

# TURNING INFORMATION INTO KNOWLEDGE INFOCODEX-YOUR INNOVATION ENGINE

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# KNOWLEDGE MANAGEMENT – A CRITICAL BUSINESS FUNCTION

# Know what you know

Increasingly, we live in a "knowledge-based" economy where information and its retrieval has become a key component of modern enterprises – and managing the knowledge an essential factor for commercial success.

Efficient management of what your company knows can yield significant benefits. For example, by avoiding costly duplication of work already performed in the past ("re-inventing the wheel") you can make use of your resources more efficiently, respond more quickly to customer inquiries and needs, and make informed and better decisions. This saves substantial amounts of time and money.

# You and your customers need your knowledge

Extensive investigations have revealed that about 85% of electronically stored corporate information exists only in loose documents. Most corporate IT systems, however, focus only on the 15% of structured data (such as databases) rather than on the vast majority of your information assets which are mainly just edited and stored.

More efficient use and management of these knowledge assets is a priority for almost all of the world's leading businesses – but the goal is seldom met. Implementing an effective knowledge management solution is often harder than expected, and too much knowledge remains unused.

# More than just a mere search engine

Internet and enterprise search engines can play a part in managing information assets. They can locate documents that contain specific search terms in an endless landscape of information sources – but they cannot recognize the thematic content of the available information. Therefore, a thematic overview of relevant information or a systematic exploitation and transfer of knowledge is not possible.

# What's it all about

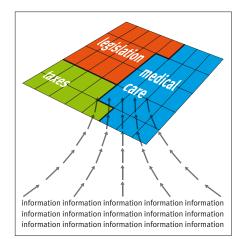
The central issues of efficient knowledge management are:

- Gaining an overview and insight over a mass of information
- Assessing, categorizing and extracting facts supported by effective visualization tools
- Retrieving, re-using, and transferring existing knowledge

This is far beyond what a mere search engine or document-sharing system can offer.

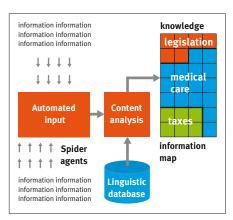
# Turning information into knowledge

The growing mass of information on computer networks and in e-mail archives does not automatically lead to broader knowledge or better decisions. In view of the overabundance of information, putting things into context becomes a crucial success factor. This makes efficient knowledge management more than a "nice-to-have." Especially with today's increased personnel mobility – what to do when key employees are absent, or leave the company – securing access to one's knowledge assets can be mission-critical for an enterprise.

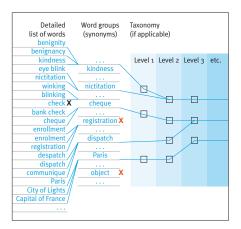


Gaining the overview





The knowledge management engine: Information gathering, content recognition and automatic classification of documents



Central knowledge repository: linguistic database linked to a universal taxonomy (ontology)

# Turning your information into knowledge

InfoCodex is a market-proven software instrument for knowledge and document management. It gathers documents from different platforms and analyzes and recognizes their thematic content – even across several different languages (recognizing, for example, that an English translation of a French, German, Italian or Spanish document has the same content and contains the same information as the original document).

InfoCodex groups the available documents according to their content into an information map, like well-organized bookshelves, without any user intervention. No human effort is needed for categorizing the information, and the resulting structured knowledge gives you a reliable and solid overview – and a basis for sound decisions.

# Making hidden knowledge visible

One is often not aware of all the information that is potentially available. Full-text search engines can only make information visible when corresponding search terms are known. But if one is not aware of the information, one doesn't know the wording, and the information remains concealed. InfoCodex's information map and content clustering, however, make even previously concealed knowledge visible to the user.

# Unique technology combination

Key features of InfoCodex's advanced (and patented) technologies include:

- Cross-language content recognition and analysis based on a linguistic database containing more than 3 million classified words/phrases linked to a universal taxonomy (ontology)
- Combining and harmonizing knowledge repositories from established works such as the WordNet of the Princeton University, EuroVoc, AgriVoc, JuriVoc, the International Classification for Standards (ICS), financial taxonomies and many other sources
- Self-organizing neural networks for categorizing documents and for building a well-founded similarity measure (content-based comparison of documents; reliable ranking of documents in the search and retrieval process)
- Automatic generation of abstracts (facilitating the recognition of information)
- Automatic keyword generation

# An award-winning Knowledge Management tool

The experts are convinced too. At the i-expo 2006 in Paris, InfoCodex won the award for "the best and most innovative economic intelligence tool."

The jury noted that InfoCodex "provides a conceptual content analysis for each phase of the information gathering process, and the content recognition and knowledge extraction engine can be applied to restricted parts of an information collection, or to the entire collection – across several languages and with an innovative categorization system."

This helps you turn information into knowledge.



# **TURNING INFORMATION...**

# **Getting started with InfoCodex**

Assume you are planning future R&D activities and need an overview of specific topics. You select the appropriate information sources from documents and e-mail archives spread across your company's network, and include the results of Internet searches. InfoCodex's spider agents then gather this information and feed it into the knowledge management engine, which performs the content recognition, categorization, abstract generation, keyword extraction, and indexing for subsequent knowledge management functions.

# Simple and powerful search functions

Enter your query in a simple search field and decide how you want to search:

- Exact search → the classical full-text search as used by Google, Yahoo, etc.; offers wild-cards and proximity search as special features.
- Synonym search → a true cross-language and semantic search. The query "bicycle" will also find "bike", "push-bike", "bicyclette", "Fahrrad", "Velo", "velocipede", "Drahtesel," etc. A very important feature when searching for documents written by other people.
- Similarity search → finds similar documents by comparing the content of a query text in natural language (e.g. an incoming e-mail) to the content of the existing documents; no literal conformity to the search terms is needed.

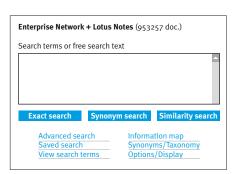
## Viewing the results

In addition to conventional search result lists, InfoCodex also offers heat maps or clustered result lists. For example, for the search term "tiger" you get clusters for the animal world and other clusters with sport clubs. These advanced result-viewing features accelerate the finding of relevant information, particularly when queries return large numbers of results. Advanced analysis features include conceptual filters, extraction of new facts, and comparison of newly added documents.

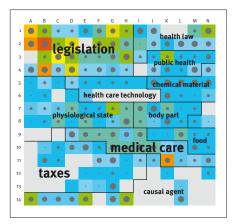
# Security and privacy

InfoCodex provides flexible and global security management. It includes and respects "File System Security" that adheres to file system access rights, while user administration can be embedded into the general administration of the underlying network using an LDAP standard interface.

High data security and privacy is achieved by creating protected sub-domains for individual users/user groups who own the full sovereign rights.



Enter your query, and then decide how you want to search

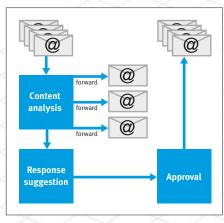


Heat map representation for targeted knowledge retrieval



# e-mails www file servers

Combining information from selectable sources and creating well-organized bookshelves



The process of automatic document categorization / response management

# You decide what to manage

InfoCodex is currently in use by a wide range of companies, universities, and governmental organizations. Some of the applications include:

# Information research (market observation, competition monitoring)

An engineering company is interested in tenders for bridge constructions. With a scheduled InfoCodex job, the related information is gathered overnight from the Internet and from specialist databases, providing an up-to-date overview of the current market opportunities. This saves time and costs and provides solid market information for effective – and timely – decisions.

# ■ Enterprise search engine / Knowledge resource management

Knowledge retrieval can be cumbersome, even if documents are stored in a document management system (DMS). This is because fields of interest change in the course of time and today's DMS structures do not necessarily fulfill tomorrow's needs. InfoCodex automatically creates a virtual order based on the current document status and the current needs. No manual input is required to organize the archives or to generate keywords. This results in accelerated location of documents and full access to the company-wide knowledge base.

# ■ Process automation / Response management

Providing an effective response management platform, InfoCodex analyzes and categorizes incoming customer requests (e-mails, scanned letters) according to their content and assigns them to similar standard or previous cases. A suitable response is generated automatically for approval by the operator. This reduces the human effort needed to deal with a response – enabling faster replies and improved quality.

# What InfoCodex does for you

The unique benefits for customers using InfoCodex include:

■ Immediate use	No reorganization of existing file archives necessary; no cumbersome training for documentation classification needed
■ Synonym recognition	Important when searching for documents written by others (using different terms for the same thing); true cross-language retrieval
■ Similarity search	Key technique for finding existing knowledge (work already done in the past or elsewhere); truly cross-lingual; crucial function in patent research and economic intelligence
<ul><li>Auto-classification</li></ul>	Self-organizing provision of thematic overviews and content clusterings; automatic classification of documents and abstract generation



# INFOCODEX – HELPING YOU GET TO KNOWLEDGE MANAGEMENT

InfoCodex SA, a provider of knowledge management solutions, is a subsidiary of MSI Dr. Wälti AG. For over 25 years, MSI has provided qualified IT solutions for data analysis as well as information and knowledge management to customers in banking, insurance, public administration, high-tech industries, and various research organizations.

The installation of the InfoCodex software and its linguistic database requires no changes to existing IT environments. The quality of the software is market-proven. InfoCodex was selected by a Swiss governmental organization after an extensive evaluation of various knowledge management tools.

The software runs on Windows, Linux, and Unix platforms.

InfoCodex is sold and supported by MSI and the network of partners of InfoCodex SA in France. Germany, Italy, Austria, and Switzerland.

### **Get in Touch**

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