Search@

Suntek's Business Intelligence (BI) Solution

Suntek Business Intelligence Solution is a suite of technologies for *gathering*, *organizing*, and *analyzing* data to help enterprise users make better business decisions. Suntek BI Solution accounts for all of the factors that affect a business, which include customers, competitors, business partners, economic environment, and internal operations to make effective and good quality business decisions. At the core of BI is Competitive intelligence (CI), which focuses on the external competitive environment. CI empowers a business to keep track of the actions of her competitors and respond to them accordingly.

Functional Architecture

The figure below shows the functional architecture of Suntek BI Solution. Since data from external sites are embedded in web pages, after web pages are downloaded, data must be cleansed, which includes filtering out useless data and removing duplicates. The data are then tagged by business rules. Tagging allows data to be categorized. The data are then integrated and managed in a repository, which is typically a database management system. These processes must operate periodically or according to a time schedule, depending on the values of the volatility of the data sources. The system must be able to deal with different file formats and flexible enough to handle new websites and data formats.
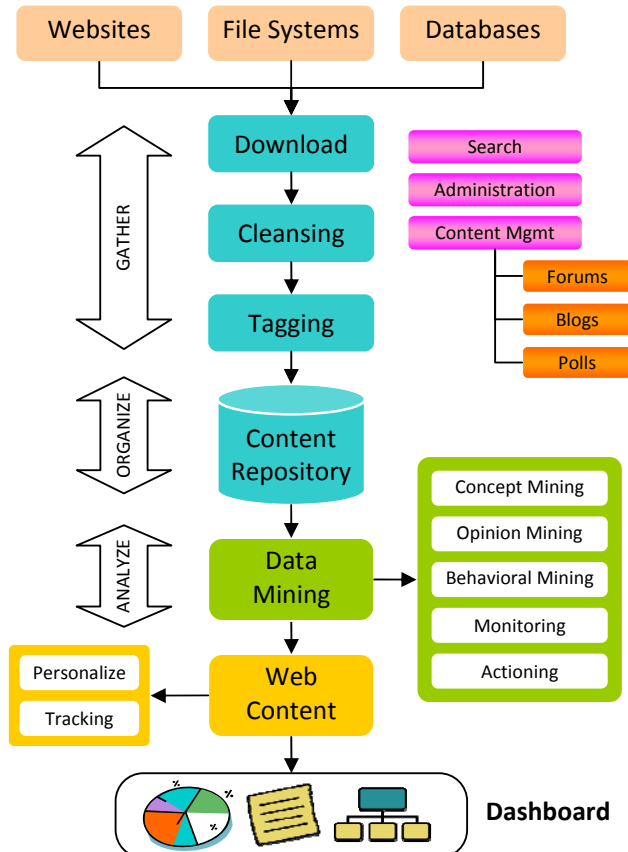
Benefits of Business Intelligence

Business intelligence reveals:

- The position of the firm compared to its competitors
- Changes in customer behavior and spending patterns
- Market conditions, trends, demographic and economic data
- Social, regulatory, and political environment

BI vs CI

An important branch of Business Intelligence (BI), Competitive Intelligence (CI) analyzes textual information on public websites. Suntek supports the core technology for web crawling, monitoring, cleansing, extraction, categorization and last but not least text mining, whereas traditional BI primarily focuses on internal business data and information display on dashboards.

After the data are loaded into the repository, data can be analyzed to discover valuable information to the business. This includes:

- Concept mining: tuning raw texts into high-level concepts, e.g., interest hike is one concept, not two, and is related to interest rate
- Relation mining: data are categorized and linked to related data
- Opinion mining: Concepts are further analyzed to identify people's opinions
- Behavioral mining: User actions are recorded and analyzed to identify users' interests
- Monitoring: Continuous monitoring of data sources (e.g., a stock index, a competitor website) to look for changes
- Actioning: Alerts and actionable items are raised in correspondence to various analysis

Finally, information is displayed in dashboards, in the forms of textual summary, charts, numerical table, etc., so that users can quickly identify any special situations and respond to them. Data can be highlighted and summarized to easy digestion by users.

Besides the main functional blocks are search engines, administration tools and content management functions. Search engines are essential for meeting users' ad hoc demands on information. Administration tools allow information to be displayed differently and new information categories to be created (e.g., responding to breaking news). Content management allows information to be created, deleted or updated, which includes forums, blogs and polls, etc.

Data Sources

Input to a BI system could be public or private. Public information sources are those available to the public on the Internet. These include economic data, regulations and economic outlooks released by the government, as well as industrial news, analysis, reports, and public opinions on various websites and blogs. Private sources refer to the internal data from the company, e.g., operational and financial data, emails, customer profiles, and internal report. Data across these two information sources could be numeric data, structure records and unstructured texts. The table below summarizes the various types of information in a matrix.

	Internal Sources	External Sources
Numeric and structured	• Business data (inventory, sales, data) • Operational data • Data spread across company databases	• Global economic data (GDP, inflation, central bank rates, export/import data) • Financial data (Bank interest rates, flight costs, stock prices, exchange rates)
Textual and unstructured	• Reports, meeting minutes, documents • Emails, customer profiles • Internal blogs, best practices	• Government polices and regulations • Industrial and business news • Public views, expert commentary

Out-of-the-Box or Custom-Made

To provide maximum effectiveness, a BI solution ideally is custom-made for a business, fitting every aspect of the business squarely. Out-of-the-Box solution does not work without extensive configuration, compromising speed, functionality and effectiveness of the solution. On the other hand, custom-made solution could be costly with large implementation efforts.

Suntek BI Solution provides the advantages of both sides. Built on Suntek's award winning search technology, Suntek BI Solution is a suite of technologies encompassing all of the major functions in the functional architecture described earlier, each carefully engineered to deliver power, functionality and extensibility. Suntek has built, launched and operated a large number of applications with the BI Solution. Customers can try them out to understand what they need and what they can do with the technology, and enjoy low implementation cost and fast time-to-launch.

Case Study: Finance portal 88iv.com

88iv.com is a finance portal providing investors a wide spectrum of information to help them make investment decisions wisely. The following lists how the BI functions are realized in 88iv.com and a screenshot of the home page illustrating some of the major functions.

Information sources	• External websites • RSS feeds
Data collected	• Stock prices and indexes, exchange rates, precious metal prices, commodity prices • Company performance data: stock price, price-earning ratio (P/E), price-book ratio (P/B), asset value, period and annual performance, etc. • News and press releases • And much more …
Cleansing	• Web pages not within the scope of interests are removed • Duplicates are removed based on content similarity
Tagging	• News are tagged automatically based on business rules • News can be tagged by users
Concept mining	• Concepts are discovered and extracted based on business rules • News are categorized based on concepts
Relation mining	• Links are created automatically between news and categorized based on their common concepts
Opinion mining	• Expert opinions on stocks are extracted and organized for easy browsing • Investment rating and reports from major investment banks are extracted and organized for easy browsing
Usage mining	• Pages accesses are tracked and concepts embodied in the pages are analyzed to identify users' high-level interests
Monitoring	• Important financial data are monitored frequently • High performers and low performers are displayed and color-coded
Actioning	• Email alerts are sent out based on user-specified triggers

Let BI Empower your Business

What about developing a BI portal for your business? Whether you are in the banking industry or in the manufacturing sector, whether you are in retail or in hi-tech, you will always benefit by knowing a little bit more about your business. Imagine a manufacturer having instant access to:

• Macroeconomic data, GDP, central bank rates, inflation rates, employment data, consumer price index

• Material prices, suppliers, lowest prices and their suppliers, flight costs, gas prices, energy costs

• New products and services offered in the industry and, in particular, from your competitors

• New technologies, machinery, packaging, disposal

• Government regulations and policies

Contact Suntek at suntek@suntek.com.hk

Screenshots of 88iv.com

Search Engine Investment Categories Stock Rating and Expert Comments

易發投資 - 金融外匯新聞 - Mozilla Firefox

http://www.88iv.com/tc/index.html

登入 | 會員注冊 | 增值服務　簡 | Eng

新功能 | 🏠 | 利率 | 匯價 | 商品 | 股票 | 新聞 | 論壇 | RSS | 相關網站 | 網頁指南 | 流動版

關鍵詞 : _____ 搜尋 | 進階搜尋

地產股 | 內房股 | 建材股 | 農業股 | 環保股 | 公用股　　上海概念 | 經濟適用房 | 二套房
銀行股 | 內銀股 | 保險股 | 七行五保 | 渣打 | 交通銀行 | 星展　股市行情 | 專家評股 | 內地樓市 | 香港樓市 |
內需股 | 飲食股 | 服裝股 | 體育用品 | 美容股 | 家電股 | 汽車股　新股 IPO | 農行上市 | 交行供股 | 中行供股 | 工行供股 | 建行供股
航運股 | 航空股 | 港口股 | 資源股 | 出口股 | 鋼鐵股 | 金礦股 |　ETF 基金 | 黃金 | 鉑金 | 石油 | 商品 | G20 | 500強
機械生產　　　　　　　　　　　　　　　　　　　　美元 | 英鎊 | 歐元 | 澳元 | 紐元 | 日元 | 人民幣
石油石化 | 電力股 | 電力設備股 | 新能源股 | 燃氣股 | 煤炭股　中國經濟 | 美國經濟 | 人民幣債券 | 美國債券 | 郎咸平
基建股 | 公路股 | 電信股 | 電信設備 | 科技股 | 藥業股 | 濠賭股
板塊行情 : 農產 航空 銀行 化工 能源 基建 原油生產 內房 地產 物流 〔更多〕

今日專家股評 : 彭偉新　熊麗萍　鄺民彬　沈慶洪

主要指數 | 恆生金融指數 — 32847.6 ▲ 114.9　　　　　　　　美通社(亞洲) 新聞

公司評級		
公司	評級	目標值
比亞迪股份	買入	▼65
維達國際	▲買入	▲9.55
中國聯通	買入	12.6
長江實業	跑贏大市	125.1
中國旺旺	買入	▼7.20
		≫更多

主要市場異動

台灣加權	▲0.333%	日圓/港元	◆0%	黃金	▲0.701%	倫敦黃金	▲1.279%
道瓊斯工業平均	▼0.201%	英鎊/港元	◆0%	銅	▲0.224%	倫敦鈀	◆0%
標普500指數	▼0.37%	紐元/港元	◆0%	中國期銅	▲0.104%	倫敦白銀	▼0.272%
倫敦富時100	▼0.622%	美元/港元	◆0%	紐約原油	▲1.436%	倫敦鉑金	▼0.38%
德國DAX	▼1.168%	新台幣/港元	◆0%	布蘭特原油	▼1.538%		
法國CAC40	▼1.279%	加元/港元	◆0%	天然氣	▼2.983%		

≫更多　　　　　　≫更多　　　　　　≫更多　　　　　　≫更多

自選市場指數變化		
美元/港元	7.763	◆0%
恆生指數	21678.8	▲0.59%
倫敦黃金	1207.8	▲1.28%
紐約原油	81	▼1.44%
詳情		按此選擇

投票 : 高盛指年初至今二手樓市已升10.8%，預測2010年本港樓市升15%。你話呢？我話香港樓市今年會升 :

多過 20%	☐
20 %	☐
15 %	☐
10 %	☐
5 %	☐
跌 5 %	☐

全球　匯市　股市　商品　銀行　經濟

[商品] 7月CPI或超3%紅線 A股再掀「抗通脹」行情
[商品] 國際小麥價格大漲難持續
[商品] 中國因素有利金價
[經濟] 佛塑股份(000973)為控股子公司提供擔保的公告(圖)
[經濟] 建行要在大連開展新業務

五大最高昇幅		全部 恆指 主板 創業板
和記黃埔	58.2	▲5.15 ▲9.71%
長江實業	100.4	▲3.8 ▲3.93%
東亞銀行	31.6	▲1 ▲3.27%
思捷環球	49.15	▲0.8 ▲1.65%
中銀香港	20.5	▲0.3 ▲1.49%
五大最高跌幅		全部 恆指 主板 創業板

Categorized News　　　　　　Price Movement　　　　　　Polls

Data Comparison　　　　Personalized Portfolio

最低匯率差價銀行
人民幣
星展銀行: 0.44%
豐明銀行: 0.52%
歐羅
招商銀行: 0.11%
永隆銀行: 0.35%
日圓
招商銀行: 0.11%
永隆銀行: 0.24%
美元
招商銀行: 0.06%
永亨銀行: 0.13%
≫更多

最高儲蓄息率銀行
澳元一个月定期
永亨銀行: 3.8%
工商銀行: 3.6125%
人民幣一个月定期
交通銀行: 0.8%
工商銀行: 0.75%
英鎊一个月定期
工商銀行: 0.25%
東亞銀行: 0.13%
港元一个月定期
工商銀行: 0.12%
大新銀行: 0.07%
≫更多

自選市場指數變化		
澳元/港元	6.971	◆0%
紐約原油	76	▼0.21%
黃金	1217	▲0.05%
日經平均	9253.5	▲0.44%
上證綜合	2606.7	▲1.21%
恆生指數	21071.6	▼0.16%
道瓊斯工業平均	10303.2	▼0.16%
標普500指數	1079.2	▼0.4%
納斯達克綜合	2173.5	▼0.77%
倫敦富時100	5275.4	▲0.18%
德國DAX	6110.4	▼0.4%
法國CAC40	3610.9	▼0.28%
香港交易所	124.9	▼1.03%
中國移動	82.55	▼1.84%
匯豐控股	79.6	▼0.5%
詳情		按此選擇