

Google™



Universal Search

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Head of Enterprise Partnerships

January 24, 2008

Agenda



Overview

Search Challenges within the Enterprise

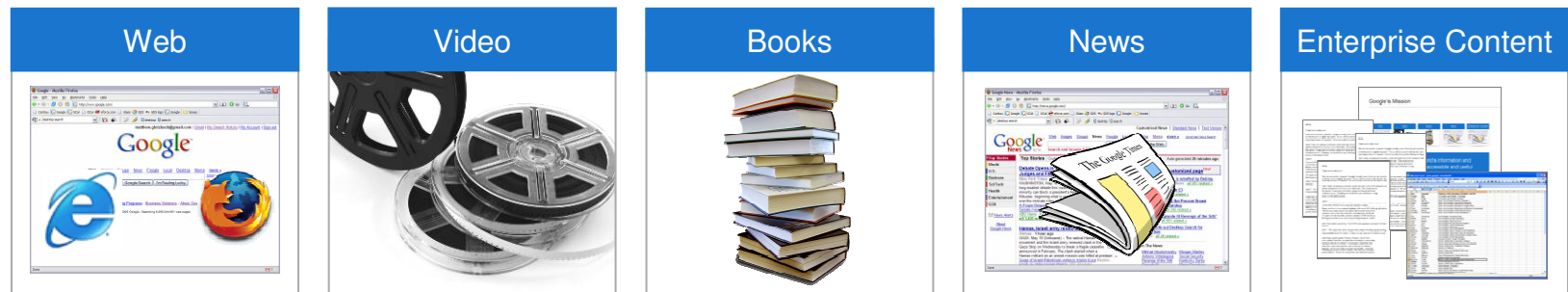
The Google Approach: Universal Search

The Google Search Appliance

Partnering with Google

Q & A

Our Mission



Organize **all** the world's information and
make it universally accessible and useful

Google's Strategy



Google Enterprise

- 600+ people dedicated to Enterprise
- Backed by Google's core research and development
- Provides Google-quality search across all Enterprise Content
- Delivers user-centric Apps that foster collaboration
- Over 10,000 active appliance customers

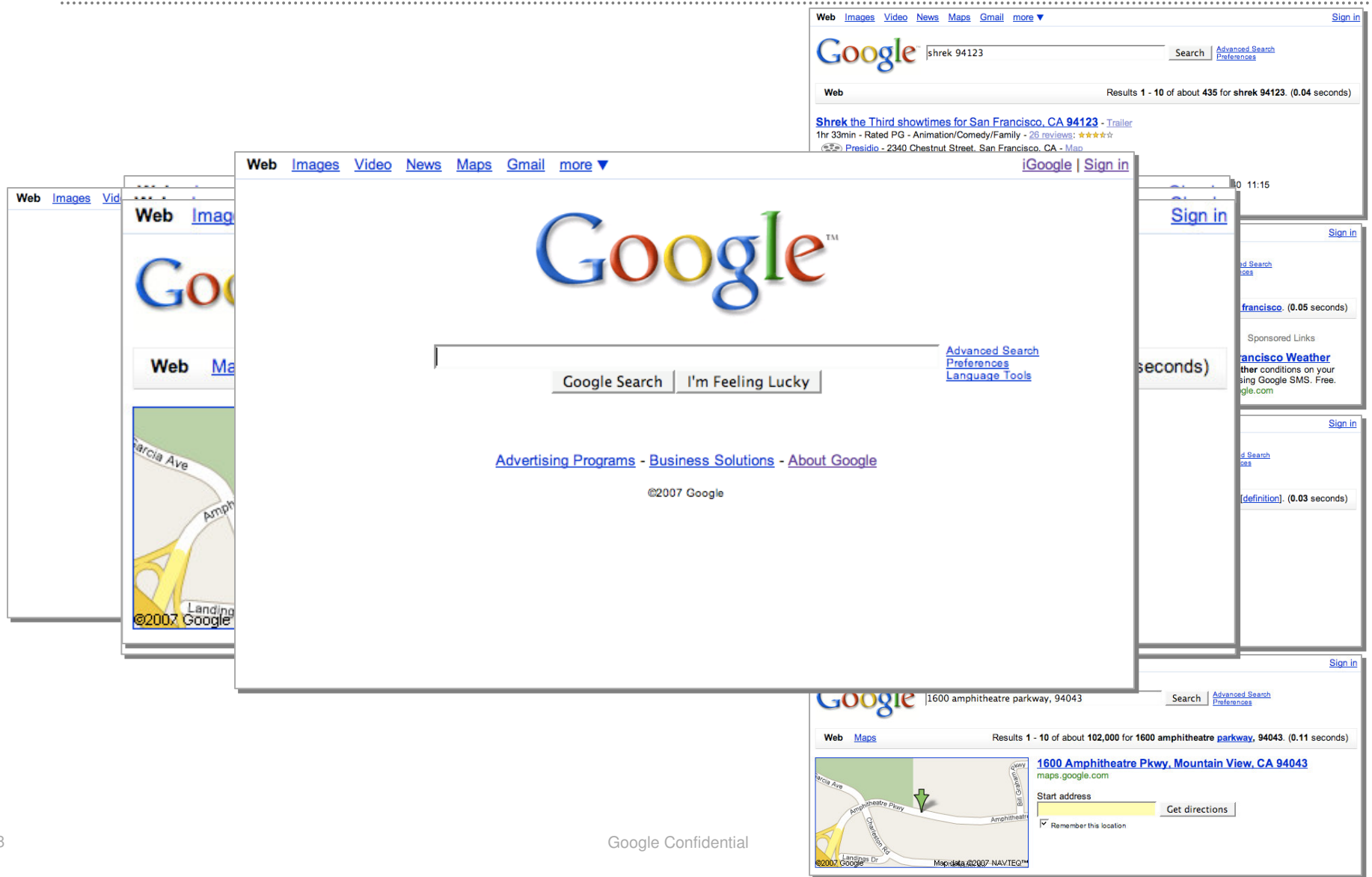
Mission:

Organize your company's information and make it accessible and relevant to authorized users

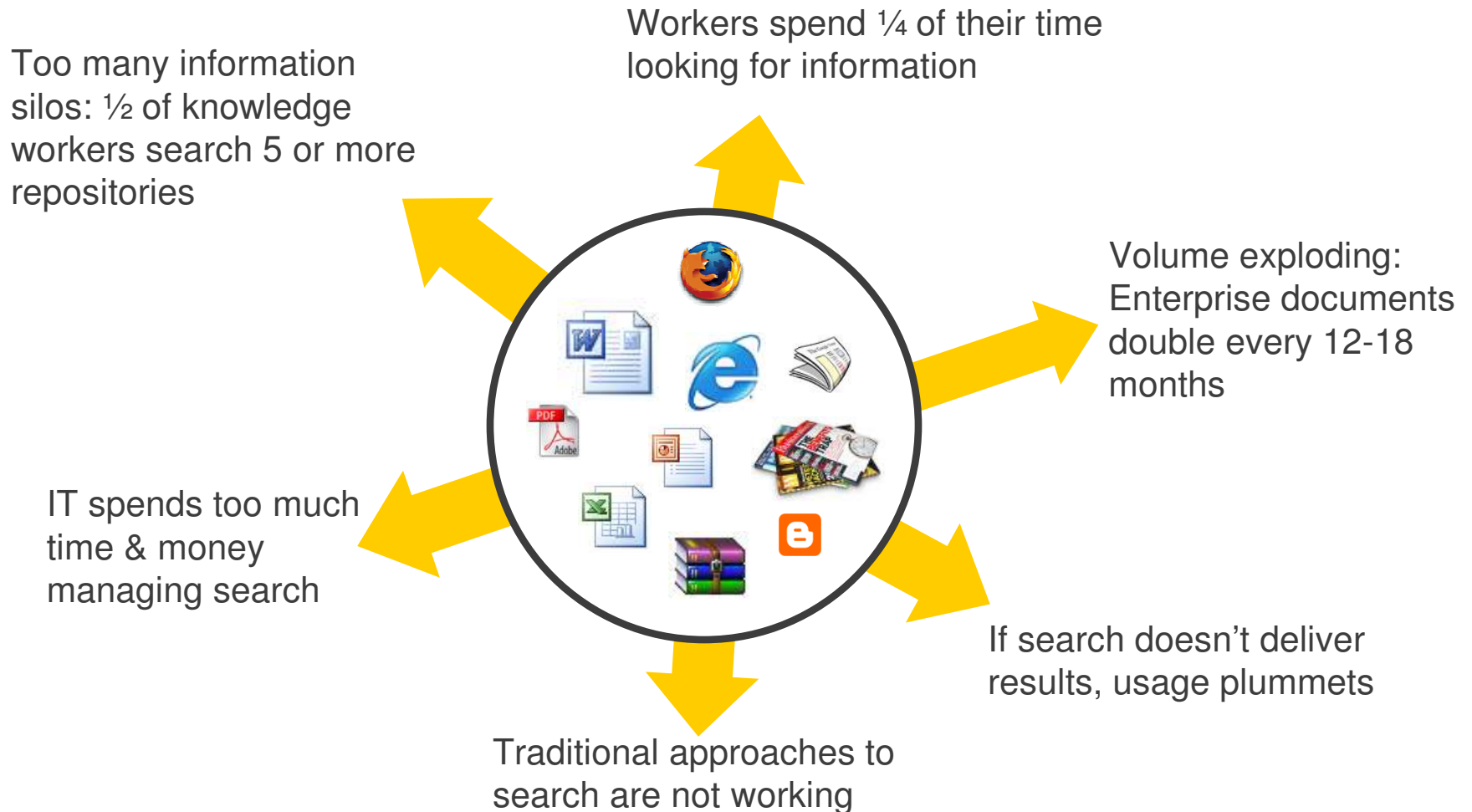


Search Challenges in the Enterprise

Search is the starting point to the world's information



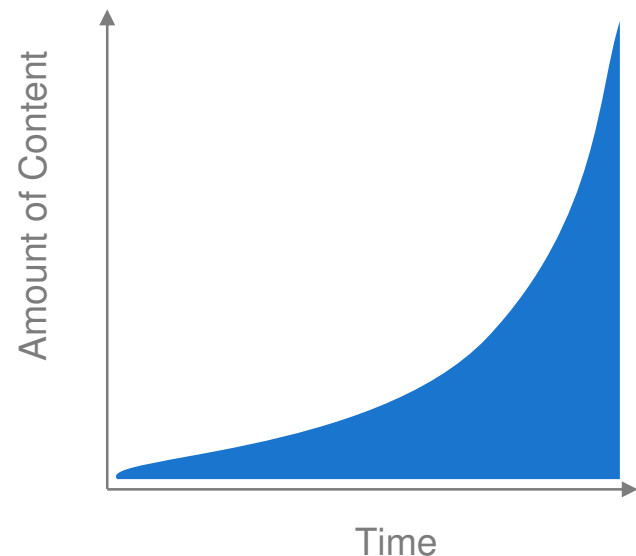
Yet, in the Enterprise, information access is a big issue



And the problem is only getting worse

Information overload...content is growing at greater than 80% per year

- Explosion of content
- Too many repositories
- Proprietary interfaces are hard to use
- Retrieval technology is not delivering relevant content
- Employees have different levels of information access



Users expect relevant results delivered quickly via simple interfaces.
IT Administrators demand security and integration.

The Impact on Business

- Loss of productivity
- Frustrated employees
- Decrease in product quality
- Compliance risks



Not utilizing your intellectual property
impacts your top and bottom lines



The Google Approach

Search is Google's key focus area



Comprehensiveness



Relevance



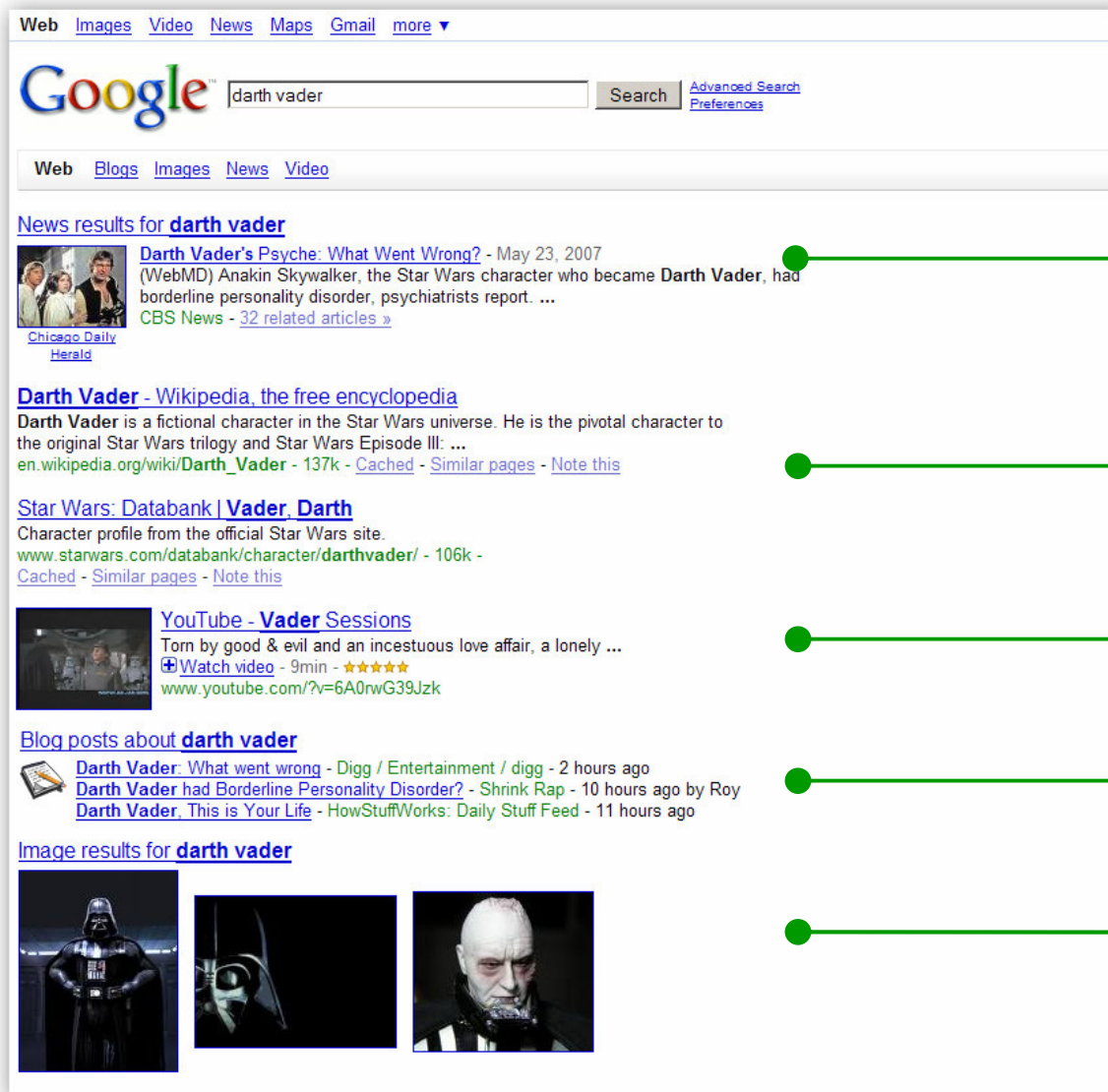
Latency



Presentation

Universal Search - All queries, all corpora, all the time

Introduced to consumers in May 2007



News results

Web results

Video results

Blog results

Image results



Universal Search for Enterprise

Even more important in the business environment

Business
Applications



Intranet

Google
Apps

Directory

News

The screenshot shows a Google search interface with the search term 'intel'. The results are filtered by 'Intranet' and 'Google Apps'. The results include:

- Salesforce.com Customer results for: intel**
 - Intel
 - INTEL
 - Intel-Lloyd
 - View all 48 results in Salesforce
- Intel RMA sheet**
 - Intel RMA sheet Archive Tracking Page: <http://www.corp.google.com/~dknowles/temp/> Try to keep the the format as consistent as possible. ...
 - www.corp.google.com/~cdove/sparrow/intel.html - 11k - 2006-03-16 - [Cached](#)
- Template Center PRD**
 - ... that the landing page mention an Intel product. ... Matterhorn will allow the parent account to place the ... controls and policy enforcement on the child accounts: ...
 - writely.corp.google.com/Doc?id=cgs4r5ds_10fjr2wm - 35k - [Cached](#)
- Sharon Pinedo** ([spinedo](#))
 - Enterprise Account Manager
 - [US-MTV-1098 203D](#)
 - +1 (650) 253-7230 desk, (415) 250-2387 cell
- News results for intel**
 -  [Intel-STMicro deal may change fortunes of beaten down NOR flash market](#) - May 24, 2007
 - This week, Intel Corp. and STMicroelectronics disclosed plans to combine their ... Becoming profitable would make it easier for the new Intel-STMicro ...
 - [MarketWatch](#) - [91 related articles](#) »
 - [Digitaltrends.com](#)
- Results in ASAM: intel**
 -  [Intellectual Ventures Management LLC](#) (Bellevue) - Robert Evanikoff
 - [INTELLITECHS](#) (AUSTIN) - [Google Internal](#)
 - [OFFICE OF NAVAL INTELLIGENCE](#) (WASHINGTON) - [Google Internal](#)

Benefits of Universal Search

Enable employees to access the entire knowledge of the company

- Increases productivity
- Reduces duplicate work
- Saves time searching for information
- Better decision-making
- Improves value of information

Unified search across all your enterprise information

Google's Enterprise Search Philosophy



User

- Intuitive and fast
- Unified
- Highly relevant



Reach

- All information
- 'Real-time' data
- Effortless access



Security

- Highly secure
- Standards-based
- Leverage existing

Increase simplicity and scale while decreasing cost and complexity

Google's Approach to Enterprise Search

Wouldn't it be great if your search at work was as good as Google?

User

Highly relevant
results

Easy to use

Across all
content

IT

Easy to
setup and
integrate

Highly
secure

Powerful,
extensible
platform



Delivering on End-user Needs

Google benefits the end-user

Relevance

- Accurate, ranked results
- Self-learning spell checker
- Intelligent query expansion

Ease

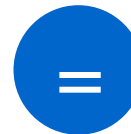
- Intuitive Google interface
- Alternate search string suggestions
- Advanced search options available

Speed

- Sub-second search results
- Real-time content search
- Fast indexing of new content

Integration

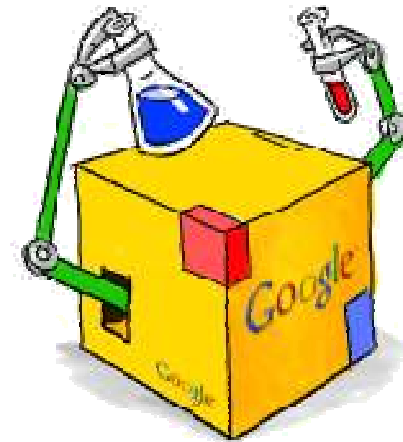
- Unified access to all enterprise content
- Search via mobile devices
- Integrates with desktop search



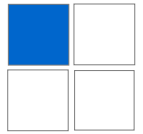


Relevance: industry leading

- Google's R&D and search experience
 - Millions of searches per day
 - 1000's of engineers working on search
- Enterprise relevancy ranking algorithms
 - Over 100 factors to determine relevancy
 - More than just PageRank on the web
- Keys to Google Relevancy
 - Automation
 - Objectivity
 - Sustained improvement (driven by real-life data)



The vast majority of Google customers surveyed switched to Google due to poor relevancy from their prior search provider



Relevance: what our customers say

84% of employees surveyed at Raytheon found the "right" answer in the top 3 results.

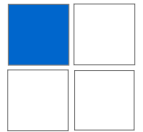
"Right out of the box, without any tweaking at all, the Google Search Appliance was more effective than the system we'd been working on for a year and a half."

Brad Hochhalter, Kaiser Permanente



Over 50% of Google customers surveyed switched to Google due to poor relevancy from their prior search provider.





Conveniences users have come to expect

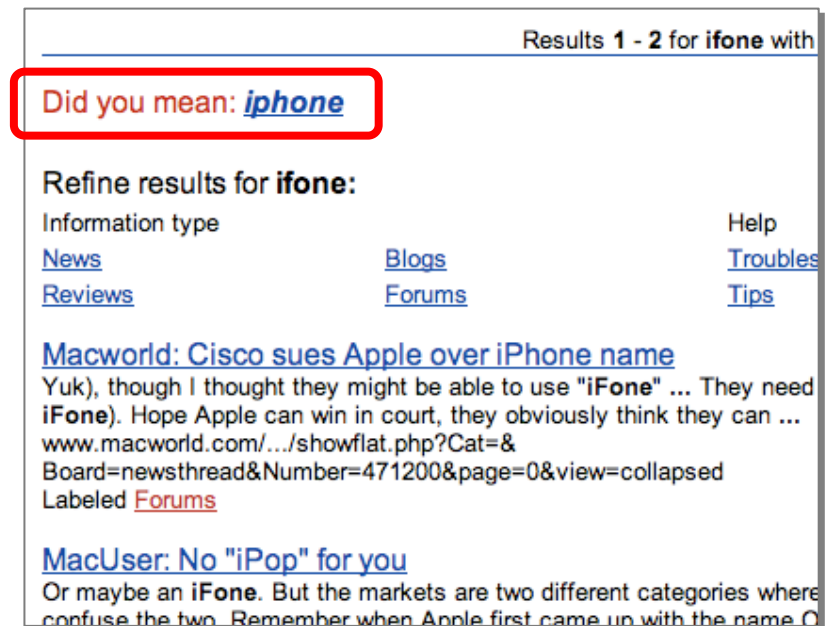
If the query is misspelled, does the user get any results?

The most comprehensive spell checker in the world

Learns from the web

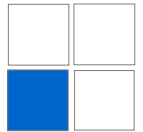
Understands context

Self-learning system corrects company and corpus-specific misspellings




“The built-in spell checker is self-learning and does not have to be configured in any way. Very nice.”

Chad Dickerson, InfoWorld



Speed: Sub-second search results

 [Moma](#) [Googler](#) [Rooms](#) [Locations](#) [Desktop](#)
sales presentation [Advanced Search](#) [Search Tips](#)
☐ include secure content (Moma search)

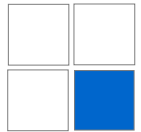
Moma Search Results 1 - 10 of about 18900 Search took 0.33 seconds.
Sort by: [Date](#) / [Relevance](#)

[Sales - Preso Center: Presentation Slide Library](#)
... Please forward any questions on existing materials or requests for new materials to fm-team@google.com... **Sales presentation** templates. PowerPoint Template. ...
[gweb.corp.google.com/sales/site.cgi?tab=client&sub=preso&page=client_resources/preso_center/library_main.f](#)
- 85k - [Cached](#)

[Sales - Verticals: Agency - SEM Center](#)
... SEM Global **Sales Presentation**: March 2004 » SEMs and Google: A love and hate relationship, past and present overview of the SEM space. ...
[gweb.corp.google.com/sales/site.cgi?tab=verticals&sub=&page=verticals/agency/sem_home.html&side=](#)
- 47k - [Cached](#)
[[More results from gweb.corp.google.com/sales/site.cgi](#)]

[MS POWERPOINT] [Building an Effective Sales Presentation](#)
Before You Start; Getting Organized; **Presentation** Checklist; Best Practices; Workshop. ...
Work with **sales** rep to determine... What is the audience of the meeting? ...
[gnome.corp.google.com/sales/html/training/sc-sp/preso_building_final.ppt - 2005-08-09](#) - [Text Version](#)

took **0.33** seconds
Sub-second search results



Integration: unified access to all content

Business
Applications

Intranet

Directory

News

moma
Experiments in search **NEXT**

Search [Advanced Search](#) [Preferences](#)

☒ include secure content

[Intranet](#) [News](#) [Web](#) [Video](#) [Googlers](#) Personalized Results 1 - 10 for intel. (0.21 seconds)

[Salesforce.com Customer results for: intel](#)

[Intel](#)
[INTEL](#)
[Intel-Lloyd](#)
[View all 48 results in Salesforce](#)

[Intel RMA sheet](#)
Intel RMA sheet Archive Tracking Page: <http://www.corp.google.com/~dknowles/temp/> Try to keep the the format as consistent as possible. ...
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[Template Center PRD](#)
... that the landing page mention an **Intel** product. ... Matterhorn will allow the parent **account** to place the ... controls and policy enforcement on the child **accounts**: ...
writely.corp.google.com/Doc?id=cgs4r5ds_10fjr2wm - 35k - [Cached](#)

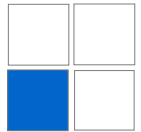
Sharon Pinedo ([spinedo](#))
Enterprise Account Manager
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+1 (650) 253-7230 desk, (415) 250-2387 cell

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[Digitaltrends.com](#)

[Results in ASAM: intel](#)

[Intellectual Ventures Management LLC](#) (Bellevue) - Robert Evanikoff
[INTELLITECHS](#) (AUSTIN) - [Google Internal](#)
[OFFICE OF NAVAL INTELLIGENCE](#) (WASHINGTON) - [Google Internal](#)



Access to real-time business data with OneBox

Acme [Directory](#) [Rooms](#) [Locations](#) [Desktop](#)

acmeINC intranet

east coast sales [Advanced Search](#)
[Search Tips](#) / [Search FAQ](#)

☒ include secure content

Acme Enterprise Search Results 1 - 10 Search took 0.54 seconds.

Sort by: [Date](#) / [Relevance](#)

[Cognos 8 Report - US East Region Sales](#) - [Hide](#) - [About Cognos 8](#)

COGNOS 8

◆ 91.6% ▼ 2005 Q4 Target: 95.1% Variance: -3.4%

Q1 2004 Q3 2004 Q1 2005 Q3 2005

Secure, real-time
access to business
information

Christine Stilwell. **East Coast Sales** Dir. Bill O'Sullivan.
David Smith. ... **Sales** Coordinator. **East Coast Sales**
[www.corp.acme.com/NSales%20ORG.ppt - 2003-05-](#)

[Bill's Q3 objectives](#)
... To promote this information, I will post on acme by
Coast Sales Meeting & West Coast Sales Meeting.
[www.corp.acme.com/Old%20Objectives/2001%20Q3](#)

Leverages a
thoroughly proven
UI design and
experience

Acme [Directory](#) [Rooms](#) [Locations](#) [Desktop](#)

acmeINC intranet

contact wick [Advanced Search](#)
[Search Tips](#) / [Search FAQ](#)

☒ include secure content

Acme Enterprise Search Results 1 - 10 Search took 0.77 seconds.

Sort by: [Date](#) / [Relevance](#)

[1 result available in the Exchange phonebook](#)

Jim P. Wick Office: (212) 555-1212 ext.2355
[jpwick@acme.com](#) Cell: (718) 555-1212

contact me at 1-800-555-1122 ext.257. ... 12/13/05, Barry **Wick**, rikwrybac@acme.
com, 55577738, The books of Ian McLaren, Beside the Bonnie Briar Bush and The ...
[www.corp.acme.com/publicdomain/ - 27k - 2006-02-14 - Cached](#)

[AU Phone Messages](#)
... how do we **contact** you? ... Matt. Yes. 1/30/06. AccountLeads. Mr. Wang. 9747-1174 /



IT Perspective: Simple, Yet Sophisticated

IT Perspective: simple, yet sophisticated

We offer a complete search solution –
not a “toolkit” that you piece together on your own

Software does the heavy lifting

Quality results without requiring meta-tags, customization and algorithm re-writing

A plug-and-play appliance

Fast to deploy, automatic indexing

Platform built to scale with you

Support your growing information needs globally

High level of security

Users only view what they are entitled to

Flat pricing

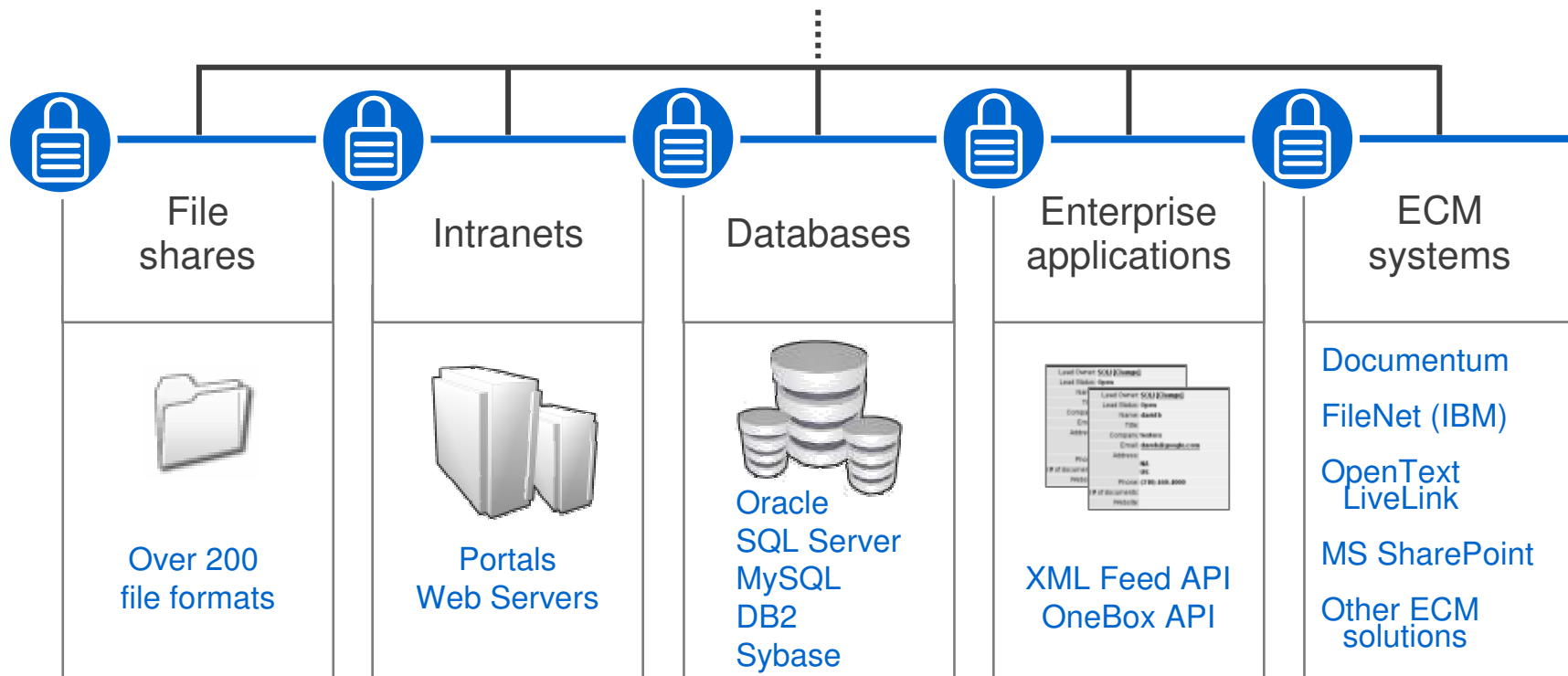
Simple contract



All your enterprise content



Google Search Appliance



Keeping all your content secure

Users **can only access** every single piece of information that they are entitled to view

Users **cannot see** anything that they are not entitled to view

Leverages your **existing security** systems

- NTLM
- Basic Authentication
- Single Sign-on Systems
- Native LDAP Authentication
- X.509 client certificates
- Other systems

SAML-based Authentication and Authorization API connects directly to other access control systems



Intelligent continuous crawler

Content is automatically updated based on frequency of change

The screenshot shows the 'Freshness Tuning' page of a Google Search Appliance. The breadcrumb trail is 'Google Search Appliance > Crawl and Index > Freshness Tuning'. The left sidebar contains a navigation menu with categories: 'Home', 'Crawl and Index' (expanded), 'Crawler Access', 'HTTP Headers', 'Host Load Schedule', 'Freshness Tuning', 'Serving', 'Status and Reports', and 'Administration'. Under 'Crawl and Index', there are links for 'Crawl URLs', 'Databases', 'Feeds', 'Crawl Schedule', 'Crawler Access', 'Proxy Servers', 'Cookie Sites', 'Forms Authentication', 'HTTP Headers', 'Duplicate Hosts', 'Document Dates', 'Host Load Schedule', 'Index Rollback', 'Freshness Tuning', and 'Collections'. The main content area is titled 'Freshness tuning for continuous crawl.' and explains that the appliance continuously crawls documents and detects optimal crawling frequencies. It provides instructions for 'Crawl Frequently' (entering URL patterns for pages that change often) and 'Crawl Infrequently' (entering URL patterns for pages with archival or rarely changing content). The 'Crawl Frequently' section has a text area with several URL patterns, including 'http://fish.corp.google.com/talks/' and 'http://wiki-crawl.corp.google.com/twiki/gsadata/linkpages/linkpage'. A green arrow points to the text area. The 'Crawl Infrequently' section has an empty text area for URL patterns.

Google Search Appliance > Crawl and Index > Freshness Tuning [Test Center]

Home

▼ Crawl and Index

- Crawl URLs
- Databases
- Feeds

Crawl Schedule

Crawler Access

Proxy Servers

Cookie Sites

Forms Authentication

HTTP Headers

Duplicate Hosts

Document Dates

Host Load Schedule

Index Rollback

Freshness Tuning

Collections

► Serving

► Status and Reports

► Administration

Freshness tuning for continuous crawl.

The appliance continuously crawls all documents and automatically detects optimal crawling frequencies for the various documents. By entering URL patterns, you can manually increase or decrease crawling frequency based on URL patterns.

Crawl Frequently: (Help)

Enter URL patterns for pages on which content changes often (typically more than once a day). The appliance will try to crawl these pages frequently. Please note that listing an excessive number of documents will increase the crawl duration.

URL Patterns:

#added by Roxane
http://fish.corp.google.com/talks/
#wiki, added by Roxane
http://wiki-crawl.corp.google.com/twiki/gsadata/linkpages/linkpage
http://wiki-crawl.corp.google.com/twiki/gsadata/linkpages/linkpage
http://wiki-crawl.corp.google.com/twiki/gsadata/linkpages/linkpage

example: mychangingdocuments.mycompany.com/

Crawl Infrequently: (Help)

Enter URL patterns for pages that contain archival or rarely changing content. The appliance will reduce the load on these servers by trying to crawl them only once.

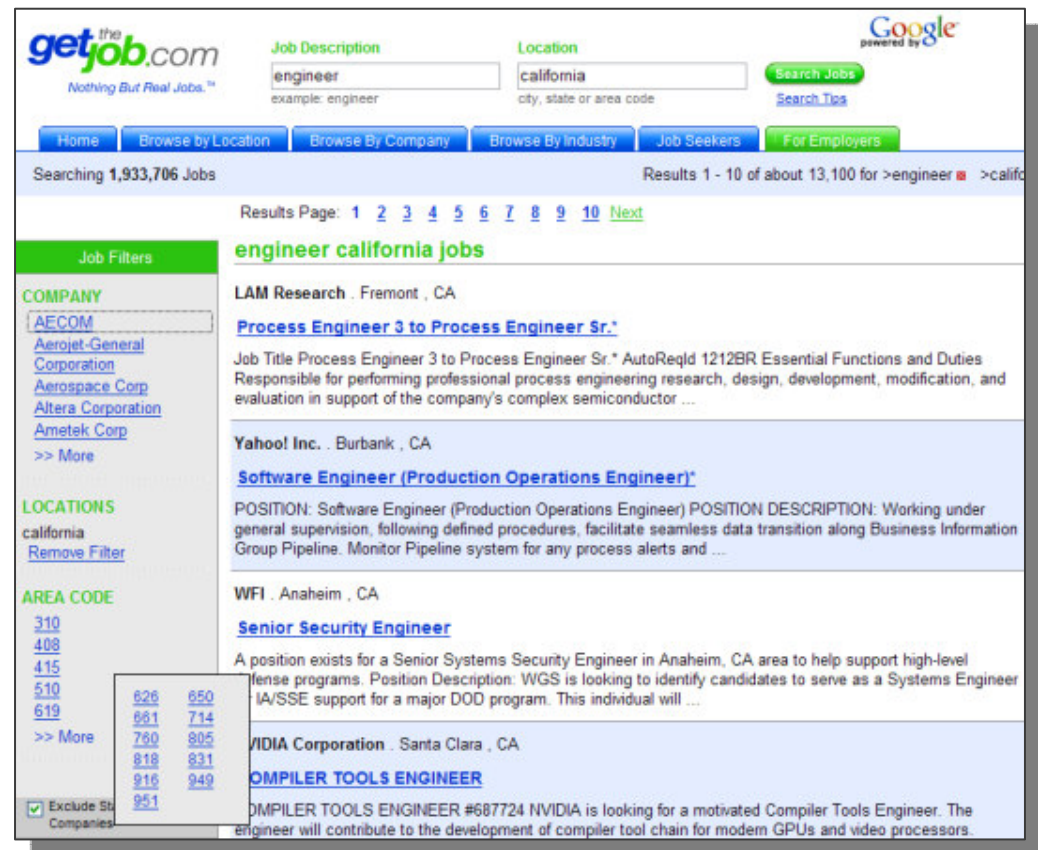
URL Patterns:

Full override control over the frequency which pages, sections, or sites are updated in the index



Meta data indexing and searching

- Automatically indexes meta-data in documents
- Indexes externally-stored meta-data in databases or other systems
 - Document and Content management systems store metadata external to the documents
 - Meta-data generated from entity extraction or taxonomical classification



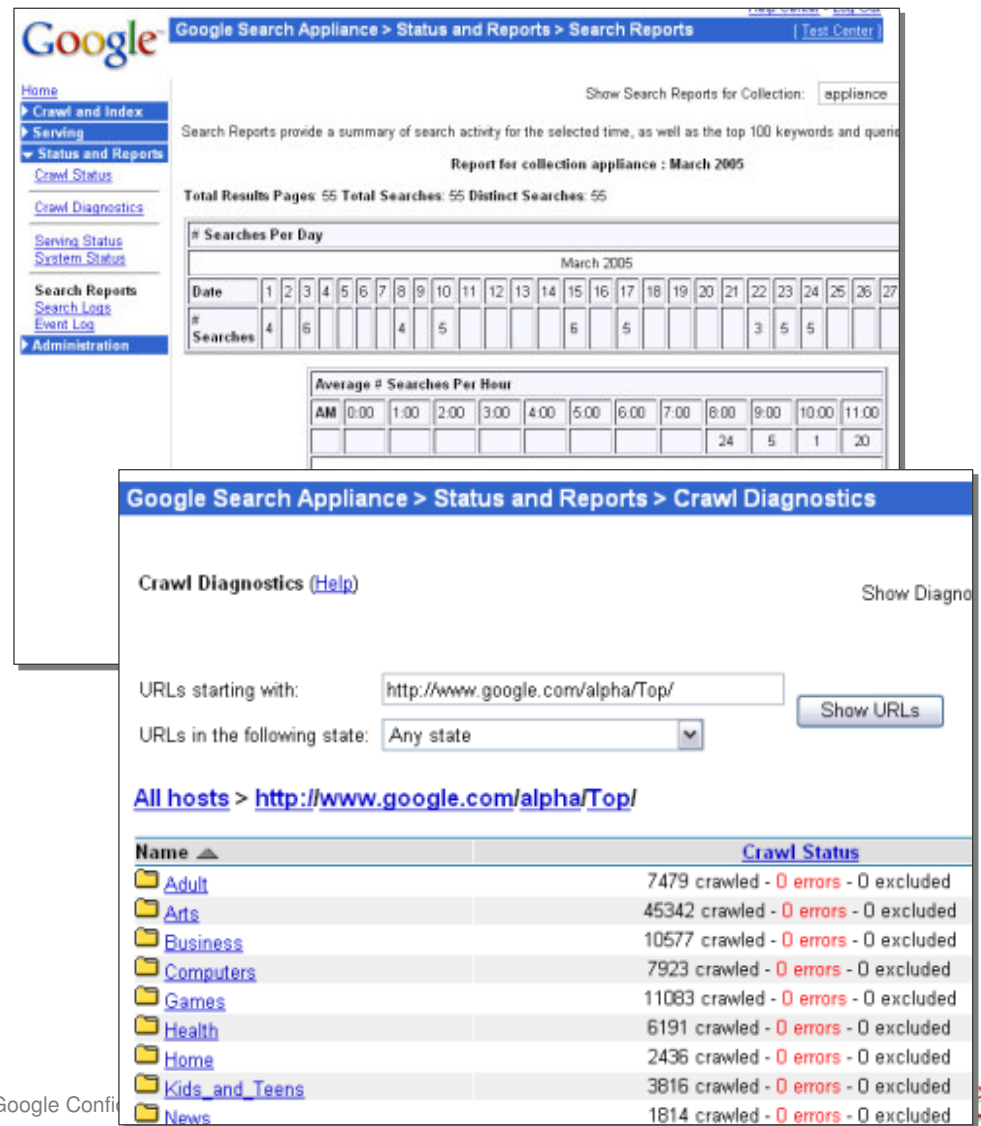
Robust reporting of crawl and serve behavior

Query Reporting

- Top search queries
- Total query volume
- Zero results queries
- Export to a log server or as a CSV file

Crawl Diagnostics

- View into upcoming crawl queue
- Status of every URL crawled
- Broken links
- Total number of pages crawled



Introducing the 5th Generation Google Search Appliance



Deliver Highly Relevant Results

- Date Biasing
- Search-as-you-Type ↴
- Wiki KeyMatch ↴
- Parametric Filtering ↴



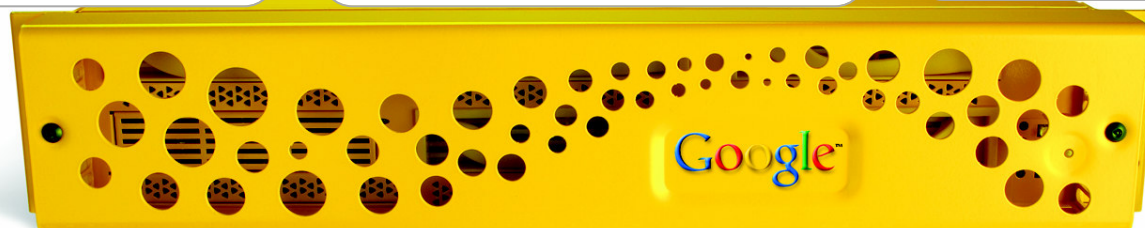
Effortlessly Reach all Content

- Google Enterprise Connector Framework
- Documentum Connector
- LiveLink Connector
- FileNet Connector
- Sharepoint Connectors
- OneBox to Google Apps



Provide Secure Enterprise Search

- Windows Integrated Authentication
- Secure Filesystem Results
- SAML API Enhancements



Enterprise Search Product Line



Google Mini

- Small and medium businesses
- 50,000 to 300,000 documents



Google Search Appliance 1001

- Departments or mid-sized companies
- RAID disk drives
- 500,000 to 3MM documents



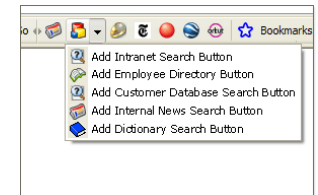
Google Search Appliance 5005/8008

- Large companies or global deployment
- Automatic built-in redundancy
- 4MM to 30MM documents; unlimited option



Google Desktop for Enterprise

- Enable employees to find email, files, media, web history, and chats instantly



Google Toolbar for Enterprise

- Powerful productivity features
- Easy access to Google, customized search buttons, instant search suggestions and a pop-up blocker



Google Enterprise Partner Program

Our Partner Strategy...

Mission Statement: “A unified partner program that holistically embraces technologists, service integrators, resellers, service providers, and distributors and provides an environment for our partners to be successful financially and strategically with their businesses.”

Vision: “To create a world class partner ecosystem through programs, operational efficiencies, and sales engagement, where it is mutually rewarding and beneficial for Google and its partners.”

Simple, High-Value Partnerships

Enable partners to build their businesses on Google technology

- Access to Google enterprise technology
- World-class training
- Technical support
- Branding
- Co-marketing
- Sales opportunities
- Partner Rewards

Partner Rewards

Specific benefits for partners delivering value (and volume)

- Access to MDF
- Access to Rebates
- Opportunity Registration
- New Account Acquisition
- Procurement Protection

Partners: Service Offerings

Quick-Start Services

- Customized User Interfaces

Content Repository (ECM) Connectors

Enterprise Application Integration

Heterogeneous Security Protocol Integrations

OneBox Modules for Enterprise Data Sources

Enterprise-Wide Search Implementation Best Practices

- Architecture Consultation

ROI Evaluation for Search

- Data Discovery Programs

Migration from Other Search Products

Paid Pilots or Proofs of Concept

Digitization of Content

Custom Solutions

Training

Why doesn't Google just do this on its own?

Google is fundamentally a product company

- Focus on core competencies

No plans to create a services arm

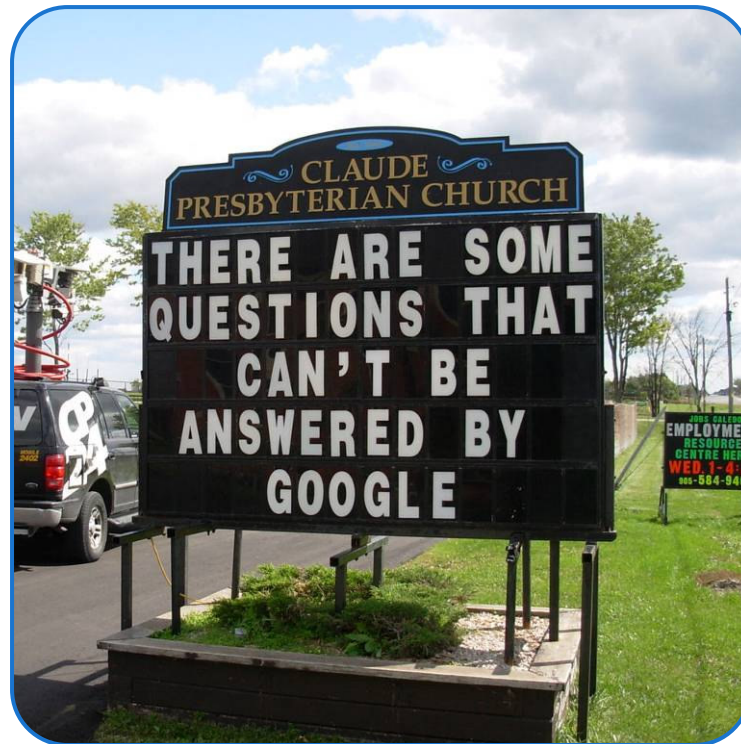
Google products are self-contained, yet extensible via APIs

Partner Focus



Partners are the Key to our Success!

Questions?





Thank You!

kevins@google.com