# What is Enterprise Search

## Why It Matters to Your Business and Your Customers

Perry Solomon

*January 14, 2010*

# Opening Questions

- Who has deployed enterprise search?
- Which types of applications?
- What were key opportunities / challenges to be addressed?
- How was the experience?

# Entering The User Revolution

- Content is king → **User** is king
- **Attention** is the scarcest resource (on the web, in the enterprise)
- ROI = Return On **Intent** …
- Publishing → **Consumption**
- Push → **Pull**
- Control → **Empower** users

*SEARCH transforms information from the publishing to the user context*

# Enterprise Search is Transforming Business

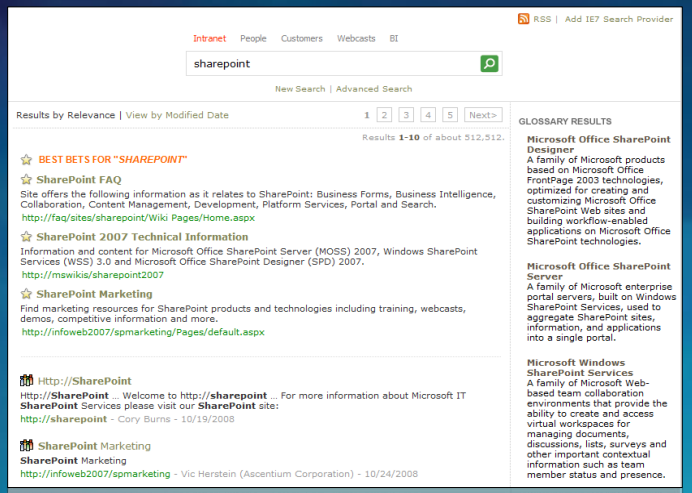
## Connecting people to information, driving better outcomes

### On a company website

search helps your **customers** get what they want

increasing revenue

### On a corporate network




search helps your **employees** get their jobs done

cutting costs

# What is Enterprise Search

What's directly visible:

- Search Box
- Results List
- Faceted Navigation

What's not but is critical:

- Relevancy
- Contextual Insight
- Entity Extraction
- Relationship Awareness
- Global Linguistics Support
- Expert Location
- Stored Searches
- Alerting
- Word Stemming
- Natural Language Query
- Content Matching
- Visualization
- Source Selection
- Federated Search
- Vertical Dictionaries
- Security Management

# Pillars of Successful Search System

Innovation in key components empowers search system builders and managers

| Interaction Management | Contextual Matching | Content Analytics |
| --- | --- | --- |
| | | |
| **Shape User Experiences**<br>Build flexible, algorithmic-driven, user experiences, unlocking user intent to guide relevancy | **Manage at Extreme Scale**<br>Deliver business control and contextual relevancy, with unprecedented performance, and expressiveness | **Deliver All The Content Users Want**<br>Capture and enhance meaning of information across diverse content sources |

# Search Vision

Create an Interactive User Experience

Make the Most of Your Content

Tackle the Most Demanding Search Challenges

*"Search is the hidden mission-critical app. Good search makes things work. High-end search makes it great."*

# Create an Interactive User Experience

## Go beyond the search box

- Visual navigation supports rapid concept recognition and search refinement
- Sliding scales, zero-term search, and tag clouds capture user intent quickly and effectively
- Scan results rapidly with document previews and thumbnails

## Tune for your users

- Granular controls allow you to tailor relevance
- Rich user context improves findability
- Multiple search profiles support tune for user groups with different needs
- Individual search experiences can be personalized for superior relevancy

# Engage Your User with Visual Search

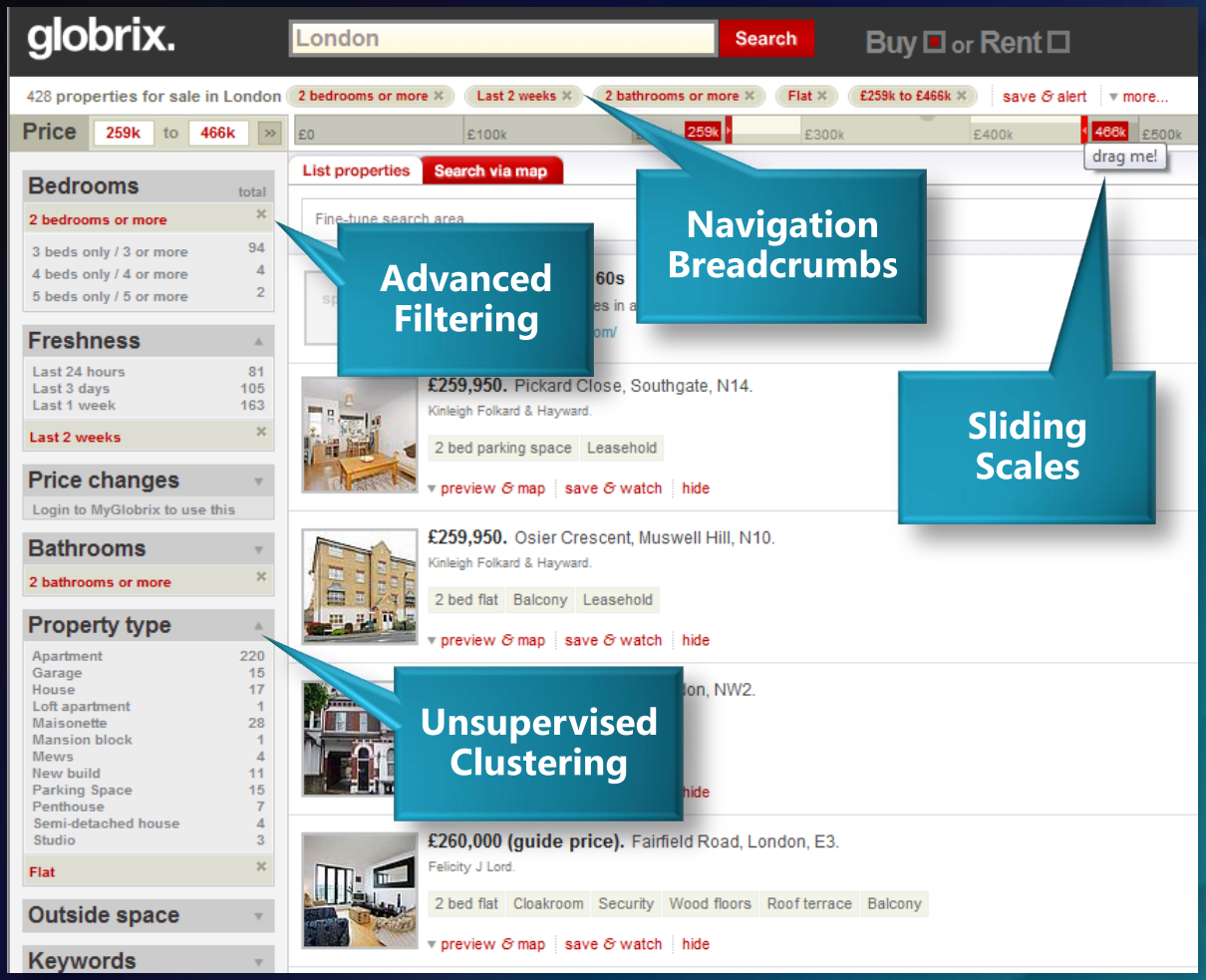
Numerous visual navigation options for more intuitive search

Results can be scanned rapidly with document previews and thumbnails

Identify content without downloading and opening applications

Disparate result sets are unified with robust federation offering more control

# Promote Interactive Search with Navigation

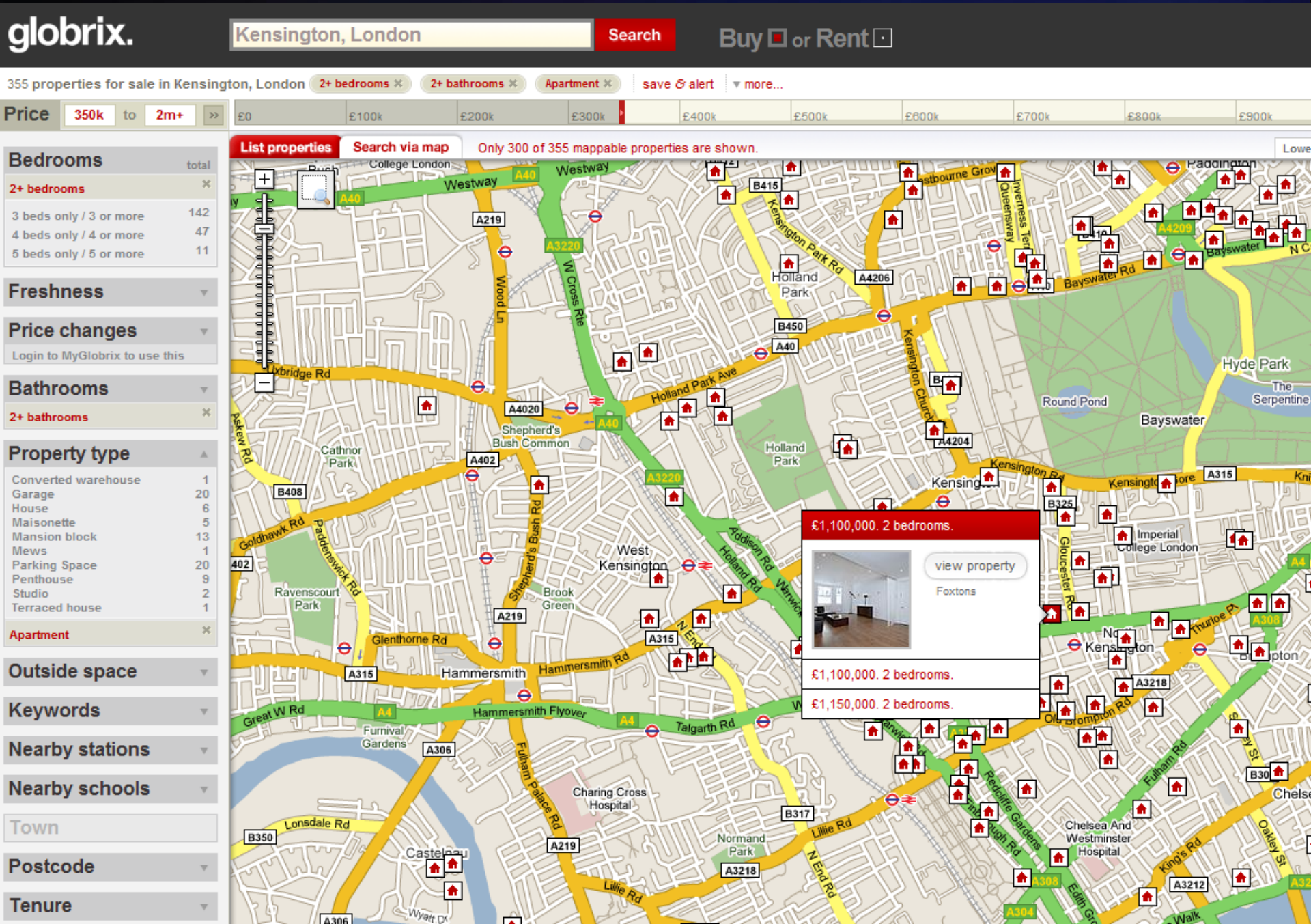



Allow users to easily specify queries with sliding scales

Support rapid query refinement with navigation

Dynamically generate navigators and categories with entity extraction

# I want a 2 bedroom and 2 bathroom apartment near kensington...



# Make the Most of Your Content

## Understanding content and user intent drive high-quality search results

### User

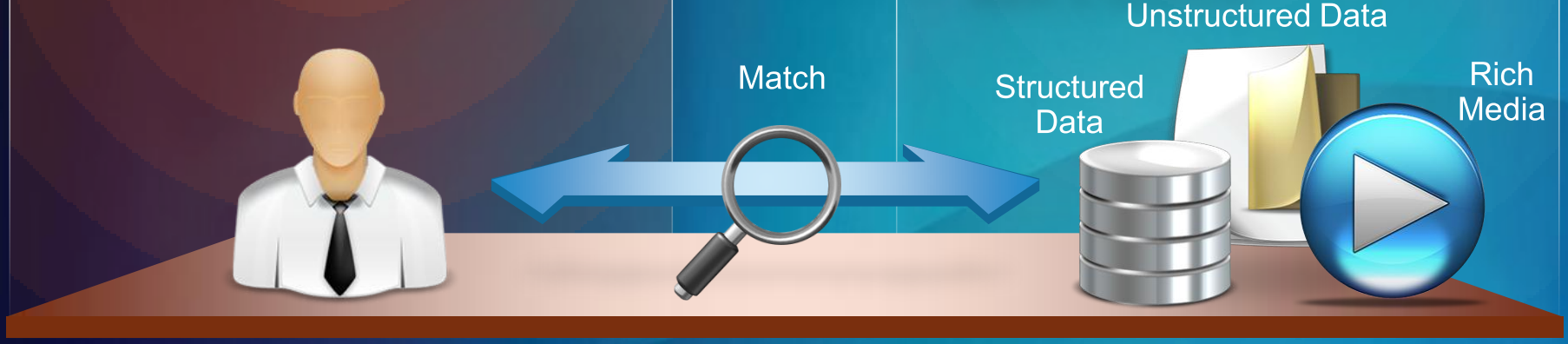
Improve understanding of user intent

- What is the user asking?
  - Get rid of noise
- Where are they asking from?
  - Understand user context
- How to translate?
  - For best system processing

### Content

Make content findable and usable

- Extend the reach of your content
- Use entity extraction to create metadata to:
  - Provide better structure for optimal findability
  - Enhance user experience through richer navigation
- Take advantage of structure where there is structure



# Make the Most of Your Content

## Times Online Unlocks 200-Plus Years of Archival Content

"We wanted to set the gold standard for an online newspaper archive for arguably the most famous newspaper in the world. Providing an accurate, multimedia search platform to enable a project of this scale and sophistication was key to a high quality user experience."
- Anne Spackman , Editor in Chief, TimesOnline

### Scenario

- Times Online has over 200 years of content they want to make available to users

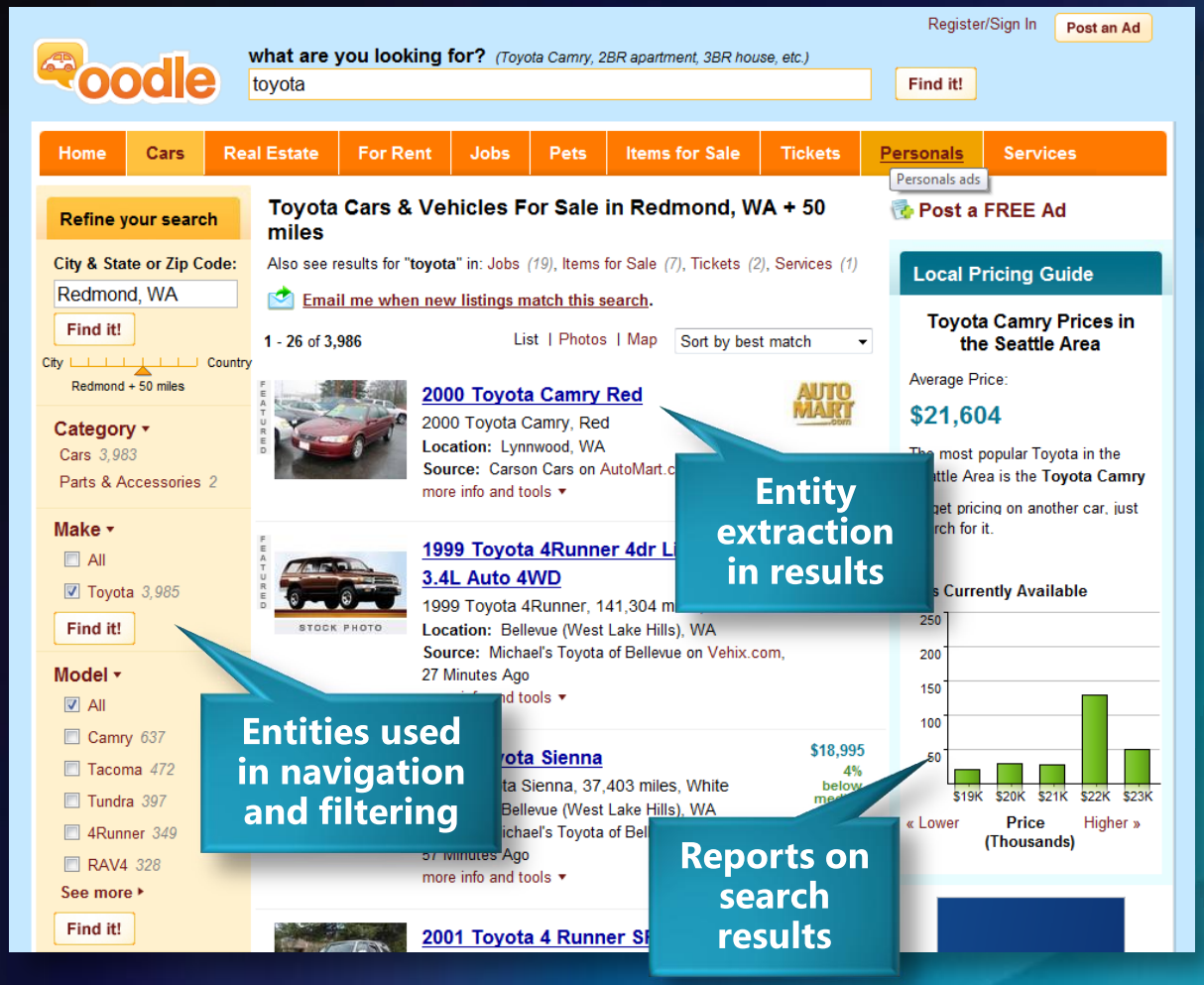
### Need

- A search solution with the right scalability, proven stability and technical sophistication
- Provide a unique customer experience that is attractive and intuitive

### Enterprise Search Solution

- Index and search The Times archive of 20 million articles
- Deliver high-quality response within a two-second

# Enrich Content to Better Match to User Intent




Aggregates 20M listings across 80,000 websites and structured data stores

Automated entity extraction, tagging, and classification drive navigation

Anti-spam and scoring algorithms used to cleanse listings

# Support Your Growth with Scalable Search

A top ranking site in Japan and top ten in the world

1,400 updates per second with over 15M SKUs

2–3,000 QPS of traffic in real-time

Number of queries tripled, helping drive revenues, with 1/3 the hardware

# Configure for Your Users' Needs

Content refinement performs analysis, extracts entities, and tags by category and subject

A variety of data asset types can be leveraged for more complete insight

Rich experience improves content "findability"

Contoso Business Consulting

# Contoso
BUSINESS CONSULTING

contoso

Search

Filter: PowerPoint (14) | Word (3) | PDF (1)

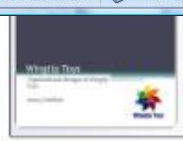
Presented by Birgit Seidl
Contoso Business Consulting

## Microsoft Office for the Pharmaceutical and

... Before IRM, Word 2003, InfoPath 2003 and Windows SharePoint Services The Regulatory Affairs and Submissions team at **Contoso** Pharmaceuticals is putting together a New Drug Application (NDA) to submit to the FDA. Information from several different...

## Q1 2009 Sales Meeting

**Contoso** BUSINESS CONSULTING Southridge Video Q1 2009 Sales Meeting Kevin Kennedy For Southridge Video **Contoso** BUSINESS CONSULTING Sales target T500 line: 200 items 200 items in stock No delivery Sales target T1000...



conservatism Costs Scenario A Scenario B Scenario C
lindy.martin@contoso.com
ben.miller@contoso.com
jenny.gottfried@contoso.com 1 2 3 4 5 6

## Proseware Accounting

Date: January 21, 2009

**Summary**
...Balance Adjusting Entries Closing Entries Proseware Accounting The Financial Statements Accounting Standards The Balanced Scorecard john.evans@contoso.com scott.seely@contoso.com 1

**Author**

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**People**

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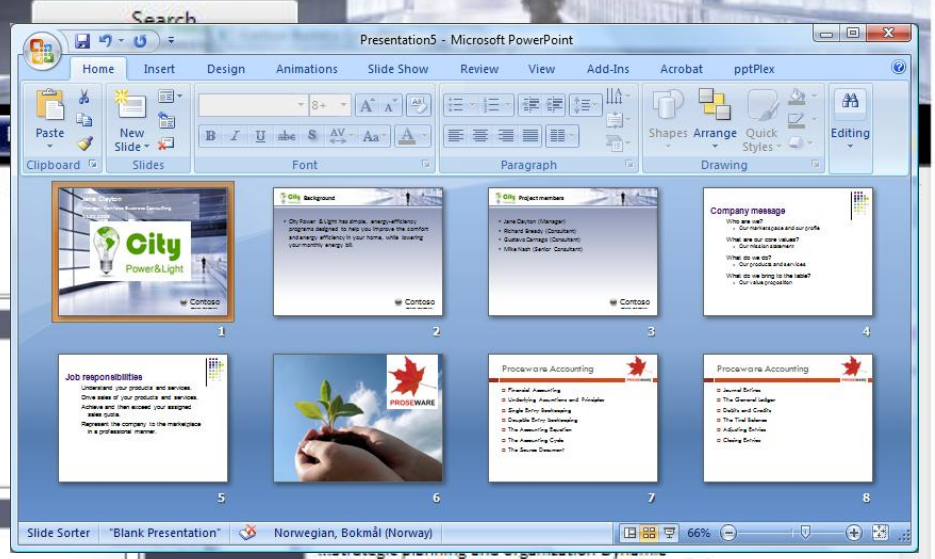
## Baldwin University Baldwin Museum of Science



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Create Presentation

Clear Slides

Contoso Business Consulting

# Contoso

BUSINESS CONSULTING

business

Search

Filter: PowerPoint (27) | Word (8) | PDF (60) | People (14) | Projects (1) | Customers (0) | Media (0)

## Customers

- **Blue Yonder Airlines** Miami, USA
- **City Power & Light** Miami, USA
- **Southridge Video** Melbourne, Australia
- **Trey Research** Cambridge, UK
- **Wingtip Toys** London, UK

## Industry

- Healthcare
- Financial Services
- Life Sciences
- Pharmaceutical
- Public Sector

## Products

- Microsoft Office
- Windows Vista
- Microsoft Exchange
- FAST ESP

## Concepts

- Microsoft Live
- Data Retention
- Social Networks
- Location Services
- Market Opportunities

### Contoso Projects and Competences

Contoso Organizational Overview Contoso Projects and Competences Alan Brewer CEO CONTOSO **BUSINESS** CONSULTING Alan Brewer (CEO) Contoso Internal Competences: Brand Management Market Research Project members: Birgit...

### Trey Research T2 project status

...Research must be able to track the identity of the individual user The Internet connection between Trey Research and their **business** Scenario 1: Merger Scenario 2: **Business** to **Business** Authentication The ability to positively identify a party...

### Contoso Organizational Overview

Contoso Organizational Overview Contoso Organizational Overview Alan Brewer CEO CONTOSO **BUSINESS** CONSULTING Organization Alan Brewer (CEO) Department: Performance Management Jay Adams (Vice President) Richard Bready...

### MessageDirect

Consolidated Messenger

Operations and Technology Management, Business Intelligence, Project Management

### MessageDirect Project brief

Date: January 15, 2009

**Summary**

...Diagram January Phase 1 April Phase 2 August Phase 3 December Phase 4 Technical Process Diagram 4 **Business** intelligence (BI) refers to skills, knowledge, technologies, applications, quality, risks, security issues and practices...

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Brad Sutton
Miami

David Yalovsky
Washington

Diane Tibbott
Melbourne

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**Brad Sutton**
Good definition of Data Warehous

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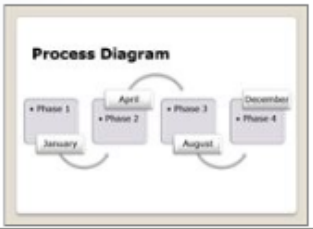
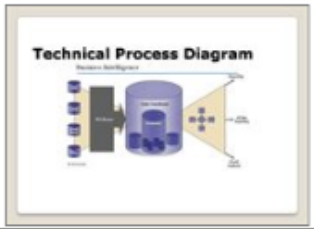
Information Management
Quality Management
Data Warehouse



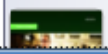
### Drive Improved Business Performance

Drive Improved **Business** Performance Drive Improved **Business** Performance White Paper Published: March 2007 The People Ready **Business** Inside your company is a powerful force: a force that can cut costs, win customers, and find innovative...

### Managing a Dynamic Business

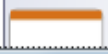
Managing a Dynamic **Business** Daniel W. Rasmus Director of **Business** Insights Microsoft Corporation Microsoft **Business** Insights2 The information contained in this document represents the current view of Microsoft Corporation on the issues discussed...

### Windows Mobile and Business Intelligence



m **Business** Intelligence Make better **business** decisions wherever **business** takes you. Many

### Pervasive Insights Produce Better Business Decisions



Pervasive insights produce better **business** decision Opening access to **business** intelligence by

# Shape User Experiences

Drive defined business results and delight users

Blended Search and Recommendations

Merchandising and Navigation Control

Popular and Premium Content Promotions

Business Rule-Based Federation

Flexible Relevancy to Power Social Communities

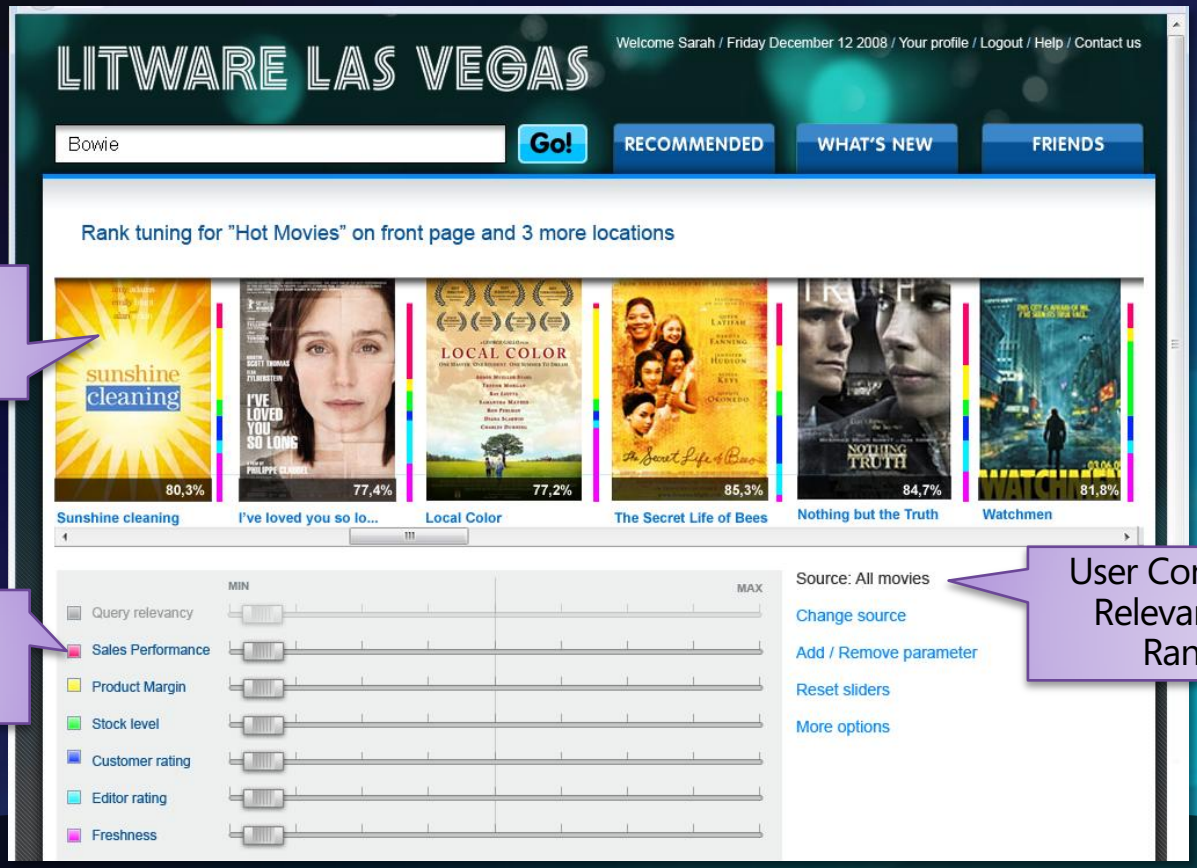
**Achieve business control**
User experience framework to implement business models and drive users "from search to finish"

**Power multiple paths to revenue**
Deep portal experiences enabling advertising, transactional and subscription revenues

**Get personal**
Personalized search and recommendations to maximize information discovery and user satisfaction

# Manage at Extreme Scale

Achieve business results with expanded, yet simplified, control and extensibility




Context-Aware Ranking and Navigation

Flexible Results Presentation

User Control over Relevancy and Ranking

**Target users**

Search profiles implemented and managed across centralized or distributed environments

**Scale to the max**

Sub-second responsiveness and great application diversity at web scale

**Unlock context**

Greater precision through improved scope search performance

# Deliver All The Content Users Want

Empower users by delivering timely, complete content experiences

Disambiguation Driven by User Context

Flexible Mapping to Diverse Search Index Structures

Management Interface for Speed and Ease of Use

Multimedia Content Experiences

Blended Content Sources

**Capture and enrich data**
Meaningful, diverse content sources, delivered more quickly to multiple applications

**Speed time to market**
Reduced manual administration of content, through enhanced content integration services

**Simplify management**
Blended structured and unstructured information, for diverse use cases with large, rapidly-changing data sets

# Las Vegas Tonite

Welcome Sarah / Friday December 12 2008 / Your profile / Logout / Help / Contact us

Bowie

Go!

MAIN SECTION | SUBSECTION | SUBSECTION

- Zowie **Bowie** – Las Vegas show (129)
- David **Bowie** – musician & more (916)
  - Albums & music (90)
  - News (549)
  - Concerts (92)
  - Acting (320)
  - Facts (50)
- **Bowie** knife (16)
- soldier (2)
- **Bowie** – model (2)

**Disambiguation:** Query suggestions

seconds on a stage before the next presenter is up. With DJ & live gigs.

At DOGA – skramsta, dagne & joj are going – 13 comments

14°C
Current: Sunny
Wind: E at 0 km/h
Humidity: 65%

Your assumed current location:
**767 5th Ave, Las Vegas**

Change your location

**User's context**

19:00
(first show)

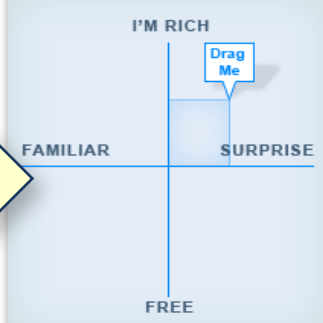
## Movies at Contoso Theater in Las Vegas

Sunshine cleaning 19:00 | I've loved you so lo... 19:15 | Local Color 18:50

**Actionable results** with commercial federation

**User's preferences**

YOUR MOOD — No mood set




☐ Friends' plans

**Or filter by:**
Friends' mood
Energy (Cozy – Exiting)
Duration (Short – Days)
Kind (Physical – Web)
More choices…

21:00

## Las Vegas Restaurants with free tables at 21:00

**Olive Garden Italian Restaurant**
★★★★☆
6850 W Cheyenne Ave, Las Vegas - (702) 658-2144
24 reviews, directions, menu, and more »
ORDER

**TAO Restaurant**
★★★★☆
3377 Las Vegas Blvd S, Las Vegas - (702) 388-8338
214 reviews, directions, menu, and more »
ORDER

**Disambiguation:** Category Tip Result

MONOLOGUE

DIALOGUE

# Why Enterprise Search Matters

## Turn information into business outcomes through engaging experiences.

### Visual

Help you identify patterns and discover new insights

### Conversational

Change how you interact with information, giving you better answers

### Actionable

Allow you to rapidly turn answers into outcomes

# Q&A / Discussion

# Thank You!

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