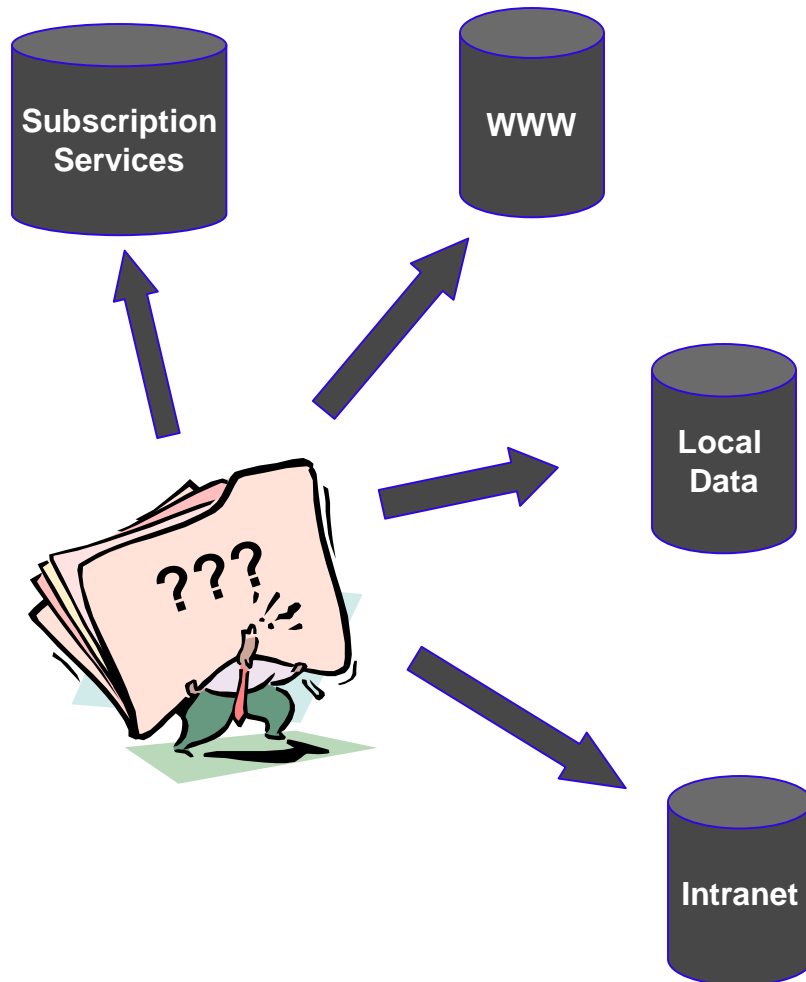




# How Do I Get People to Use the Content?

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# The Burden of Search is on the User



1. They have to decide to search.
2. They have to know where to search.
3. They have to use the system well enough to get the information needed.



## “If you build it, they will come”

- Motorola has a 5TB Enterprise Content Management system.
  - Only 1% of Motorola’s content is used within a given year.
- A Large Consultancy has a state of the art enterprise search tool
  - Employees download a document less than once a month.
- Web search and subscription services suffer from the same adoption challenge.

**The information is out there but users don't think to search for it.**



## The New Challenge

How do you get the right content to the right people at the right time?

Once users can **search** for content, make sure it gets **found**

*The solution:*

*Deliver content to users proactively*



# Getting information to the user

## We are seeing some of this today:

- **Alerts**
  - Users can set up search alerts that deliver new content to them based on the criteria they enter.
- **RSS**
  - Subscribe to a source, and have information delivered to you as it is published.

## But there are challenges:

- **Relevance**
  - Alerts and RSS feeds are not relevant to what the user is doing *right now*. They are only “relevant in general.”
- **Too many choices / information overload**
  - Which of these alerts or RSS feeds are going to be a good investment of my time?



# Where to search: Too Many Choices

- The Deep Web
  - Web search engines only index a fraction of the information available
  - With the 1000s of sources out there, which do you choose?
- RSS
  - Too many channels! Which one should I read?

**“As the number of choices grows further, the negatives escalate until we become overloaded. At this point, choice no longer liberates, but debilitates.”**

**- Barry Schwartz,  
*The Paradox of Choice***



# Where's the info?



Intranet  
Portal



Web  
Search



My  
Desktop



Lexis



Sales  
Force



CRM



Shared  
Drive



Email



DIALOG



Journals



EV2



Hoovers



Blogs



News  
Feeds



## You don't have to choose

- Search federators broker queries to existing engines
  - The user can have one interface to search all of the sources at once
  - Results are fused and allow the user to drill down on the sources they care about.
- RSS aggregators accomplish the same thing
- But users still have to decide to go search.



## “If they come, they will find it”

- Searching is simple – type what you need and get what you want.
- But User queries are ambiguous.
  - 2 words long
- > 50% of all searches are abandoned.
- User satisfaction with search is still low.

**Even if users go to search destinations they don't find what they're looking for.**



## Technologies try to help

- Better search algorithms
  - Network and Bayesian models make it easier to get to documents that use the most popular meaning of a search query
  - LSI helps to find documents that match based on terms with similar meanings
- But purely algorithmic approaches still have to guess based on what users type – 2 words, like:
  - erosion banks
  - moving china



## Technologies try to help

- User profiling
  - Learn content areas the user is interested in to drive more precise results when they query
  - Proactively recommend new items based on what others are viewing
- But this assumes you have the same goals all the time.
- What if you're doing research for a friend?
- Profiles are too hard to debug.



## Objectively Relevant?

- Search engines are measured based on relevance
  - Would some reasonable person say that search result could have been relevant to the user's query?
- But how are they supposed to know?
- Access to user context allows us to deliver *useful* results.
- Talk of relevance is meaningless without context.
  - Study found little relationship between user judgment of utility in the context of a task and similarity of a search result to the document they were editing.

**You can only achieve  
relevance with context!**



## What about advanced features?

- Advanced features allow users to specify more criteria in their search request, resulting in more precise results.
  - Examples: ranges, relations, entities, taxonomy, author, source
- Results are astounding, but mostly these tools are unused.

**Integrated into a user's workflow,  
advanced features finally get used.**



## Users are in pain, but so are companies.

- IDC survey found knowledge workers spent:
  - 3 hrs/week recreating existing content
  - 9.5 hrs/week searching
  - 8.32 hrs/week gathering information for docs
  - 3.5 hrs/week searching but failing to find
- And these are self-report data – which establish a *lower bound* on the actual.

**Companies waste a lot of time and money not finding what they're looking for.**

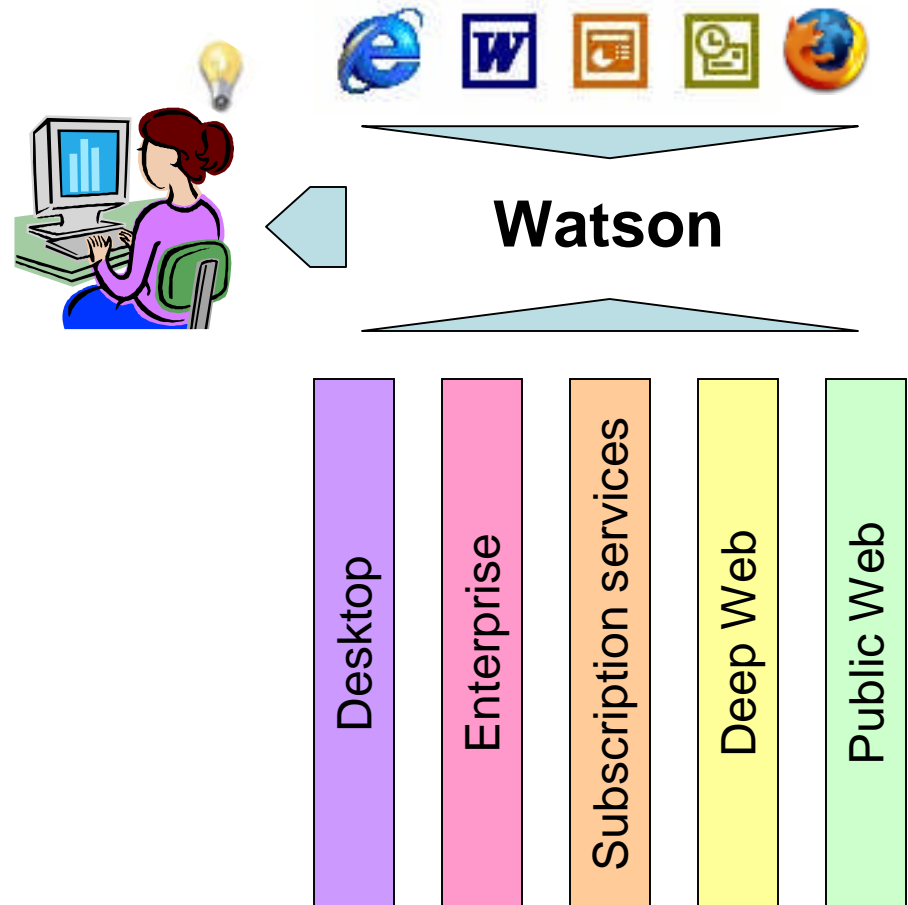


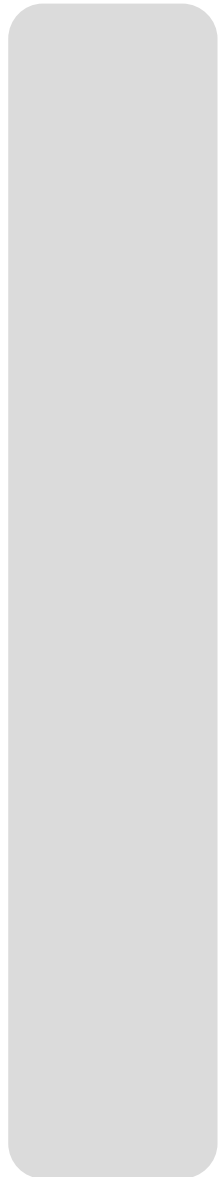
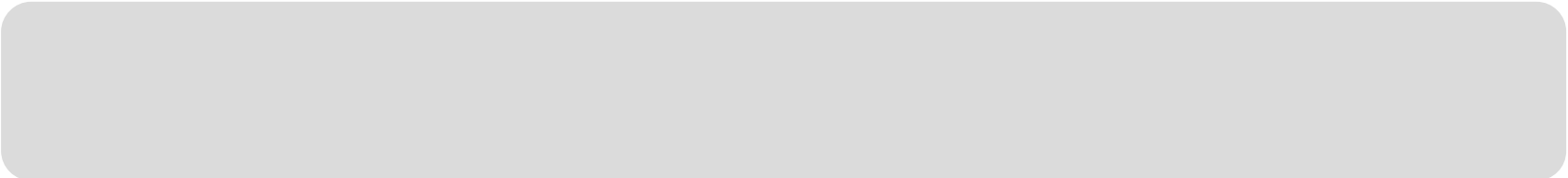
## A complete solution must include:

- All of the search capabilities we have today, PLUS:
- A proactive user experience
  - So the user doesn't need to take action in order to benefit
  - A constant presence means users *always* benefit
- Federation
  - So that users can access information from all of the places it resides
- Context awareness
  - Knowing about what the user is doing the only way to help them
  - The system must be polite and responsive to the user

## Working with existing search technologies, Watson brings information to users

- As the user interacts with common apps
- Watson reads the documents she is working with
- It queries the sources she chooses for related information
- And delivers relevant results next to the application she is using.

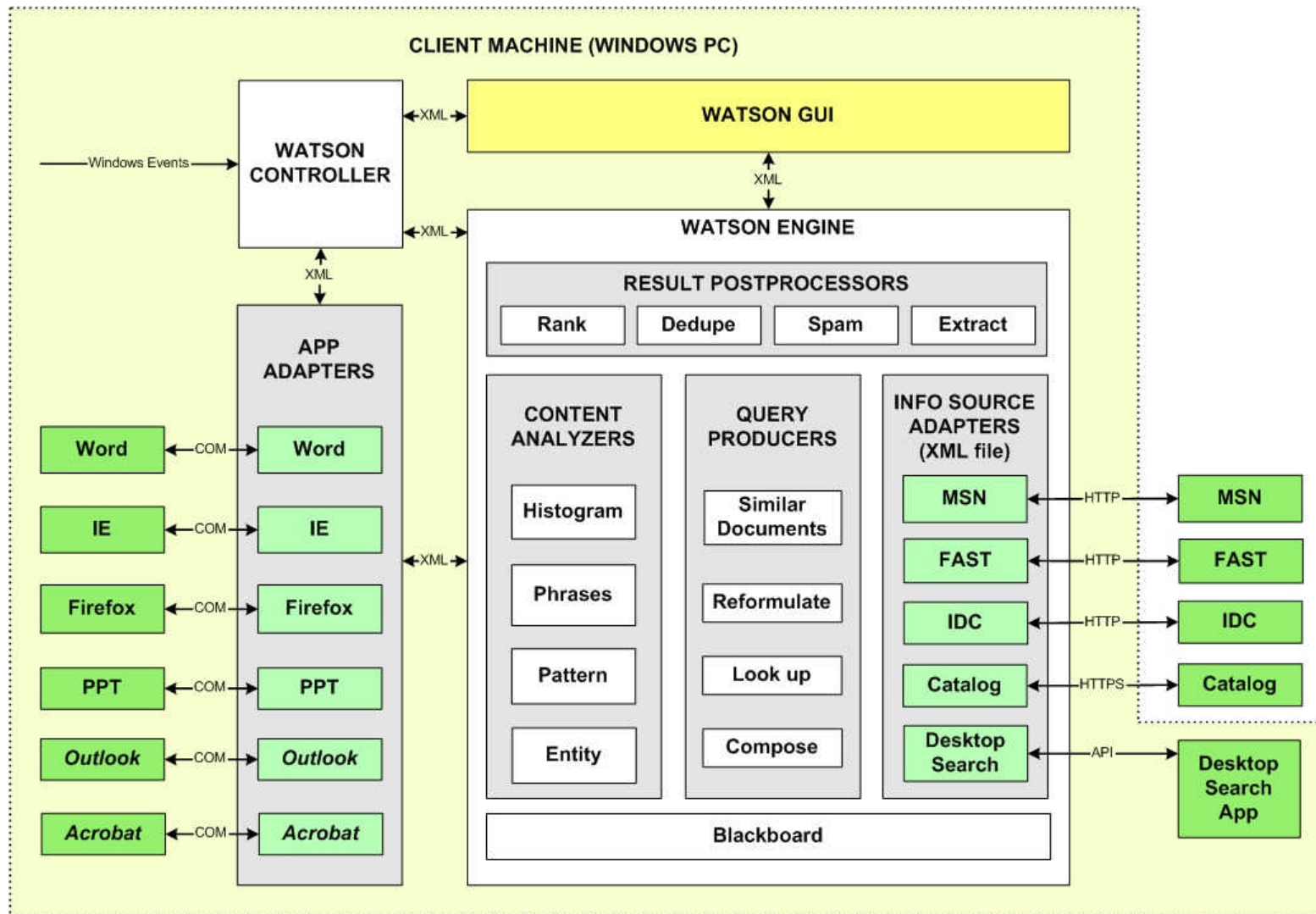




# Demo



# Watson's advanced context-driven architecture is open and flexible





## Watson helps users get more

- 3-6x increase in use of information (as measured by clicks)
- 2x more relevant documents as compared with expert end-users searching themselves

*“If I didn’t have Watson, I’d have to hire a research analyst to sit next to me.”*

-Don McLellan, VP Strategic Transactions, Motorola, Inc.

# Thank You

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[www.intellect.com](http://www.intellect.com)

# Appendix

Based on the context of your email or document,  
Watson brings you information while you work.

The screenshot shows an email client window titled "Re: Senior Vitamin presentation - Message (HTML)". The email content is as follows:

From: Boss Sent: Tue 5/23/2006 8:06 PM  
To: Jeff  
Cc:  
Subject: Re: Senior Vitamin presentation

How is this senior vitamin presentation to the sales team coming along?

Boss

-----Original Message-----  
From: Boss  
Sent: Sun 5/21/2006 4:32 PM  
To: Jeff  
Subject: Sales presentation - details

Jeff -

For the presentation to the sales team, we'll want to brief them on all aspects of the senior vitamin product.

- Senior Vitamin Market Size
- Senior Vitamin Market Trends
- Competition - key players
- Latest Pharmacological Study Results

Anything else you think is important to add?

Boss

The Watson sidebar on the right shows search results for "Senior Vitamin presentation". The top result is "Sales Team Presentation .ppt (Senior Vitamin)", which is highlighted with a red box. Other results include "Senior Vitamins", "Vitamin Sales Team", "Vitamins for Seniors", "Senior Vitamin Market Size.ppt (Senior Vitam...)", and "What are Senior Vita...". At the bottom of the sidebar, there is a summary of results by source: Web (49), News (13), Blogs (25), Desktop (6), and SharePoint (13).

Information from your intranet can be automatically delivered when it is most relevant to the task at hand.

The screenshot shows a Microsoft PowerPoint window titled "Sales Team Presentation.ppt" displaying a slide titled "Senior Vitamin Product Update". The slide content includes:

- Senior Vitamin Market Size
- Senior Vitamin Market Trends
- Competition – key players
- Latest Pharmacological Study Results

The slide also features the Contoso Pharmaceuticals logo. A search window titled "Watson" is open on the right, showing search results for the query "Senior Vitamin Study Results.doc (Senior V...". The top result is "Senior Vitamin Study Results.doc (Senior V... Results Contoso Pharmaceuticals has completed a pharmacolo... SharePoint-Contoso server/per...". Other results include "Sales Team Presentation .ppt (Senior Vitamin)", "Senior Vitamins", "Senior Vitamin Product Announcement", "seniors : Study backs up claims over vitamin E...", and "Vitamins for Seniors.doc".

“You don’t know what you don’t know” - Now you do .  
Watson finds information you might not think to look for.

The screenshot displays a Microsoft Word document titled "Senior Vitamin Study Results.doc" with the Contoso Pharmaceuticals logo and the following text:

## Pharmacological Study Results

Contoso Pharmaceuticals has completed a pharmacological study of our new senior vitamin. As with all Contoso research, this study is a thorough review of the effects and benefits of product usage.

### Results Overview

Senior vitamin has been approved for release. Our Contoso study has also proven that this remedy is effective and will benefit the marketplace.

### Scope of Study

- Number of participants: 12,500
- Duration of study: 39 months
- Intended effects: Improve nutrition
- Patient condition: Low energy, works too much
- Condition to remedy: Create a balanced level of minerals and vitamins
- Expected success rate: 96.4%

### Benefits/Side Effects

The right-hand side of the screenshot shows the Watson search interface with the following results:

- Top Results (79)
  - Web (19)
  - News (16)
  - Blogs (26)
  - Desktop (4)
  - SharePoint (14)
- Case Study xam**

XAM has been taking the Contoso senior vitamins for the past 2 years. Age: 57  
Weight profile: Underwei...  
Contoso server/sites/VitaminSal...
- Case study mps** (highlighted with a red box)

Case study Case Study - MPS RMN has been taking the Contoso senior vitamins for the past 27 months. I...  
Contoso server/personal/leah/S...
- Pharmacological Studies**

Help Contoso  
Pharmacological Studies  
Current Location Actions  
Upload Document Contac...  
Contoso server/C17/Pharmacol...
- Senior Vitamin Product Announcement**

Product Announcement  
Product Announcement - October 2003 Contoso P...  
Contoso server/personal/leah/S...
- Senior Vitamin Product Launch**

Launch the Senior Vitamin Product on time with great

Configure Watson to search the sources that matter to you: KM systems & intranet, your desktop, the web and more.

The screenshot displays a Microsoft PowerPoint presentation titled "Sales Team Presentation.ppt" with the "Configure Information Sources" dialog box open. The dialog box is divided into several sections:

- Available Sources:** Includes "Create an Information Source" with options for "Connect to Microsoft SharePoint" and "Specify a Web Site or Domain". Below this is a list of "Information Sources" such as Dogpile, Forrester, Gartner, Google Desktop Email, Google Desktop Files, IDC, and Windows Desktop Email. Buttons for "Add >>", "<< Remove", "Import Source", and "Remove Source" are present.
- Restore Default** and **Check for Updates** buttons are at the top right.
- Folders:** A list of folders including Web, News, Blogs, Premium, Shopping, and Desktop. Buttons for "Move Up", "Move Down", "New", "Rename", and "Delete" are to the right.
- Information Sources in "Web":** A list containing Yahoo, AltaVista, and MSN, with a "Configure..." button below.
- OK** and **Cancel** buttons are at the bottom right.

In the background, the Watson search results window is visible, showing "Top Results (103)" for the query "Senior Vitamin Study". The results list includes documents like "Senior Vitamin Study" and "Vitamin Product Announcement". At the bottom of the Watson window, a summary of sources is shown: Web (44), News (16), Blogs (23), Desktop (7), and SharePoint (13).