



Brunello Bonanni Federated Enterprise Search Engine

**INFORMATION MANAGEMENT
DAY 2009**

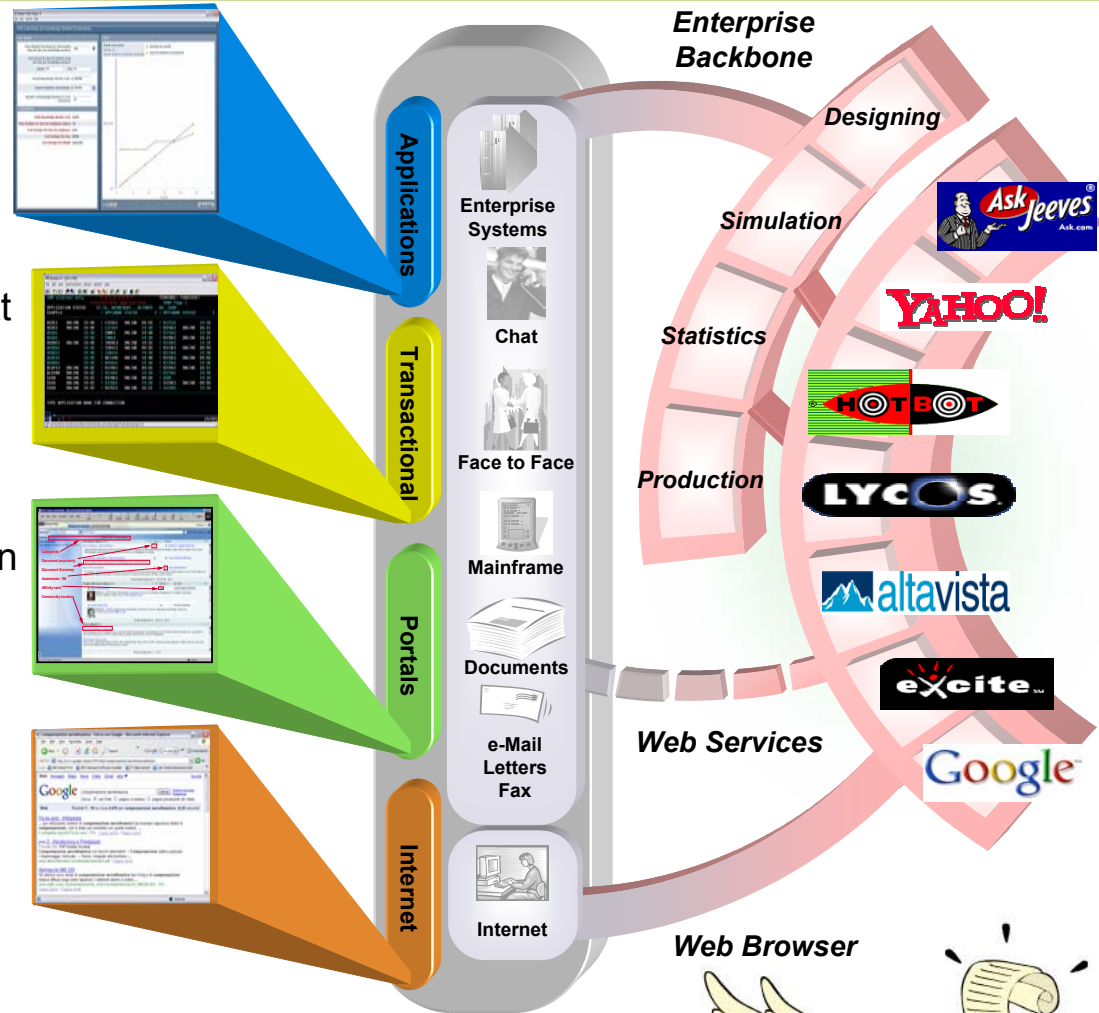
Enterprise Search Scenario



Compelling issues

- Multiple Sources and Environments
- Many Systems and Tools
- Different Engines and Context Spheres
- No Correspondence and Correlation among wide spread of information
- No criteria for source selection and results validation
- No Cataloguing and Classification of the picked results

Waste of Time and Resources by Adopting Different Technologies



How to get a reliable Information in a multi-context environment

- Multiple Sources and Environments
 - Source Type 1.
 - Multiple Relational and Object Oriented DB servers
 - Multiple solution applications (ERP, CRM, ..)
 - Source Type 2.
 - Web Applications both internal and external of the Enterprise
 - Web Services content information
 - Source Type 3.
 - Client-server applications
 - Mainframe applications (cobol,cics,..)
- Multiple functionalities, Interfaces and Scopus
 - SQL standard access
 - Custom GUI application access



Understanding Enterprise Scenario (2/2)



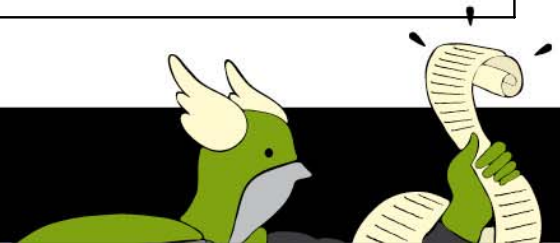
How to check the “CARS” Checklist for Research Source Evaluation

Credibility	Trustworthy source, author’s credentials, evidence of quality control, known or respected authority, organizational support. Goal: an authoritative source, a source that supplies some good evidence that allows you to trust it.
Accuracy	Up to date, factual, detailed, exact, comprehensive, audience and purpose reflect intentions of completeness and accuracy. Goal: a source that is correct today (not yesterday), a source that gives the whole truth.
Reasonableness	Fair, balanced, objective, reasoned, no conflict of interest, absence of fallacies or slanted tone. Goal: a source that engages the subject thoughtfully and reasonably, concerned with the truth.
Support	Listed sources, contact information, available corroboration, claims supported, documentation supplied. Goal: a source that provides convincing evidence for the claims made, a source you can triangulate (find at least two other sources that support it).

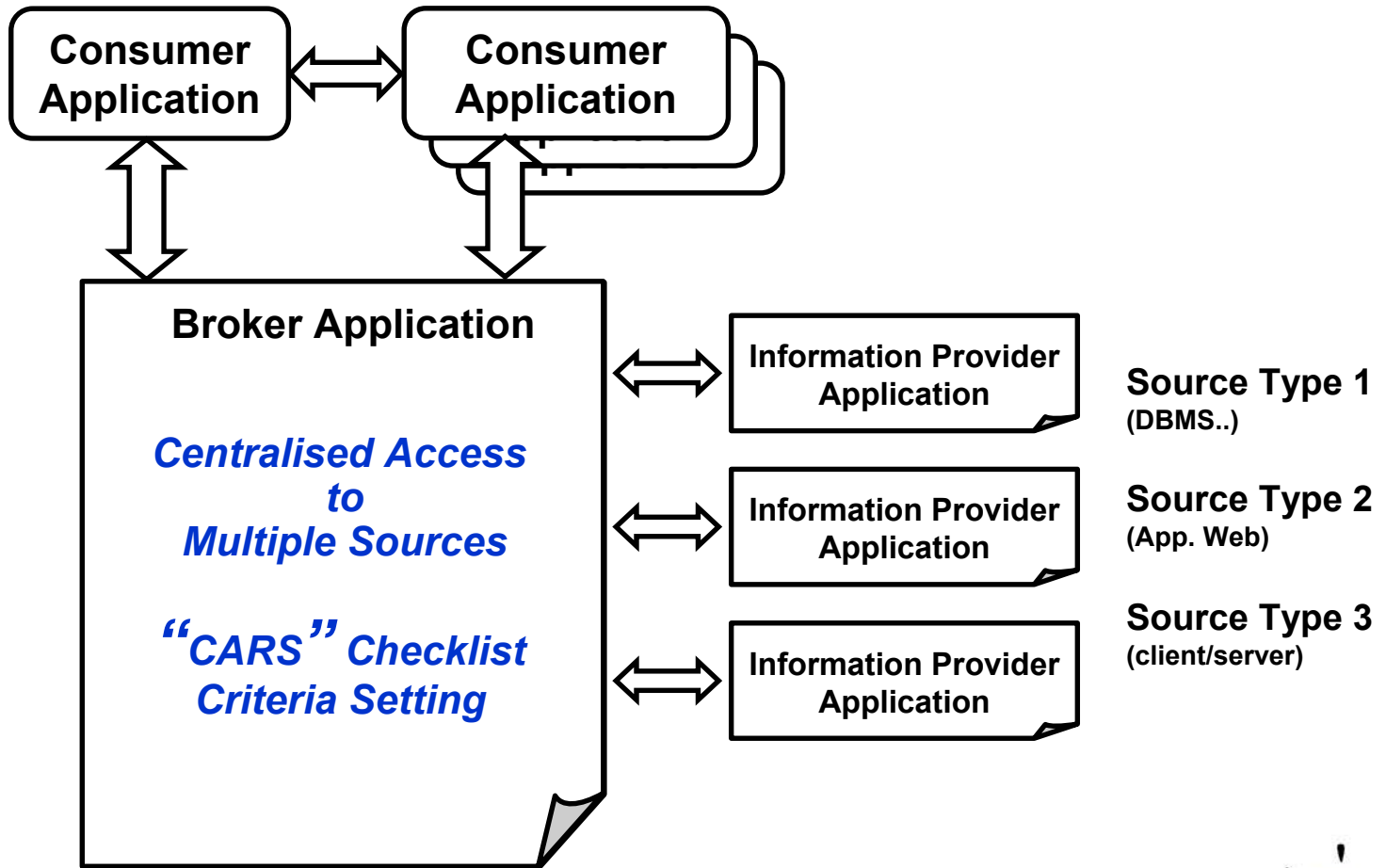
Evaluating Internet Research Sources: <http://www.virtualsalt.com/evalu8it.htm>

Robert Harris: Version Date: June 15, 2007 – January 27, 2009

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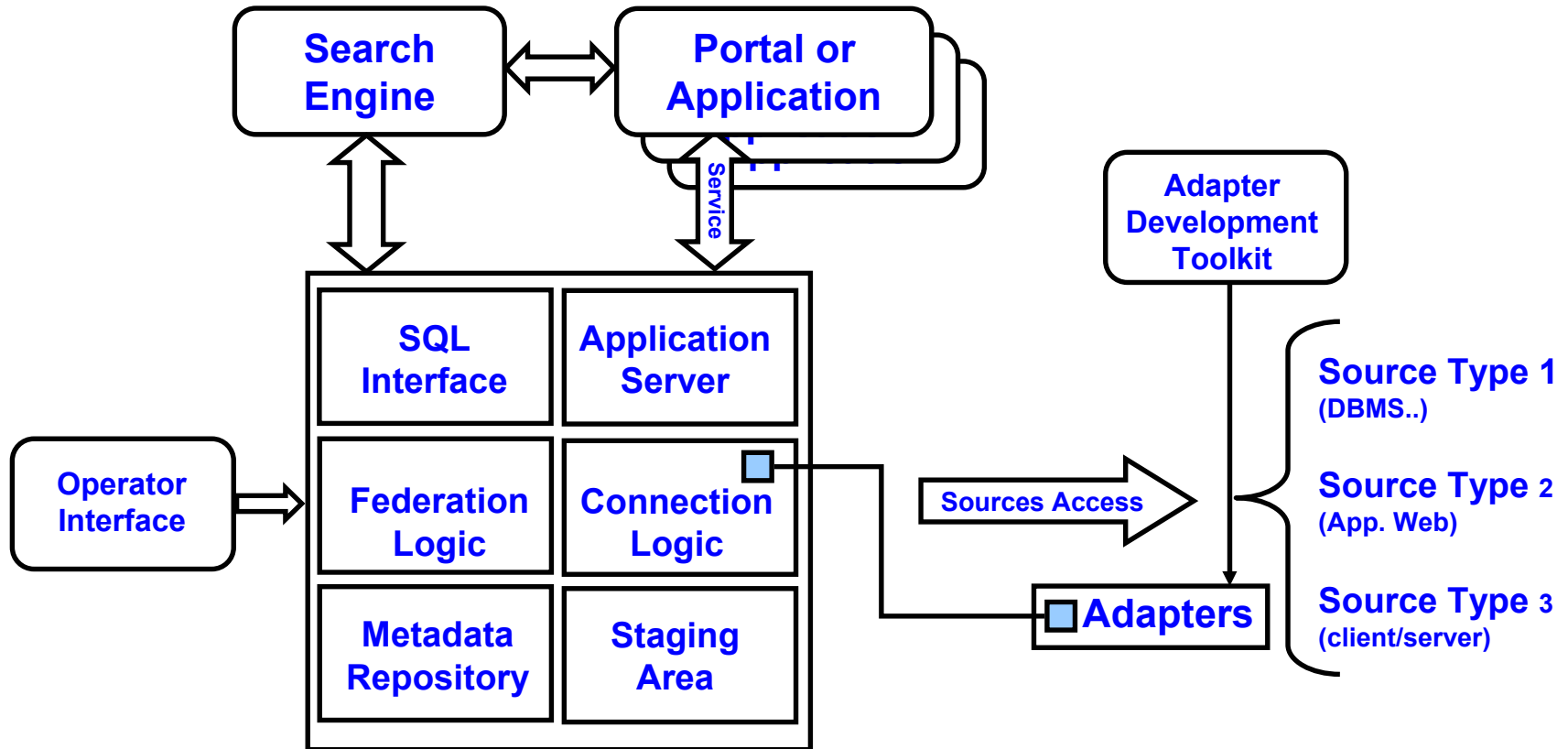
Architecture Planning



Source: The Open Group Architecture Framework (TOGAF)
Version 8.1.1, Enterprise Edition – Chap. 22 Copyright © 2007 The Open Group, All Rights Reserved



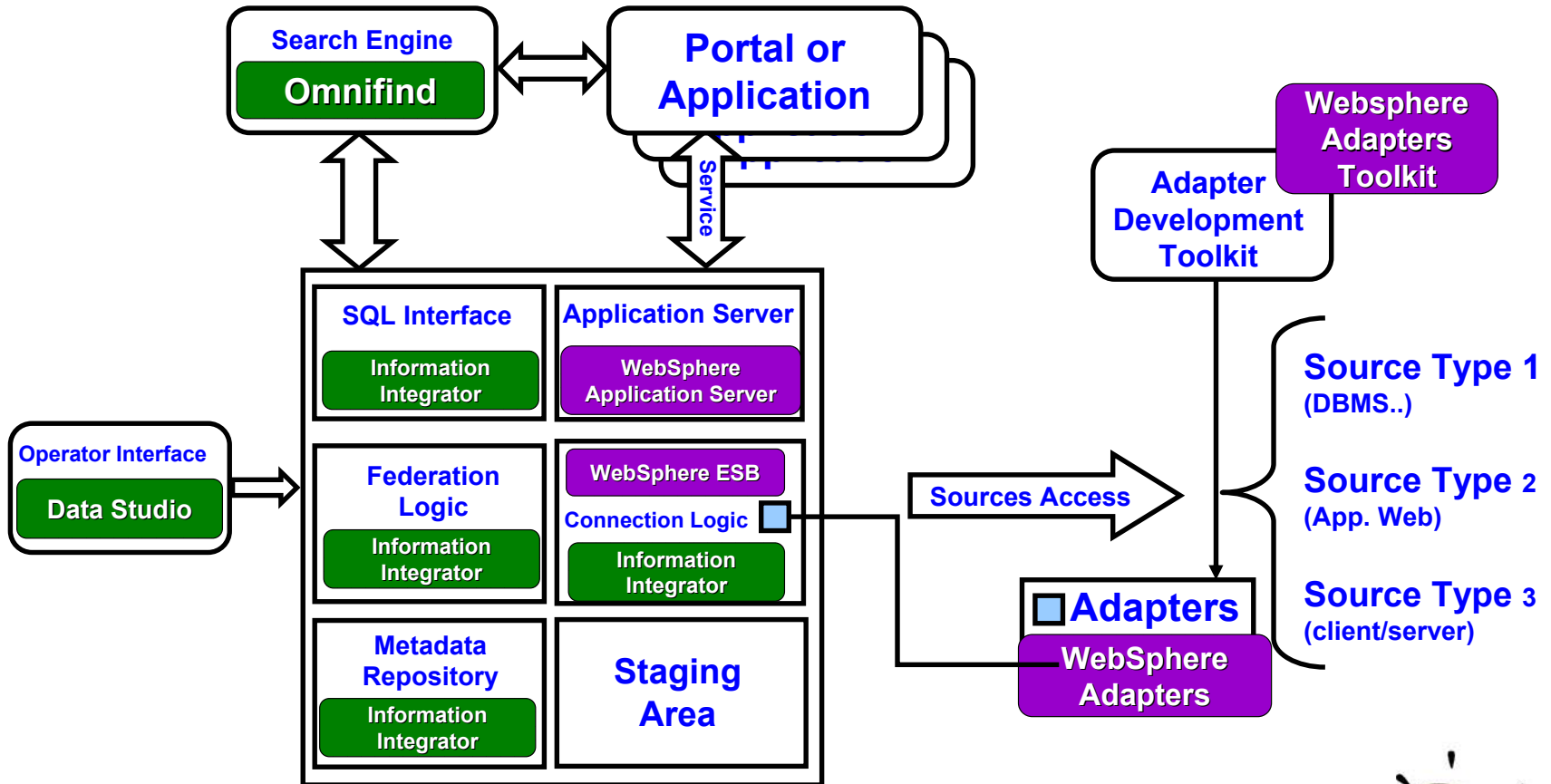
Business View Architecting



Source: The Open Group Architecture Framework (TOGAF)
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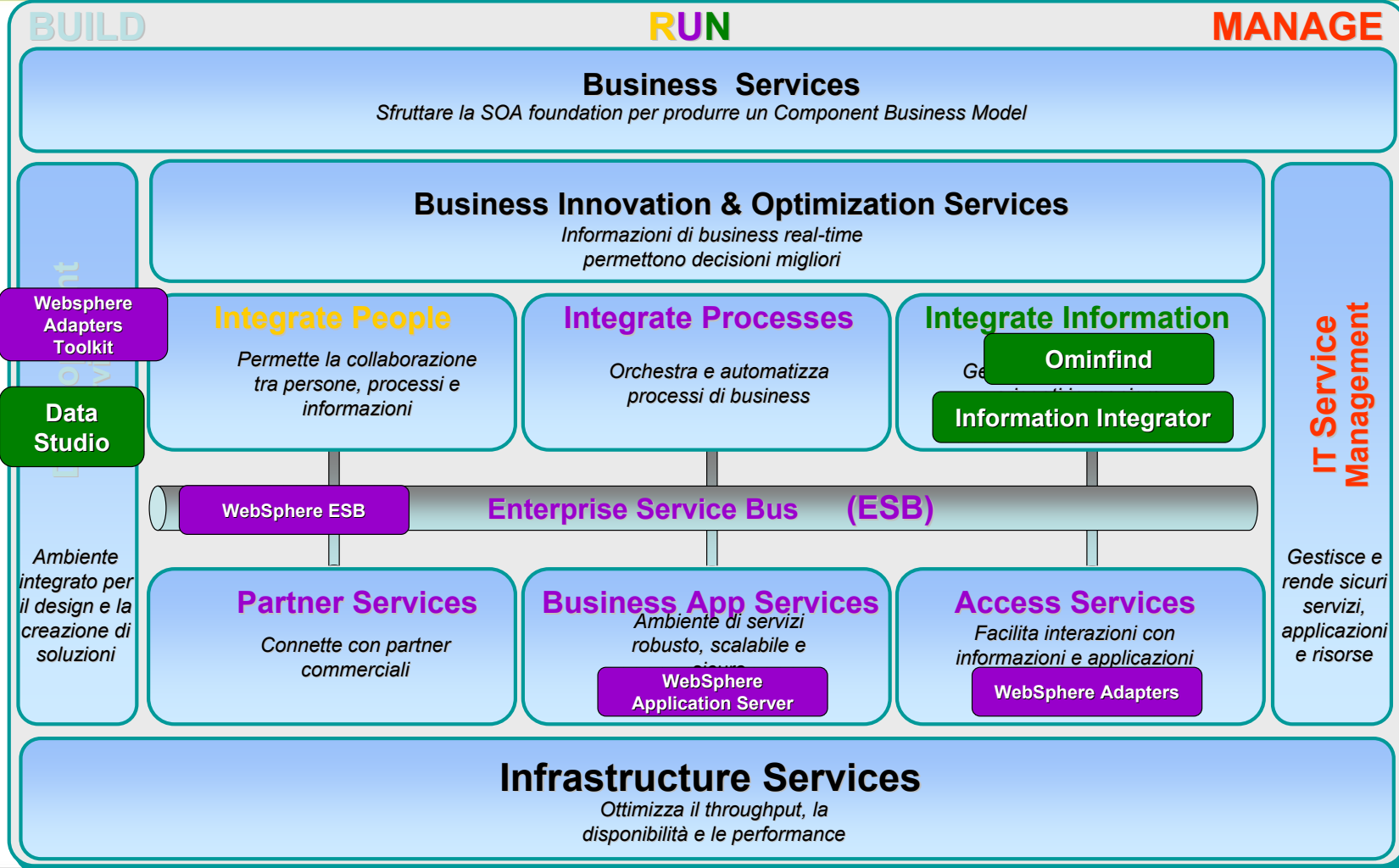
Technical Architecting



Source: The Open Group Architecture Framework (TOGAF)
Version 8.1.1, Enterprise Edition – Chap. 22 Copyright © 2007 The Open Group, All Rights Reserved



Architecture Frameworks Validation



Federated Enterprise Search Framework



Common Search Environment

OmniFind Enterprise Edition

Search for:

File type filter: [All](#) [doc](#) [html](#) [pdf](#) [ppt](#) [txt](#) [xls](#) [xml](#)

Source type filter: [All](#) **DB2**

Sort by: [\[Relevance\]](#) Sort order: [Descending](#)

Expanded query: tablename:DB2ADMIN.EMPLOYEE
149 search results returned | 149 documents match all query terms

Top result charts

Dynamic field chart

Field name:

SMITH (2)	██████████
YOSHIMURA (1)	██████████
YAMAMOTO (1)	██████████
WONG (1)	██████████
WALKER (1)	██████████

Relevance	Date	Document ID	Document Title
96.32%	9/22/08	100	DB2ADMIN.EMPLOYEES IODOB9 SKING, Steven, AD_PRES, King, 515 123 4567 ...
96.32%	9/22/08	206	DB2ADMIN.EMPLOYEES IODOB9 WGIEZT, William, AC_ACCOUNT, Gietz, 515 123 8181 ...
96.32%	9/22/08	205	DB2ADMIN.EMPLOYEES IODOB9 SHIGGINS, Shelley, AC_MGR, Higgins, 515 123 8080 ...
96.32%	9/22/08	204	DB2ADMIN.EMPLOYEES

Classify and Catalog

Enterprise Search Engine

Unified Infrastructure

Federation and Integration Infrastructure

System Typologies



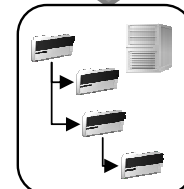
Transactional



Statistics



Portal & Internet



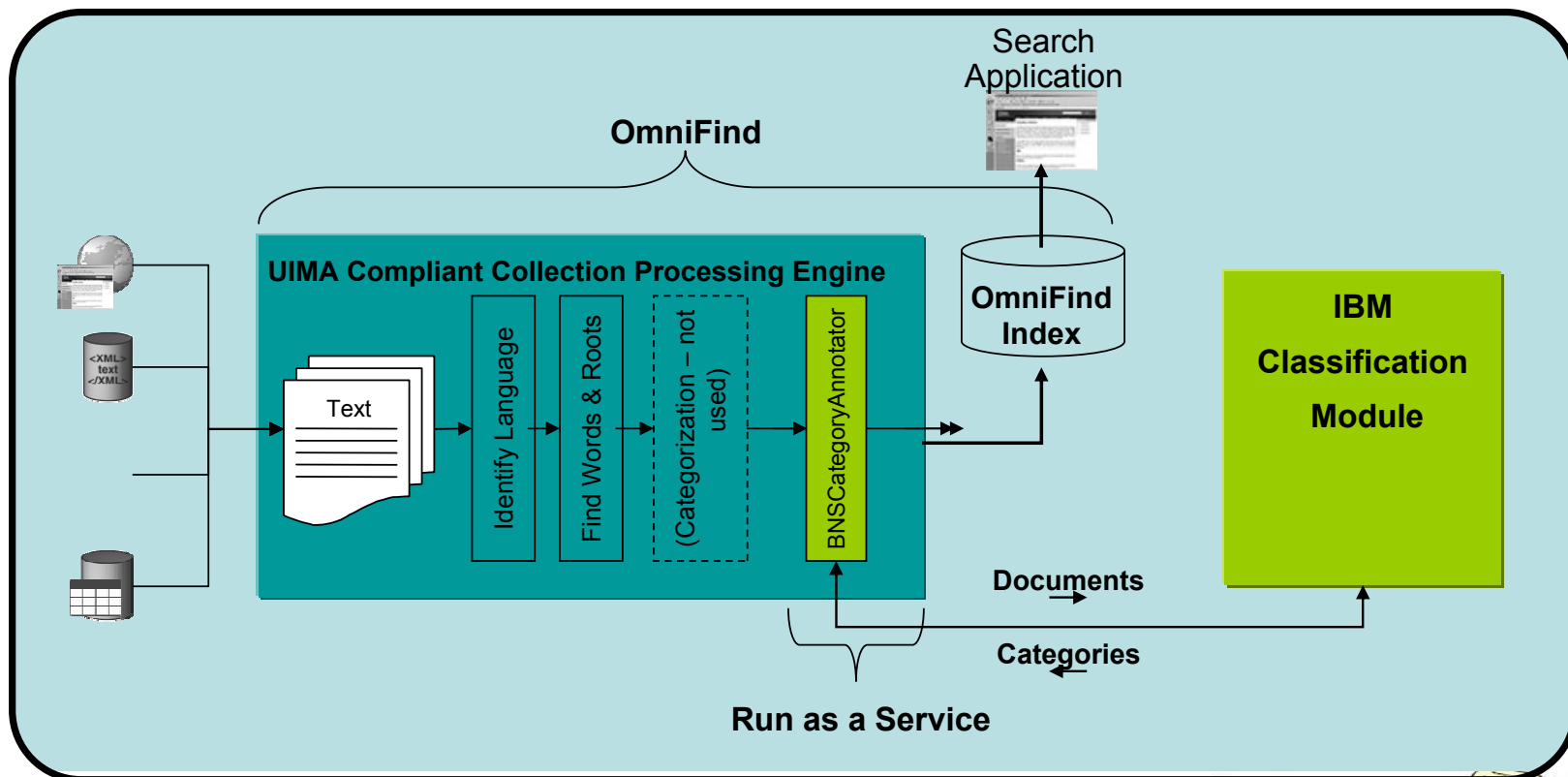
ECM

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Advanced Classification Frameworks Architecture

UIMA framework integrates the Classification Module in the OEE Environment to assign new categories in OEE



Run Time Classification Functionality



Consumer Application

Input

“Buongiorno. 3 settimane fa ho ricevuto conferma che i miei libri sono stati spediti, e il controvalore addebitato sulla mia carta di credito. Sono trascorsi 22 giorni ed i libri non mi sono ancora arrivati. Potete aiutarmi a capire cos'è accaduto? Cordiali saluti”

Output

ORDER_STATUS (92%)
COMPLAINTS (82%)
ACCOUNT_BALANCE (32%)

Feedback

Intent =
ORDER_STATUS

IBM® Classification Module



Benefits and Features of the Solution



Search

- Free Text Queries, Fixed Queries, Keywords Based Search
- Parameters Search, Entity Search, Dashboards and Charts for drill-down Search
- Web Services compliant
- Portals Integration and Support (portlet JSR168)
- Cataloguing and Classification of the picked results

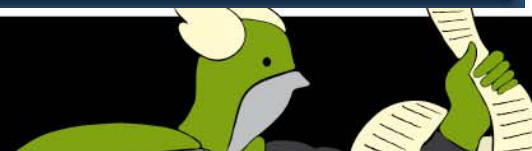
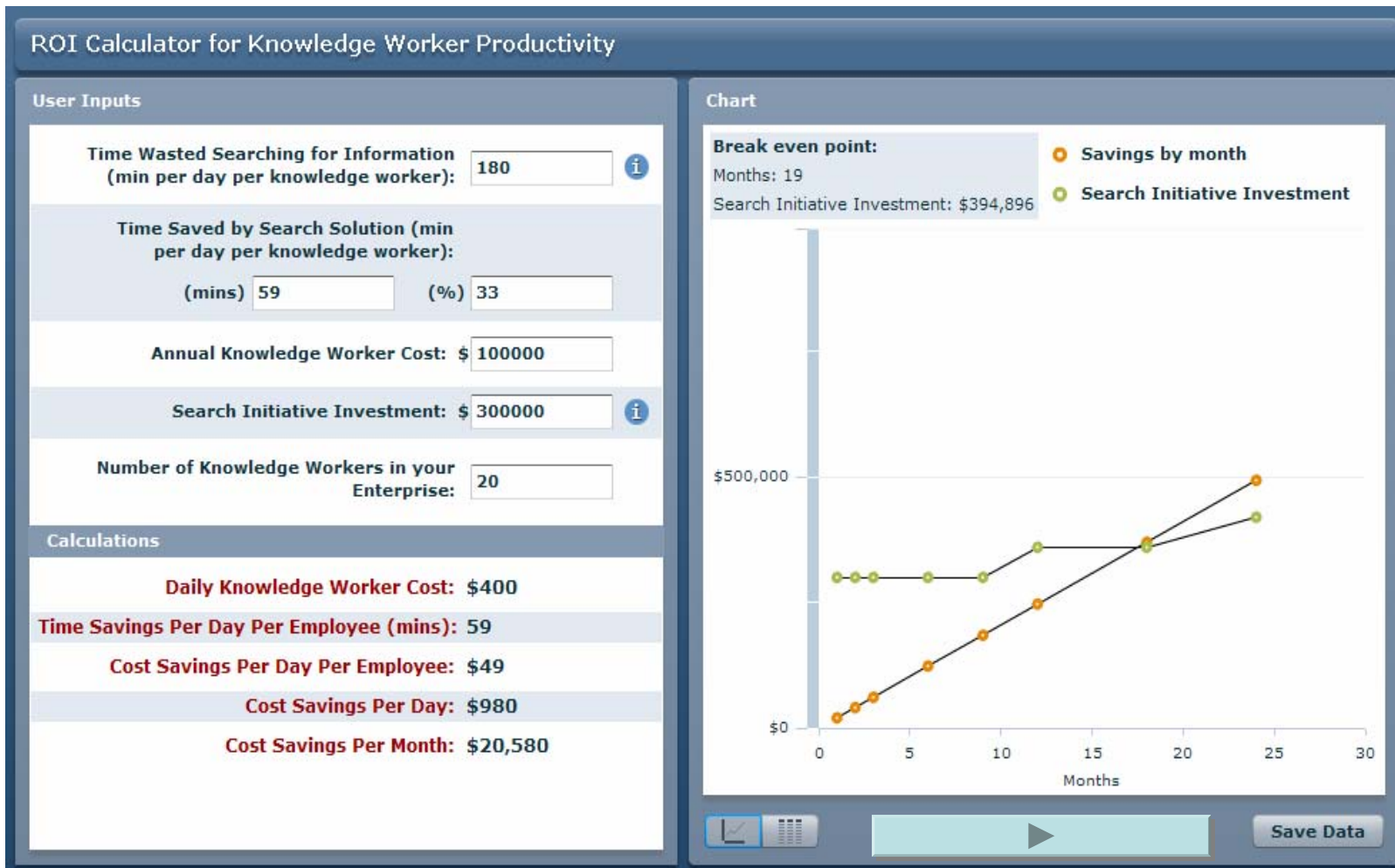


Federation

- Common RDBMS and Web Services federation
- ECM federation and category classification integration
- WEB Application federation via Web Service or Adapters
- Client/Server application federation by Custom Adapters
- Best Source Choice based on deterministic criteria
- Conflict Resolution by source configurable selection and results validation



Tangible Benefit by ROI Estimation





Demo Live

Maurizio Gallotti
Federated Enterprise
Search Engine

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Thank
YOU

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