Knowledge Stewardship & Healthy Information Management

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Abstract

The Knowledge Stewardship (KS) Service was established to provide a planned approach to maintaining content across multiple platforms so that it is findable, actionable, and maintains a high value throughout the information life cycle. The KS Service has a combined staff with expertise in taxonomy creation and maintenance; content organization; information life cycle management; and forming and maintaining strong partnerships across all of MITRE's work programs.

Hear how the KS Team fills a significant information gap, how its stewardship fulfills the goal of maintaining healthy information, and ensures that "gold source" information is accessible.
Meet the Authors

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MITRE:
Established to Serve the Public Interest

established
1958
not-for-profit
conflict-free
environment

science & technology

Part of the ecosystem of federal research centers
Today MITRE Operates Seven FFRDCs

Our customers benefit from our breadth of experience

National Security Engineering Center

Center for Advanced Aviation System Development

Homeland Security Systems Engineering and Development Institute

CMS Alliance to Modernize Healthcare

Center for Enterprise Modernization

Judiciary Engineering and Modernization Center

National Cybersecurity Center of Excellence
Our Employees

7,300 employees

67% advanced degrees

25 average years experience

12 years average tenure

Our employees have a passion for public service
InfoServices:
Established to provide access, analysis, answers.

Locations in
Bedford, MA
McLean, VA

20 plus employees
88% advanced degrees
12 years average tenure

Part of MITRE’s Knowledge Driven Enterprise
# Four Service Teams

The resources we provide MITRE range from self-service solutions to custom-products tailored to specific requirements.

| InfoDesk Services          | • Quick Research at no cost to projects  
|                           | • Document Delivery  
|                           | • Inter-Library Borrowing of Books  
|                           | • Print Journals  
|                           | • Collaboration Space  
|                           | • 3D Printer Space  
| Information Resources     | • Digital Libraries  
|                           | • Discover Digital Library Search Tool  
|                           | • Negotiates Licenses  
| Custom Research           | • Database & Open Source Searches  
|                           | • Customized News Products  
|                           | • Synthesis and Analysis  
|                           | • Environmental Scans  
|                           | • Special Initiatives  
| Knowledge Stewardship     | • Organization of Content  
|                           | • Improve Findability of Information  
|                           | • Stewardship of Sites  

Knowledge stewardship is like gardening.

Just as gardeners want to have healthy plants, in a weed free, well maintained garden...

Knowledge Stewards aim to assist staff in maintaining “healthy” information so that it is findable, actionable and maintains a high value throughout the information lifecycle.
Establishment of Knowledge Stewardship Service

Problem:
MITRE has developed a number of “gold source” information assets which are key to business processes or functions.
Information can become stagnant over time, unused, unorganized and not findable. MITRE has an interest in seeing that its repositories are well stewarded, well organized and that content is findable.

Solution:
To fill the gap, the Knowledge Stewardship Service was established to provide a planned approach to maintaining content.
Knowledge Stewardship is part of MITRE’s Knowledge Driven Enterprise

Knowledge Management is part of MITRE’s work flow, maintaining “healthy Information “ is part of this effort.
How did we get started?

- Developed an inventory of currently managed content
- Divided the content into categories:
  - Enterprise-wide
  - Center
  - Division
  - Project
- Looked at the projected growth of additional content
- Reviewed the support model for content built by other departments in CI&T
- Looked at MITRE and CI&T strategic goals for information and knowledge management
- Met with other departments doing similar work
What services did we decide to offer?

- Information life cycle management of content, or “information gardening,” including:
  - Link checking
  - Purging
  - Pruning

- Updating sites with changes in organizational structure/metadata, including tagging content with appropriate metadata

- Enhancement of the repositories

- Organizing and assistance with uploading of content
  - Copyright & License compliance

- Developing training materials, maintaining FAQs and other training documentation for users

- Survey creation and analysis
What options did we consider?

- **Option A:** Move two staff people into the department responsible for building platforms and training people how to use them.
  - Both people primarily doing stewardship work.

- **Option B:** Move two staff people into the department responsible for finding, organizing, and making information accessible.
  - One person doing stewardship work and survey development.
  - One person doing taxonomy development & maintenance.
Why did we pick Option B?

- Libraries have a tradition of fostering learning, innovation, and collaboration...

  Knowledge Stewardship is an outcome of the next evolution in fulfilling MITRE’s information needs

- This is a unique librarian role, one that marries a background in information science and technological expertise.

- The establishment of the service fills an information gap and fulfills MITRE’s goal of maintaining healthy information across the information lifecycle.

- The knowledge stewardship service creates a “one stop shop” for customers and allows for a holistic approach to asset stewardship.
What skills are needed for this service?

- Understanding of copyright and licensing
- Metadata Management
- Information Management Practices
- Project Management
- Strong Customer Service Skills
- Meeting Facilitation
- Ability to translate technology to match customer needs
- Taxonomy Maintenance and Development
- SharePoint Power Users

Diagram:

Taxonomy + Content Organization + Information Life Cycle Management = Knowledge Stewardship
What did we do?

- **Promote organization action**
  - Prepared and socialized change
  - Defined and refined a service definition and value proposition
  - Defined the role of “knowledge stewardship”
  - Aligned staffing
  - Defined “gold source” information asset and collection “owners”
  - Developed a service road map and prioritized outcomes that prove value

- **Execute**
  - Communicated and educated staff on the service
    - Reassure people we were not taking their work
    - Affirm and reaffirm the kind of work we were taking
  - Developed a strategy
  - Drafted a hiring plan
  - Built cohesion and trust...across team, department, division and Center
  - Identified additional knowledge management gaps
Collaboration

Design

Information Architecture & User Experience
- Site & application architecture, design & navigation structures
- Search integration, content inventories, profile structures
- Service coordination; project management
- User feedback (e.g., usability testing)

Build

Information Assets & Community Support
- Community registration and set up
- Second- and third-tier support
- Templates and metadata
- Training
- SharePoint site development and implementation (softshell)
- Web part maintenance and testing

Steward

Knowledge Stewardship Service
- Information life cycle management of content including purging/pruning
- Updating site with changes in organizational structure/metadata, including tagging content with appropriate metadata
- Taxonomy development and maintenance
- Enhancement of the repository
- Survey creation and analysis
What does the service look like today?

- 5 person team
- 57 sites managed
- 152 requests processed since February 1, 2015
- 1,310 hours logged on requests
- 2 – 3 prospective stewardship requests in the pipeline (monthly average)
- 2 internal awards won for team members’ work
  - Survey expertise delivered to Board of Trustees
  - High visibility site delivered on tight deadline with limited direction
What did we learn?

- Partnerships are essential
- Communication and collaboration are key
- People have different ideas of what “stewardship” means
  - Definitions are important
    - You need to define a “high value information content”
    - You need a definition for gold source
- Discovering gaps is part of the process
- It is good to have a “swing” or triage person on the team
- Developing a new service takes time
  - It will take longer than you think to develop a pipeline of work
  - Need to develop ways to deal with “feast or famine”
- Having advocates that support your work is essential
Questions

It’s the spirit of evolution and foresight that allows InfoServices to adapt to the changing needs of MITRE staff and fulfill our mission to serve our customers.