

# Knowledge Management

## *Navigators in a Sea of Data*



**Information International Associates' (Ila's)** business is knowledge management. We thoroughly understand how to effectively capture, organize, disseminate, and preserve the knowledge and content assets of an agency or organization to support optimized decision making and mission achievement. With over 20 years of experience, Ila leverages information science skills across the information lifecycle to provide the best value in high quality knowledge management services.

### **KM Solutions**

#### **Information Capture**

Ila helps customers identify and capture content such as journals, technical reports, datasets, videos, and images to develop repositories of agency or mission specific information and knowledge assets. Ila has developed and managed extensive selection profiles, advanced harvesting approaches to automatically capture web sites and document. Ila's experience digitizing analog materials and working with licensing and intellectual property issues provides a comprehensive information capture service

#### **Description and Metadata Creation**

Using domain-specific standards and best practices, Ila staff members develop and apply metadata schemes for data objects like documents to videos and web sites for inclusion in physical libraries and digital collections.

#### **Quality Assurance**

As a trusted party, Ila ensures the quality of content, repositories and information flows. As part of the quality assurance service, Ila develops metrics, collects data, and presents summarized results and recommendations to the customer.

#### **Workflow Design**

Ila recommends and designs efficient and effective workflows after working closely with clients and stakeholders to identify project objectives, requirements, and constraints. Process design, assessment and reengineering are supported across the information life cycle.

#### **Knowledge Organization**

Ila creates and maintains knowledge organization systems, ranging from simple keyword lists to complex taxonomies and thesauri. Ila also develops and applies controlled vocabularies for use in glossary, taxonomy, and other terminology services. The work spans a variety of scientific and non-scientific domains including energy, agriculture, environmental science, earth sciences and museology.

#### **Dissemination**

Ila designs portals, web sites, mobile apps, and information systems to deliver information to audiences such as researchers, decision makers, and the public. Ila has developed a variety of usability and feedback methods to provide customers with the data necessary to evaluate these systems.

#### **Technology Integration**

Ila helps clients integrate advanced technologies across the life cycle or in support of specific targeted solutions. Ila designs user interfaces and implements emerging technologies such as social media tools, semantic web, and crowdsourcing. Technologies integrated to-date include harvesting tools, automated classification/indexing, terminology management tools, databases, search engines, and visualization tools.

## Projects and Satisfied Customers

### U.S. Department of Commerce National Technical Information Service (NTIS)



Ila and the NTIS formed a public-private partnership to develop a searchable, digital Federal Science Repository Service (FSRS) to preserve collections of documents, images, videos, and data streams in support of agency mission activities.

The system is based on a customizable, open source architectural framework using an integration of Fedora, SOLR, and PHP to achieve a flexible, extendable, scalable, full-service repository with robust security and access controls. The framework was used to develop a repository for the National Oceanic and Atmospheric Administration (NOAA) Deep Water Horizon oil spill content, utilizing physical storage of metadata-rich content, as well links to outside resources that enhance the physical store. This information is served to the public to increase transparency of data related to this national disaster.

### U.S. Geological Survey (USGS)



Ila staff provides guidance for biodiversity data and information management policies and procedures for the USGS National Biological Information Infrastructure (NBII) and created the precursor to the current NBII cataloging tool to collect Dublin Core standard metadata of web assets available with information about the nation's biodiversity resources.

Ila designed and implemented the systems architecture for the non-geo-referenced data and participated as part of the team that designed the overall architecture of the geospatial information system for the Southeastern Information Node (SIN) for the NBII. Once the non-geo-referenced data systems architecture was designed and implemented, Ila developed and implemented a content migration plan for the system. We are currently implementing the migration plan we designed to move all content (geo-referenced and non-geo-referenced) from the current systems to one single system hosted by the Center of Bioinformatics in Denver.

### Institute of Museums and Library Services (IMLS)



For the IMLS MuseumsCount.gov project, Ila is developing a set of web portals for consumption, gathering, visualization and analysis of museum information with an interactive portal of information about all of the museums in the United States.

Museum professionals have access to a secure section of the portal where they may update museum information as well as several custom museum information visualization and analyses tools. IMLS staff will be able to use a secure access view of the portal for day to day analysis, visualization and trend calculation operations. Also, museum visitors will have access to information about all of the museums in the country and will have the option to download the mobile app or visit the mobile site for museumscount.gov. Both the portal and the mobile app will have crowdsourcing features allowing users to provide information about parking, public transportation and museum amenities.

### Tools & Methods

- Synaptica
- Semantic Media Wiki
- Multi-Thes
- Vivisimo
- Deep Web Technologies
- Lucene
- Solr
- Fedora
- DSpace
- Drupal
- Ila-developed methods
  - vocabulary comparison
  - harvesting
  - quality control

### Prime Contract Vehicles

- GSA Alliant Small Business
- GSA IT Schedule 70
- GSA MOBIS

For agency vehicles, visit [www.iiaweb.com/services/vehicles](http://www.iiaweb.com/services/vehicles).



### About Ila

Navigators in a Sea of Data

Ila facilitates knowledge and information transfer to maximize customer resources and support the mission. Our innovative applications of technologies unlock the value of information for an organization and deliver solutions that make a difference.

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