

What does Significs® do?

Significs® helps organizations to transform their data into business value that enable smarter decision-making, strengthen customer relationships, improve performance, and drive growth.

Significs® detects, measures, and exploits attitudes, opinions, emotions, needs as well as many other areas of significance in online, social, and enterprise information sources. Identify the possible subject of the text or speech through relating it to the objects/actions, compare different possibilities using the combined semantic indicators and categorize different meaning groups into a tree-like hierarchy, with such sophisticated structure, **Significs®** can identify the main substance of any stream of words.

Why is Significs® unique?

Significs® understands input textual streams based on a sophisticated, inter-related, well developed and language independent ontological based data structure (Taxonomy) that tries to simulate the human mind when thinking of any matter.

Regardless of the language; formal or a local slang; **Significs®** gets use of all linguistic rules as morphing, grammar and eloquence in identifying the precise intended meaning

Significs® is capable to analyze many thousands of input text chunks (an article or a post) per second and give you their areas of significance as a whole or on one-by-one.

Significs® can also go with you in digging down into details as much as you want through its very well designed ontological structure.

Significs® utilizes the most advanced deep analysis algorithms developed by Info Arab® the world leader in Arabic linguistic technologies.

The term "**Significs**" is defined as the science of meaning or the study of significance, providing sufficient recognition to the practical aspect as a method of human mind (involved in all forms of mental activity, including that of logic).

"Sentiment" becomes recently a popular metric for showing whether customers like or dislike a company's products and services. But in the social media era, sentiment really doesn't tell you all what you want -- especially when, on average, only one out of four posts indicates sentiment. This is a real problem when you're wading through tens or hundreds of thousands of posts, trying to figure out how people feel about your company. You miss a lot of clues about what people are really saying and feeling.

Semantic analysis refers to a group of methods that allow machines to discover the fundamental patterns of words or phrases that act as building blocks in a large set of text.

Significs® solve the dilemma by understanding the input textual streams based on a sophisticated, inter-related, well developed and language independent ontological based data structure (Taxonomy) that tries to simulate the human mind when thinking of any matter.

Significs® semantic analysis engine uncovers and distills the natural structure around mountains of data – Newspapers, blog posts, social network, tweets and more. In fact, a valuable type of semantic analysis is topic discovery: the summarization of large amounts of text by automatically discovering the topics and themes within.

Significs® Key Benefits

Public Opinion and Trends Analysis

The researcher can obtain priceless indicators about the public opinion regarding any subject or issue as well as the market trends and customers' preferences.

Utilizing **Significs®** semantic analytics features, the researcher will easily obtain such opinion/trends and represent them in a comprehensive dashboard to be used by the decision makers.

Online Monitoring

Whether a politician, a movie star or a business enterprise; word of mouth may definitely affect their reputations and their ability to fulfill their targets. Such word of mouth may start with an article in a newspaper, a blog or a post in one of the social networks. Then comes the BUZ that may reach many millions of target audience.

Significs® technologies can help organizations to...

- Monitor any mention about the organization, its brands and key personnel.
- Monitor other mentions about their peers and competitors.
- Keeping a thorough eye on such mentions over a span of time and analyze their trends.

Sentiment & Opinion Analysis

Utilizing the deepest analysis algorithms, **Significs®** engines are able to...

- Handle formal Arabic and English text streams as well as local Egyptian slangs (GCC slangs are coming soon).
- Parse and understand common internet users' writing styles (e.g. emotions like :) and :(), writing Arabic words in Latin characters "transliteration" ..etc).

What is Significs®?

Significs® is a core technology that can be integrated in any application to empower it with many unprecedented features.

With **Significs®** technologies, you will be able to parse any text stream and get numerical indicators for its contents' meanings.

Significs® is currently able to analyze standard formal Arabic, Egyptian Cairo slang, Transliterated Arabic texts (written in Latin characters) standard formal English, and ready to be customized for GCC slangs.

Information is expanding at a challenging pace, and valuable nuggets can come from the most unexpected places. Semantic analysis with **Significs®** will help you harness and make sense of it all.

You can cost-effectively learn volumes about how your company and your products and services are being judged in the marketplace.

With **Significs®**, it is a journey to discovery, not a set path that may lead to inadequate insights or misleading conclusions.

- Analyzing text streams to identify their general Tone as well as specific Opinion about any set of objects.
- Use of a sophisticated Ontological structure to distinguish between different object types / domains and consider their impact on what is positive and what is not.

Feelings and Mocking Identification

Consider a Newspaper or a TV channel that allows its readers to post comments on their articles or publish their SMS's on their screens. They will be able to stop inadequate entries automatically without human intervention saving themselves a lot of headache and efforts.

A chief editor or editorial desk will also be able to monitor all the articles and make sure that they are in-line with their publishing policy.

Even a facebook page admin will rest assured that fans of his/her page will never misuse it.

Semantic Search

Never miss any mention that you are looking for with **Significs®** semantic based search engines. Our engines are taking care of the following...

- Basic search objects in a hierarchal format (e.g. a company, its senior managerial staff, its main brands, sub brands ...etc).
- Totally morphed (i.e. in their singular, plural, masculine, feminine, adjectives ...etc).
- With all their Arabic/English synonyms and antonyms.
- Taking care of spelling mistakes and grammatical errors.
- Taking care of object types and their components.

Needless to say, there are thousands and tens of thousands of implementations' ideas for Significs® in every day's life aspect.

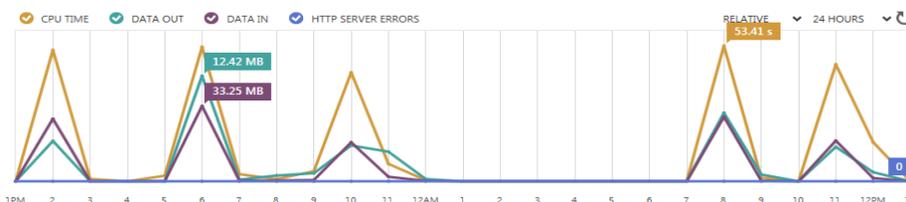
Significs® Technical Requirements

	DDL, LIB or SO	Web Service	Web Request
OS	✓	✓	✓
Application Server	✗	✓	✓
Database	✗①	✗①	✗①
Disk space	30 MB+②	30 MB+②	30 MB+②
Memory	80 MB+③	80 MB+③	80 MB+③

① All data dictionary files are binary files handled directly by Significs®

② Data dictionaries plus DLLs and web service / pages. Add about 500KB to 1Mb for each user dictionary.

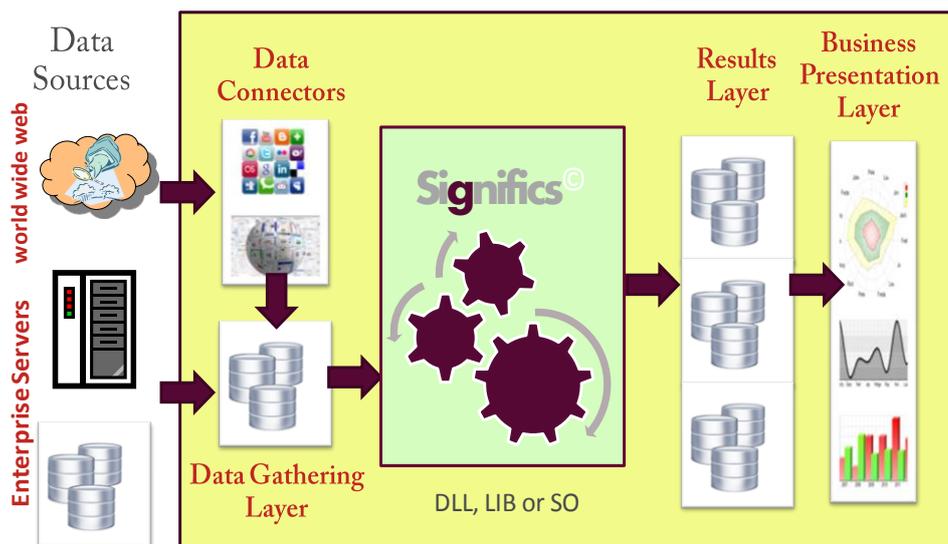
③ Core memory space required for all functions. Add the text stream size and less than 100KB for each concurrent living thread.



The above figure (from Microsoft® Azure® control panel) represents a typical usage to analyze exactly 2428 news feeds (article) including their associated social networks' posts and comments (with a total size of 41.02 Mega Bytes) using **Significs®** WCF web service on Azure platform.

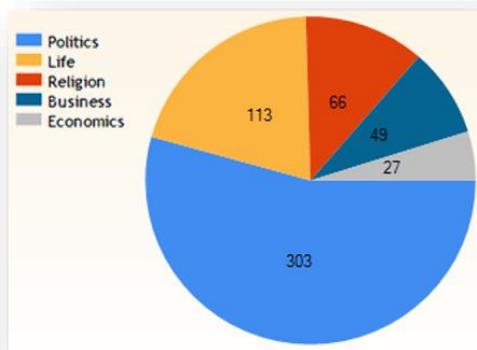
- The whole stream was analyzed in 101.50 seconds –i.e. 41 millisecond per feed including its associated social networks' inputs.
- Maximum memory usage was 81 Mega Bytes on a tiny single core processor / single thread

Significs® Key Features



A technology that can be used everywhere

- ✓ Totally platform independent.
- ✓ Works seamlessly with all types of databases including but not limited to Oracle®, Microsoft SQL®, Teradata® and many others.
- ✓ Can be implemented as an embedded LIB or linked DLL/SO or called through typical web service or standard http requests.
- ✓ Most optimized to use the minimum computer resources.
- ✓ Most optimized to process many millions of words per second.



Various Language Analysis Techniques

In order to get the most accurate results of the Semantic analysis, the following techniques are implemented in our DEEP Analysis...

1. Direct Semantics.
2. Morphological Semantics.
3. Grammar Semantics.
4. Eloquence Semantics.

Significs® version 1.00 implements 100% of the first two techniques and most of the third and the most commonly used parts of the fourth.

Supported Platforms and Formats

All **Significs®** modules' routines are written with strict ANSI C. So, we can say with confidence that **Significs®** is totally platform independent. Although it is originally developed under Microsoft® Windows® platform, but we have ported it with no problem to run under MAC OSX®. We anticipate no problem in porting it to other operating systems.

Significs® is available on the following formats...

- Microsoft® Windows® .DLL.
- MAC OSX, UNIX, LUNIX .LIB & .SO.
- Web service.
- WCF web service.
- http request (with some limitations regarding input text size).

Wealthy Data Dictionaries

Significs® utilizes three types of data dictionaries as follows...

1. Generic data dictionaries... that contain the basic data sets taking care of the linguistic parameters, ontological structure as well as the generic areas of significance.
2. Business domain specific data dictionaries... that describes the specific areas of significance of a specific domain.
3. User specific data dictionaries... that are specific to a particular user according to its business nature and interests.

Non-Competitive optimized Performance

Since the first day of **Significs®** research, design and development; we were aware with the fact that performance is a key success factor. Dealing with the expected data volumes gave us no choice except to be as fast as NOT to present a bottle-neck to our users.



Find Out More about Significs®...

To find out how we can help your company succeed, send email to
info@info-Arab.com

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The digital ERA... Horizons & Challenges

Significs

Taming the BIG DATA