

ENTERPRISE SEARCH 2009: FINANCIAL PRESSURES, USER NEEDS, AND GOOGLE

The week of November 3, 2008, I participated in a formal tutorial, a number of small group discussions, and a conference lecture. The topic in each of these settings was enterprise search in 2009. This narrative is a summary of the research results I presented plus the commentary offered by attendees and myself in response to questions from the more than 260 attendees at the Boye 08 conference. This conference began several years ago with a focus on content management, but the program has now expanded to embrace portals, search and retrieval, content analytics, and enterprise content management. This is a narrative version of my lecture with elements lifted from my tutorial and conversations with other attendees. The observations are based on my research and are my opinions. If you object to my thoughts, use the comments section of this Web log to get this addled goose back in the flight line.

Introduction

The major news in the last few months in my opinion can be summarized with reference to three events:

1. The Microsoft Fast interaction with the Norwegian authorities with regard to financial impropriety. My view is that Fast Search was one of the first search and content processing companies to become the focal point of inquiries about its business activities. No charges have been filed, but my hunch is that as the financial crisis worsens, other vendors may find themselves under a microscope. At best these inquiries are distracting. At their worst, the inquiries suggest that some business practices may attract attention to organizations essentially off the radar of the media, lawyers, and oversight authorities. With some vendors closing their doors, enterprise search is transitioning from side show to center stage. I hope Microsoft Fast resolves its issues with the authorities. I hope that other vendors do not follow in the footsteps of Delphi, Entopia, and other firms unable to compete in search and content processing.
2. Jane McConnell's soon to be released survey of search users seems to suggest, if I understood her remarks to me, dissatisfaction among users of enterprise search and content processing systems seems to be creeping upwards. Her full report will be available on November 25, 2008, but she and I agreed that users are not as happy as their management or the vendors suggest. When users are unhappy with search systems, costs for information access rise. Inefficient manual methods or duplicative search systems impose a financial burden on the organization. When money is tight, such expenses become untenable in some organizations.
3. Google continues to expand its presence in the enterprise. On one hand, Google offers a dead simple search appliance that is in sharp contrast to the complex systems available from some vendors. More important, Google's new 2008-2009 prices makes it economical for an organization to upgrade from an entry level Google Search Appliance to a more robust GB 7007. In addition, Google has introduced a Service Level Agreement to entice organizations to use Google's cloud based applications. The Google Maps products are pulling other Google products into an organization. Google, therefore, is a force in search and enterprise applications.

Against this background, I mentioned that Morgan Stanley reported at the Web 2.0 conference in San Francisco, California, that technical spending was likely to decline. The money would not drop to zero for new hardware, systems, and software. What seems to be happening is that money is less plentiful. Efficiency, return on investment, and cost control become more important than technology investments that may have a longer term

payoff. So, in the closing months of 2008 and in 2009, cost control and fungible benefits may make the difference between a license renewal or a license termination. Search, with its user satisfaction issues and its tendency for blue sky fuzzy return on investment calculations, may be under increased pressure. Some licensees may not pay their bills. Others may break their agreements without warning, telling the vendors that their software did not meet the organization's needs. Either way, this puts financial pressure on search vendors. Sales professionals who need bookings to earn their commissions may step up their assurances and hints about the benefits of a search system. Hyperbole may make it difficult to get hard facts about the cost, performance, and features of a new or improved system.

In short, the risks are going up for licensees and vendors.

Trends in 2009

Against this background, my research suggests that six trends will characterize the next 90 to 180 days in the search, content processing, and text analytics space. Let's look at each briefly.

Trend 1: Licensees put pressure on vendors. This can be seen in the US with the number of inquiries underway into vendors whose software is being evaluated in terms of the requirements and the statement of work for the project. In my Web log, I have documented one situation involving a major portal, CMS, and search vendor and a customer, who happens to be an attorney. Licensees want software to deliver and deliver results within cost parameters. In short, licensees will be looking closely at agreements and invoices to control costs and ensure that the licensee gets what he or she paid for.

Trend 2: Embedded search. The notion of search is "just there" is becoming a more and more common approach. For example, enterprise publishing systems from Hewlett Packard and IBM/Ricoh InfoPrint include a search function. When an organization licenses a system from one of these two firms, search and retrieval is included in the license fee for the whole software package. In short, search is a item on a punch list. Organizations looking for more search functionality can download Lucene, an open source solution, or look for a lower cost add in that delivers the functionality required by the organization; for example, a component from SAS Institute or SPSS for business intelligence to cite one example. Search platform vendors may find themselves having to work harder to make a big dollar sale.

Trend 3: User dissatisfaction. I want to remind you that unhappy users are the rule, not the exception. This means that vendors must work harder to ensure that a deployed system meets user needs. The search procurement team and the search administrator must offer interfaces and functions that allow users to do their information centric work with a minim of hassle. A misstep can lead to staff and vendor changes.

Trend 4: Tighter specifications. In the last year, I have worked on a number of projects where clear, pragmatic specifications were desired. Gone were the nice to have or science fiction requirements. The goal was to get a system that would solve specific problems. Unfortunately many organizations lack the discipline to prepare clear, concise, easily measured requirements. Litigation, staff realignments, and vendor shifts may be more common when the deployed system does not match these tighter specifications.

Trend 5: More interest in silver bullets. The metaphor "silver bullet" refers to a solution that will kill a problem with a single action. Organizations with a history of poor search systems may seek vendors able to provide an instant fix. The vendors who sell silver bullets to solve a big problem fast may find themselves facing push back when licensees find that the problem solved was not the problem that needed to be solved.

Unfortunately, the number of vendors offering silver bullet solutions seems to be on the rise.

Trend 6: SharePoint. The interest in SharePoint is remarkable. According to one source with whom I spoke, Microsoft suggest it has more than 100 million SharePoint installations. I believe the number is high, although maybe not 100 million active SharePoint installations. Nevertheless, SharePoint is a one size fits all solution to content management, collaboration, and search challenges. SharePoint can be made to work; however, I personally am concerned about the complexity of SharePoint when scaled and the alleged impropriety at Fast Search & Transfer adds friction to my willing to rush forward with SharePoint.

Companies to Watch

There are a number of companies to watch. In my April 2008 study for the Gilbane Group, I identified 24 vendors who were pushing beyond search; that is, offering more than key word retrieval. Five of these companies are organizations that procurement teams will want to examine and possibly place on their short list of bidders. I am going to list these companies in alphabetical order and make a brief comment about each. I cannot tell you which of these companies is the best vendor for your search and content processing solution. I can say that each of these companies' technologies impressed me, and I had positive feedback from some of each of these companies' customers. Beyond that, you will have to make your own decision about whether to look or license these solutions:

- Clearwell Systems. This is an eDiscovery vendor specializing in processing content quickly. The company's "rocket docket" message connotes high speed content processing. The firm delivers an appliance which serves up search results often within hours of deployment. www.clearwellsystems.com
- Coveo. This firm provides enterprise search and mobile email search. I tested the company's new mobile email search service and found that I could look at email and attachments from my BlackBerry and other mobile test devices. The company's enterprise search system supports federation and advanced content processing. www.coveo.com
- Exalead. This company shares some DNA with Google but has moved quickly to expand its information access offerings for the enterprise. The company has audio and video search, business intelligence options, and an interface for searching for information about people and other entities. The system can scale using commodity hardware to process billions of documents on commodity hardware. The company interviewed me about my reaction to its audio and video and business intelligence services because I was delighted with the results of my tests of the Cloud360 platform. www.exalead.com
- ISYS Search Software. I encountered this company in a number of intelligence and law enforcement agencies. Upon testing the company's enterprise search system, I quickly adopted it for my own patent analysis work. The system identifies entities, classifies, and permits one click access to documents. The system is among the speediest I have tested for content indexing. www.isys-search.com
- Mark Logic. Strictly speaking, Mark Logic is an XML database, but it is more like a Swiss Army knife for content. The system can integrate with other search systems, functioning as an XML content repository. The system can also be configured to function as an enterpriser publishing system, an information access system, and an advanced text processing system. www.marklogic.com

Hot Market Sectors

I identified several market sectors where customers are licensing software and information access systems. The uptick in interest in these sectors counterbalances the broader downturn in one size fits all search systems. The sectors identified from my 2008 market research include but are not limited to:

- Customer support. An example of a company focusing on this sector is Attensity, a text processing company with roots in the intelligence community.
- eDiscovery. This is the litigation support sector. An example of a company making sales in this sector is Open Text, a Canadian firm with a platoon of separate search systems.
- Business intelligence. A number of search vendors and start ups are active in this sector. An example is Silobreaker, a company owned by a friend of mine. www.silobreaker.com A single screen presents a "what you need to know now" approach to information access. Charts and other data are generated automatically by the system to permit a heads up approach to information monitoring.
- Text analytics. Scientists and mathematicians from Moscow State University have created a robust text analytics system called Megaputer. The mathematics used separate this company's approach from its competitors.
- Open source search. A number of firms are tapping the growing appetite for open source search solutions. Tesuji.eu and Lemur Consulting are of particular interest to me for the quality of the software and the reasonably priced, comprehensive consulting options available to those who download their search systems.

Longer Term Challenges for 2009

A number of challenges await licensees and vendors in the coming months. I have touched upon some issues, but now I want to zoom my lens to five specific challenges that will in one form or another accompany you, me, vendors, and users into the winter of 2009. I anticipate that some of the parvenus in search consulting will recycle "just there" and a handful of the observations in this essay version of my talk. I expect nothing less of the so called experts who are increasingly visible at industry meetings, in Web log postings, and trade shows. Now, on to the larger problems my research has identified.

First, deals for bundled or just there search. IBM, Microsoft, and Oracle are moving down this path. The charm of this approach is that systems which have higher perceived value than key word search simply give away a basic search system. You can't go wrong in an organization by going with the just there search system included with the firm's database or enterprise resource planning application. The problem with this approach is that it will put increased sales pressure on smaller or specialized search vendors. I fear that we will lose some number of search and content processing firms in the next six to 12 months. Innovation will continue to replenish the pool but some relatively well known firms will run aground.

Second, Google is the master of disruption. Telecommunication companies have finally figured out that Google is a serious player in their members only polo club. Other sectors will be disrupted. Keep in mind that wherever Google goes, search goes as well. Companies not accustomed to competing will find themselves in surprisingly choppy water. In search, Google itself may roll right over some smaller vendors. Google, therefore, is a positive and negative influence on the search community. The role of Google as disrupter is in its early stages. By the end of 2009, we will know more about its effects on the search sector.

Third, boil the ocean systems are too expensive even for some Fortune 100 firms. The result is that vendors who are pushing platforms will compete more fiercely than ever

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before to win the big deals. The platforms are too bulky for some small and mid sized firms. In the high profile search sector, five years ago, we had Autonomy, Convera, Endeca, Fast Search & Transfer, and Verity. Now we have Autonomy and Endeca. I can't predict the trajectory of these two firms, but my hunch is that by the end of 2009, only one will remain independent.

Fourth, the newly minted consultants, the 20 something system administrators, and most search vendor sales professionals don't understand the costs of content transformation. In fact, search is not the problem. There are content related cost issues that sink some search system deployments. By the end of 2009, there will be greater understanding of the challenges of content transformation.

Finally, SharePoint complexity will not leave us any time soon. I have several interesting diagrams that map the components and dependencies in a SharePoint installation in a company with 100 or more users. Navigate to <http://www.arnoldit.com/wordpress> and run a query for placemat. You will see one example. In my view, SharePoint may be the largest single information technology organizations will face in 2009.

Action Items as Summary

Let me conclude by mentioning seven action items I have identified for my team. You may find that one or two of these are appropriate for you:

1. We have to move beyond search. Key word queries are not useful to most employees who must perform information access tasks to do their jobs. The goal is to come up with more than a search box. Easy to say, and it is hard to do.
2. We have to recognize that a bad decision can cost money and jobs. A casual "good enough" approach to information access is not enough. I know I need to think more diligently about options for finding information, not take the key word route because it is easy and cheap.
3. Consolidation means that more organizations will be using similar tools. The sameness means opportunity for some consultants. But a shallow ecosystem is vulnerable. I need to keep this weakness in mind and encourage innovation when and where I can.
4. Business failures are inevitable in a good economic environment. In a lousy environment, there will be quite a few business failures. I need to work harder to make sure that my clients and colleagues can succeed. For me, innovation is more important than a 20 something who finds it expedient to borrow without asking other innovators' ideas or information.
5. Ethical issues are now a big deal in search. The Microsoft Fast alleged impropriety is one example, and it is a major one. I need to work harder to identify organizations that may take short cuts that can create problems for users or for me.
6. Marketing seems to be more important than systems which work. I want to use clear language. Martin White and I have made an effort to write about successful enterprise search management with an eye to clarity and plain talking. I have to work harder on this. Jargon is easy but it masks critical thinking in my experience.
7. Cost control. The key issue is to deliver results at a price that is fair and acceptable to the parties involved. I have to think harder about costs and try to deliver value and seek value.

Thank you for your attention.

Stephen Arnold, November 11, 2008