DIGITAL SERVICES GOVERNANCE RECOMMENDATIONS

Supporting Implementation of Digital Services Governance Structures in the Federal Government

AUGUST 2012

Product of the Digital Services Advisory Group, Federal Chief Information Officers Council, and Federal Web Managers Council

Contents

Introduction

The Digital Government Strategy (PDF/HTML), issued by Federal Chief Information Officer (CIO) Steven VanRoekel on May 23, 2012, describes a broad approach for improving management and delivery of digital services by the Federal Government. One component of the Strategy focuses on the need for improved governance of digital services. Currently, many Federal agencies lack strong governance, and therefore struggle to develop coherent priorities, ensure current and accurate services, and take advantage of new capabilities. However, a well-developed governance structure at each agency is essential to satisfy the public's expectation and right to the best possible level of service.

Therefore, the Strategy emphasizes the need for a well-developed governance structure for digital services. To help agencies improve their existing governance and as called for in the Strategy, the Office of Management and Budget (OMB) created the Digital Services Advisory Group (Advisory Group)—a collection of digital services leaders from across the Federal Government who are responsible for identifying and promoting best practices for digital services. This document fulfills Milestone Action #4.1 of the Strategy, which requires the Advisory Group to create agency-wide digital services governance guidelines. Agencies will use these recommendations to help create digital services governance by November 23, 2012, fulfilling Milestone Action #4.2.

This document is intended to help agencies develop or strengthen their governance structures across all three layers of digital services: information, platform, and presentation. The Advisory Group doesn't presume that agencies are starting from scratch; in fact, many agencies already have some elements of digital services governance in place. Therefore, this document encourages agencies to build upon existing structures and processes as much as possible when working to meet Milestone Action #4.2.

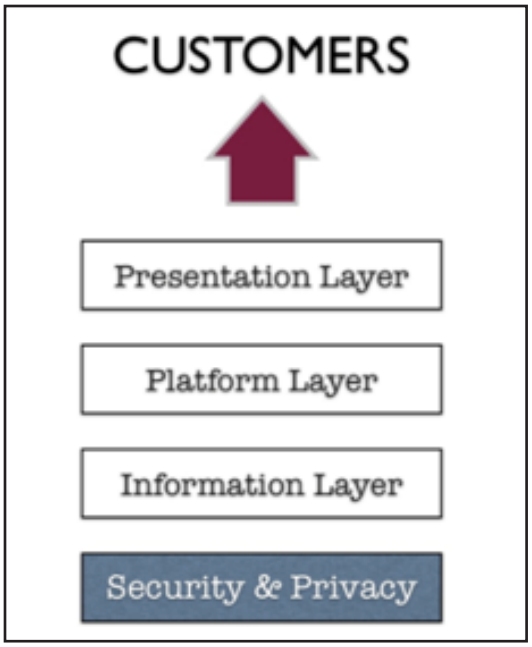


Figure 1

Whether standing up a new digital services governance structure or modifying existing structures, governance is a means to an end instead of an end itself as depicted in Figure 1. The ultimate goals of governance are to empower and accelerate an agency's ability to make informed digital services decisions and to help an agency achieve the goals named in the Digital Government Strategy. In support of these goals, digital services governance structures will be responsible for:

- Setting specific, measurable goals around digital services; and
- Establishing agency-wide policies for digital services and products.

Recommendations on how to meet these requirements are included throughout this document.

Establishing Digital Services Governance

Benefits

The Strategy emphasizes governance as a key component of digital services because of its many benefits. Governance:

- Ensures agencies align priorities and produce coordinated services, thereby reducing redundancies, inefficiencies, and wasted dollars;
- Provides clarity about how decisions are made and implemented, enabling internal stakeholders to more easily navigate processes and create digital products;
- Creates accountability among agency leaders, resulting in better products for customers;
- Creates opportunities for improved communication and collaboration within and across agencies, which can result in greater information sharing and understanding of best practices;
- Ensures adherence to law, standards, and government-wide policy; and
- Creates a structure for taking advantage of new technologies and approaches to customer service.

In short, strong digital services governance enables strong digital services.

Definitions

According to the Digital Government Strategy, "digital services" refers to "the delivery of digital information (data or content) and transactional services (e.g., online forms, benefits applications) across a variety of platforms, devices, and delivery mechanisms (e.g., websites, mobile applications, and social media)." Digital services may be delivered to internal customers, external customers, or both.

This definition can be broken down using the three layers described in the Digital Government Strategy:

- **Information Layer. Includes:**
  - "Content," meaning any unstructured material that agencies provide online:
    - Written materials (e.g., fact sheets, press releases, and compliance guidance);
    - Online transactions (e.g., benefits applications, purchases, job applications); and
    - Multimedia (e.g., photos, video, audio).
  - "Data," meaning structured information (e.g., census and employment data, environmental measurements, activity logs, and structured website content).
- **Platform Layer. Includes:**
  - APIs, feeds, and web services; and
  - Web content management systems.

- **Presentation Layer. "Delivery mechanisms" include:**
  - Web sites and web applications on desktops, mobile and other devices (viewed via a browser, not including standalone, downloadable apps);
  - Native mobile apps; and
  - Social media.

As described in the Strategy, to ensure the safe and secure delivery and use of digital services, security, privacy, and data protection must be built in throughout the entire technology life cycle. Thus, the layers of digital services rest on a platform of "Security and Privacy."[1]

Approach

Creating a digital services governance structure can seem like a daunting task with so many stakeholders and processes involved. However, by breaking this effort into small, strategic steps, an agency can transform this mandate into a manageable effort.

Accordingly, to help agencies meet the November 23, 2012, deadline, the Digital Services Advisory Group recommends that they work through the following process[2]:

- **Step 1:** Gather a Core Team
- **Step 2:** Assess What You Have
- **Step 3:** Determine What You Want
- **Step 4:** Build or Validate Your Governance Structure
- **Step 5:** Share, Review, and Upgrade
- **Step 6:** Establish and Implement

The following provides in depth recommendations on how to approach each of these steps.

Step 1: Gather a Core Team

Name a senior leader in the agency to serve as the executive sponsor for Milestone Action #4.2 (establish an agency-wide digital services governance structure). This individual should be empowered to lead and coordinate the agency's implementation of Milestone Action #4.2, which will cut across traditional functional and programmatic lines within the agency. This individual invites representatives from existing digital services working groups, governance boards, or offices (e.g., Office of the Chief Information

1. Under the Federal Information Security Management Act of 2002 (FISMA) and related OMB policies and circulars, Agencies are required follow mandatory standards and guidelines for information and information systems developed by the National Institute of Standards and Technology (NIST). Agencies should first refer to FIPS Publication 200, Minimum Security Requirements for Federal Information and Information Systems, the mandatory Federal standard developed by NIST in response to FISMA. To comply with the Federal standard, organizations determine the security category of their information system in accordance with FIPS Publication 199, Standards for Security Categorization of Federal Information and Information Systems. These standards and guidelines should be used throughout the process envisioned in this document.
2. This process was validated through a Governance Sprint hosted by the General Services Administration (GSA) Digital Services Innovation Center. In the week-long Sprint, four agencies piloted this approach to develop digital services governance for their respective agencies.

Officer and the equivalent communications organization) to participate in the development of the new digital services governance structure. Participants must be able to speak with authority on behalf of their agency, bureau, or office, and must commit to this effort; the agency will see the best results when the same participants are involved at each step.

Step 2: Assess What You Have

Inventory the existing governance structure(s) and processes related to digital services. The assessment should encompass efforts from top to bottom—headquarters level through bureau or office levels—and document:

- How existing governance structure(s) are set up, specifying:
  - Layers of approval;
  - Processes in place;
  - Decision-making groups related to digital services and their respective authorities/responsibilities; and
  - Other structures and considerations that affect digital services governance in your agency;
- What is successful about the existing governance structure(s) and processes; and
- Where are gaps, redundancies, or challenges.

Step 3: Determine What You Want

Based on this initial assessment and the recommendations described in Appendix A[3], identify an ideal digital services governance structure. Frame this discussion around six essential elements[4]:

Element A: Clearly Defined Scope of Authority

For governance to work, everyone must understand *what* is being governed and what authorities or policies will be relied upon. Before diving into what the actual structure will look like, clearly define what "digital services" the structure will govern. Use the definition from the Digital Government Strategy above as a starting point and adapt the definition as appropriate to your agency.

Element B: Core Principles to Guide Action

Establish agreed-upon principles to ensure that decision-makers are aligned around a common, consistent set of values. These principles must reflect the agency's mission and ensure that the agency carries out the key approaches in the Digital Government Strategy.

3. As part of Milestone Action #4.2, the Strategy requires agencies to establish specific, measurable goals for delivering better services at a lower cost and set agency-wide policies and standards in specific areas. Appendix A (Building Blocks for Effective Digital Services Governance) provides a detailed set of recommendations to help agencies meet these requirements.
4. The Digital Services Innovation Center's July 2012 governance sprint demonstrated that these elements are essential to any successful governance structure.

- The ***"Information-Centric"*** approach moves agencies from managing "documents" to managing discrete pieces of open data and content that can be tagged, shared, secured, and presented in the way that is most useful for the consumer of that information.
- The ***"Shared Platform"*** approach helps agencies, both internally and when working with other agencies, to reduce costs, streamline development, and apply consistent standards and approaches (e.g., creation and delivery of information).
- The ***"Customer-Centric"*** approach influences how agencies create, manage, and present data through websites, mobile applications, raw data sets, and other modes of delivery. This approach also allows customers to shape, share, and consume information, whenever and however they want it.
- The platform of ***"Security and Privacy"*** ensures the safe and secure delivery and use of digital services to protect information and privacy.

Element C: Established Roles and Responsibilities

In addition to determining what is being governed in element A, everyone must understand *how* it is being governed. Establishing clear roles and responsibilities will avoid duplicate efforts. Because digital services are often interdisciplinary, there are likely a number of groups or offices already involved, possibly with overlapping duties. Clearly define:

- Responsibilities in the new governance structure for the following groups, including whether each will *advise, approve, decide,* or *implement* digital services decisions, or some combination:
  - Line program offices that deliver services and "own" end-user relationships such as program offices, regions, or district offices
  - Offices that "own" data for research, policy development or other purposes outside of program offices
  - Information Technology or CIO organization
  - Communications and Public Affairs
  - Web management
  - Officials responsible for implementing related OMB guidance (e.g., plain language official, customer service official, open government official)
  - Grants management staff
  - General Counsel and Policy
  - Information Security and Privacy officials (to validate security and privacy controls)
  - Information Management personnel (e.g., records management and accessibility)
  - Other governance groups or officials whose responsibilities touch on or overlap digital services (e.g., contracting, regional/field operations)

- The level at which various types of decisions will be made (e.g., strategic, tactical, production, operational).
  - For example, strategic decisions might be handled by senior officials, whereas production decisions (e.g., Web content) may be dealt with by the responsible official or manager.
- Who will make agency-wide decisions regarding digital services (e.g., specific leader or committee), including stating:
  - How individual leaders will be chosen;
  - How other relevant leaders and individual staff members will provide input;
  - How committee membership will be determined, and how alternates and successors will be chosen; and
  - How committee decisions will be made (e.g., consensus, voting, unanimity).

Test whether the roles and responsibilities are practical by employing use cases and thinking through the steps involved in producing a digital service. The use cases will help agencies identify and address potential bottlenecks, ensuring that the final process is both effective and efficient.

See Appendix A for decisions and activities that can be made within a governance structure to help meet the goals of the Digital Government Strategy, and Appendix B for examples of existing governance structures at Federal agencies.

Element D: Stakeholder Input and Participation

Because digital services cross disciplines and organizational boundaries, approving and deploying digital services requires a clear understanding of both user/customer needs and stakeholder issues.

Creating digital services no one uses wastes time and money, so the governance structure must include mechanisms for determining what people want.

Stakeholders will greatly affect governance's success. Within most agencies, creating a digital services governance structure is as much an organizational change management effort as it is a technology deployment process. To gain stakeholder support, the effort must engage stakeholders early and often.

To address both users' and stakeholders' needs:

- Identify stakeholders versus end users or customers
  - Stakeholders could include, but are not limited to:
    - Agency offices with authority in the decision making process or who own essential content and data
    - Oversight organizations: both internal and external to the agency
    - Potential partners that either enable digital services or that take agency data or content and repackage to provide digital services to end-users
    - Professional or affinity groups that represent end-users or digital services partners

  - End users or customers could include, but are not limited to:
    - Citizens or employees trying to complete a transaction (e.g., check on the status of their tax refund or apply for benefits)
    - Citizens or employees looking for information (e.g., how to apply for a national park permit or comply with a policy)
    - Citizens or employees who want to analyze a data set (e.g., researching long-term effects of a natural disaster)
- Document how you will involve stakeholders in strategic discussions:
  - The goals of consultations are to:
    - Avoid surprises
    - Identify issues needing to be resolved early
    - Provide "voice of the customer" proxies if possible
    - Share long-range product strategies
  - Consider how often to consult with stakeholders and what mechanisms or approaches to use
  - Capture current processes and techniques to consult with stakeholders and agencies.

Element E: Consistent Communications

Communications are a key component of any change management effort. For the change to be effective, stakeholders must be aware of what it is and how it affects them. For both new and revised digital services governance structures, inform and educate stakeholders about changes to processes, policies, standards, requirements, and points of contact. Communicate early and often when implementing the structure and continue educational efforts.[5]

Element F: Performance Metrics

Create a mechanism (for example, a committee or a team) to establish requirements for metrics and establish specific performance measures to ensure governance structure accountability and effectiveness:

- Create metrics to determine whether the governance structure is improving digital services. Performance indicators could include:
  - **Reduced cost** (e.g., the agency saves money on avoiding duplicate solutions, maintenance and employee work hours)
  - **Reduced cycle time** (e.g., the governance board completes reviews/approvals 5 days sooner than previous boards)

5. Resources on effective customer engagement approaches are available at http://www.howto.gov/customer-service/how-to-collect-customer-feedback

  - **Decreased redundancy** (e.g., there is a single approval process instead of multiple approvals from multiple boards)
  - **Increased flexibility** (e.g., the agency now has multiple solutions and sources of knowledge available to them for implementing digital services)
  - **Improved quality** (e.g., internal agency customers can share tools that perform better)
  - **Increased rate of product creation** (e.g., the agency develops a new mobile app every quarter)
- Create metrics to determine outcome and value improvement for the customer experience (external)
  - **Reduced time per transaction** (e.g., customers do not have to enter as much data or wait as long for agency response for services)
  - **Higher quality and lower error rates** (e.g., better, more accurate services and information are provided)
  - **Increased customer satisfaction** (e.g., customer satisfaction with a website, or with specific aspects like navigation, have improved)
  - **New customer interactions** (e.g., customers interact, engage and collaborate with us in new and innovative ways)

Establish a regular assessment time line for governance leaders to evaluate the metrics and take appropriate action, such as every six months.

Step 4: Build or Validate Your Governance Structure

Your governance structure should address each of the six elements described above. The structure will vary according to the agency's culture, mission, and existing organizational structure. Various governance models and approaches exist and clearly can work; there is no "one-size-fits-all" approach. Consider using one of the following generic organizational structures as a starting point or creating a hybrid based on the needs of the agency:

Organizational Structures

- *Consensus-Based Structure*—Decision-makers must agree enough that they will publicly support each decision. In practice, consensus-based structures can be slow to make decisions because a single person or office can withhold approval and prevent consensus. However, they also produce strong support across the agency.
- *Starfish Structure*—Operating units coordinate around agreed-upon principles, standards, and infrastructure. As shown in Figure 2, the tips of the arms (light blue circles) represent offices in an agency or bureaus in a multi-bureau agency. These groups act with autonomy, but make decisions that are informed by agreements from the traditional central office (symbolized by the center of the starfish). This structure can be nimble and allow for flexibility to respond to unique end-user needs, but might not produce the desired level of consistency.

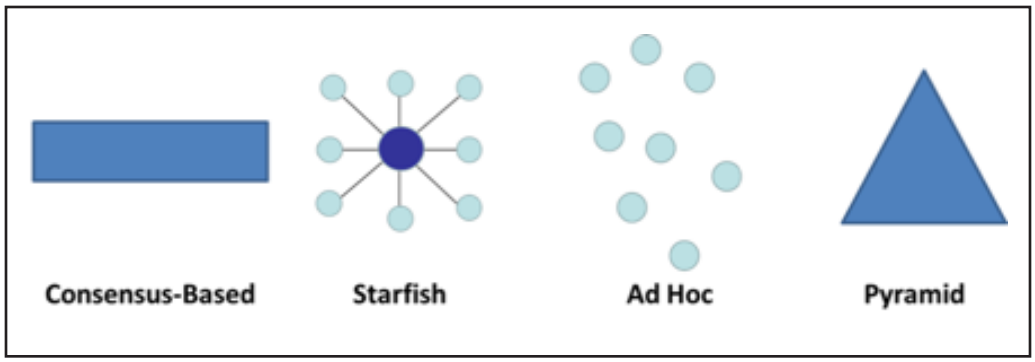


Figure 2

- *Ad-Hoc Structure*—Each bureau or office operates individually to satisfy the needs of end users without any central coordination across the agency. Services will likely be highly responsive and deployed relatively quickly; however, such extensive decentralization may lead to unnecessary duplication of infrastructure capabilities and platforms, and inconsistent decisions and standards. It may also diminish the customer experience by creating confusing, complex, or redundant products and transactions.
- *Pyramid Structure*—Agencies operate in a top-down command and control structure. Many Federal agencies currently employ a version of this structure in which operating units and program offices comply with policies and directives issued by headquarters. Ideally, this governance structure maximizes coordination to avoid unnecessary duplication of effort. However, response to fast-changing circumstances can be slow, and unique end-user needs can be overlooked with the emphasis on common capabilities.

Once a structure is formulated, develop a comprehensive roadmap that clearly outlines the changes to the existing governance structure(s). This roadmap will serve as the "project" or "transition" plan for setting up digital services governance. It can go so far as to have a set of assigned tasks, lanes of work where similar tasks are grouped, resources assigned, and due dates for particular tasks.

Single vs. Multiple Structures

Governance needs to allow for different time frames: both steady, planned development and rapid creation of digital services (e.g., responding to a natural disaster or a short-deadline legislative requirement). Depending on the agency's culture, responsibilities, and capabilities, it might be possible to build flexibility into one structure, but it also might be appropriate to set up an alternate structure for rapid response.

Furthermore, the start-up, turn-around, realignment, and sustaining phases could require different structures. Different types of digital services (for example, web vs. mobile apps) might, therefore, have different structures.

Step 5: Share, Review, and Upgrade

Share proposed governance structure(s) with stakeholders throughout the agency (e.g., via a charter or other similar document). Drawing on the feedback received, iterate until it is a viable policy. By engaging stakeholders early in the process, the agency will gain more widespread buy-in.

Step 6: Establish and Implement

Work through the agency approval processes. Create or edit policy documents as appropriate to institutionalize the governance structure as soon as possible.

As you implement the structure, clearly communicate internally and externally what changes are being made to the existing structure.

Once implemented, digital services decisions should be made in accordance with the governance structure. To create even stronger alignment, address the following topic areas as required in the Digital Government Strategy:

- Establish specific, measurable goals for delivering better services at a lower cost by:
  - Prioritizing projects
  - Directing resources
  - Assessing status and identifying metrics
  - Establishing performance goals
  - Reviewing progress
  - Reporting on progress, risks, and challenges
  - Establishing tools and training needed
- Set agency-wide policies (including policies, guidance, processes, etc.) for the following areas:
  - Content life-cycle management
  - Adoption of third-party online tools
  - Mobile application delivery
  - Sharing (e.g., infrastructure and digital information)
  - Data management and inventory

Appendix A provides additional details and areas of consideration for each of these topics. At least annually, each agency should evaluate the governance structure's effectiveness and adjust the structure accordingly.

Closing and Next Steps

The recommendations in this document are intended to help agencies as they establish their Digital Services Governance structures by November 23, 2012, fulfilling Milestone Action #4.2. As necessary based on agency feedback, the GSA Digital Services Innovation Center will issue additional recommendations.

Consistent with the principles laid out in the public progress reporting requirements sent by the OMB Controller to Agency Deputy Secretaries on July 23, 2012, OMB will provide agencies with guidance for reporting progress regarding their implementation of Milestone Action #4.2. OMB will use this information to assess whether agencies have fulfilled the requirements of Milestone Action #4.2.

Appendix A: Building Blocks for Effective Digital Services Governance

As part of Milestone Action #4.2, the Digital Government Strategy requires agencies to establish specific, measurable goals for delivering better services at a lower cost and set agency-wide policies in specific areas. Appendix A provides a detailed set of recommendations to help agencies meet these requirements.

Establishing Specific, Measurable Goals for Delivering Better Services at a Lower Cost

The Digital Government Strategy requires each agency to establish specific, measurable goals for delivering better services at a lower cost through their governance structure(s). Agencies should establish goals that are tailored to their organization's needs, and consider pursuing the following types of goals:

- Prioritize projects (e.g., identifying the top 5 digital services the agency provides) using:
  - Agency mission objectives
  - Indications of public interest such as website metrics and contact forms, customer service surveys, and other feedback mechanisms
  - Projected project return-on-investment if relevant.
- Direct resources to priority projects, focusing especially on how to reduce costs through collaboration and consolidation:
  - Staff time
  - Training
  - Contractor support
  - Infrastructure (for example, servers and software)
  - Support program offices in understanding and addressing:
    - Procurement
    - Management of staff accounts on agency systems
    - Information management and legal issues (e.g., privacy, security, paperwork reduction, and terms of service)
    - Timeline and project planning
    - Technology solutions, including establishing requirements
    - Branding if applicable or desired
- Regularly evaluate and re-prioritize, especially when projects are completed or cancelled

- Assess baseline status and identify appropriate metrics
- Establish performance goals. For example:
    - Rewrite content using plain language
    - Setting targets for how many APIs to create
    - Meeting all Federal requirements
    - Staff training and skills requirements to carry out various roles
- Review progress against the performance goals
- Report to agency senior management or OMB on progress, risks, and challenges

Setting Agency-Wide Policies[6]

The Digital Government Strategy requires agencies to set agency-wide policies in the following areas through their governance structure(s):

- Content lifecycle management
- Adoption of third-party online tools
- Mobile application delivery
- Sharing (e.g. infrastructure and digital information)
- Data management and inventory

Agencies should establish specific policies that are tailored to their organization's needs and are consistent with law, NIST standards and government-wide policy. Considerations for each area are discussed in detail below.

Content Life Cycle Management

Agencies should d evelop policies to ensure that creating and managing content used in digital services, for both internal and external customers, begins with prioritization, as described above, and continues through the following steps:

- Developing concepts:
    - Does this concept already exist elsewhere within the agency or at another agency? If so, why create a new content set (website, set of pages, etc.)?
    - Who are the intended audience and what are their top tasks?
    - What is the purpose of providing this content to those audiences?

6. Under the Federal Information Security Management Act of 2002 (FISMA) and related OMB policies and circulars, Agencies are required follow mandatory standards and guidelines for information and information systems developed by the National Institute of Standards and Technology (NIST). These standards and guidelines should be used throughout the process envisioned in this document.

  - Are all relevant offices involved and have they committed necessary resources? How will they interact, especially after launch?
  - What is the planned time line for each phase of the life cycle?
  - What is the change management process?
- Approving concepts: who approves and under what process?
- Creating information (data and content):
  - For content, ensuring it is accessible, written for the web, and uses plain language
  - For data and structured content, ensuring a sound structure and including metadata
  - For both, minimizing data download requirements for mobile users
- Meeting all Federal requirements (e.g., privacy, security, and records management)
- Choosing the appropriate platform and presentation. The best approach is often to create information once and reuse it on both desktop and mobile platforms, but there are cases in which mobile applications don't work in a desktop context.
- Approving information, platform, and presentation
- Establishing feedback mechanisms so the public can indicate whether each service is meeting their needs
- Regular reviewing for:
  - Continued relevance
  - Currency and accuracy
  - Updating per new best practices
  - Consideration for incorporation into new services
- Removing or consolidating with other content, archiving when appropriate

Adoption of Third-Party Online Tools

Adopting tools managed by organizations or companies outside the agency introduces considerations beyond those listed above. Agencies should:

- Establish that such tools are used to promote the agency's mission
- Ensure that terms of service are legally acceptable. GSA has established a process for creating such Federal friendly terms, but each agency must still review and accept them.
- Guard against being associated with legally problematic companies (e.g., using a social media site that abuses intellectual property rights)
- Protect agency content (e.g., consider the risks of content being modified inappropriately or removed entirely)

- Consider the effects of a tool being taken offline on the agency's reputation or ability to communicate
- Provide guidance on the acquisition and use of open source software

Mobile Application Delivery

Mobile applications can either run in a browser or "natively," meaning they are downloaded and run directly on a mobile device's operating system. Considerations for creating browser-based mobile apps are not significantly different from those related to content lifecycle management discussed above, but agency policies should address the following additional considerations:

- Whether a particular platform will be available to a significant portion of the intended audience
- Availability of similar private-sector apps
- Risk of appearing to endorse specific mobile platforms
- Providing a means to easily update apps to current versions
- Cost and timeliness of a native app vs. a mobile web app
- Accepting terms of service for participating in app stores (e.g., the App Store (iOS devices) or the Android Market)
- Particular benefits a platform offers over a mobile web app (e.g., complex calculations, personalization, offline access, access to a camera, interactive features like swiping, etc.)
- Emergence of, and agency development for, new platforms

Sharing (e.g., Infrastructure and Digital Information)

Policies should ensure that digital services are created in such a way that they maximize sharing:

- Create well-structured data and include metadata
- Structure new content and create a path for adding structure to currently unstructured content
- Share data and content within an agency to the maximum extent possible
- Provide for the creation, documentation, and promotion of APIs, data feeds, and other mechanisms for sharing to the maximum extent possible
- Reduce duplication of effort, both within an agency and across agencies:
  - Conduct the same lifecycle management process as for content and data, paying special attention to not creating minor variations on existing apps
  - Share code, data, and content across agencies, such as by using sharing platforms to be established by GSA's Digital Services Innovation Center.
  - Share policy and governance documents
- Follow established standards for data structure and content creation where available

Data Management and Inventory

Many of the governance considerations discussed previously also apply to data management. The following are additional issues that data management policies should address:

- Ensure that data and metadata structures ease presentation on all devices
- Reduce duplication of effort and maximize reuse of data within an agency
- Follow current Federal data requirements and use current best practices for data creation and management
- Provide guidance on when data is 'good enough' to share, as opposed to first requiring perfection
- Ensure data is stored in machine-readable formats
- Create mechanisms for customers to provide feedback about the usefulness, relevance, accuracy, and currency of data
- Ensure the security of agency data
- Protect confidentiality and privacy as appropriate to the dataset's purpose and use

Appendix B: Digital Services Governance Case Studies

To help with the development of these recommendations, all Federal agencies were invited to submit case studies of digital services governance structures. Several agencies responded with studies on their use of governance to drive improved outcomes; these studies are highlighted below, and followed by a brief synopsis which summarizes the specific challenges, approaches, and lessons learned of each.

The Department of Homeland Security's (DHS) Office of Public Affairs (OPA) and the Office of the Chief Information Officer (OCIO) established a DHS Web governance framework, comprised of a Web Content Management Executive Steering Committee (ESC) and a Web Council with representation from all Components;

The Department of Energy (DOE) created a Web Managers Council for digital staff to collaborate across programs, and share common challenges, ideas, and best practices;

The Department of State's Internet Steering Committee (ISC) serves as a key policy and governance body within the Department and reviews and develops policies, procedures, and functions related to Internet presence, use, and services maintained by the Department domestically and abroad.

Because they pre-date the development of these recommendations, the case studies demonstrate only how those agencies achieved some aspects of governance. They are not structured the same as the recommendations and they do not represent a comprehensive picture of efforts at those agencies. Therefore, agencies should not consider the presented model in any single case study as fulfilling all requirements of Milestone Action #4.2.

Department of Homeland Security Web Governance

Bringing Governance to the Enterprise

July 12, 2012

Department of Homeland Security
Office of Public Affairs

Executive Summary

On June 13, 2011 the Office of Management and Budget issued guidance for implementing executive order 13571, Streamlining Service Delivery and Improving Customer Service. In response to this policy direction and Secretary Janet Napolitano's December 2010 action directive on Web Systems Optimization, the Department of Homeland Security (DHS) has set a course for website consolidation to improve the customer experience and reduce costs by consolidating web-content management and web-hosting services.

The action directive spurned the DHS Office of Public Affairs (OPA) and the Office of the Chief Information Officer (OCIO) to establish a DHS Web governance framework, comprised of a Web Content Management Executive Steering Committee (ESC) and a Web Council with representation from all Components. Together these bodies overseen the development and execution of a customer-focused strategy for web-content management and web-hosting services for all DHS public-facing websites, created a clear path to leadership for web operations, and have modernized DHS' approach to web communications.

The ESC and Web Council provide an essential forum to enable stakeholders to monitor and support the progress of key initiatives along with providing executive level guidance and oversight, addressing issues and risks requiring executive attention to resolve or escalate, and ensuring the program manager has access to resources, including staff and Department and component support, to successfully manage the program. The utilization of the Web Council and ESC within DHS offers executives from the business function, for which the IT capability is being developed, to address difficult issues, come together and reach consensus on the strategic approach, and agree on the business capabilities and "Target Standards" needed to meet the Enterprise requirements.

Challenge

Goal-setting: The public web provides a global platform for public engagement and is often referred to as the single most important communication tool at DHS' disposal to quickly reach a global audience. It provides a key means of information sharing on Department policy and programs, reaching stakeholders and the public, and putting a human face on the work DHS does to keep the country safe.

To meet these objectives, DHS has invested resources in a web infrastructure, publishing environments and human resources. However, it was clear DHS was not getting its money's worth for this investment in public web.

Baseline Analysis: When Secretary Janet Napolitano issued her Action Directive on Web Systems Optimization in December 2010, DHS faced a number of challenges in how the online footprint for the agency was being managed. DHS knew there was room for improvement in how its public web was managed but it did not have a measured baseline for the scope of the program. For example, DHS did not know how many websites it had, how many Content Management System (CMS) platforms it supported, how many people were in the web workforce, how many hosting solutions it had, how much training was provided to its workforce, how it measured performance on the web, etc.

Strategy: DHS' lack of strategy on content, search, and metrics was also hampering its ability to succeed. The skills gap was also a pain point and the lack of a training approach or strategy was problematic.

Policy: DHS' domain administration at the agency can best be described as un-managed at the start of this process. This had led to a proliferation of domains, no process to evaluate the business need for the domain and no enterprise asset management plan. The result of this inattention was duplication of effort, inefficient allocation of scarce resources, and a poor user experience due to the difficulty of finding DHS' content.

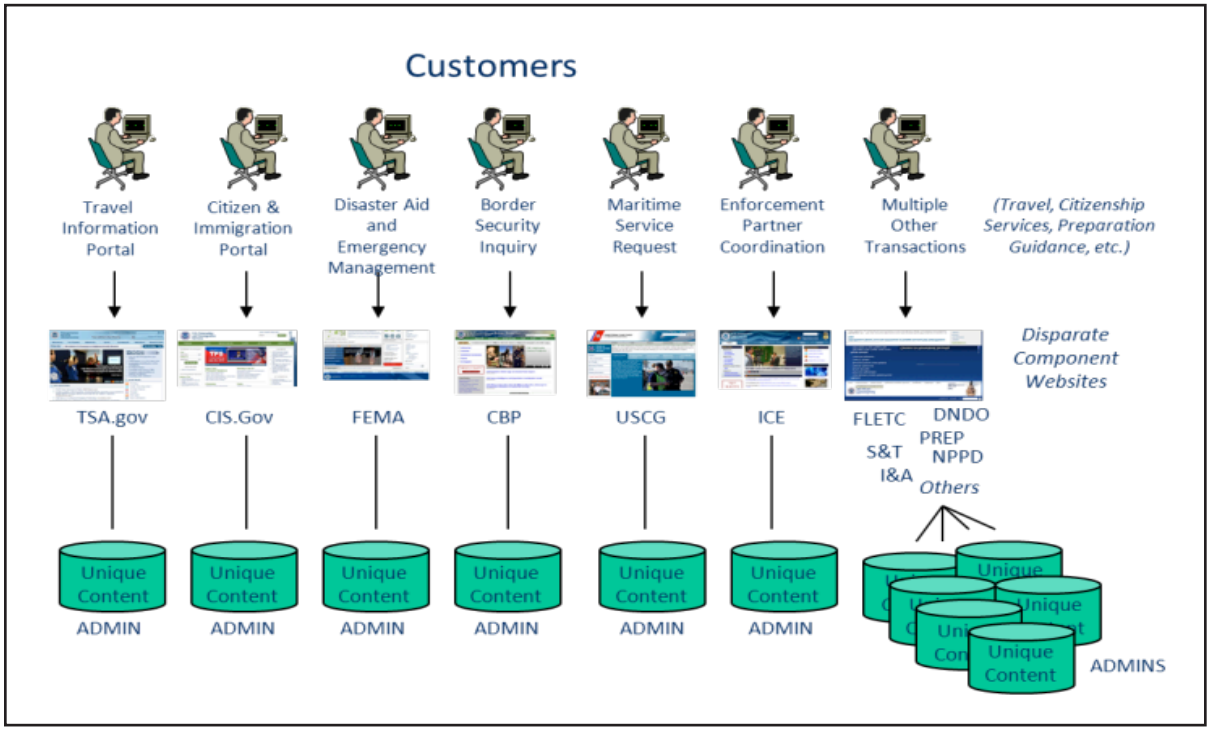
Staffing and Structural Reform: DHS also faced significant staffing and structural issues in how the web was supported at the agency. The OPA unit was given authority as the business owner but was not funded to support web and originally had contractor staff that was on-loan from another directorate. In addition, the centralized publishing model using a very outdated and difficult CMS was unsustainable for an organization of DHS' size.

Approach

The Secretary's intent in her action directive was "To streamline customer access to DHS services, improve DHS web content management and reduce costs by establishing a strategy for web-content management and web-hosting services through consolidation and centralized hosting of DHS public-facing websites." This policy created the authorities needed for action. She directed the agency to take a number of steps within prescribed timetables to remedy this, including:

- Setting up a two-tiered governance structure, (ESC and a Web Council) including charters adopted by each tier, with representation from both the Public Affairs and Information Technology experts and leadership
- Conducting a data-call to discover the scope of all public facing websites and resources supporting them

- Create and approve a web content managing and hosting services strategy
- Provide implementation requirements and milestones through the ESC to all components
- Provide for a moratorium on spending to support legacy CMS or web hosting solutions and an approval process for significant spending to enhance legacy systems
- Establish metrics to capture improvements to customer service, web content management and cost avoidance
- The legacy architecture is depicted in the chart below.



Goal-Setting: DHS' content strategy started with a common understanding of the purpose of its site and a strategy to move to a new model that recognized DHS had to prioritize the work of publishing to the website and fully recognize that DHS' users had shifted from navigation to search in their preferred methods for retrieving content. DHS also made a commitment to removing old content and following its user's task orientation.

Strategy: The content strategy was recently approved by the ESC and the fee structure for the hosting strategy is currently being finalized for approval. The agency decided to adopt an open-source Web CMS in their strategic sourcing. A short-term training strategy was developed by OPA along with an outline for a long-term training strategy to address DHS' known skills gaps.

DHS adopted a problem—solution approach. To address web-sites being hard to navigate DHS moved to simplify and unify its site. To address the lack of consistency DHS adopted customer service standards and consistent templates. To address the issue users had with the site being unwieldy DHS moved to enhance content quality, especially search. To address the proliferation of CMS systems DHS adopted

PURPOSE OF OUR WEBSITE:

1. Provide valuable info
    a. tell our story to a global audience
    b. help them complete their top tasks
2. Help people find stuff
    a. Improve content quality by eliminating redundant/old/trivial (the ROT)
    b. Improve search
3. Do the feedback loop: engage

strategic sourcing. DHS has one approved Web CMS for new systems and plans to migrate operational components to that platform between by the end of FY2013. DHS is also building once and reusing many times, and plans to adopt a common content repository in a multi-tenant environment. To address the expensive infrastructure systems DHS identified in the data-call, it is now in a cloud-based hosting environment that is cost effective and pay-as-you-go.

To address DHS deficiencies in metrics, it adopted an enterprise metrics standards document at the DHS web counsel which spells out standards and best practices for collecting metrics across five streams: analytics, usability, satisfaction, business goals, and search. For analytics, DHS has made a determination to adopt Google Analytics as the agency tool and adopted a metrics plan which directs everyone to use this service and share the data with OPA.

To address DHS' lack of enterprise search, it has adopted the USASearch affiliate program and has authorized it as the enterprise approach in DHS' content strategy document, which was adopted by the ESC.

OPA has developed and has begun to implement its short-term training plan and has an outline for a long-term training approach to address the skills gaps. Discussions are underway about roles and responsibilities for training at the enterprise in terms of which areas OCIO is responsible for and which areas OPA is responsible for.

Policy: The data-call provided the agency with a baseline inventory of known domains and called into sharp relief the lack of management controls. The Web Governance bodies adopted criteria for new URLs and sub-domains. OPA drafted and implemented a secretarial Action Directive regarding Cross-component collaboration. This action-directive gives OPA authority to approve new internet identities and to have an approval process for all new domains. This provides transparency on activities underway to create new domains and an opportunity to stop actions that were inconsistent with the web governance mandates. The Web governance body also directed the OCIO to begin an asset management plan for putting the website inventory in a modern asset management database.

Staffing and Structural Reform: For the known structural staffing issues, OPA negotiated a Memorandum of Agreement (MOA) with the OCIO that agrees to convert four contractor positions to full time Federal positions and eventually make them positions that are funded through OPA. This will save money, but also builds in important accountabilities and assurances that the public release authority for OPA resides with Federal employees.

DHS also introduced de-centralized publishing and tiered administration to address the unsustainable web publishing model. Tiered administration has business units (called support components) at Headquarters (HQ) appointing a HQ Web Liaison and alternate and having these people responsible for all communication with OPA web publishing as well as vetting web publishing that comes from content authors within their organization.

Results

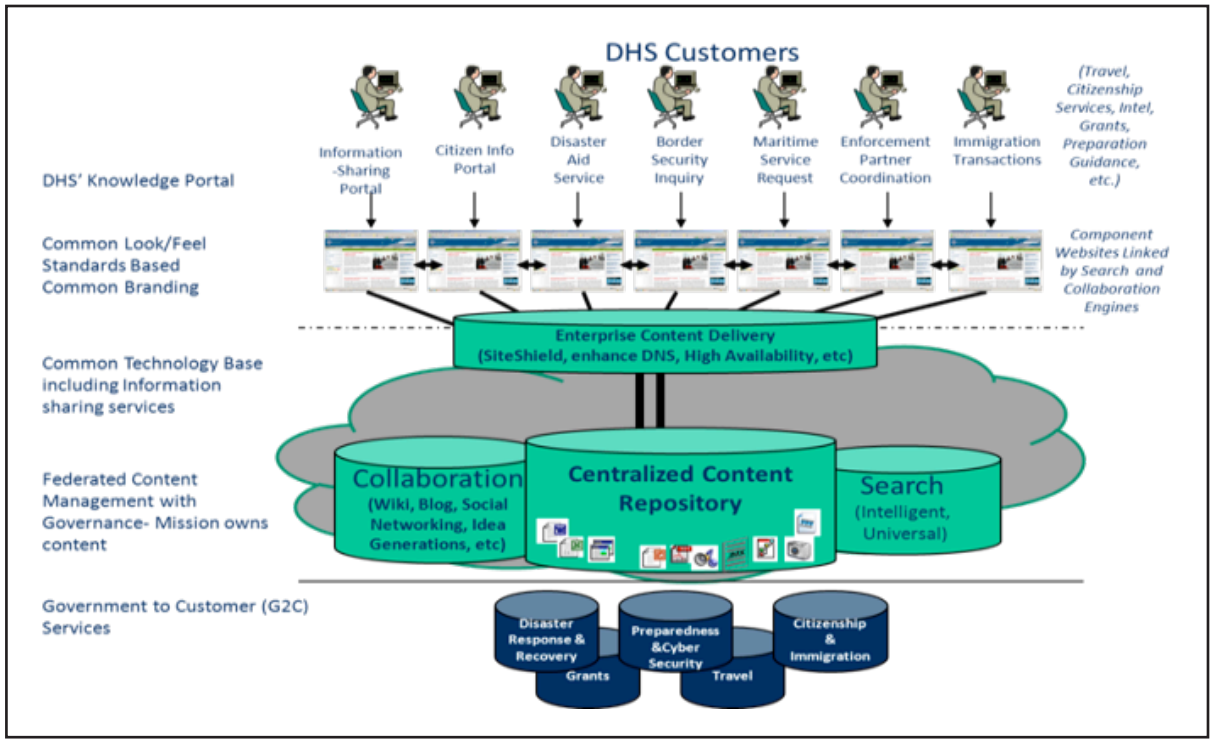
Strategy: DHS' strategy documents are in the process of being implemented; Preliminary results include the following:

- By eliminating redundant old and trivial content DHS trimmed its assets by 20 percent.
- DHS is in the process of migrating to a new data-base CMS which will allow it to implement a de-centralized publishing approach and free its OPA Web team to be more active in managing the web activities for the enterprise.
- The new template based publishing will allow DHS to get out of the business of creating custom web layouts and concentrate on fielding greater content for the public.
- Use of the new search engine will save DHS $50,000 a year and has already helped increase the DHS.gov customer satisfaction from 71 to 73 in the first month. United States Citizenship and Immigration Services (USCIS) has implemented USASearch and has achieved a double digit increase in satisfaction which they attribute to the new search strategy.
- The use of Google Analytics is in the process of being implemented and will allow DHS to have apples-to-apples comparisons of user behavior on its collective sites when the code is put on all target top level sites.
- The short-term training plan is starting later this month and when implemented is expected to train over 170 people across HQ in how to publish and approve content within the new Web CMS.
- Successfully implemented Preview.Fema.Gov as the anchor website for the Web Content Management Cloud Service. DHS.gov, TSA.gov among others will go live this fiscal year.

The target environment is depicted in the chart on next page.

Policy: The process to gate approvals of new URLs has proven a success in providing for a review stage by OPA as the business owner of Web Communications. The criteria for obtaining a new URL have been published. This allows transparency for the policies, which has led advocates for new initiatives to re-evaluate whether a new domain and infrastructure is needed.

To date DHS has reduced the 302 public facing websites reported to OMB in October 2011 to a current level of 286. Further reductions are planned for FY12 and FY13.



Staffing and structural reform: One of the four positions is now filled and hiring actions in an advanced state for the three remaining vacancies. When fully executed, this change will:

- Map functional responsibilities to the proper organizational unit.
- Shift from contract support to a sustainable Federal civil service staff model.
- Assure Web publishing subject matter expertise will reside with civil servants, so OPA will enjoy enhanced continuity of operations and provide for inherently governmental activities to be handled by civil servants with release authority.

Lessons Learned

- It is vital to have authorities set and documented from the highest possible individual at the agency, the Secretary if possible; also have clear Delegation of Authorities in place to avoid unnecessary delays or obstacles in implementing your program.
- Resource web operations in a way that maps functional responsibilities to the proper organizational unit.
- Strongly encourage and incentivize reuse across a Federal agency and ultimately across the Federal Government. Shift to open-source or government funded tools where possible to save money and gain efficiencies.
- Document strategic plans and socialize and approve through governance bodies to aid buy-in.

- Assure proper representation and attendance at the right level for web governance entities and approve charters that set out the business rules for how these structures will operate across the enterprise.
- Need to mature a Federal acquisition contract framework to better support reuse, delivery and cost efficiencies.

Disclaimer

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U.S. DEPARTMENT OF ENERGY

Department of Energy Web Council

Web Governance at the U.S. Department of Energy

July 13, 2012

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Executive Summary

Outlined below is an overview of the U.S. Department of Energy's (DOE) Web Council.

Challenge

More and more the public and DOE stakeholders are using digital tools to access government information and services. In the past, the DOE has provided its information and services online in a piecemeal fashion to mixed results. Some offices have embraced digital tools but within their own silos; and others have been slow to adapt to the changing media environment not sure of how to approach this ever-changing landscape, nor how to most effectively apply the resources to support it. In simple terms, the Department has been trying to navigate the digital space with no captain and crew leading the way.

Approach

In December 2010, DOE Web Managers Council was created as a way for digital staff to collaborate across programs, and share common challenges, ideas, and best practices. Members work in various program and staff offices and include representatives from Policy, Communications, Public Affairs, and Chief Information Office (CIO) staffs. The Web Council is sponsored by the Office of Public Affairs, because of its role in managing Energy.gov, the enterprise web platform for the Department, with the Director of Digital Strategy and Communications serving as its President, primary champion. Two Co-Chairs, one of who is the current DOE Web Manager, manage the Council. The second Co-Chair is a representative from one of the Department's headquarters offices.

Per the DOE Web Council Charter, the purpose of the DOE Web Managers Council is to:

- Promote the use of Web best practices on DOE web sites serving internal and external audiences;
- Address high-level web policy issues that affect all programs;
- Advise and make recommendations to policy-makers, partners and other stakeholders, to improve DOE web content and strengthen web content management policies;
- Educate the DOE community - give them tools to improve web content today, and prepare them to handle the challenges of tomorrow;
- Promote collaboration across programs;
- Provide a way for DOE Web Managers to share skills, knowledge, best practices, ideas, and solutions;
- Communicate DOE's successes (and challenges) to stakeholders, to bring greater recognition and support for DOE's work and DOE web as a whole; and
- Leverage the size and influence of DOE's community to get things done across DOE that would be harder to do individually.

The long-term goals of the Council are to:

1. Help the public quickly and easily accomplish their most critical tasks online;
2. Improve DOE online content so it's on par with the best content in the world; and
3. Support and expand DOE's dynamic community of government Web Managers from across the country.

Results

The primary successes of the Web Council to date include a member-adopted charter as well as Department-wide membership, including participation from the 17 National Laboratories. In addition, frequency of meetings has been moved from semi-monthly to monthly, with attendance growing with the increase.

While the Web Council has made significant progress over the course of its 18-month existence, it has much more work to do as digital services become a greater part of achieving the Department's mission.

Lessons Learned

- As more of the Department's web presence moves to a central, open-source, cloud-hosted platform via Energy.gov, the role of the Web Council must grow to allow internal stakeholders the ability to provide strategic advice and direction to Public Affairs and OCIO, the platform's owners.
- Members would like the Web Council to provide more mentorship and peer review of digital products further facilitating its responsibility to share best practices.
- The Web Council would like to publish a yearly "State of DOE Digital" report to help establish itself as a thought-leader within the Department, as well as celebrate its successes.
- It's important for participation in the Web Council to be acknowledged in performance standards as a means to demonstrate its value to the DOE community.
- Some larger program offices have established their own digital governance bodies. The Web Council needs to adapt to incorporate feedback from those existing structures that are already working well within their respective organizations.

Related Information

For information regarding governance at a program office level, check EERE's web governance model: http://www1.eere.energy.gov/communicationstandards/approval.html

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Department of State Internet Steering Committee

Internet Steering Committee, US Department of State

July 23, 2012

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Executive Summary

In 2001, the U.S. Department of State's (State) Under Secretary for Management approved the formation of an Internet Steering Committee (ISC) to serve as a key policy and governance body within the Department. The Committee serves a Department-wide function and consists of members from multiple bureaus. The Committee reviews and develops policies, procedures, and functions related to Internet presence, use, and services maintained by the Department domestically and abroad.

The Committee addresses State's unique needs in the areas of technical policy and governance presented by the decentralized nature of the Department's operations. In addition to its numerous domestic bureaus, the Department supervises over 290 overseas posts, making centralized decision-making difficult in an area that grows and changes as fast as technology and the Internet.

Since its formation, the Internet Steering Committee and its executive staff have served as a central resource for Department policy related to digital technologies. Notable achievements include instituting a registration process for government URLs, allowing the Department to more closely track and manage those sites and ultimately reduce their numbers; expanding the Department's inventory of government sites to include social media sites; implementing various directives from the Federal Web Managers Council; facilitating negotiations of Terms of Service with various third-party internet platforms; and making significant strides to bring Department Social Media sites into compliance with Section 508 of the Rehabilitation Act by enhancing accessibility for the disabled. Having a centralized policy and governance body to serve as a Department-wide resource has allowed the State Department to better facilitate community building and customer service.

Challenge

State's large size and decentralized operation mechanisms make managing digital policy and governance at a Department level difficult. Not every geographic location is able to support the same tools and State's business requirements frequently involve exploring local or regional tools unknown to most Americans. In addition to its 56 domestic bureaus, the Department is comprised of over 290 overseas posts. Prior to formation of the Internet Steering Committee in 2001, the Department had no established system for managing the policy issues surrounding websites and digital services. There was little consensus on how to run these type of services, and posts and bureaus developed independent strategies, often without any guidance from Washington. This approach resulted in inconsistent quality, varying effectiveness, and significant confusion. A centralized body was needed to improve operations Department-wide by facilitating intra-agency cooperation and ensuring digital services were put in place and advanced to support Department strategic goals and priorities.

Approach

The Internet Steering Committee (ISC) is comprised of representatives from multiple bureaus. Member representatives from all other bureaus are welcomed and encouraged. The committee meets monthly and as needed to address current issues.

The Committee reviews and develops policies, procedures, and functions related to Internet presence, use, and services maintained by the Department. That presence includes domestic and overseas websites, mobile technologies, other emerging technologies, extranet, and Internet.

In addition to the Committee itself, the Internet Steering Committee has an executive staff of three people that manages the day-to-day operations of the Committee. The staff handles policy related questions from posts and bureaus on a daily basis, and operates an intranet site from which ISC projects are administered. The ISC executive staff handles about 5-15 requests for guidance on a daily basis.

The role of the Committee and staff is not simply to create and dictate policy, but to build consensus among key stakeholders in the Department. The Committee receives input from all stakeholders across the Department, from both domestic bureaus and overseas posts. The Committee examines the business needs and goals of these entities to create a consolidated policy framework for practitioners to work from, and the Committee's staff helps them through pitfalls that may arise. After new policies are drafted or old policies are changed, they go through an extensive clearing process.

The Committee developed an internal process to facilitate the domain management process, which is necessary to obtain a .gov URL from the Department.

After a domain is registered, it is added to an internal IT inventory.

The Internet Steering Committee is also responsible for implementing directives from the Federal Web Managers Council within the Department of State. ISC serves as the Department's liaison to the Federal Web Manager's Council. The ISC distributes guidance from the Council and coordinates Department-wide responses to requests for information.

Results

Since the formation of the Internet Steering Committee, the Department has been able to better manage its Internet presences worldwide while still providing a flexible framework to allow employees to be innovative. The ISC has provided a central resource for policy and governance, and implemented processes that facilitate open discussion across the Department. Internal regulations provide definitive resources for Internet policy for Department employees, and provide a central contact point in Washington for additional questions via the ISC help desk. The Department's digital presence has become more customer-focused and concentrated on community building. Notably, the management and review process of top level domain URLs has enabled State to limit the number of .gov domains. The addition of annual reporting and registering of all IT has helped the Department understand its business requirements, track its public presence, and ensure good management of all assets.

Lessons Learned

- A central governance framework regarding digital policy keeps confusion to a minimum and is preferable to multiple, uncoordinated efforts.
- Allowing for flexibility in the policy allows employees to be innovative within certain parameters.
- Bureaus and posts are encouraged to develop local communications strategies that must co-exist with the larger policy framework and their specific policy goals.
- Gathering perspectives and building consensus among all stakeholders to create a consolidated policy framework is essential to sustaining a strong digital strategy.

Disclainer

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