

Case study

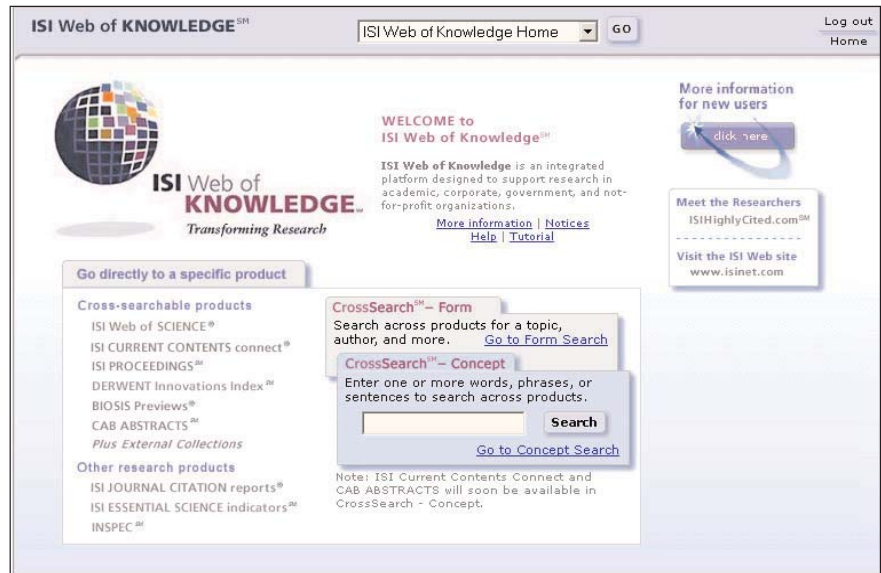
Thomson ISI



ISI Web of Knowledge launches CrossSearch and Current Contents eSearchSM

“We chose APR Smartlogik’s solution because it met our integration needs. As the content and functionality of ISI Web of Knowledge broadens, we can take advantage of APR Smartlogik’s advanced search and categorisation capabilities to meet the current and future needs of our customers.”

Frank Licata, Senior Vice President, Systems & Technology, ISI.



Business Benefits/ROI:

1. Highly relevant search results via a single search interface means more downloads and greater customer satisfaction.
2. Fast and precise search results from multiple sources.
3. A refined single index removes duplicate data through combining previously separate databases.

ISI Background

Founded in 1958, ISI traditionally catalogued academic journal titles manually via editorial selection to create a substantial scientific information database.

Using this database, ISI 'carved out' various products and product lines, and today, provides comprehensive, high quality Web-based information resources that enable its user base to gain access to historical scientific research and keep abreast of the most recent developments in their respective disciplines.

ISI Customers

ISI's seven million users span the globe, encompassing academic, corporate and government institutions. User groups include researchers, information specialists, graduate students and administrators.

ISI Web of Knowledge

Introduced in May 2001, the newly developed ISI Web of Knowledge extends and deepens research capabilities by integrating journal arti-

cles, patents, proceedings information, structural chemistry, life sciences literature, evaluated Web content (at both Web site and individual web document level), analytical and evaluation tools, and bibliographic management resources.

The single environment combines high quality, evaluated content with the specific tools needed to use, analyse, and manage that content..

Following recent technology upgrades, ISI decided to re-evaluate their technology requirements. APR Smartlogik's suite of knowledge management software technologies was chosen to become a key foundation for future growth.

With such a wide variety of users ISI has come to recognise the importance of providing relevant, high quality, and timely information. It was therefore essential that the new technology would adapt to fit all ISI products and services – a challenge which APR Smartlogik's suite of technology products was well suited to overcome.

"The ISI reputation for quality of product and service is one of our most important assets. A key factor in the choice of our suppliers is that their product must enhance the products and services we offer."

Frank Licata, Senior Vice President,

Systems & Technology, ISI.

Business Objectives

The incorporation of Smartlogik was aimed at addressing a need to:

1. Provide unified access to previously separate databases.
2. Provide an intuitive, fast, and accurate search engine.
3. Deliver sufficiently relevant search results.
4. Offer a solution that can scale to handle ISI's growing list of information resources.

Why APR Smartlogik?

1. The Smartlogik Decision Intelligence suite of products offers a comprehensive set of features that can easily be tailored to meet specific customer requirements.
2. APR Smartlogik's open architecture approach supports intuitive flexible product development and integration.
3. APR Smartlogik maintains a highly skilled consultancy team, adept at helping clients integrate Smartlogik



ISI Web of
SCIENCE®
Powered by ISI Web of KnowledgeSM



ISI PROCEEDINGS®
Powered by ISI Web of KnowledgeSM



DERWENT
Innovations
Index®
Powered by ISI Web of KnowledgeSM



BIOSIS
Previews®
Powered by ISI Web of KnowledgeSM

technology into their offerings and enterprises.

4. APR's Smartlogik support team and product upgrade facilities promote ongoing support and development for continued return on investment.

"We chose APR Smartlogik's Discover search engine because of its flexibility and APIs. The new system allows us to exploit natural language querying, probabilistic search techniques, linguistic inference, both structured and unstructured data indexing, dynamic categorisation and a thesaurus."

Frank Licata, Senior Vice President, Systems & Technology, ISI.

The Result

The first phase, released in September 2002, saw the addition of Smartlogik Discovery to the ISI Web of Knowledge core search technology, through ISI CrossSearchSM, resulting in:

1. Fast and precise search results from multiple sources.
2. A refined single index, which removes duplicate data by combining previously separate databases.
3. Highly relevant search results via a single search interface, which translates into greater customer satisfaction.

Within ISI Web of Knowledge version 1.0, ISI CrossSearch provides researchers with a single sophisticated interface from which to search ISI

resources in tandem or in separate user defined groups. ISI CrossSearch enabled:

1. Journal articles found in the ISI Web of Science[®].
2. Conference papers found in ISI Proceedings[®].
3. Patents found in Derwent Innovations Index[®].
4. Bioscientific information found in BIOSIS Previews.

Initially, ISI CrossSearch will serve as an entry point searching more than 3.5 terabytes of information, providing a new concept-based search box that employs a probabilistic search methodology to present relevance-ranked results.

With ISI CrossSearch, users can choose to search by specific fields (such as topic and author), or they can conduct natural language searches by entering words, phrases, sentences, or paragraphs.

Using the Boolean terms from a researcher's query, the engine works with a front-end query processor developed at ISI to perform simultaneous sub-queries over the index: a Boolean sub-query to define the results set and a probabilistic sub-query to add weighting and relevance to the terms.

By integrating this search feature behind the scenes, Smartlogik allows a researcher to discover valuable web resources as a natural extension of a typical journal article search through one interface – ensuring maximum performance levels in a wholly scalable product.

Additionally, just as ISI CrossSearch integrates ISI information resources and those of partner organisations, Current Contents eSearchSM removes the boundaries between structured content (such as scientific and academic journals) and the unstructured content of the Web, and PDF, PostScript, HTML and plain text files.

The service also employs probabilistic search technology to help users plumb the depths of what some call the invisible or deep web.

The Future

The ultimate goal of ISI Web of Knowledge is to provide total flexibility to incorporate proprietary, public, and commercial content and integrate with existing customer systems: the creation of a true research portal environment. In the next phases of development,

ISI CrossSearch will enable a suite of ISI Web of Knowledge products, extending its capabilities to content sources residing outside the ISI Web of Knowledge environment, such as Agricola and PubMed.

"ISI Web of Knowledge will provide researchers worldwide with unparalleled access to scientific research and discovery, and is the paradigm of what can be achieved when high quality content and the most progressive technologies are merged."

Frank Licata, Senior Vice President, Systems & Technology, ISI.