

Linguistic Data Cleansing Case Studies

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FAST Co-Innovates with Customers - Using Search on Structured Data







...and many more (est. 65-75% of customer implementations involve structured data)





Case Studies – using linguistic data matching, consolidation, and cleansing

White pages cleansing and consolidation

Name & Address consolidation, cleansing, and house-holding

Fraud detection

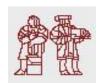
Product catalog cleansing and rollup

Financial data matching and exploration





Standard Phone No. Search is **Severely Limited**



FIND A BUSINESS OR PERSON BY PHONE NUMBER

U.S. - anywho.com

Area Code Required Telephone Number Required 781 SEARCH |3042400 TIP: Cell phone numbers are not available You searched for: 781 3042400 ◆ PREVIOUS | NEXT ▶ Results 1 - 1 of 1 Reverse Telephone Listings Wrong address Fast, Search & Transfer listed! 781-304-2400

93 Worcester St Wellesley, MA 02481

Maps & Directions | Did you go to school with Search & Transfer Fast? Public Records Results for Search & Transfer Fast, Preview Results. Instant Background Check Available - \$49,95!

Find a Nearby Business

Bjørn Boberg siv.økonomi

Jomfrubråtv. 29 C, 1179 Oslo ... 22 67 94 55

- Sommerbolia

Solvarp, 1794 Sponvika....... 69 19 45 17

- Mobiltelefon <u>928 97 133</u>

Norway – gulesider.no

Map | Send as SMS | Save | Call

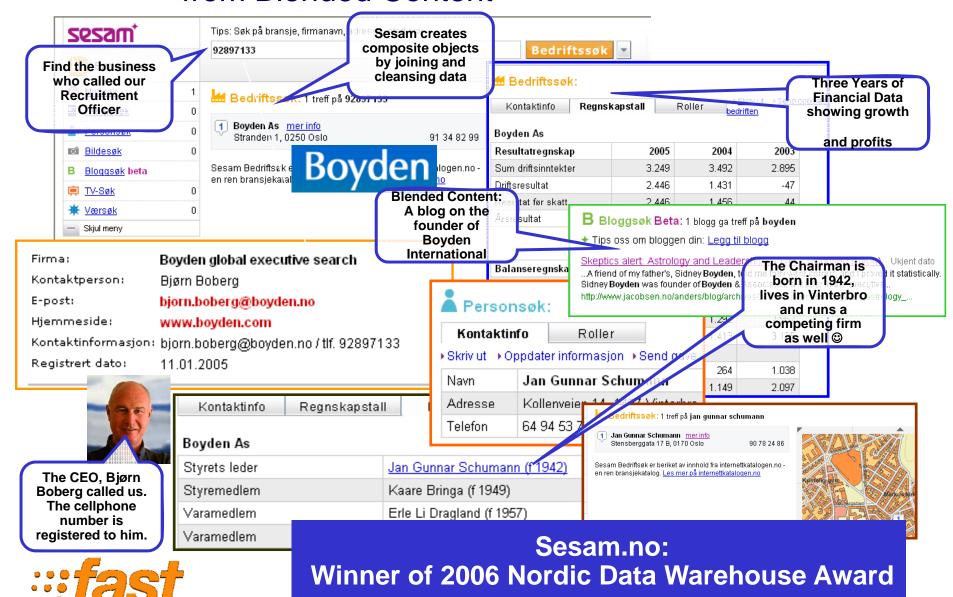
Send flowers





Contrast to Results with Sesam.no: Creating Cleansed Business Information from Blended Content





FAST Data Cleansing

Telstra

Leading telecom and information services company, competing in all telecommunications markets throughout Australia, providing more than 9.94 million Australian fixed line and more than 8.5 million mobile services.



Challenge:

- Over 240 Telstra systems use address data, therefore quality of this data is critical
- Poor data quality in processes such as activation, billing, customer contact, marketing.



 Provide correct legal, mailing and service addresses used for emergency services

Solution:

- Developed a search service that incorporates a configurable query transformation pipeline
- Automatically "corrects" user input when queries do not match any results and quickly expand or modify the search to find a result set.
- Provides an Address Search web service for the enterprise
- Live synchronization against an address database
- External system interactions continue with the database (National Postal System etc)

Australia's leading telecom provider



Results with FAST:

- Reduced Costs: Reduced ineffective truck rolls due to incorrect service address
- Increased Productivity: Reduced time in contact centers validating addresses
- Increase Customer Satisfaction: Decrease the incidence of unsuccessful self-service due to poor address search, resulting in a call to a live agent.





Fraud Detection example - insurance

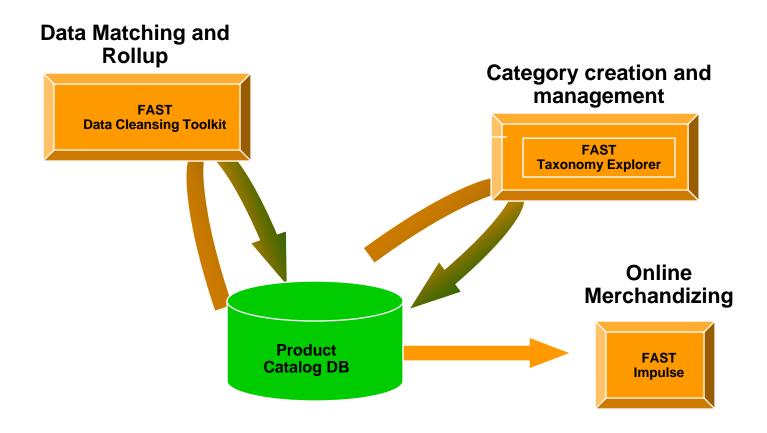
- Detect "patient tourism": Care Providers cooperating to pull as much money from the insurance company as possible when treating a patient that has been in an accident. After investigation, the first doctor passes the patient to other doctors (typically friends) that also investigate and do some treatment, and then pass on to next "friend". That way they are able to get a higher total amount from the insurance company.
- Detect "ping-ponging" of patients: This is a specialized version of Use Case 1, where N=2 (two doctors involved). For example, this could be your primary care physician (PCP) sending you to a specialist, the specialist sending you back to your PCP ("for checkup"), and then your PCP sending you back to the specialist ("for additional treatment touch-up"), and so on.
- Detect "treatment prolongation": Find doctors that cause the longest "time-from-the-accident-till-patient-was-cured". The insurance company pays their salary in this period. FAST is creating a system for coordinators to assigning Care Providers when new patients came in. Type in treatment type and get a list of doctors, sorted on which doctor caused shortest treatment time, lowest price and lowest invalid-level.
- Detect "improper drug prescriptions": Find doctors who are prescribing unnecessary or improper drug treatments, for example by prescribing patented drugs when a generic is available or by prescribing more drugs than are required for treatment. Then the doctors get kickbacks from the pharmacy.







Product Catalog Cleansing and Rollup

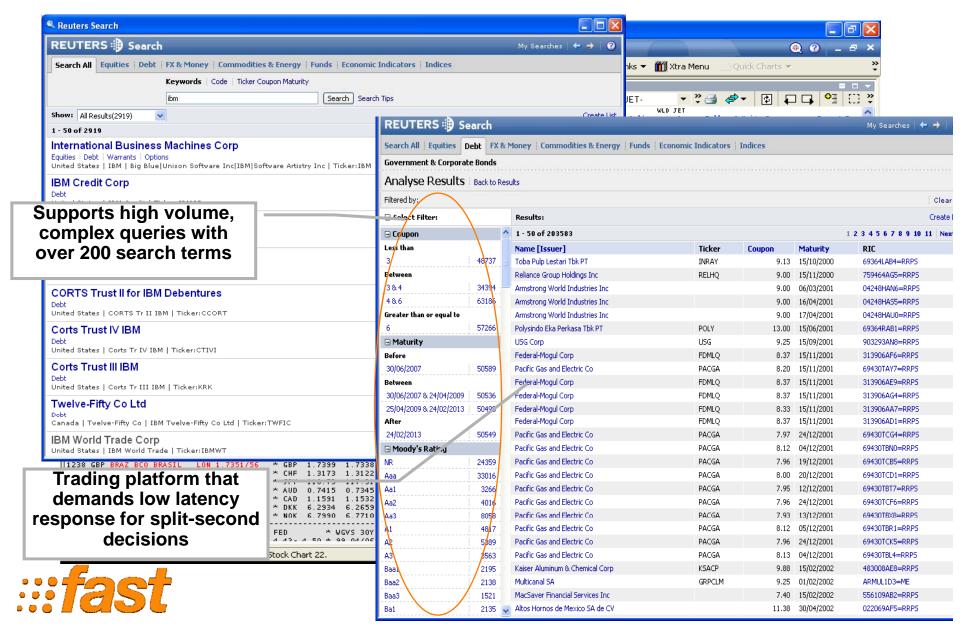






Extreme Performance For Demanding Environments











Thank you!



find the real value of search

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