

Knowledge Base Publishing Services

2007-2008

The Montague Institute was named for the town of Montague Center, located near Amherst in western Massachusetts.

Right: Montague Center Town Hall



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" A big part of the value [we get from the Montague Institute] has been in taxonomy thinking. Roundtables were very helpful. I still look to the Institute to help me see things in new ways – not necessarily a new topic, but a new way of thinking about it. I think of the Institute as an idea-generating group. "

**Corporate Information
Manager, technology
think tank**

What is Knowledge Base Publishing?

Knowledge Base Publishing is a system of managing business information through relational databases (collectively called a *knowledge base*). The knowledge base structure makes it easy for users to design a personal or departmental information toolkit without high development costs. The toolkit includes features from print, Web, and database publishing formats, such as A - Z indexes with cross references, glossaries, hyperlinks and electronic forms, precision search functions, and private archives.

In a Knowledge Base Publishing system, *information* can include:

- articles and documents;
- business forms;
- notes and e-mail messages;
- images;
- annotations and book excerpts;
- information about people;
- transaction data (e.g. time sheets);
- organization schemes (taxonomies).

The knowledge base contains descriptive data (metadata) about the information. For fast retrieval, each knowledge base record is linked to the original document, form, or other information artifact, which can be stored anywhere – on the user's computer, on a network drive, in a database, or in an external service.

Increasing productivity

Knowledge Base Publishing systems are based on the assumption that the greatest productivity gains will come from integrating the best features of print, Web, and database formats. For example, the need for A - Z indexes, thesauri, bibliographies, and card catalogs does not disappear just because most business information now resides in electronic form; they need to be adapted for use with Web content. Moreover, the quality control processes of print publishing – e.g. editing, indexing, and peer review – must be adapted to electronic information to ensure that documents can be found by search engines, verified through links to sources, and re-used in other business contexts.

Knowledge Base Publishing is geared to individuals and work groups that want to work more efficiently, ensure the highest quality work product, and make an important contribution to their organization and profession. Knowledge Base Publishers:

- have the desire and skills to create their own information tools;
- create or adapt an organization scheme (taxonomy and thesaurus) that accurately describes their business environment and that references related concepts from other work groups;
- take responsibility for adding accurate metadata and links to source material in their publications;
- participate in the development of enterprise-wide standards and policies;
- use "open" technologies that make it possible to export and import, access data in other applications, and add custom functions.

" Jean Graef of the Montague Institute is a reliable source in the KM area and she does her homework. She also has a good communication style and success at getting others to participate in her briefings. "

Director, Knowledge Management & R&D Planning, pharmaceuticals firm

About the Montague Institute

Who we are

Jean Graef founded the Montague Institute in 1992 shortly after seeing a demonstration of the Internet. As a professional librarian with a background in automated systems, she immediately saw the Internet's potential as a global networking standard that would eliminate the costs and delays of proprietary systems. As a business person, she recognized the opportunity to provide new tools, techniques, and training for information professionals and their clients. The Institute is named for the town of Montague Center, Massachusetts, where its office is located.

Today, the Institute consists of Jean, her Montague-based staff, and an international network of IT and content professionals. Affiliates under the same management include the Society of Knowledge Base Publishers and Montague Information Technology LLC.

What we do

At the Montague Institute, we:

- conduct **research** on topics related to the integration of print, Web, and database publishing as well as trends in information services and new business models. Research results are published in the *Montague Institute Review*, a monthly Web journal, which includes a digest, compilation of Internet discussion group postings, and original articles;
- develop hands-on **educational programs** that allow participants to learn by doing;
- **evaluate** selected commercial software and **develop** new knowledge base publishing tools. Some of these programs are used internally to make the Institute's work more efficient. Others, such as the A - Z index and the teaching lab, are available to members;
- sponsor a **membership organization**, the Society of Knowledge Base Publishers;
- tailor the Montague Institute's **Knowledge Base Publishing system** to the needs of members through our technology affiliate, Montague Information Technology LLC.

Why we are unique

Our work reflects a unique approach that is:

- *Interdisciplinary* – We bridge the gaps between multiple publishing disciplines and technologies.
- *Vendor neutral* – We do not recommend or sell commercially available software.
- *Focused on practitioners* – Our members, most of whom are practitioners in large companies, drive our research and event agendas.
- *Includes all levels of information management* – We cover information management topics at the individual, team, department, and enterprise level.

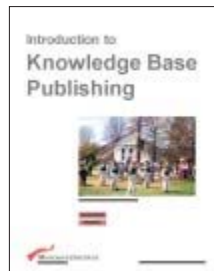
" This course was everything I'd hoped for, and then some. Excellent content, superb presentation; plus the access to the Society's knowledge base is a significant value added for me and for our company. "

Content/Taxonomy Specialist, computer software and services firm

Montague Institute courses

Courses in the Knowledge Base Publishing series are currently available in a variety of formats – Web-based, face-to-face, and on-site. Course participants can choose from a variety of follow-up options, including on-site executive briefings, development of a publishing “roadmap,” custom taxonomy development, and customized knowledge base publishing software (see page 8).

Individuals can register for one or more courses, but **we highly recommend a team approach**, with up to ten individuals who have good writing skills. The following is a list of the most popular topics.

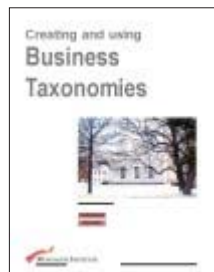


Introduction to Knowledge Base Publishing

The business case for Knowledge Base Publishing. Best practices for organization and staffing. How to create a basic knowledge base for a single business domain that includes a document repository, controlled vocabulary, and expertise locator.

Taxonomies, Sharepoint & Search

How to design a search architecture for Microsoft Office Sharepoint Services (MOSS 2007) that serves the needs of both enterprise and departmental search. How to use a metadata management system to customize Sharepoint search. How to identify and evaluate third-party applications that enhance search.



Creating and using business taxonomies

How to create an organization scheme (taxonomy) for a business application for a single domain. How to use the taxonomy to classify content and create Web site navigation systems.

Integrating taxonomies

How to bridge interdisciplinary gaps with mapped thesauri (cross references between two different vocabularies). How to standardize personal, organizational, and product names (authorities).



Information modeling and metadata management

How to develop an efficient knowledge base architecture. How to adapt, extend, and integrate existing technical, organizational, and topical information models. The pros and cons of various information modeling methods.

" I can always count on you to come up with a unique perspective. "

National Managing Director of Marketplace Systems, financial services firm

Roundtable discussion for Society members, hosted by KPMG in Boston, 1999.

Society of Knowledge Base Publishers



The Montague Institute sponsors the Society of Knowledge Base Publishers, a membership organization for information professionals engaged in managing intellectual assets in a business context. Members include people from librarianship, knowledge management, organization development, corporate learning, information technology, and business management.

Member benefits include:

- full text of the *Montague Institute Review*, a monthly Web journal;
- discounts on courses and roundtables;
- participation in Member Q&A, a personalized information and referral service.

Roundtables

Since 1998, the Society has held roundtable discussions on the following topics:

- Knowledge management in law firms
- Bridging the gap between folksonomies and taxonomies
- Multi-lingual taxonomies
- Sharepoint, taxonomies, and search
- Semantic Web applications
- Collaboration and innovation
- Usability testing
- How to improve search performance
- Capturing know-how
- Leveraging experts
- Role of the Knowledge Base editor

" It's very useful that you pull in practitioners. Instead of making 20 phone calls, we just look it up on the Montague Institute Web site. Thanks for always staying on top of burning issues."

Librarian/indexer, financial services firm

Montague Institute Review

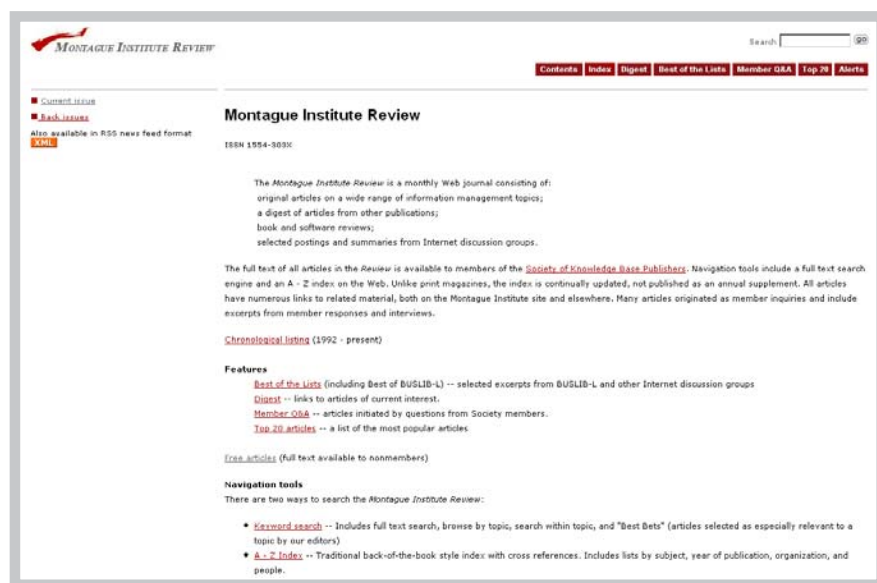
The *Montague Institute Review* is a monthly Web journal consisting of:

- original articles on a wide range of information management topics;
- a digest of articles from other publications;
- book and software reviews;
- selected postings and summaries from Internet discussion groups.

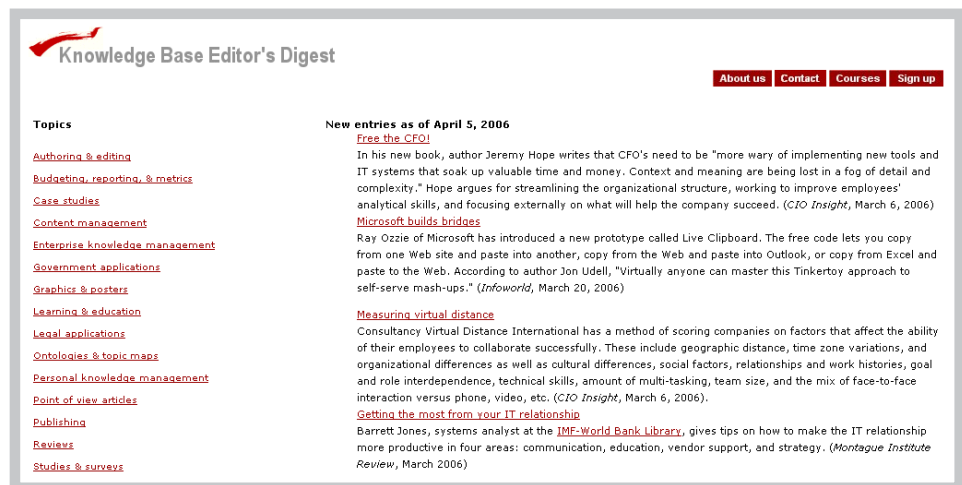
The full text of all articles from 1992 to the present is available to members of the Society of Knowledge Base Publishers. Navigation tools include a full text search engine and an A - Z index on the Web. Unlike print magazines, the index is continually updated, not published as an annual supplement. All articles have numerous links to related material, both on the Montague Institute site and elsewhere on the Web. Many articles originated as member inquiries and include excerpts from member responses and interviews.

Contributed articles are welcome, both from members and others.

Montague Institute Review title page.



Knowledge Base Editor's Digest shows abstracts and links from other trade and business publications. The Digest has its own A - Z index and includes cross references to articles in the *Montague Institute Review*.



" I trust Jean's ability to spot emerging trends in information/knowledge management. Here's another one that, should she be right again, has the long term potential to impact us from several vectors. "

*Architecture Practice Leader,
financial services firm*

Montague Information Technology LLC

Montague Information Technology LLC is the implementation affiliate of the Montague Institute. It creates custom versions of the Montague Institute teaching lab for organizations to run on their own internal networks. The implementation process is incremental and low risk and consists of four phases:

1. *Course work.* One or more information professionals take a Montague Institute course, in which they learn basic principles of information modeling, express the information needs of a real world application, and get input from their stakeholders.

2. *Custom lab on the Web.* In conjunction with a more advanced course, the knowledge base team works with a custom version of the lab on the Web with additional data elements and screen displays. The primary deliverable is a demonstration that can be used to get funding for more extensive knowledge base customization and installation on the organization's internal network.

3. *Funding proposal.* Using their knowledge of business processes and information models along with the Web-based demo, the team writes a description of the knowledge base they would like to create. This document can be used as the basis for a competitive bidding process or it can serve as the foundation of a contract with Montague Information Technology LLC for custom knowledge base development.

4. *Knowledge base development.* Using a rapid prototyping process that minimizes risk and reduces development time and cost, the team and Montague Information Technology LLC work together to implement the desired system.

Knowledge base vs. thesaurus manager

A knowledge base includes a thesaurus segment, but it also has something thesaurus management programs don't: links between terms and documents as well as links between documents and people. In other words, a knowledge base is more than a reference tool for catalogers and indexers; it's a complete system for storing, organizing, and retrieving information about content and experts.

Knowledge base services

Montague Information Technology LLC provides the following services as part of custom knowledge base development:

- integration with applications (e.g. with a content management system) and external information services;
- import wizards in for a variety of formats;
- custom XML exports, including SKOS (semantic Web) and OAI-complaint formats;
- metadata integration with search engines, such as export of synonyms and Best Bets;
- training materials for end users, knowledge base administrators, library catalogers, and indexers.

" The most valuable thing from my membership is the research that you conduct with other companies – being able to compare what we are doing and learn from them. I think the monthly e-mail alerts are one reason I find the forum so useful – I am enticed to the site and then once I get there I find all sorts of new useful things. "

**Knowledge Architect,
computer firm**

Knowledge Base Rapid Prototyping

Knowledge bases that combine the best features of print, Web, and database technologies can greatly increase an organization's productivity, but they can also be tricky to design and hard to explain to executives. As a result, productivity gains are late in coming or may never come at all. Members of the development team often approach the process from different perspectives and may use different terminology for similar concepts. Moreover, nailing down specifications is problematic because users can't easily visualize new ways of working. Finally, technology is changing so fast that by the time the system is implemented, it might be obsolete. In this environment, the traditional "waterfall" method of software development (requirements-design-implementation-testing) can lead to significant time and cost overruns as well as underutilization of the new system.

Rapid prototyping method

At the Montague Institute, we have been successful at developing knowledge bases incrementally using a rapid prototyping method. In this approach, we start with a vendor-neutral technology (e.g. a relational database management system) and a key business process (e.g. gathering competitive intelligence or offering customer support services). We then create a data structure that will accommodate electronic document storage, document classification using a thesaurus, search engine-compatible semantics, and links to author information. Finally, we create data flows to print and Web publishing systems.

Users have something to look at and try out in a matter of weeks instead of months. The system expands in small, manageable increments based on user feedback, new technology, and business requirements. Testing and verification occurs throughout the process. As a result, Knowledge Base projects get funded sooner and productivity gains are realized much earlier.

Getting management approval

In our case, rapid prototyping begins with one or more Montague Institute courses. The focus on a real world problem, the availability of the Web-based Lab, and individual assistance from an experienced knowledge base designer help teams create a compelling demo for senior managers. To make the demo even more realistic, an organization can contract for a custom Lab experience that incorporates some of its own metadata elements and graphics. The Web-based demo helps get all the stakeholders on board, lowers the risk of misunderstood requirements, and shortens the time required to draft development proposals.