

Highlights

- ◆ Management of structured company information
- ◆ Industry specific search
- ◆ Crawling for specific terms
- ◆ Modeling of rules, facts and evidences
- ◆ Interfaces with different data providers to import company data
- ◆ Company tags
- ◆ Managing financial data
- ◆ Report builder

Situation

Risk is a concept that denotes precise probability of specific eventualities. Analysis of risk while investing in a company is a major and critical factor for any investor.

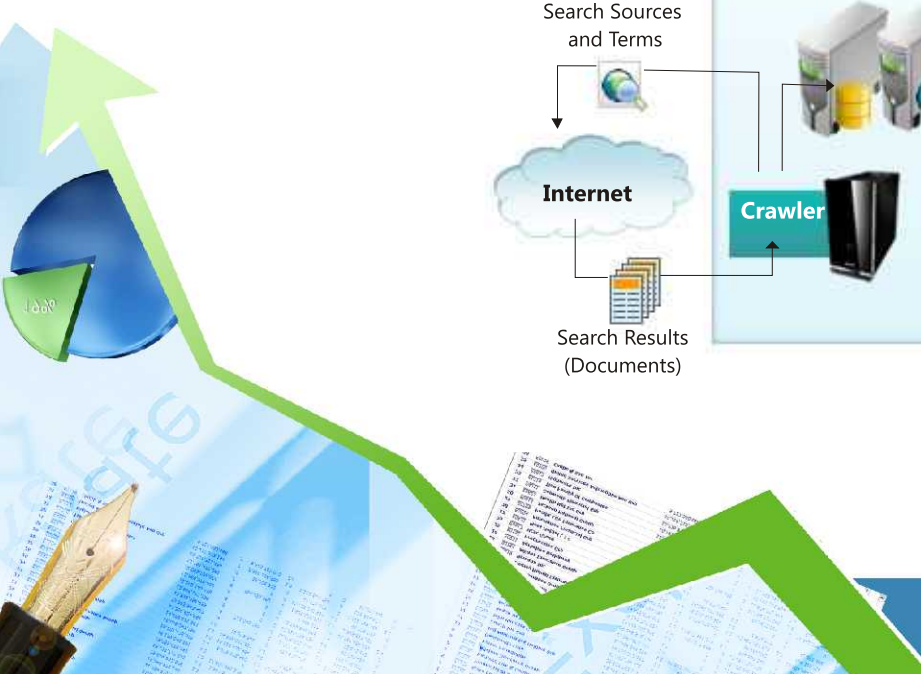
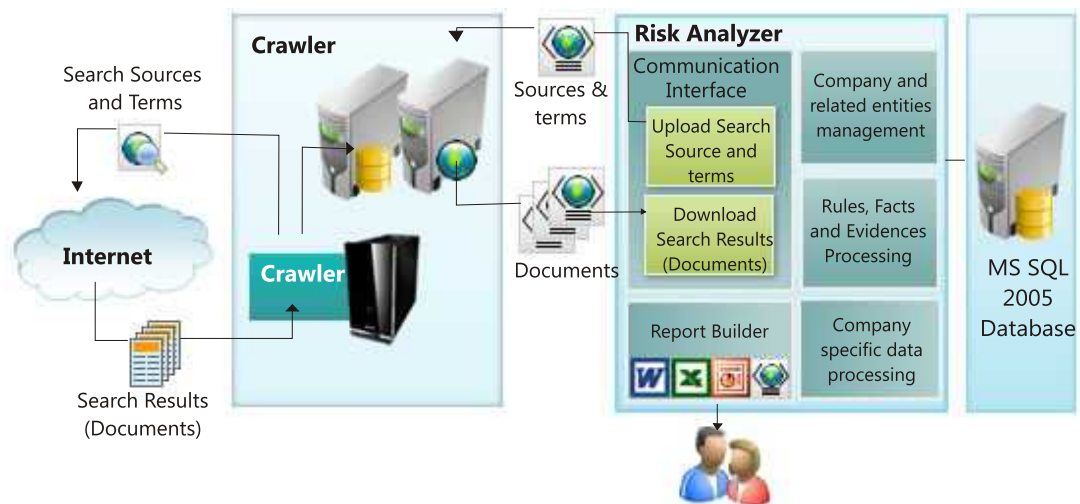
To analyze the risk, specific information related to the company, like news and financial information need to be gathered. Analysis of the gathered information can be done with help of specific set of rules, facts and evidences. According to the risk involved, the company can be categorized in different risk zones like Green (Low Risk), Yellow (Medium Risk) and Red (High Risk).

Solution

Aftek has provided a scalable solution for unstructured data management and data processing using extendable patterns and pre-defined powerful statistical model for Risk Analysis that helps investors to detect possible and emerging risk in a particular company. For this purpose, the company and its information is collected from various sources like internet sites, newspapers, trade publications, and company reports which are gathered by a special Crawler.

The rules, facts and evidences on company results (by comparing past and current results) and related news are modeled for detecting possible risks. Company as well as sector specific reports are generated for the investor.

Architecture





About Aftek

Aftek Limited is a full spectrum technology services company from India. Over last 20 years Aftek has gained significant exposure to variety of technologies. Rich technological capabilities, focused investments in Research & Development and industry exposure enables us to reach beyond the basic IT services to design and deliver projects, products and implement end-to-end solutions to customers in variety of industries. Our service spectrum covers key services as Application Development, Application Maintenance, Embedded Systems and Testing Services.

Aftek Limited

50/24 Pralhad Arcade, Bhakti Marg,
Off. Law College Road, Erandwane,
Pune, India - 411 004.
Tel. No.: +91 20 3024 0000
Fax. No.: +91 20 3024 0001
Email: servicesinfo@aftek.com
Website: www.aftek.com

Features

- ◆ Management of structured data about a company and related entities like company employees and products information
- ◆ Defining industry specific search sources and terms
- ◆ Crawler for gathering the specific information for given search terms
- ◆ Modeling of rules, facts and evidences
- ◆ Interfaces with different data providers to import company data into the system
- ◆ Processing company and related entity data for tagging the company using Regular Expressions
- ◆ Applying rules over tagged data, finding facts and evidences using Regular Expressions
- ◆ Managing company financial data like balance sheet, company shares data
- ◆ Report builder for customizable reports in various formats like MS PowerPoint, MS Word, and PDF.

Technologies

- ◆ Server
 - MS SQL Server 2005
 - Service broker
 - SOAP, Web Services
- ◆ Reporting
 - Windows report
 - MS Office COM API for PowerPoint, Excel, MS Word
- ◆ Profilers
 - ANTS Profiler
 - Perf-mon Windows Profiler
- ◆ .Net
 - ADO.Net
 - Threading
 - Event-based Asynchronous Pattern
 - Regular Expressions
 - Windows Reports
 - GDI + library
 - SMO (SQL Server Management Objects)
- ◆ Tools
 - Mantis defect tracker
 - VSS

Key factors involved

- ◆ Managing and processing millions of unstructured documents (around 30GB) within reasonable amount of time
- ◆ Dynamic Report Builder to provide maximum flexibility to user while generating reports
- ◆ Distributed design of client-server architecture to avoid overloading of either client or the server
- ◆ Advanced CPU handling techniques, like setting the core affinity to manage work load on server
- ◆ Managing memory efficiently so as to avoid memory leaks while processing huge data
- ◆ Optimum usage of CPU by running multiple concurrent threads to perform certain tasks
- ◆ Optimized processing by using a pipeline of tasks where data is produced by one thread and consumed by another
- ◆ Designing complex company wide database and indexing for 700+ companies data