

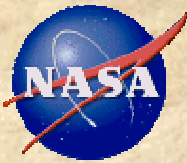
Understanding the NASA Taxonomy and Information Architecture: Creating Context for Content

Jeanne Holm, Chief Knowledge Architect, NASA/JPL

Jayne Dutra, Information Architect, JPL

Ron Daniel, Joseph Busch, Taxonomy Strategies

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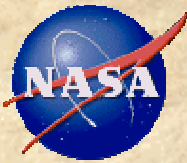


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Taxonomy Relating to Conversation

- ◆ Predefined organizational structure that covers a range of subjects, typically in a hierarchical arrangement, and may also show non-hierarchical relationships between subject areas
- ◆ Optimized information architecture that allows users to intuitively navigate to content or arrange search results
- ◆ Creating categories creates the structure in which people will have a conversation with, by, and about the organization
- ◆ How a taxonomy is structured and implemented will put change the way people view an organization and its value



Current NASA Taxonomy Facets

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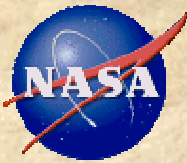
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Facets	Strategic Value	Source
Access Requirements	Sensitivity and access control	NODIS
Audiences	Who the content is intended for	Multiple: Including educational audiences
Business Purpose	Why the content was created	NASA Archive Filing System
Competencies	Relevant field or discipline	NASA CMS
Content Types	The genre of the content	Custom
Industries	External partners & businesses	NAICS Standard
Instruments	Flight payloads that yield science	PDS
Locations	Sites where work occurs	PDS/Custom
Missions/Projects	NASA's lines of business	NASA MDM/Polaris
Organizations	NASA organizations	Multiple
Subject Categories	The topic of the content	NASA STI Community



NASA Taxonomy Website and Resource

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Link to Metadata Specification

Link to XML DTDs and RDFs

Background and training materials

Links to Controlled Vocabularies

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

+ Visit NASA.gov
+ Contact the NASA Curator

- TAXONOMY TOP LEVEL FACETS + FAQs + NASA METADATA + NASA TAXONOMY XML + NASA XML PROJECT

NASA Taxonomy - Top Level Facets

- [Access Security Requirements](#)
- [Audiences](#)
- [Business Purpose](#)
- [Competencies](#)
- [Content Types](#)
- [Industries](#)
- [Instruments](#)
- [Locations](#)
- [Missions and Projects](#)
- [Organizations](#)
- [Subject Categories](#)

Tips on using the NASA Taxonomy

What is the NASA taxonomy?

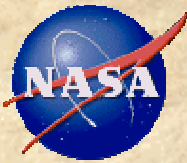
The NASA taxonomy is a controlled vocabulary that is designed to populate the [NASA metadata core specification](#).

It is also a means of tagging NASA content so that it can be used and reused in many different contexts.

FIRST GOV Your First Click to the U.S. Government + Freedom of Information Act + The President's Management Agenda + FY2002 Agency Performance Report

Contact the NASA Curator
NASA Official: Jayne Dutra
Last Updated: May 25, 2004

<http://nasataxonomy.jpl.nasa.gov>



Gold Sources –

Stitching Together NASA's Knowledge

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- ◆ Taxonomy Facets use existing NASA sources as much as possible
- ◆ Core Team Members suggested specific NASA-wide sources to be considered
- ◆ Centers will make their own extensions to the NASA Taxonomy
 - The ‘attachment points’ must be common to most Centers
 - Enables data mash ups for the future

NASA Taxonomy



Content Types

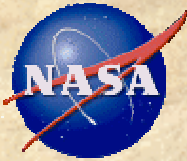
- Designs and Specifications
- Quality Control

-
- Problem Failure Report
 - Incident Surprise Anomaly
 - Corrective Action Notice



JPL Taxonomy

*Combined through RDF
for Seamless Integration*



Knowledge Management Environment

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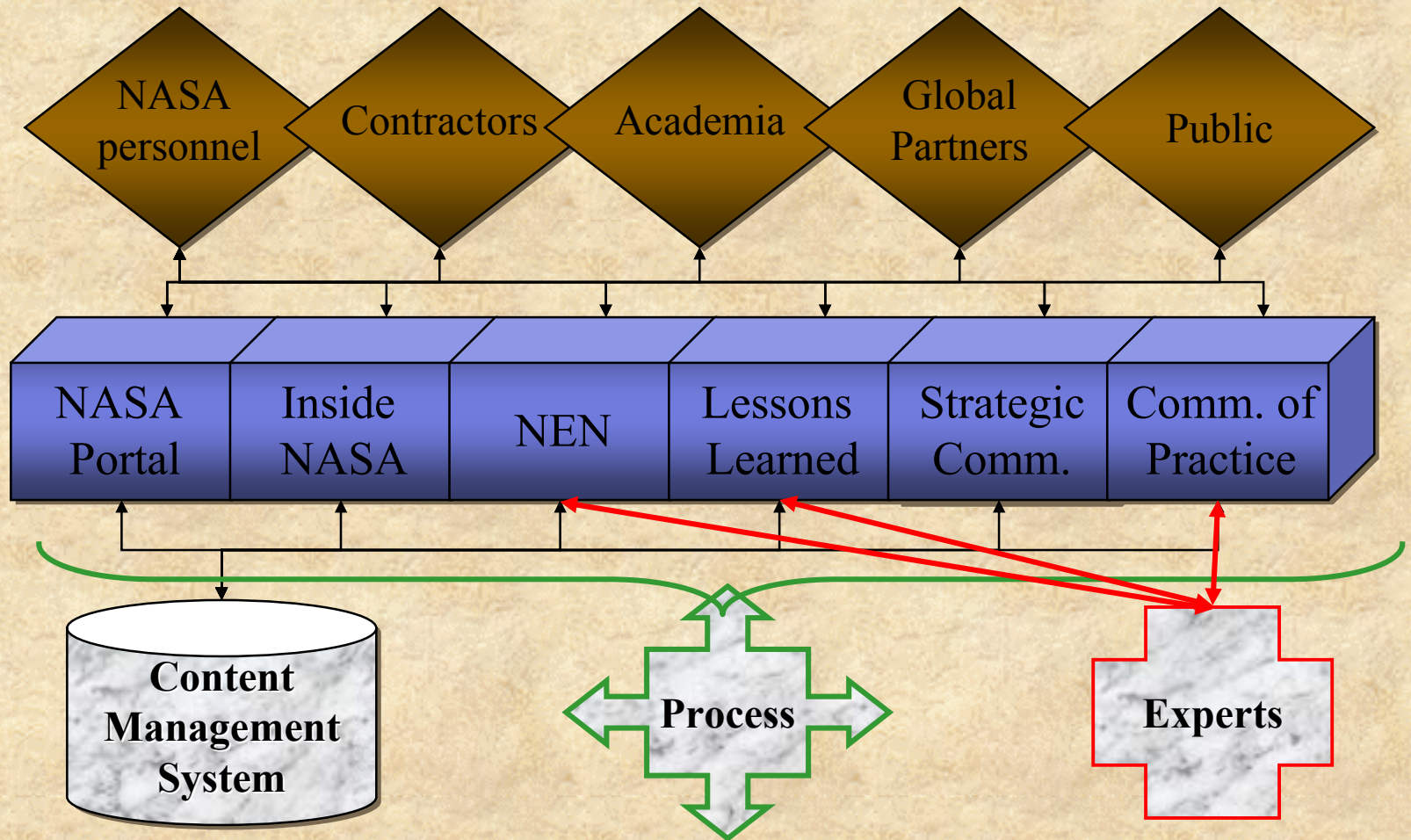
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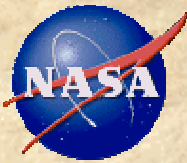


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- ◆ Integrating knowledge management into our engineering and project management lifecycle





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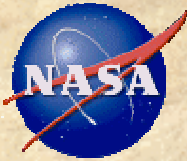


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Sample Use Cases

- ◆ Project Manager or PEM
 - “I want to hire someone at a different Center to be my team Cog E since the work is being done there. Who has the right skills and experience? Who has done this type of work before?”
- ◆ Cognizant Engineer:
 - “I’d like to see all problem failure reports on a subsystem I designed and flew 5 years ago so I can incorporate the lessons learned into my current mission.”
- ◆ Scientist:
 - “I’d like to see what types of data were returned on earlier missions using a particular instrument to help with the Science Definition Goals of my new project.”
- ◆ Taxonomy flows across communities to drive relevant information into the places/spaces people are already gathering
 - NASA Technical Fellows
 - Structures
 - Propulsion
 - Systems Engineering
 - Lessons Learned Community
 - Nondestructive Evaluation
 - Software Engineers



Inside NASA

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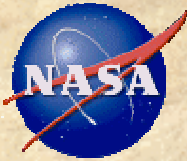


- ◆ For employees and partners
- ◆ Customizable
- ◆ Access to e-mail
- ◆ Secure instant messaging
- ◆ Collaborative tools
- ◆ Application integration
- ◆ Wikis and blogs (e.g. Shana Dale)

The screenshot shows the 'InsideNASA' website interface. At the top, there's a navigation bar with 'Home', 'About', 'Contact', 'NASA Engineering Network', 'Launch & Landing', 'Employee Issues', and 'Design'. Below this is a search bar and a 'Home' button. The main content area is divided into several sections:

- Home:** A large image with the text 'NASA Images of the Day'.
- NASA-Wide Announcements:** A list of recent announcements with dates and brief descriptions.
- NASA News from Public Affairs:** A list of news items with dates and brief descriptions.
- Messages From: SHANADALE:** A section for instant messaging, showing a message from 'Shana Dale'.
- Current Weather:** A section showing weather information for various locations, including a map of the United States.
- Local Forecast:** A section showing a local forecast for a specific city.
- Administrative & Career:** A section with a profile picture and text about administrative and career opportunities.
- Calendar:** A calendar for the month of July 2007.

At the bottom of the page, there's a footer with the NASA logo, 'National Aeronautics and Space Administration', contact information, and a version number '00000000 V 2.0'.



Communities for Collaboration

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Integration to document management

Saved searches and subscriptions

Key lessons are integrated into the community

Find information

Discussions and Q&A

The screenshot displays the NASA Engineering Network interface. At the top, it includes navigation links for NASA TV, NASA Employment, Customer Support, and Site Help. The main header features the NASA Engineering Network logo and a search bar. Below the header, there's a sidebar with navigation options like 'NEN Home', 'Lessons Learned', and 'Engineering Resources'. The main content area is titled 'Program/Project Management' and includes sections for 'Program/Project Management Announcements', 'FAQs on NPR 7120.5 (D)', and a table of forums. A 'Learn Project Management with NASA APPEL' section is also visible, along with a 'Design Suggestions & Recommendations' form and 'Industry Project Management Associations'.

Program/Project Management
Main Page | PPMB | 7120.5D

Program/Project Management Announcements

PM Challenge 2008 Call for Speakers Jun 8, 2007
Anyone interested in speaking at NASA's PM Challenge conference should submit abstracts and biographies by September 14. More information is at <http://pmchallenge.gsfc.nasa.gov>

FAQs on NPR 7120.5 (D)
Below is a list of discussion forums. Click on a forum to view related topics.

Forum (1-7 of 7)	Megs	Last Post
Decision Authority	4	3/6/2007 9:44 AM
Governing Documents	1	3/5/2007 2:01 PM
New Definitions in 7120.5 (D)	3	3/5/2007 1:44 PM
Schedules and Approvals	1	3/5/2007 1:42 PM
Project Reviews and Review Boards	2	3/5/2007 1:40 PM
Ask a New Question	1	2/6/2007 2:37 PM
Dollar Threshold for Projects	2	12/14/2006 6:15 PM

Learn Project Management with NASA APPEL

- APPEL website
- Case Studies
- 100 Lessons Learned for Project Managers
- News & Events
- ASK Magazine
- ASK QCE

NASA Project Management

- NPR 7120.5D, Requirements for Space Flight Programs and Projects
- NPR 7120.5C, Requirements for All Other Programs and Projects
- Latest Program and Project Management Lessons from Lessons Learned Database
- NASA Earned Value Management

Project/Program Management Community

Welcome to the Program/Project Management Community. I am the Leader of the Program & Project Management Community of Practice. I welcome your ideas and experiences. --

Michael Blythe
+ Read Biography
Contact: Michael P. Blythe
Co-Facilitators: Daria Topousis, Mansoureh Yew

POLARIS
Program/Project Online Library And Resource Information System
<https://polaris.nasa.gov/>
Program and Project Planning Checklists
Tools
Program & Project List

Design Suggestions & Recommendations
Let us know what you think! Click on the button below to make a suggestion.
Suggestion refers to...

 Make this anonymous

Industry Project Management Associations

- PM Boulevard
- Project Management Center
- Project Management Institute

NASA TV | NASA Employment | Customer Support | Site Help
NASA Engineering Network | NASA Domain | Lessons Learned | Employee Locator | Google
Search for [] Search
You are logged in as Jeanne Holm | Site Map | Logout | My Account | Site Colors | Administration

NEN Home | Lessons Learned | Engineering Resources | Engineering Search | My Saved Searches | My Subscriptions | Office of the Chief Engineer | APPEL | NESC | Program and Project Management | PPMB | 7120.5D | What's New | InsideNASA

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NEN V.2.0



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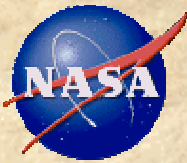
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NASA Public Portal

- ◆ Facets of the taxonomy are reflected in the NASA portal at www.nasa.gov
- ◆ These facets help to drive the audience usage, and how people look for information

The screenshot shows the NASA Public Portal homepage. At the top is the NASA logo and navigation tabs for HOME, NEWS, MISSIONS, MULTIMEDIA, and ABOUT NASA. Below the navigation is a search bar and a user login/sign-up section. The main content area features a large image of the MESSENGER spacecraft's view of Mercury, with a headline: "A pioneering NASA spacecraft becomes the first to visit Mercury in almost 33 years." Below this are two news snippets: "NASA Scientists Learn to Speak New Language" and "NASA Brings Cosmic Images to Fingertips of Blind Readers". To the right is a grid of icons for various NASA topics: SHUTTLE & STATION, MOON AND MARS, SOLAR SYSTEM, UNIVERSE, AERONAUTICS, EARTH, TECHNOLOGY, NASA IN YOUR LIFE, NASA PEOPLE, and NASA HISTORY. At the bottom, there are three sections: "Image of the Day Gallery" showing a close-up of Mercury, "NASA TV & Video" with a "NASA TELEVISION" logo, and "Popular Content" featuring a search bar and results for "space shuttle", "Jupiter", "nasa tv", "venus", "saturn", and "fss".



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Architecture Drives Conversation

- ◆ Caution: taxonomy choices can be a self-fulfilling prophecy
 - If you have matured the area of engineering in your taxonomy
 - People who publish information can select that facet = more content is tagged for it
 - People who are looking for information can both browse that facet and search results drive people to that content
 - Communities can gather rich content based on specific needs expressed within the taxonomy
 - If you do not have a mature taxonomy in an area that is of potential interest to your users (internal or external)
 - People who publish cannot link to this area, with less content published, less traffic yields less likelihood to publish
 - People looking for information can find through full content search, but not through browse or metadata search
 - Communities struggle harder to find information that is relevant to them