Improving Search Technology by the use of Semantics

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SIEMENS – global network of innovation

- Information and Communications
  - Communications
  - Siemens Business Services
  - Siemens Building Technologies
- Automation and Control
  - Automation and Drives
  - Industrial Solutions and Services
- Power
  - Power Generation
  - Power Transmission and Distribution
- Transportation
  - Transportation Systems
  - Siemens VDO Automotive
- Medical
  - Medical Solutions
- Lighting
  - OSRAM

Total sales of Operations Groups excluding Other Operations:

- Information and Communications: €21.1 bn (27%)
- Automation and Control: €18.5 bn (24%)
- Power: €12.3 bn (16%)
- Transportation: €13.8 bn (18%)
- Medical: €7.6 bn (10%)
- Lighting: €4.3 bn (5%)

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Status Quo: Search Technology at Siemens

Siemens Corporate Search

- is a mandatory search service for our groups, regions and operating companies and delivers basic search functionalities
- 30 Languages and 255 document types supported
- 5 Mio. documents in Intranet / 0.5 Mio. documents in Internet

Implemented Search functionalities

- Internet search delivers recommended links to the customer
- Ranking of search results can be influenced according to business needs
- Siemens has its own Metadata standard implemented for all major content repositories (an extension of Dublin core)
Beyond Simple Search

- SCS Basic Search
  - anonymous
- Keyword Search
  - best bets
- Guided Search
  - context & ranking
- Efficient Workplace
  - “Search where you work”
- Efficient Integration
  - Application Connectors
- Secure Roles & Rights
  - SSO / ACLs
- Distributed Search
  - Customization Self Service

Internet/Extranet
Intranet
Applications

Enterprise Portal
Browser
Desktop
Semantic Search Solution: Integration of multiple knowledge resources

**Semantic Layer**

- e.g. technologies
- e.g. roles and processes

**Query Expansion**

- Repository 1
- Repository 2
- Repository 3

**Query Result Filtering**

- Workspaces

- Semantic Web Search
- Agents
- Distributed Reasoning
- Meta repositories
- Ontology
- Web Services
- Semantic Technology

- Marketing Material
- Marketing
- Technical Description
- SWOT Analysis
- Engineer
- Consultant
- Key Account Manager