Exalead whitepaper

Achieving Business Agility with Search-Based technologies

exalead®

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1 What is Business Agility?

An agile business is one that can "sense environmental change and respond efficiently and effectively to that change" (Gartner). Whether these changes represent threats or opportunities, the capacity to react swiftly and appropriately can spell the difference between getting ahead, getting by—or going under.

> "Agility is the ability of an organization to sense environmental change and to respond efficiently and effectively to that change"
> Gartner, *Achieving Agility*

How do you assess your own business's agility? One way is to benchmark your organization's performance under a variety of change scenarios. Does your business:

- Proactively monitor **regulatory change**, participating in the dialogue as regulations are being shaped, and reacting swiftly and efficiently to changes once enacted?
- Effectively identify and mitigate incipient **legal risks**, and respond quickly and cost-effectively to **discovery demands**?
- Respond efficiently to merger and acquisition (**M&A**) **due diligence** demands, and quickly achieve **operational unity** upon enactment?
- Identify and respond effectively to nascent shifts in **customer demand** and emerging **competitive threats**?
- Proactively monitor and respond to changes or disruptions in **partner and supplier networks**—in real-time?

Few organizations can answer "Yes" to every one of these questions. Achieving true agility across the breadth and scope of all operations is a rare accomplishment. Those that have succeeded share a common characteristic: they capitalize on forward edge **information technology** in a way their less agile counterparts do not.

2 Agile IT = Agile Business

An organization's **information architecture** is widely recognized as the key to enterprise agility, and logically so, as one cannot detect and respond effectively to change without access to the right information, at the right time, by the right people. Not surprisingly, therefore, demand for performance management, risk monitoring and decision-intelligence software continues to grow at a robust pace. However, a focus on application-specific solutions is not the most effective means of achieving enterprise-wide agility. What is needed instead is a cohesive vision of IT marked by agility at every level. This requires conceptualizing IT in radical new ways.

> **IT as Agility Enabler**
>
> "IT must set the pace for change, blending IT requirements and capabilities more fully into the business strategy and building agility into the organization... [This] involves breaking down the old impressions of IT as a cost-center and building up its image as an enabler."
>
> Forrester Research, Inc.

One of the most influential new paradigms in this regard is an information architecture that non-intrusively places a **search engine** at the center of its operations, and in doing so, achieves unprecedented IT agility **quickly** and **inexpensively.** How is it that search engines have begun to play such a pivotal role? To better understand this phenomenon, let's take a closer look at the role of search technology in today's IT environment.

3 The Role of Search Technology in Agile IT

Bringing Web-Style Agility to the Enterprise

In a search-based information architecture, **primary information access** is shifted from enterprise databases to a **search engine index**. Why? Because Web-derived search and indexing technologies provide data access that is **100s of times faster**, infinitely **more scalable**, and **far cheaper** than traditional database querying, yet rich enough to support most information access needs.

Unlike familiar Web search engines that can only index limited types of content and return simple lists of results, a next generation engine like Exalead CloudView™ adroitly indexes and queries both structured data (like database content) and unstructured content (like Web pages, email, and Office documents). These new-generation engines are fully optimized for fast information access (*'read'* operations), yet they can **automatically categorize and classify unstructured content**, and extract and retain **existing classification information** stored in relational data tables. This new type of engine further uses **semantic technologies** to identify hidden meanings and relationships in data, thereby enriching data with valuable new attributes. These engines can then exploit all this inferred and extracted metadata for multi-criteria search, dynamic content presentation, and real-time reporting.

The unified, enriched data layer these engines create can also be used to rapidly create agile business applications (**search-based applications, or SBAs**) that effortlessly bridge information silos and exploit high volumes of hybrid content. Furthermore, thanks to SBAs' **non-intrusiveness, scalability,** and **rapid time to market**, businesses can meet new challenges quickly, at a controlled TCO, and with a swift return on investment. In short, this new breed of search engine brings **Web-style agility to corporate IT**, helping businesses achieve unprecedented new agility at every level in the IT ecosystem: **infrastructure, application** and **user.**

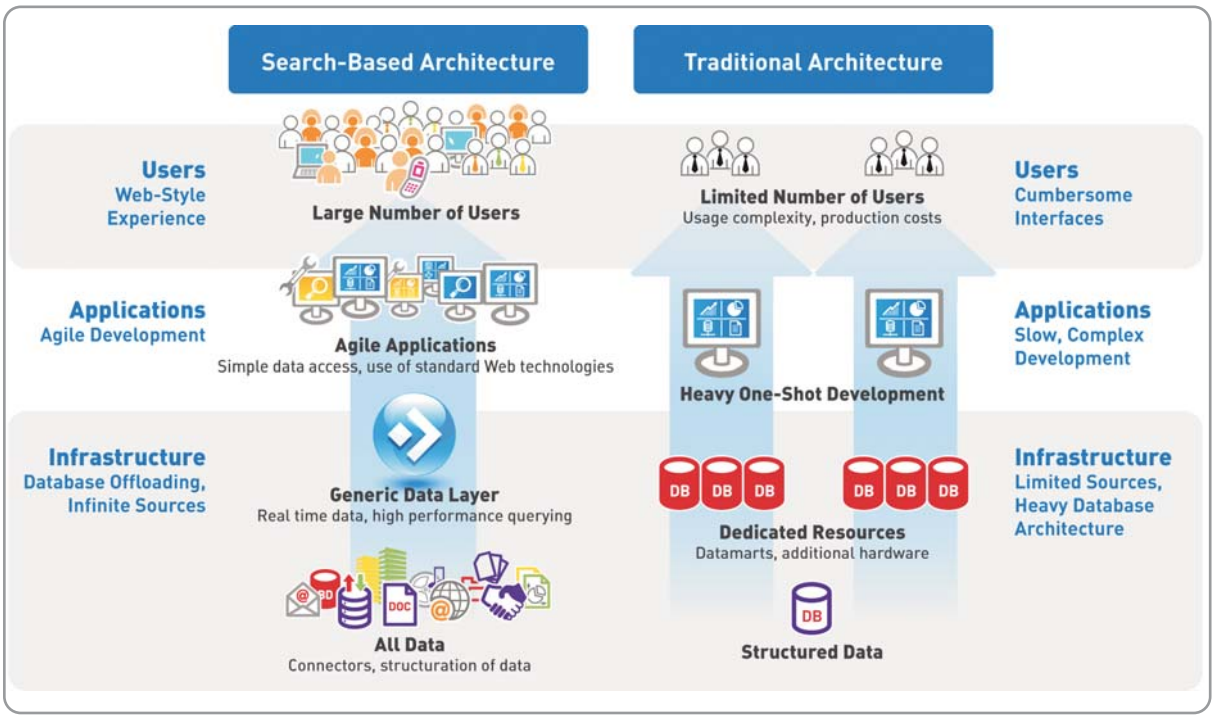

Figure 1: The Search-Based Architecture: Built for Agility
In a search-based architecture, primary information access is shifted from select enterprise databases to a search engine index that encompasses all relevant data: internal and external, structured and unstructured

4 Search-Enabled IT: A Closer Look

4.1 Agile Information Infrastructure

Compared to a traditional IT architecture, a search-based infrastructure provides:

- Higher performance and availability
- Easier, infinitely greater scalability
- More flexibility in responding to changing conditions
- A more comprehensive data scope

High Performance and Availability

Having been designed for the Web, today's powerhouse engines can index **staggering volumes** of data, maintain this information in **real-time**, and make it available at **sub-second rates** to an **unlimited number of users**. And because the data view the platform offers is a **virtual** one, information access functions can operate **without affecting data production**: there is no longer any need to modify underlying systems or construct complex middleware in order to bridge data silos. As an added benefit, a search-based architecture can even improve performance for existing transactional systems by **offloading** routine access demands from **overtaxed databases**.

Easy, Unlimited Scalability

The independence of the search platform data layer, plus the **efficient engineering** and **distributed architecture** of the best-of-breed engines, further enables infinite scaling **without having to scale underlying information systems**. With the right search platform, one simply adds inexpensive commodity hardware to expand data access in a linear manner—no painful migration required.

Swift Adaptability

Based on Internet technologies, architectures, and standards, a search-based infrastructure also brings **Web-style adaptability** to the enterprise. CloudView, for example, supports the use of SOAP and REST architectures and technologies like XML, XPATH, XQUERY, RSS, RDF and OWL. As on the Web, this makes essential resources **easily configurable** and **available 'on-tap'** for infinite uses.

Comprehensive Scope

This Web framework, plus semantic text processing capabilities, advanced structured data handling, and standards-based APIs, extends **data source connectivity infinitely** to both structured and unstructured sources. With the right engine, there is no information of value to your end users that your information infrastructure cannot **tap into, process and serve up** in a meaningful and coherent way.

An Easier Way

Unifying access to both structured and unstructured information is slowly being recognized as a new enterprise requirement. This trend is driven by the need to understand the customer - in emails, voicemails, blogs, wikis, and CRM systems. Pulling all of the data together from diverse silos is not easy. It can be accomplished through major shuffling and restructuring of repositories, or by using the ad hoc and fuzzy matching capabilities of the latest search applications that perform joins between multiple databases and content repositories on the fly.

IDC, *Search & Discovery Market 2008-2012*

4.2 Agile Application Development

A search-based architecture provides a highly **versatile development environment**, and **accelerates time to market** by providing 1) a **single, ready-to-use platform** for information presentation, reporting and search, and 2) a framework ideally suited to **Agile Development** methodologies.

High Versatility

The generic data layer created in a search-based architecture can fuel an **infinite variety** of business applications, including:

- Customer Self-Service Applications (e.g., eCommerce, Customer Support, Social Networking)
- Enterprise Management (e.g., CRM, ERP, SCM) and Intelligence Applications (BI, CI)
- Information Governance, Compliance and Auditing, eDiscovery and Risk Management
- Online Publishing, Classifieds and Directories

What's more, SBAs enable developers to extend the reach of these applications to the **unstructured content** that comprises up to 80% of total corporate information assets, content such as text documents, Web pages, blog and micro-blog entries, social networking site content, presentations, email messages, and call transcripts.

Because these assets contain highly valuable **emotive and qualitative data,** they can be especially valuable for risk management, business and competitive intelligence, and marketing. An advanced engine can even provide automated "**sentiment analysis**" for this data, helping companies address questions like "Are customers happy with our support?", or "Is industry coverage of our new product favorable?"

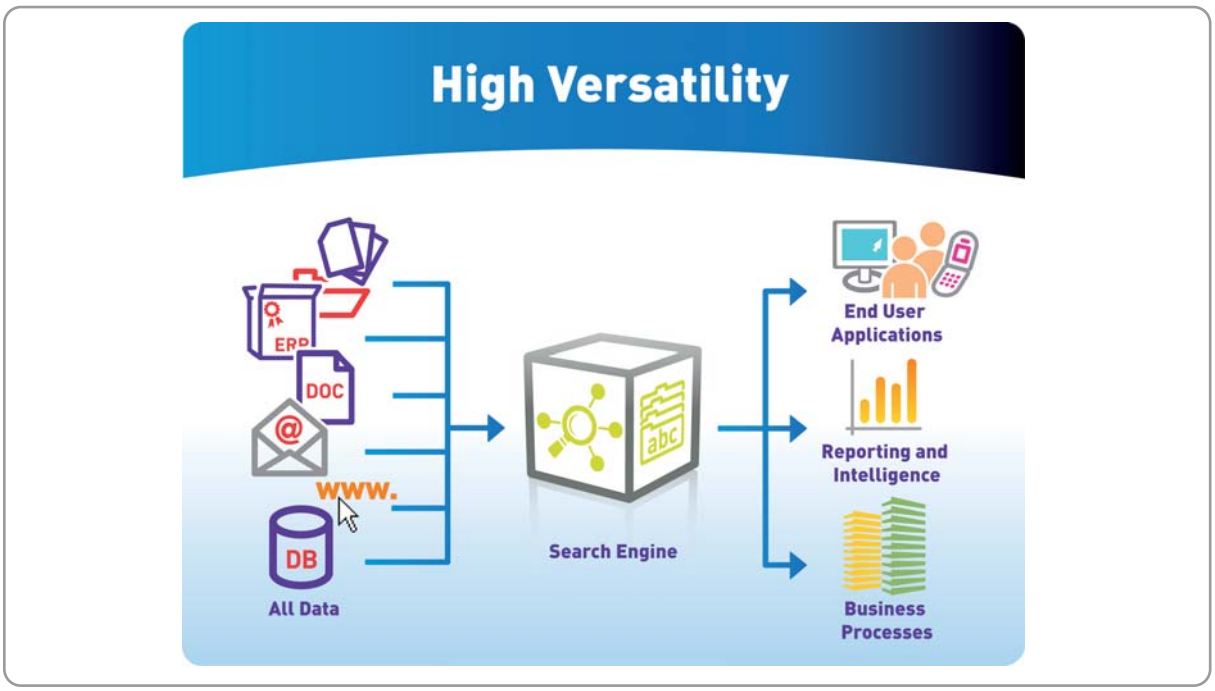

Figure 2: A Highly Versatile Development Environment
A search-based infrastructure enables rapid construction of an infinite variety of business applications. These applications benefit from a unified view of all relevant data, regardless of format or location

Accelerated Time to Market

Rich, Out-of-the-Box Functionality

Using automatically-extracted classification and categorization information, an advanced engine like CloudView provides a single, ready-to-use platform for search, content presentation, and reporting. Ready-to-use functionality includes:

- 'Fuzzy' natural language search
- Structured queries
- Numerical/mathematical operations
- Faceted navigation of results

Query results can be dynamically output as:

- Hyperlinked lists
- Categorized data (data clusters)
- Charts and graphs
- Maps
- Real-time operational reports
- Customizable dashboards

The possibilities are endless, representing an **inherent flexibility** unavailable with either traditional database technologies or conventional search engine technologies.

Support for Agile Development Methodologies

An SBA architecture also provides the ideal framework for **iterative development**, the strategy of rapid prototyping and early, regular application releases at the heart of Agile Software Development Methodologies. Agile Development has been proven to help companies **gain agility, reduce costs** and **improve competitiveness** by:

- Identifying and **addressing weaknesses early** in the software cycle (when they are less costly and disruptive to rectify)
- Accelerating **time to market** (an issue for both internal and customer-facing software)
- Encouraging **creativity and innovation** on the part of technical teams
- Producing software that is **more closely aligned with business objectives** and end user needs

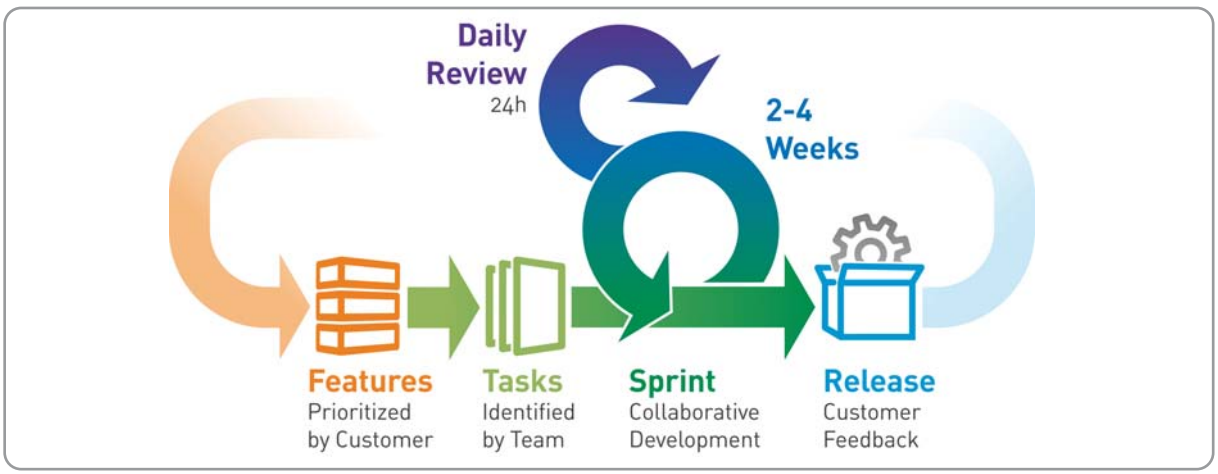

Figure 3: Typical Iterative Framework for Agile Development

An SBA architecture is well-suited to rapid prototyping and iterative development because it: 1) leverages an independent data layer, 2) employs a service-oriented architecture (SOA), and 3) provides flexible support for ad hoc querying.

1) Independent data layer encourages experimentation

First, in building the index, the search engine essentially **decouples data** from the underlying applications that generate it, creating a globally accessible, independent data layer. As this layer and the supporting index build and maintenance processes are **non-intrusive** to source systems, developers can add new data and construct (or reconstruct) data models on the fly **without affecting production data**. This non-intrusiveness frees IT to experiment, encouraging innovation while ensuring business continuity and preserving existing IT investments.

2) SOA + Web technologies facilitate rapid prototyping

Second, if the search engine is well-adapted for SBA development, it will feature a **service-oriented architecture** (SOA), which means its core operations (like indexing and query processing) are made available as **on-demand 'services'** that can be easily tapped by other applications or services using **standard Web technologies** (SOAP, REST, XML, RSS, RDF, OWL, etc.). This 'light' application framework facilitates prototyping and integration and shortens development cycles.

Architected for Agility

"Service Oriented Architecture represents the architectural approach to creating an agile IT environment. It is based on the ability to assemble reusable services, each of which represents a specific business activity, into composites that deliver real business value."

Butler Group

3) Reduced need to anticipate and plan for user needs

In a traditional database application, the range of possible end user information requests and desired data views must be **anticipated in advance** and **hard-coded** in the application. This necessitates **extensive planning** and **complex programming**. If unanticipated needs arise, modifications are difficult to implement.

An index-based solution eliminates these constraints. The right engine can open up **all data attributes** for spontaneous information organization, exploration, reporting and search, eliminating the requirement to anticipate users needs in advance. And, as noted above, data models and sources can be easily modified without affecting production systems. This **flexibility and automation** boosts responsiveness while significantly accelerating development cycles.

4.3 Agile Users

Agile Users can detect and anticipate trends, and respond rapidly and appropriately. While education, training, culture, and individual character all shape behavior, IT can significantly aid users in understanding and responding to change by using SBAs to provide information access that is much more **timely, comprehensive, and intuitive**.

What's more, IT can use SBAs to **democratize** information access, promoting better day-to-day, **operational decision-making** at the broadest possible level.

Timely Data

With the pace of change today, working with data that is hours or even days old is a handicap, one that is unfortunately common due the **complex systems of batch updating** necessitated by traditional database architectures. Web-born SBA technologies, on the other hand, were designed to maintain **immense volumes of data in real time**. Bringing these technologies into the enterprise means IT can give users access to much **fresher data**. Furthermore, because search engines were engineered to serve millions of simultaneous users, SBAs enable **instant access** to this fresh data—a responsiveness today's Web-savvy business users demand.

Comprehensive Information

While corporate databases form the backbone of enterprise information systems, the bulk of information users need to make good decisions resides outside of databases: it is in **emotive and qualitative data** on the Web, on intranets and extranets, in email messages, on file servers, and so on...To be truly agile, a user needs unified access to the **totality** of this data, **coherently and meaningfully presented**. Able to connect to any and all sources desired, SBAs deliver this **comprehensive, unified access,** and the semantic technologies they use can reveal embedded meanings and relationships that help users go beyond the **'what'** to understand the **'how'** and **'why'**. These semantic technologies also help users identify **emerging trends** in '**weak signal**' data (like blogs) that has to be extensively filtered before patterns can be detected.

Real Insights

"Businesses now need to keep tabs on thousands of blogs and billions of other Web pages to understand what people are saying about their products. The real insight from this content comes when it's aggregated and summarized in some meaningful way for deeper analysis."

Forrester Research, Inc.

Intuitive, Web-Style Usage

Speaking the Same Language

"[SBAs] differ from more traditional transaction-based software applications in that they are language based. Their technologies have been developed to understand the meaning of words, and to handle the fuzziness that is inherent in rich language."

IDC, *Search and Discovery Market 2008-2012*

SBAs also help users freely and easily follow their curiosity. SBAs provide '**zero-training**' access inspired by the **consumer Web**, with a single text box for launching queries together with faceted navigation of results and support for **'fuzzy' natural language search**. For each user query, SBAs can automatically generate a faceted menu of related categories, concepts, people and places, and built-in statistical processors can likewise generate summaries, reports, charts, and graphs **on the fly**.

Democratized Access

Together with **Web-grade scalability**, SBA's intuitive usage can help IT **democratize information access**. While senior management may continue to use complex tools for deep data mining and analytical reporting, IT can use SBAs to bring easy real-time information access, search and operational reporting to the masses, enhancing day-to-day **enterprise decision making** and boosting the effectiveness of **customer self-service applications** (ecommerce, support, etc.), and encouraging information **collaboration, reuse and sharing**.

5 Business Agility in Action

Agile IT's Role in Six Change Scenarios

5.1 Regulatory Change

There are over 15,000 regulations in the U.S. alone that govern the handling of data

Financial reporting and auditing, environmental and product safety, consumer privacy protection...the operational areas affected by governmental and industry regulation, and the frequency with which those regulations change, presents a formidable business challenge.

In the face of this challenge, an agile organization **stays abreast** of regulatory change, quickly **determining the relevance** of new regulations to its own operations, and swiftly putting **compliance measures** into place as well as effectively **monitoring and reporting** on compliance efforts. These efforts are supported by applications which exploit advanced search technologies, either through **standalone SBAs** (running off a single search platform) or via a **search engine embedded** within a comprehensive software package. Utilities may include:

- A **competitive intelligence (CI) tool** to monitor potential regulatory change across a customizable set of sources (e.g., industry and government websites, news feeds, and blogs), thereby better positioning the organization to shape potential regulation as well as to respond effectively to change
- A **text analysis and monitoring** component to **minimize the manual review** of documents and identify **hidden compliance risks**, for example, a text mining tool that can spot check sources like email or chat transcripts for inappropriate disclosures of regulated data
- A **search and reporting system** that can reach across all data silos, enabling a cost-effective, decentralized (at the source) archiving strategy

As an added benefit, the use of a search platform allows a business to **easily reuse the data** it is required to gather for regulatory compliance for other business applications, enabling it to extract significant value from what would otherwise be a straight cost of doing business.

5.2 Legal Challenges

Agility in responding to regulatory change helps organizations manage legal risks associated with non-compliance, but this is only one of the many legal challenges corporations face. A 2007 survey by law firm Fulbright & Jaworski LLP noted that large companies face an average 556 lawsuits each, with 50 new suits filed annually.

Large companies face on average 556 lawsuits, with 50 new lawsuits filed annually

To survive in this hostile environment, an agile business needs to be able identify and address legal risks **before they evolve into litigation**, and to respond swiftly and efficiently to **discovery demands** when matters do proceed to the courts.

Identifying and Addressing Legal Risks

To identify risks at an early stage, when they are more likely able to be resolved without resorting to legal action, agile organizations often use search engines to **monitor communications** (for instance, email, instant messaging, or phone communications) for:

- Inappropriate content (offensive words and terms)
- Inappropriate or unauthorized transmission of personal data (social security numbers, birth dates, medical information, etc.)
- Unauthorized disclosure of financial data (account numbers, salaries, etc.)
- Unlawful communication of 'insider' data (information regarding mergers, acquisitions, layoffs, unpublished results, etc.)

Agile companies further seek to identify potentially litigious issues with customers, employees and shareholders by using a Competitive Intelligence SBA to monitor company **'buzz' on the Internet**.

An agile business also seeks to reduce legal risks by deploying state-of-the-art customer, employee and stakeholder management systems to build **trust and loyalty**, facilitate **communication** and aid **problem resolution**. Such applications typically leverage search engine technologies to integrate high volumes of unstructured content like email messages, Web pages and text documents. This 'wide-net' produces a holistic, 360° view of customers, employees and stakeholders—a comprehensive vision impossible to achieve using traditional database technologies.

Responding to Evolving Discovery Demands

Forester research shows that less than 20% of companies consider themselves well-prepared for eDiscovery issues

To respond effectively to variable discovery demands and litigation hold requests, agile organizations often have in place sophisticated eDiscovery systems that can **archive, mine and filter** staggering volumes of unstructured and structured digital data, and route that data through efficient and cost-effective eDiscovery **workflow processes**. Some of these eDiscovery systems are comprehensive suites that use an embedded search engine to facilitate large-scale information access and management, others are rapidly constructed SBAs that may be more limited in workflow functionality, but which fulfill the vast majority of most organizations' Discovery needs inexpensively and non-intrusively.

5.3 Mergers and Acquisitions

In spite of the economic crisis, global M&A volume in 2008 totaled 2.89 trillion dollars

Mergers and acquisitions are valuable tools for growing a business, entering new markets, and even eliminating competitive threats. However, if the changes accompanying a merger or acquisition are not adroitly managed, it can be disastrous for both organizations. The list of potential differences that must be (expeditiously) reconciled is daunting: cultures, information systems, business processes, brand positioning, data standards, human resources.... To minimize risks and maximize the chance of success, an agile business can respond quickly and efficiently to due diligence demands, and effectively manages change once an accord is reached.

Efficiency in Due Diligence

Whichever side of the negotiation one is on, search engines are being used to reduce the costs, manage the risks and minimize the frustrations typically accompanying due diligence. Agile organizations are tapping them to:

- Quickly **locate relevant resource**s across data silos
- **Minimize the manual review** of documents
- **Uncover hidden risks**, particularly if access to unstructured data is available

The insight an engine provides not only helps organizations more **accurately value** potential M&As, it can also provide insight into the **true level of change** necessary for success if an accord is reached.

Effective M&A Change Management

After an agreement is reached, an agile organization is able to make the newly joined entities function as one as quickly and smoothly as possible. Search engines play an important role in this process by providing an **instant federated view** of data across the two organizations—an achievement that is notoriously difficult and costly using traditional technologies.

In fact, the unified view achieved with a search platform can actually eliminate the need to merge some underlying production systems. For systems that absolutely must be merged, a search platform can provide essential business continuity during the migration.

5.4 Evolving Customer Demand

Unless your business is a monopoly, gaining and maintaining customer loyalty is a perpetual struggle. Never has this been more true than in the last few decades. In our media-saturated, fully wired world, customer opinions can shift worldwide in the blink of an eye, and certainly consumer awareness of, and access to, options and alternatives has never been more pervasive.

To cope with shifts in consumer demand, agile business capitalize on extended Business Intelligence and Competitive Intelligence (BI and CI) tools that use search technologies to identify **nascent trends** in high volume, **"weak-signal"** data such as that found on the Web, in the media, or even within the enterprise in the form of unstructured data.

They further frequently use semantic technologies like sentiment analysis to extract deeper insights from this content.

Discover the Unexpected

Gathering, organizing, managing, finding, and analyzing information is now crucial to most businesses. Doing it quickly and thoroughly enables an organization to be more flexible, and to detect and catch emerging trends. Search and discovery applications are at the heart of this drive to know what's happening.

IDC

Search & Discovery Market 2008-2012

5.5 Competitive Threats

Agile organizations exploit similar CI tools to stay abreast of changes in the competitive landscape, filtering weak-signal data to **identify emerging competitive threats** and opportunities. Is there a new supplier on the market? Is a known competitor gaining traction in a sensitive area? Is that competitor a potential target for a merger or acquisition? A new generation of search-powered CI tools are enabling agile organizations to get **early answers** to such questions so they can respond before a competitive threat turns into a bottom line liability, or the window for a potentially lucrative opportunity closes.

5.6 Changes in Partner & Supplier Networks

Prospecting and Intelligence

Because search-powered CI tools are adept at processing high volume Web content, they have come to play an important role in helping agile businesses **identify potential partners** and suppliers, as well as monitoring **market buzz** in order to identify and address **partner and supplier weaknesses** before they become liabilities: Is a partner facing potential litigation? Is a supplier's viability threatened by regulatory change? Is the performance of a potential partner faltering due to a poorly executed acquisition?

Full Pipeline Visibility

Beyond these general viability issues, agile organizations are using the native **Operational Intelligence** capabilities of new generation search engines to monitor partner and supplier operations in **real-time** (or quasi real-time) in order to respond rapidly to **potential disruptions**. A search-based Operational Intelligence application provides:

- A fully unified, organization-wide view of operations
- End-to-end pipeline visibility
- Real-time activity monitoring and reporting
- Workflow support for just-in-time management

6 Agility, Search Technologies, Exalead, and You...

As these change scenarios demonstrate, Web-derived search and indexing technologies have finally removed the last roadblocks to achieving true agility at every IT level: users, applications and infrastructure, thereby helping **IT fulfill its role** as the **prime enabler of agility** in an organization. And no platform is better designed to aid IT in this undertaking than **Exalead CloudView™**, the market's **leading infrastructure platform for SBAs**. CloudView's success as an SBA platform is due to its unique evolution: CloudView alone was designed from inception for both **the enterprise and the Web**, powering an 8-billion (soon to be 16-billion) page public search engine and serving 100 million unique monthly visitors through its public and customer installations. Because of this dual Web/enterprise DNA, CloudView alone provides the balance of corporate functionality and Web simplicity, scalability and innovation essential for successful SBAs—and true enterprise IT agility. CloudView features include:

6.1 High Usability

- **Unified, Timely Data Access**
  Provides centralized, versatile access to all data regardless of format or location, with sub-second query processing and support for real-time updates
- **Forgiving Search**
  Processes natural language questions; interprets imprecise requests and offers spelling corrections, close matches, and related content
- **Intuitive Navigation and Reporting**
  Offers navigation of results by dynamically generated categories, with on-the-fly production of charts, graphs, reports and dashboards

6.2 Unlimited Linear Scalability

- **Web-Scale Performance**
  Can index petabytes of data in real-time while serving millions of users
- **Highly Efficient Engineering**
  Indexes 100 million documents and processes 20 queries per second on a single dual-processor server
- **Fully Distributed Architecture**
  Scales simply by adding commodity processors or servers—no painful migration required

CloudView can index 100 million documents and process 20 queries per second on a single commodity server

6.3 A Versatile, Open Infrastructure

- **Standards-Based**
  Service-oriented architecture (SOA), open application programming interfaces (APIs), support for standard Web formats and protocols (SOAP, REST, XML, RSS, RDF, OWL, etc.)
- **Non-Intrusive and Quick to Deploy**
  Can be deployed and modified without touching underlying data structures; enables rapid prototyping & development, with an average time to market of 2-8 weeks
- **Highly Versatile**
  Processes structured and unstructured content; supports more than 50 languages, 320 data formats and 50 types of databases; provides an API for unlimited connectivity

7 A Complimentary Look at Agility in Your Own Organization

To help you further explore the possibilities for using search-based technologies to infuse new agility into your organization, we invite you to call us today to request our **complimentary 2-day audit package**. We will examine your existing infrastructure and applications, review your planned initiatives, and provide you with detailed options for using search technologies to boost agility within your unique environment.

About Exalead

Founded in 2000 by search engine pioneers, Exalead is a global software provider in the information access and enterprise and Web search markets. More than 250 companies worldwide and 100 million unique users a month rely on Exalead's information access platform to search, discover, and manage their information assets for faster, smarter decision-making, real-time unified data access, and improved productivity.

Exalead's team includes industry-leading experts in information search, non-structured data analysis, and natural language processing. This team has concentrated its R&D efforts on meeting its clients' need to collect, transform, index, and search arbitrarily complex data from heterogeneous sources.

As a result, the Exalead CloudView product has emerged as a uniquely successful platform for automatically structuring very high volumes of nonstructured data, such as email messages, Office documents, presentations, Web pages, blogs, forums, and RSS feeds, and meaningfully synthesizing this data with structured content.

CloudView is currently being deployed for Enterprise Search, Embedded Search for OEMs/ISVs, and Search-Based Applications including:

- Extended Business Applications (harnessing unstructured data to enhance enterprise applications like BI, SCM, CRM, ERP and Compliance)
- Innovative Web Applications (search and intelligent mash-ups for high traffic websites)
- Improved Database Applications (database offloading and agile development for information access, operational reporting, and comprehensive business applications)

For more information, please visit http://www.exalead.com/software. The company's public WWW search engine is accessible at http://www.exalead.com/search.

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