private and public-sector best practices that, used together, will help government agencies provide services that won't only work better for users -- they'll take less time and money to operate.

You should also read:

- Learn more: The U.S. Digital Service Playbook
- Fact sheet: Improviding and Simplifying Digital Services
- Get updates: Sign up for news from the U.S. Digital Service



Lindsay Holst
Former Director of Digital Strategy for the Office of the Vice President

Follow @Holst44

THE FINAL STATE OF THE UNION

Watch President Obama's final State of the Union address.

THE SUPREME COURT

Read what the President is looking for in his next Supreme Court nominee.

FIND YOUR PARK

Take a look at America's three newest national monuments.

Delivering a Customer-Focused Government Through Smarter IT

AUGUST 11, 2014 AT 1:50 PM ET BY BETH COBERT, STEVE VANROEKEL, AND TODD PARK

Summary: The Administration is launching the U.S. Digital Service -- a small team made up of our country's brightest digital talent that will work with agencies to remove barriers to exceptional service delivery and help remake the digital experience that people and businesses have with their government.

As technology changes, government must change with it to address new challenges and take advantage of new opportunities. This Administration has made important strides in modernizing government so that it serves its constituents more effectively and efficiently, but we know there is much more to do.

Last year, a group of digital and technology experts from the private sector helped us fix HealthCare.gov – a turnaround that enabled millions of Americans to sign up for quality health insurance. This effort also reminded us why the President's commitment to bringing more of the nation's top information technology (IT) talent into government is so critical to delivering the best possible results for our customers – the American people.

A core part of the President's Management Agenda is improving the value we deliver to citizens through Federal IT. That's why, today, the Administration is formally launching the U.S. Digital Service. The Digital Service will be a small team made up of our country's brightest digital talent that will work with agencies to remove barriers to exceptional service delivery and help remake the digital experience that people and businesses have with their government.

We are excited that Mikey Dickerson will serve as the Administrator of the U.S. Digital Service and Deputy Federal Chief Information Officer. Mikey was part of the team that helped fix HealthCare.gov last fall and will lead the Digital Service team on efforts to apply technology in smarter, more effective ways that improve the delivery of federal services, information, and benefits.

The Digital Service will work to find solutions to management challenges that can prevent progress in IT delivery. To do this, we will build a team of more than just a group of tech experts – Digital Service hires will have talent and expertise in a variety of disciplines, including procurement, human resources, and finance. The Digital Service team will take private and public-sector best practices and help scale them across agencies – always with a focus on the customer experience in mind. We will pilot the Digital Service with existing funds in 2014, and would scale in 2015 as outlined in the President's FY 2015 Budget.

The Digital Service will also collaborate closely with 18F, an exciting new unit of the U.S. General Services Administration (GSA). GSA's 18F houses a growing group of talented developers and digital professionals who are designing and building the actual digital platforms and providing services across the government.

With today's announcement, the Administration is also releasing for public comment two crucial components in our growing IT toolkit that will help enable agencies to do their best work – the Digital Services Playbook and the TechFAR Handbook.

Leveraging Best Practices with the Digital Services Playbook

To help the Digital Service achieve its mission, today the Administration is releasing the initial version of a Digital Services Playbook that lays out best practices for building effective digital services like web and mobile applications and will serve as a guide for agencies across government. To increase the success of government digital service projects, this playbook outlines 13 key "plays" drawn from private and public-sector best practices that, if followed together, will help federal agencies deliver services that work well for users and require less time and money to develop and operate.

The technologies used to create digital services are changing rapidly. The Playbook is designed to encourage the government to adopt the best of these advances into our own work. To further strengthen this important tool, we encourage folks across the public and private sectors to provide feedback on the Playbook, so we can strengthen this important tool.

Using Agile Processes to Procure Digital Services with the TechFAR Handbook

To ensure government has the right tech tools to do its job, the Administration is also today launching the TechFAR Handbook, a guide that explains how agencies can execute key plays in the Playbook in ways consistent with the Federal Acquisition Regulation (FAR), which governs how the government must buy services from the private sector.

Too often, the lack of guidance encouraging agency use of innovative contracting practices results in narrow and overly rigid interpretations of federal acquisition rules that complicate the government's ability to adopt smarter ways of acquiring high-quality digital services. This document will guide agencies in how to procure development services in new ways that more closely match the modern software development techniques used in the private sector.

The TechFAR explicitly encourages the use of "agile" development -- an incremental, fast-paced style of software development that reduces the risk of failure by getting working software into users' hands quickly, and by providing frequent opportunities for delivery team members to adjust requirements and development plans based on watching people use prototypes and real software. Following this methodology is a proven best practice for building digital services, and will increase government's ability to build services that effectively meet user needs.

Together, the U.S. Digital Service, 18F, the Digital Services Playbook, and TechFAR Handbook will help advance the Smarter IT Delivery agenda in major ways – helping government deliver continually better services at lower cost, as our customers should expect and deserve. And as technology continues to evolve, we will continue to look for ways we can strengthen our efforts along with it – to make sure we're applying new and innovative tools as we continue working to expand opportunity for the American people.

Stay informed -- sign up here to monitor the latest news from the U.S. Digital Service.

FIND YOUR PARK

Take a look at America's three newest national monuments.

THE U.S. DIGITAL SERVICE

Digital Services Playbook

The American people expect to interact with government through digital channels such as websites, email, and mobile applications. By building digital services that meet their needs, we can make the delivery of our policy and programs more effective.

Today, too many of our digital services projects do not work well, are delivered late, or are over budget. To increase the success rate of these projects, the U.S. Government needs a new approach. We created a playbook of 13 key "plays" drawn from successful practices from the private sector and government that, if followed together, will help government build effective digital services.

Digital Service Plays

1. Understand what people need
2. Address the whole experience, from start to finish
3. Make it simple and intuitive
4. Build the service using agile and iterative practices
5. Structure budgets and contracts to support delivery
6. Assign one leader and hold that person accountable
7. Bring in experienced teams
8. Choose a modern technology stack
9. Deploy in a flexible hosting environment
10. Automate testing and deployments
11. Manage security and privacy through reusable processes
12. Use data to drive decisions
13. Default to open

PLAY 1

Understand what people need

We must begin digital projects by exploring and pinpointing the needs of the people who will use the service, and the ways the service will fit into their lives. Whether the users are members of the public or government employees, policy makers must include real people in their design process from the beginning. The needs of people — not constraints of government structures or silos — should inform technical and design decisions. We need to continually test the products we build with real people to keep us honest about what is important.

Checklist

- Early in the project, spend time with current and prospective users of the service
- Use a range of qualitative and quantitative research methods to determine people's goals, needs, and behaviors; be thoughtful about the time spent
- Test prototypes of solutions with real people, in the field if possible
- Document the findings about user goals, needs, behaviors, and preferences
- Share findings with the team and agency leadership
- Create a prioritized list of tasks the user is trying to accomplish, also known as "user stories"
- As the digital service is being built, regularly test it with potential users to ensure it meets people's needs

Key Questions

- Who are your primary users?
- What user needs will this service address?
- Why does the user want or need this service?
- Which people will have the most difficulty with the service?
- Which research methods were used?
- What were the key findings?
- How were the findings documented? Where can future team members access the documentation?
- How often are you testing with real people?

PLAY 2

Address the whole experience, from start to finish

We need to understand the different ways people will interact with our services, including the actions they take online, through a mobile application, on a phone, or in person. Every encounter — whether it's online or offline — should move the user closer towards their goal.

Checklist

- Understand the different points at which people will interact with the service – both online and in person
- Identify pain points in the current way users interact with the service, and prioritize these according to user needs

- Design the digital parts of the service so that they are integrated with the offline touch points people use to interact with the service
- Develop metrics that will measure how well the service is meeting user needs at each step of the service

Key Questions

- What are the different ways (both online and offline) that people currently accomplish the task the digital service is designed to help with?
- Where are user pain points in the current way people accomplish the task?
- Where does this specific project fit into the larger way people currently obtain the service being offered?
- What metrics will best indicate how well the service is working for its users?

PLAY 3

Make it simple and intuitive

Using a government service shouldn’t be stressful, confusing, or daunting. It’s our job to build services that are simple and intuitive enough that users succeed the first time, unaided.

Checklist

- Use a simple and flexible design style guide for the service. Use the U.S. Web Design Standards as a default
- Use the design style guide consistently for related digital services
- Give users clear information about where they are in each step of the process
- Follow accessibility best practices to ensure all people can use the service
- Provide users with a way to exit and return later to complete the process
- Use language that is familiar to the user and easy to understand
- Use language and design consistently throughout the service, including online and offline touch points

Key Questions

- What primary tasks are the user trying to accomplish?
- Is the language as plain and universal as possible?
- What languages is your service offered in?
- If a user needs help while using the service, how do they go about getting it?
- How does the service’s design visually relate to other government services?

PLAY 4

Build the service using agile and iterative practices

We should use an incremental, fast-paced style of software development to reduce the risk of failure. We want to get working software into users' hands as early as possible to give the design and development team opportunities to adjust based on user feedback about the service. A critical capability is being able to automatically test and deploy the service so that new features can be added often and be put into production easily.

Checklist

- Ship a functioning "minimum viable product" (MVP) that solves a core user need as soon as possible, no longer than three months from the beginning of the project, using a "beta" or "test" period if needed
- Run usability tests frequently to see how well the service works and identify improvements that should be made
- Ensure the individuals building the service communicate closely using techniques such as launch meetings, war rooms, daily standups, and team chat tools
- Keep delivery teams small and focused; limit organizational layers that separate these teams from the business owners
- Release features and improvements multiple times each month
- Create a prioritized list of features and bugs, also known as the "feature backlog" and "bug backlog"
- Use a source code version control system
- Give the entire project team access to the issue tracker and version control system
- Use code reviews to ensure quality

Key Questions

- How long did it take to ship the MVP? If it hasn't shipped yet, when will it?
- How long does it take for a production deployment?
- How many days or weeks are in each iteration/sprint?
- Which version control system is being used?
- How are bugs tracked and tickets issued? What tool is used?
- How is the feature backlog managed? What tool is used?
- How often do you review and reprioritize the feature and bug backlog?
- How do you collect user feedback during development? How is that feedback used to improve the service?
- At each stage of usability testing, which gaps were identified in addressing user needs?

PLAY 5

Structure budgets and contracts to support delivery

To improve our chances of success when contracting out development work, we need to work with experienced budgeting and contracting officers. In cases where we use third parties to help build a service, a well-defined contract can facilitate good development practices like conducting a research and prototyping phase, refining product requirements as the service is built, evaluating open source alternatives, ensuring frequent delivery milestones, and allowing the flexibility to purchase cloud computing resources.

The TechFAR Handbook provides a detailed explanation of the flexibilities in the Federal Acquisition Regulation (FAR) that can help agencies implement this play.

Checklist

- Budget includes research, discovery, and prototyping activities
- Contract is structured to request frequent deliverables, not multi-month milestones
- Contract is structured to hold vendors accountable to deliverables
- Contract gives the government delivery team enough flexibility to adjust feature prioritization and delivery schedule as the project evolves
- Contract ensures open source solutions are evaluated when technology choices are made
- Contract specifies that software and data generated by third parties remains under our control, and can be reused and released to the public as appropriate and in accordance with the law
- Contract allows us to use tools, services, and hosting from vendors with a variety of pricing models, including fixed fees and variable models like “pay-for-what-you-use” services
- Contract specifies a warranty period where defects uncovered by the public are addressed by the vendor at no additional cost to the government
- Contract includes a transition of services period and transition-out plan

Key Questions

- What is the scope of the project? What are the key deliverables?
- What are the milestones? How frequent are they?
- What are the performance metrics defined in the contract (e.g., response time, system uptime, time period to address priority issues)?

PLAY 6

Assign one leader and hold that person accountable

There must be a single product owner who has the authority and responsibility to assign tasks and work elements; make business, product, and technical decisions;

and be accountable for the success or failure of the overall service. This product owner is ultimately responsible for how well the service meets needs of its users, which is how a service should be evaluated. The product owner is responsible for ensuring that features are built and managing the feature and bug backlogs.

Checklist

- A product owner has been identified
- All stakeholders agree that the product owner has the authority to assign tasks and make decisions about features and technical implementation details
- The product owner has a product management background with technical experience to assess alternatives and weigh tradeoffs
- The product owner has a work plan that includes budget estimates and identifies funding sources
- The product owner has a strong relationship with the contracting officer

Key Questions

- Who is the product owner?
- What organizational changes have been made to ensure the product owner has sufficient authority over and support for the project?
- What does it take for the product owner to add or remove a feature from the service?

PLAY 7

Bring in experienced teams

We need talented people working in government who have experience creating modern digital services. This includes bringing in seasoned product managers, engineers, and designers. When outside help is needed, our teams should work with contracting officers who understand how to evaluate third-party technical competency so our teams can be paired with contractors who are good at both building and delivering effective digital services. The makeup and experience requirements of the team will vary depending on the scope of the project.

Checklist

- Member(s) of the team have experience building popular, high-traffic digital services
- Member(s) of the team have experience designing mobile and web applications
- Member(s) of the team have experience using automated testing frameworks
- Member(s) of the team have experience with modern development and operations (DevOps) techniques like continuous integration and continuous deployment
- Member(s) of the team have experience securing digital services

- A Federal contracting officer is on the internal team if a third party will be used for development work
- A Federal budget officer is on the internal team or is a partner
- The appropriate privacy, civil liberties, and/or legal advisor for the department or agency is a partner

PLAY 8

Choose a modern technology stack

The technology decisions we make need to enable development teams to work efficiently and enable services to scale easily and cost-effectively. Our choices for hosting infrastructure, databases, software frameworks, programming languages and the rest of the technology stack should seek to avoid vendor lock-in and match what successful modern consumer and enterprise software companies would choose today. In particular, digital services teams should consider using open source, cloud-based, and commodity solutions across the technology stack, because of their widespread adoption and support by successful consumer and enterprise technology companies in the private sector.

Checklist

- Choose software frameworks that are commonly used by private-sector companies creating similar services
- Whenever possible, ensure that software can be deployed on a variety of commodity hardware types
- Ensure that each project has clear, understandable instructions for setting up a local development environment, and that team members can be quickly added or removed from projects
- Consider open source software solutions at every layer of the stack

Key Questions

- What is your development stack and why did you choose it?
- Which databases are you using and why did you choose them?
- How long does it take for a new team member to start developing?

PLAY 9

Deploy in a flexible hosting environment

Our services should be deployed on flexible infrastructure, where resources can be provisioned in real-time to meet spikes in traffic and user demand. Our digital services are crippled when we host them in data centers that market themselves as “cloud hosting” but require us to manage and maintain hardware directly. This outdated practice wastes time, weakens our disaster recovery plans, and results in significantly higher costs.

Checklist

- Resources are provisioned on demand
- Resources scale based on real-time user demand
- Resources are provisioned through an API
- Resources are available in multiple regions
- We only pay for resources we use
- Static assets are served through a content delivery network
- Application is hosted on commodity hardware

Key Questions

- Where is your service hosted?
- What hardware does your service use to run?
- What is the demand or usage pattern for your service?
- What happens to your service when it experiences a surge in traffic or load?
- How much capacity is available in your hosting environment?
- How long does it take you to provision a new resource, like an application server?
- How have you designed your service to scale based on demand?
- How are you paying for your hosting infrastructure (e.g., by the minute, hourly, daily, monthly, fixed)?
- Is your service hosted in multiple regions, availability zones, or data centers?
- In the event of a catastrophic disaster to a datacenter, how long will it take to have the service operational?
- What would be the impact of a prolonged downtime window?
- What data redundancy do you have built into the system, and what would be the impact of a catastrophic data loss?
- How often do you need to contact a person from your hosting provider to get resources or to fix an issue?

PLAY 10

Automate testing and deployments

Today, developers write automated scripts that can verify thousands of scenarios in minutes and then deploy updated code into production environments multiple times a day. They use automated performance tests which simulate surges in traffic to identify performance bottlenecks. While manual tests and quality assurance are still necessary, automated tests provide consistent and reliable protection against unintentional regressions, and make it possible for developers to confidently release frequent updates to the service.

Checklist

- Create automated tests that verify all user-facing functionality
- Create unit and integration tests to verify modules and components

- Run tests automatically as part of the build process
- Perform deployments automatically with deployment scripts, continuous delivery services, or similar techniques
- Conduct load and performance tests at regular intervals, including before public launch

Key Questions

- What percentage of the code base is covered by automated tests?
- How long does it take to build, test, and deploy a typical bug fix?
- How long does it take to build, test, and deploy a new feature into production?
- How frequently are builds created?
- What test tools are used?
- Which deployment automation or continuous integration tools are used?
- What is the estimated maximum number of concurrent users who will want to use the system?
- How many simultaneous users could the system handle, according to the most recent capacity test?
- How does the service perform when you exceed the expected target usage volume? Does it degrade gracefully or catastrophically?
- What is your scaling strategy when demand increases suddenly?

PLAY 11

Manage security and privacy through reusable processes

Our digital services have to protect sensitive information and keep systems secure. This is typically a process of continuous review and improvement which should be built into the development and maintenance of the service. At the start of designing a new service or feature, the team lead should engage the appropriate privacy, security, and legal officer(s) to discuss the type of information collected, how it should be secured, how long it is kept, and how it may be used and shared. The sustained engagement of a privacy specialist helps ensure that personal data is properly managed. In addition, a key process to building a secure service is comprehensively testing and certifying the components in each layer of the technology stack for security vulnerabilities, and then to re-use these same pre-certified components for multiple services.

The following checklist provides a starting point, but teams should work closely with their privacy specialist and security engineer to meet the needs of the specific service.

Checklist

- Contact the appropriate privacy or legal officer of the department or agency to determine whether a System of

Records Notice (SORN), Privacy Impact Assessment, or other review should be conducted
- Determine, in consultation with a records officer, what data is collected and why, how it is used or shared, how it is stored and secured, and how long it is kept
- Determine, in consultation with a privacy specialist, whether and how users are notified about how personal information is collected and used, including whether a privacy policy is needed and where it should appear, and how users will be notified in the event of a security breach
- Consider whether the user should be able to access, delete, or remove their information from the service
- “Pre-certify” the hosting infrastructure used for the project using FedRAMP
- Use deployment scripts to ensure configuration of production environment remains consistent and controllable

Key Questions

- Does the service collect personal information from the user? How is the user notified of this collection?
- Does it collect more information than necessary? Could the data be used in ways an average user wouldn’t expect?
- How does a user access, correct, delete, or remove personal information?
- Will any of the personal information stored in the system be shared with other services, people, or partners?
- How and how often is the service tested for security vulnerabilities?
- How can someone from the public report a security issue?

PLAY 12

Use data to drive decisions

At every stage of a project, we should measure how well our service is working for our users. This includes measuring how well a system performs and how people are interacting with it in real-time. Our teams and agency leadership should carefully watch these metrics to find issues and identify which bug fixes and improvements should be prioritized. Along with monitoring tools, a feedback mechanism should be in place for people to report issues directly.

Checklist

- Monitor system-level resource utilization in real time
- Monitor system performance in real-time (e.g. response time, latency, throughput, and error rates)
- Ensure monitoring can measure median, 95th percentile, and 98th percentile performance
- Create automated alerts based on this monitoring
- Track concurrent users in real-time, and monitor user behaviors in the aggregate to determine how well the service meets user needs

- Publish metrics internally
- Publish metrics externally
- Use an experimentation tool that supports multivariate testing in production

Key Questions

- What are the key metrics for the service?
- How have these metrics performed over the life of the service?
- Which system monitoring tools are in place?
- What is the targeted average response time for your service? What percent of requests take more than 1 second, 2 seconds, 4 seconds, and 8 seconds?
- What is the average response time and percentile breakdown (percent of requests taking more than 1s, 2s, 4s, and 8s) for the top 10 transactions?
- What is the volume of each of your service's top 10 transactions? What is the percentage of transactions started vs. completed?
- What is your service's monthly uptime target?
- What is your service's monthly uptime percentage, including scheduled maintenance? Excluding scheduled maintenance?
- How does your team receive automated alerts when incidents occur?
- How does your team respond to incidents? What is your post-mortem process?
- Which tools are in place to measure user behavior?
- What tools or technologies are used for A/B testing?
- How do you measure customer satisfaction?

PLAY 13

Default to open

When we collaborate in the open and publish our data publicly, we can improve Government together. By building services more openly and publishing open data, we simplify the public's access to government services and information, allow the public to contribute easily, and enable reuse by entrepreneurs, nonprofits, other agencies, and the public.

Checklist

- Offer users a mechanism to report bugs and issues, and be responsive to these reports
- Provide datasets to the public, in their entirety, through bulk downloads and APIs (application programming interfaces)
- Ensure that data from the service is explicitly in the public domain, and that rights are waived globally via an international public domain dedication, such as the "Creative Commons Zero" waiver

- Catalog data in the agency's enterprise data inventory and add any public datasets to the agency's public data listing
- Ensure that we maintain the rights to all data developed by third parties in a manner that is releasable and reusable at no cost to the public
- Ensure that we maintain contractual rights to all custom software developed by third parties in a manner that is publishable and reusable at no cost
- When appropriate, create an API for third parties and internal users to interact with the service directly
- When appropriate, publish source code of projects or components online
- When appropriate, share your development process and progress publicly

Key Questions

- How are you collecting user feedback for bugs and issues?
- If there is an API, what capabilities does it provide? Who uses it? How is it documented?
- If the codebase has not been released under an open source license, explain why.
- What components are made available to the public as open source?
- What datasets are made available to the public?

US Digital Service

Google employees played a central role in creating the US Digital Service, raising questions about the procurement process, inside-knowledge and user privacy

HealthCare.gov was sending personal data to Google

Google and its employees were heavily involved in the launch of the U.S. Digital Service (USDS), a White House group[i] tasked with advising federal agencies on big technology projects and improving the federal government's websites.[ii]

Current and former Googlers have also disproportionately[iii] staffed the new office, which is partly made-up of temporary advisors that can return to their companies after a limited "tour of duty".[iv]

An analysis of publicly available information shows at least 13 of the new USDS employees are ex-Google software engineers, coders and executives, while one Google employee is a former member of the USDS. 18F, a group of technologists and designers working within the General Services Administration, and who have informal ties to USDS, includes another four former Google engineers and developers.

Those include:

Name	Org.	Date Hired	Google Position
Albert Wong[v]	USDS	7/14	Mgr. Chrome Site Isolation
Brian Lefler[vi]	USDS	7/14	Google Software Engineer
Eric Hysen[vii]	USDS	9/14	Google Technical Program Manager
Nathan Parker[viii]	USDS	9/14	Google Site Reliability Engineer
Matthew Weaver[ix]	USDS	10/14	Google Staff Site Ecologist
Kathy Pham[x]	USDS	11/14	Google Data Scientist
Sangeeta Narayan[xi]	USDS	2/15	Google Executive Recruiter
Grant Dasher[xii]	USDS	3/15	Google Staff Software Engineer
Rachelle Gupta[xiii]	USDS	3/15	Google University Program Specialist
Dennis Gilbert[xiv]	USDS	9/15	Google Technical Recruiter
Sabrina Williams[xv]	USDS	10/15	Google Software Engineer
Janine Gianfredi[xvi]	USDS	12/15	Google[X] and Project Glass Marketing

Amy Barker[xvii]	USDS	1/16	Google Corporate Counsel
Kadir Barry[xviii]	USDS	1/16	Google People Operations
Micah Saul[xix]	18F	N/A	Google Developer
Amanda Robinson[xx]	18F	9/15	Google Software Engineer
Victor Udoewa[xxi]	18F	N/A	Google Education Instructional Designer
Mike Bland[xxii]	18F	11/14	Google Software Engineer

The group has broad sway over large-scale government information technology projects. Key projects identified by USDS include redesigns and modifications to government websites related to immigration, veterans' affairs, social security, student loans, healthcare and small business.[xxiii] [xxiv]

What the data suggest

USDS employees at work

Google's intimate involvement in the creation of the U.S. Digital Service gives the company an inside-track on large government IT projects.

Current White House Chief Technology Officer Megan Smith—herself a former Google executive—stated in 2015 that USDS was designed with "limited tours of duty" in mind. "We want technical people to come and serve… But come for tours of duty: come as a reserve, come for two weeks, come for two years and come in and out of government just like our colleagues in other fields are doing."[xxv]

The large number of former Google employees working today at USDS as well as the fact that the Service was designed with such "limited tours of duty" in mind, suggests that many former Google employees working for USDS today may return to their Google jobs tomorrow with inside knowledge and relationships that could prove invaluable in securing large IT contracts for Google.

Questions Raised

Given Google's voracious appetite for our personal information and its close involvement with USDS, what privacy protections are in place for visitors' use of government websites?

On January 20, 2015, the *Associated Press* reported that the HealthCare.gov website was quietly sending consumers' personal data to private companies including Google's DoubleClick that specialize in collecting personal information for advertising and marketing purposes.[xxvi]

USDS' focus on revamping government websites related to citizens' most sensitive personal information—involving healthcare, veterans' issues, social security, school loans and immigration — raise concerns about whether Google is collecting data when we visit government websites. The Electronic Frontier Foundation has filed a complaint alleging that Google collects data on students, despite their promises to refrain from doing so.[xxvii]

[i] USDS is a part of the Executive Office of the President.
[ii] Officially launched on August 11, 2014 largely as an outgrowth of the shock teams of coders and software engineers recruited from private industry (many from Google) to repair the Healthcare.gov website during the six week period from October to December 2013.
[iii] Fast Company reported in June of 2015 that USDS had a staff of approximately 37 people with 140 more "in the network" according to then White House Chief Technology Officer Todd Park.
[iv]http://www.fastcompany.com/3046756/obama-and-his-geeks
[v] http://ben.balter.com/2015/04/22/the-difference-between-18f-and-usds/
[vi] https://www.linkedin.com/in/albertjwongseattle
[vii] https://www.linkedin.com/in/apathia
[viii] https://www.linkedin.com/in/erichysen
[ix] https://www.linkedin.com/in/nathanparker
[x] https://www.linkedin.com/in/matthewjweaver
[xi] https://medium.com/@USDigitalService/why-i-joined-the-u-s-digital-service-24c6682afce2#.euuj97mht
[xii] https://www.linkedin.com/in/recruitingdiva
[xiii] https://www.linkedin.com/in/grant-dasher-b45b7283
[xiv] https://www.linkedin.com/in/rachellegupta
[xv] https://www.linkedin.com/in/gilbert0369
[xvi] https://www.linkedin.com/in/sabrina-williams-509b52ba
[xvii] https://www.linkedin.com/in/janinegianfredi
[xviii] https://www.linkedin.com/in/amy-barker-20857a13
[xix] https://www.linkedin.com/in/kadirbarry
[xx] https://18f.gsa.gov/team/micahsaul/
[xxi] https://18f.gsa.gov/team/amanda-robinson/
[xxii] https://18f.gsa.gov/team/victor-udoewa/
[xxiii] https://www.linkedin.com/in/mike-bland-4127803b
[xxiv] http://ben.balter.com/2015/04/22/the-difference-between-18f-and-usds/
[xxv] https://www.fastcompany.com/3046756/obama-and-his-geeks
[xxvi] http://www.federaltimes.com/story/government/it/2015/04/13/obama-hopes-tech-talent-can-hot-wire-federal/25592829/
[xxvii] https://www.eff.org/deeplinks/2015/01/healthcare.gov-sends-personal-data
[xxviii] https://www.eff.org/document/ftc-complaint-google-education