



## **Enterprise Search - Actionable Information**

Efficiency & productivity through effective information location

Get started from just £6,000

June 2009



# Enterprise Search - Actionable Information

## Efficiency and productivity - effective information location

---

Find it. Act on it. Finding the information you need intuitively and fast, using natural language search capabilities and advanced analytics for document content, text and data.

Maximise daily performance by reducing the time taken by each individual to locate and access the information they require from across your systems.

Search for, navigate, access, analyse, understand, use and communicate information, quickly, efficiently, securely and effectively regardless of where it is located.

Enterprise search and information access software enables staff to compile all the pertinent information they need. It also provides the opportunity for greater insight and innovation from the organisation's existing information.

---

Estimates vary but analyst research indicates that a typical knowledge worker spends 1.5 hours to 3 hours (or about 15% to 35%) of their time at work, just searching for information.

The variety of formats in which information is stored exacerbates the situation - it is commonly accepted, and confirmed by industry analysts, that somewhere between 60% and 80% of corporate information is not in a 'structured data' format but is in 'unstructured' formats such as documents, presentations, 'free text', e-mail...

With enterprise search you enable rapid analysis of what is likely to be truly critical information. Ranking, categorisation and navigation capabilities enable users to rapidly collect the pertinent and relevant information types and specific items they require to perform their jobs efficiently, effectively and intuitively.

Search on document content not just titles and file names. Go beyond keyword search and beyond 'Google' search to gain search results and insight from the *meaning* of words in context.

Don't let valuable information and knowledge lie dormant – let your employees locate it quickly and intuitively with federated (cross-system) search capability. Maximise the benefit available from the resources you have today.

Enhance your ability to locate the pertinent information by adding contextual analysis and personalisation.

Stop wasting time searching and spend more time performing. Use 'meaning based' analysis to aid in the location of the best and most beneficial information from across your organisation's entire information domain.

If you could reduce the amount of time wasted searching for information by each

knowledge worker by 30 minutes each day you would save in the region of 110 hours/person/year - or over 2 working weeks a year. That's around a 5% efficiency improvement throughout the organisation!

Add to that the improvement in decision making based on faster, more pertinent information and greater insight, and the performance improvement potential is substantial.

The quality of the decisions employees are making is challenged by the process by which they find the supporting information they require. Tough deadlines and harsh business environments bring time pressures that result in decisions being made without all the appropriate information being available in time, or with the most pertinent information never being referenced at all. Sub-optimal decisions impact the performance of the individual(s) and the organisation as a whole.

More effective information access supports more effective decision making and increases the speed with which the organisation can perform in the optimum manner.

Get the best from your people and your information. Enhance productivity and efficiency. Increase the potential for insight and innovation. Increase employee satisfaction and performance. Enable optimum decision making in support of individual objectives and the goals of the organization.

As the amount of information grows employees are spending more and more time just locating, assessing and analysing the information they need to do their job and the challenge is getting worse. This is valuable time, and therefore money, being wasted. This issue is exacerbated by the increasing number of systems and information sources

being implemented. If your organisation has grown through acquisition (or has been acquired/merged) then this situation is likely to be especially challenging.

The current environment with lots of separate systems and data/information repositories can be highly inefficient, requiring a lot of experience to get the most from it. New starters take a long time to get to grips with all the resources available to them. Users have to log on to multiple systems and run multiple searches to consolidate all the information which may be useful and then spend time assessing it to filter out what is truly pertinent to their need.

Diegesis can support you to provide an intuitive search capability across all your enterprise information, structured and unstructured, to support greater performance from your employees and from your enterprise information.

Benefits of effective enterprise search include:

- Higher efficiency
- Greater productivity
- Reduced costs
- Increased job satisfaction
- Greater opportunity for innovation
- Greater performance
- Improved decisions through greater insight
- Improved team work

With an effective enterprise search capability individuals and teams can rapidly locate, access, analyze, understand and utilize pertinent information to support the decision making process, regardless of where it resides.

To add even greater value, your ability to run effective internal audits and demonstrate compliance is enhanced, thus improving the posture of the organisation as a whole.

## Get started:

We can help you implement a test environment where you can get to grips with using enterprise search and establish how it will benefit individual users, departments, divisions and the entire organisation.

With a rapid test environment you can run a basic test scenario, supported by Diegesis, within a matter of days or take a phased approach to a full live implementation.

At the 'basic' level enterprise search provides a single, secure search window across all appropriate repositories, allowing a single search request to return a consolidated results list from all approved systems. This can include traditional structured data sources such as databases, ERP, SCM, CRM and finance systems as well as 'unstructured data sources' such as file systems, free text, e-mail, documents, presentations, intranet, web...

This enhances accessibility but the real power comes from the information filtering process which ensures that the results hit-lists are relevant, pertinent and of value.

Enabling the federated search process to return pertinent information based on the context of the query extracts real value from the organisation's information. Whether using comparatively 'simple' capabilities such as dictionaries of terms and associations, the use of master data management tools and semantic analysis (to account for misspellings and variations) or more advanced linguistic analysis (e.g. lemmatisation, normalisation, disambiguation, concept/entity extraction and meaning based analysis). In some circumstances such as for support query routing and market perception analysis the 'intent' or 'sentiment' of an item of information can be assessed.

For international and global organisations the ability to extract meaning from multiple languages whilst including the above capabilities adds to the ability of individuals to gain maximum benefit and re-use of the organisation's vast store of information.

Diegesis provide skills, experience and products to support you in assessing and addressing your enterprise search needs. We provide powerful, scalable, flexible, secure and robust software to enable your employees to work more effectively.

Users are able to search a wide variety of content, information and data in their own terms. Contextual understanding and powerful search technology enables rapid delivery of pertinent results and the ability to refine the results down to the precise information required. Visibility of related items and similar items supports further investigation, exploration, understanding and discovery.

Advanced search technologies and information access software linked to 'meaning based' search capability enables people to locate what they need when they need it whilst supporting the ability to investigate, analyze, explore and understand topics of interest.

The power of this capability can also be used to enable people to discover information, data and content that they were unaware of previously or could not find, and thus enhances the potential for optimum decision making and the probability of greater innovation.

“Where is the wisdom we have lost in knowledge? Where is the knowledge we have lost in information?”

Elliot, T. S. (1934). The Rock. Faber & Faber.

## Quick start options:

### Option 1

Shows how federated search can work for you. Installing basic federated search capability and enabling you to test queries and see the results for yourself. Running on file servers and internet/intranet this scenario really is a 'quick dip' into the realms of enterprise search. Quick, low cost and often highly revealing with regards to the potential power of the information you already have.

Enables web and file system crawling and search features such as synonym search, 'featured links' and customizable ranking.

(Option includes searches across up to 40,000 documents. Includes software license for subsequent use for up to ½ million documents)

#### Option 1 just £6k

(includes software license(s) and up to 8 days services)

### Option 2

90 day (elapsed) trial run on our systems. Enhancements over Option 1 include greater power and capability by providing more advanced search techniques and wider connectivity - enabling access, search and navigation across structured and unstructured information sources and repositories (e.g. databases, file systems, ECM and document management systems, intranet/web, e-mail and collaboration environments such as Lotus Notes, Microsoft SharePoint, Microsoft Exchange... and/or other key repositories).

Enables Single Sign-on, LDAP integration, and other security options.

All the capabilities of 'Option 1' are included, plus additional search capabilities including, search of custom meta data, sorting by field, results grouping and collapsing, scopes/categorisation, portlet options, parametric search, XML mapping and XML search, semantic search.

#### Option 2 just £35k

(includes up to 25 days services)

### Option 3a

As Option 2 but running on your site and infrastructure, and including licenses for production use.

2 CPUs maximum

#### Option 3a from £85k

Price dependent on processing power and types and number of repositories. Price guide is an example for a department or small company environment (software licenses provided can be upgraded). Limited number of source connections included. Additional source/system connections available.

### Option 3b

As Option 3a but for company-wide and larger enterprise environment including greater processing power and an increased number of source/repository connections. Global Enterprises with complex technical environments and numerous languages/dialects in use should contact us for further details and price guidance.

(50 million+ documents)

#### Option 3b from £ (contact us)

Price dependent on processing power and types and number of repositories. Additional source/system connections available.

NB: If you would like to implement Option 3b and test the incremental advanced functionality of option 4 for a period of 90 days then please contact us for a quote.

### Option 4

As Option 3b with the enterprise search configured for each area of the business so that search results are pertinent to the user's job role and objectives. All the power of enterprise search, linguistic analysis, results ranking, categorisation and more delivered in a manner which puts the user at the centre of their responsibilities and the information to support success. Enables the ability to locate associated content, and access 'similar' content to the initial result(s).

This is also where the power of '**meaning based**' search is available so that search results have *context* and *pertinence*.

This option enables greater productivity for users and greater granularity of results filtering based on the context of the user and the query.

Multilingual capabilities are enabled and linguistic analysis provides outstanding hit list results based on the meaning and context of the search (e.g. knowing whether 'June' is intended as a person's name or a month of the year. Knowing if 'vessel' is a container or a ship, if 'Washington' is a place or a person...)

(50 million+ documents)

#### Option 4 from £ (contact us)

Price dependent on processing power, number of languages, types and number of repositories and number of documents.

## Option 5

As Option 4 with the addition of 'relationship analysis' and 'insight extraction' from unstructured information and documents. Correlation analysis, trend analysis, pattern analysis and delta analysis.

The software automatically recognises 'things' (items, products, people, telephone numbers, product codes, addresses etc.) mentioned in text, recognises the actions mentioned, recognises the relationships mentioned (between two or more 'items'), to provide deeper levels of insight and understanding to free text fields, e-mails, electronic forms, documents, intranet, web sites and other unstructured and semi-structured information.

Find a 'person' in a 'location' related to a particular 'topic' or 'item'. For example find a 'document' which contains a 'person' associated to 'pipeline construction in South Africa'. Find all instances of 'failures of [xyz] widget in North America' e.g. from warranty or service documents/logs or user groups web sites.

Gain insight into information correlations and relationships to help locate early signs of fraud; to spot similarities between crimes; identify potential harassment cases or anti-competitive practices, or other breaches of policy, before they impact the organisation.

'Know your customer' through effective address analysis and linking of addresses to people and their financial activity or insurance claims records. Understand correlations between entities e.g. customers, organisations, products, components (especially valuable across multiple systems after an acquisition).

Option 5 from £ (Get in touch to discuss your requirements and for an accurate quote to meet your needs).

Price dependent on processing power, number of languages, types and number of repositories and number of documents.

## Option 6

As Option 5 and adds automated document classification and sentiment analysis.

Automated classification of vast volumes of documents and records to enhance search and locate capabilities and to assist in the application of policies (such as retention, access and disposition), whether company specific or legal/compliance.

Assists in classifying documents across the enterprise. Can learn from sample documents and continues to learn over time to constantly enhance accuracy and reduce employee workload.

In addition, enables analysis of sentiment within documents and text e.g. to assess marketing results or gain market feedback – is the sentiment positive or negative?

Optional keyword frequency analysis and results mining linked to sentiment and meaning analysis. E.g. in all the queries we get to our web site how many are positive and how many are negative? How many relate to each of our key offerings. Is there one particular product, offering, person or topic which generates a disproportionate number of issues/complaints?

Option 6 from £POA get in touch to discuss your requirements.



Function/Capability	Option 1	Option 2	Option 3a	Option 3b	Option 4	Option 5	Option 6 <sup>i</sup>
Price	£5-10k	£35k+	£85k+	Contact us	Contact us	Contact us	Contact us
Implemented at our location/server		x					
Implemented at your location/on your infrastructure	x		x	x	x	x	x
License entitlement included	x		x	x	x	x	x
License upgrade/extension available	x	x	x	x	x	x	x
Scalability	Up to 40k documents (license up to ½ million docs)	(Call to discuss your requirements)	2 CPUs maximum.	50+ million documents	50+ million documents	50+ million documents	(See footnote)
<b>System access</b>							
▪ File system search	x	x	x	x	x	x	x
▪ Web/HTML search	x	x	x	x	x	x	x
▪ Database search		x	x	x	x	x	x
▪ Unstructured information search e.g. document management, e-mail		x	x	x	x	x	x
<b>Security</b>							
▪ Single sign-on		x	x	x	x	x	x
▪ LDAP Integration		x	x	x	x	x	x
▪ Custom security interfaces		x	x	x	x	x	x
▪ Group-based security		x	x	x	x	x	x
▪ Detailed document & user level security		x	x	x	x	x	x
Multiple indexes		x	x	x	x	x	x
<b>Standard search features</b>							
▪ Synonyms	x	x	x	x	x	x	x
▪ Featured links	x	x	x	x	x	x	x
▪ Customizable ranking	x	x	x	x	x	x	x
▪ Customizable search interface	x	x	x	x	x	x	x
▪ Search custom meta data		x	x	x	x	x	x
▪ Dynamic faceted navigation		x	x	x	x	x	x
▪ Sorting by field		x	x	x	x	x	x
▪ Results grouping/collapsing		x	x	x	x	x	x
▪ Scopes, categorization		x	x	x	x	x	x
▪ Parametric Search		x	x	x	x	x	x
▪ XML mapping and XML search		x	x	x	x	x	x
▪ Semantic search		x	x	x	x	x	x
<b>APIs</b>							
▪ Search API	x	x	x	x	x	x	x
▪ Document push API	x	x	x	x	x	x	x
▪ Extensible architecture for open source/standards integration for additional analytics capabilities for unstructured information		x	x	x	x	x	x
Linguistic analysis for English and Western European languages	x	x	x	x	x	x	x
Linguistic analysis for 20+ languages	x	x	x	x	x	x	x
200+ file formats supported	x	x	x	x	x	x	x
Optional advanced linguistic analysis and support for additional languages including Indo-European languages, Chinese, Japanese, Arabic					x	x	x

and Korean							
Standard software support available	x	x	x	x	x	x	x
<b>Function/Capability</b> (continued)	Option 1	Option 2	Option 3a	Option 3b	Option 4	Option 5	Option 6 <sup>i</sup>
System support available	x	x	x	x	x	x	x
Advanced analytics							
▪ Entity extraction					(x)	x	x
▪ Action recognition					(x)	x	x
▪ Relationship analysis					(x)	x	x
Advanced capabilities							
▪ Automated classification							x
▪ Sentiment analysis							x
▪ Keyword frequency analysis							x
▪ Advanced results mining							x
Search Features – specialised							
▪ Product feature browsing							x
▪ Contextual understanding					(x)	x	x
▪ Merchandising business rules							x
▪ Advanced search usage reports							x

(x) = licensed but not implemented within the scope of the option described

<sup>i</sup> Option 6 - not all capabilities are enabled on all source/information types.

## Next steps

Either choose which option you would like to start with from the above options and contact us with details of what you wish to achieve (and some basic metrics regarding system coverage and information stores to include) **or** get in touch for more information and an initial discussion.

We can then assist you in defining the required outcomes and benefits to be obtained, the domain for initial assessment (this may be a company within a group, a division within a company or even a department such as legal, marketing, business analysts, design, engineering, sales, finance, operations, HR, R&D, audit & compliance... OR a particular data set/system such as intranet, internet, file system, document management system, e-mail...) and agree project protocols and pricing.

Get in touch on +44 (0) 208286 7587 or e-mail [sales@diegesis.co.uk](mailto:sales@diegesis.co.uk) to get started and increase the value of your information.

## About Diegesis

**Diegesis** provide consultancy, IT services, systems-integration and software to deliver 'business performance improvements'. Key areas of expertise include: enterprise search & knowledge discovery solutions, systems integration, and business insight/intelligence solutions.

**Diegesis** can work with you on strategic objectives such as the 'Business Performance Framework' and 'information architecture' required to enable flexible and dynamic business improvements today and for the

future, or provide you with niche solutions to specific challenges.

The **Diegesis** team has significant experience in 'business technology' and information technology; from needs analysis to cost/benefit analysis; from solution framework architectures to solution design; from software development to software package implementation; from systems integration to user training and support. We have particular experience in information management (including data and document/content management), data & document archiving, enterprise search & knowledge management, portals, systems integration, and risk management systems. We prefer to deliver within an overall service oriented architecture, however we can deliver niche solutions if required.

**Diegesis** takes a phased approach to projects of significant customer value so that you are able to assess performance and value-for-money along the way. **Diegesis** focus on the business objectives and balance this with your Return on Investment (RoI), Cost/benefit and Total Cost of Ownership (TCO) requirements as well as your overall appetite for risk.

We deliver solutions which have practical applications to your business needs. We provide up front consulting where appropriate as a basis for ensuring everyone is clear of the business objectives and critical success factors. Consulting is always focused on the end objective of delivering a practical solution to a business issue.

For more information contact Nick or David at [sales@diegesis.co.uk](mailto:sales@diegesis.co.uk)

Tel: +44 (0) 208 286 7587

## Technical Information

### Supported Platforms:

- IBM AIX 5L™ Version 5.2, 5.3 (64-bit support)
- Linux
  - Red Hat Enterprise Linux AS 5
  - SUSE Linux Enterprise Server Version 10
- Microsoft Windows 2003 R2
- Solaris 9 (64-bit SPARC support)

### Integrations and connectors:

Enterprise search offers a rich library of pre-built integrations to various enterprise data and content sources to help you unify vast amounts of diverse and widely-dispersed information into a searchable index.

These ready-to-deploy integrations help reduce time-to-value and the total cost of implementing an enterprise search solution.

Pre-built connectors are available for the following data sources:

- DB2® Universal Database for Linux®, UNIX®, Windows, z/OS, iSeries
- EMC/Documentum
- FileNet® Content Services. FileNET Content Manager
- Hummingbird DM
- IBM Content Manager for Multiplatforms. IBM Document Manager V8.3 (Via CM connector).
- Informix® Dynamic Server Version 9
- Lotus® Domino® Document Manager (including V8.0). Lotus Notes®/Domino Server (including V8.0). Lotus Domino QuickPlace® and Lotus Quickr™ (Domino and J2EE)
- Microsoft® Exchange Server 2000, 2003
- Microsoft SQL Server 2000

- Newsgroup (NNTP)
- OpenText Livelink Enterprise Server
- Oracle 9i, 10g
- Sybase 11.9.2, 12.0, 12.5
- UNIX file systems
- Windows file systems
- Web (HTTP or HTTPS)
- WebSphere® Portal Web pages
- WebSphere Portal Document Manager
- Windows SharePoint® Services, Service Pack 2, for Windows 2003
- Workplace™ Web Content Management
- JDBC databases accessible through the JDBC crawler (IBM DB2 Universal Database V8.2, Oracle 9i, Oracle 10g, Microsoft SQL Server 2000, and Microsoft SQL Server 2005 databases through Type 4 JDBC drivers)
- (Mainframe sources accessible through separate purchase, Federation for z/OS (VSAM, IMS™, CADatacom, Software AG Adabas))

© Copyright Diegesis Limited 2009

Produced in the United Kingdom

May 2009

All rights reserved

Price guides are quoted excluding VAT and are in pounds sterling.

All prices and specifications are believed to be accurate at the time of writing. Diegesis reserves the right to change prices, specifications and other details at the sole discretion of Diegesis Limited.

Company, product, or service names may be trademarks or service marks of others.

The information contained in this publication is provided for informational purposes only. It is provided "as is" without warranty of any kind, express or implied. Diegesis Limited shall not be responsible for any damages arising out of the use of, or otherwise related to, this publication or any other materials.