

Building the Search Center of Excellence

By **Hadley Reynolds**, VP Center for Search Innovation and
Silvija Seres, VP Strategic Market Development, FAST

Search is strategic; however, the strategic potential of search is not captured by the act of acquiring a powerful search platform alone. Pioneering firms are now developing a new kind of management approach to help deliver maximum value across multiple search-driven applications: the "search center of excellence." It is a structured approach, utilizing a focused cross-functional team, and it is emerging as a practical tool to drive search innovation and deliver high quality online experiences.

This is the age of search; search is becoming the *de facto* infrastructure for finding and delivering information. It is ubiquitous in new online business applications, driving revenue and capturing operational efficiencies inside the organization. Any organization whose operations touch the Internet, or important digital information in general, is finding that delivering better search is good for business.

Yet despite the scale and importance of this trend, many companies can't seem to get out of their own way as they begin using search. For example, many firms have fallen into what we refer to as the "one-size-fits-all" technology purchase syndrome. In this mode, the enterprise search problem is seen (at least by the sponsors) as solved as soon as new "enterprise" software is installed on a production server. In such cases, however, the value of the solution often fails to impress users inside the company or customers and partners outside, because it simply does not seem to "get" their particular business situation. This is because the core of all successful search experiences is built on understanding the enterprise business context and the knowledge drivers that power each specific set of business interactions.

One indicator of the challenges posed by this current state of the practice is that virtually all researchers into search quality continue to report user frustration in both external and internal applications of

search. Forrester Research, for example, has consistently reported breakdowns in site-search quality. Recent research shows that 58% of 211 websites reviewed through mid-2006 failed to meet basic criteria for site search engine and search interface quality. Failure rates for clarity and presentation of navigation options were in the same range or higher. At the same time, the firm's demographic research finds that findability and navigation are even more important to online site visitors than the quality of information on the site or the range of functions available.

Looking at information breakdown inside the organization, IDC Research has found consistently that the cost of wasted time on the part of professionals searching but not finding information is a major

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continuing cost to organizations. The most recent 2006 "Hidden Costs of Information Work" report suggests that this cost amounts to \$5.3 million annually for an enterprise with 1,000 information workers.

Delphi Group reported that more than 50% of professionals surveyed report being either dissatisfied or very dissatisfied with the search experience in their firms, while only 15% reported that their firms had an enterprise search strategy in place.

These research examples show that the issues with achieving high-quality search go much deeper than a selection of technology. Some of the problem is clearly related to the legacy of basic keyword search deployments whose fatal lack of accuracy and relevance continues to disappoint users. Most modern platform offerings combine families of advanced linguistic and statistical functions that are more than adequate to deliver highly accurate and contextually significant results in a rich analytic framework with suggestive and intuitive navigation options. We maintain that many of the issues of search quality arise not from technology limitations, but from the unnecessarily limited implementation practices which most firms have resorted to in deploying search.

Fortunately there is a constructive solution to the challenges described above; we are seeing impressive results at a number of firms who are making search quality a priority. Businesses as diverse as Merrill Lynch, Pfizer, McGraw-Hill, Autotrader.com and YouTube are dramatically raising the level of the search experience they offer their online audiences. They are replacing "one-size-fits-all" thinking with a management process that secures business acumen and measured investment strategies at the center of the search deployment. The new focus is on developing core organizational resources and tailored governance capabilities that will deliver business value across multiple search-powered applications.

Search Quality Drivers

Before we describe the approach in more detail, let's take a closer look at the kinds of competitive and business drivers that lead these pioneer firms to deliver best-in-class search.

The Internet has made everyone more demanding when it comes to search performance and intelligence. Customers and employees have all become acclimated to the apparent effortlessness of Web search on MSN or Yahoo! or Google.

Self-service is no longer just for shops or gasoline "service stations." Today it is also the accepted access model for information. Customers and employees now require, as well as expect, self-service tools able to mine all the information sources they should have access to and to deliver relevant results in a familiar and comfortable environment.

Organizations that can deliver the right information at the right time with the right search behavior reap dividends from increased online sales and from empowered employees. In order to gain these returns, information access needs to go beyond the "one box/one button" paradigm and adjust user experiences to match their

Typical Roles in a Search Project

1. Executive sponsor—budgets and overall success of project.
2. Business owner—representation of business/user community and clear definition and communication of their requirements to the project.
3. Program/project manager—all project planning, resources, communications and deliverables.
4. Information architect—content planning and management (e.g. meta tags and taxonomies).
5. User interface engineers—design, development and integration of search front end with existing applications.
6. Hardware engineer—all hardware and O/S installs, in addition to DNS, DB or other software.
7. Network engineer—network configurations as required for the implementation.
8. Operations—daily operations of search solution, including all first-line support.

roles, the context of their questions, their vocabulary and their purchase or work patterns. Users do not want to know about the multitude of different formats being consumed, analyzed, contextualized and personalized for consumption by the search platform—they just want the system “to work” across this universe of information, with the most suggestive and relevant results. The best of these results are, in fact, delivered by composite and intelligent business applications, built on the search platform and engineered to unify views of an arbitrarily complex information “space.”

With this new class of intelligent business applications, “search” is moving far “beyond the box” and taking up a role that is as central to today’s Internet-connected businesses as relational databases and ERP systems were to the pre-Web era of IT. In the most advanced enterprise and commerce implementations today, “search” acts as the crucial business information filter—bringing to life the “long tail” value resident in both enterprise and Internet information.

Taking advantage of these new capabilities in search platforms requires an evolution in internal processes and practices for aligning business goals with technology management. It requires a new collection of skill sets for developing composite applications with disparate data. It requires a change in thinking from data models to consumption paradigms.

Enter the Search Center of Excellence

In adopting a “search center of excellence” (COE) approach, organizations are moving search from the level of technology detail to the level of business innovation and strategy. With a strategic approach and executive-level support, they are adopting a centralized management capability to

turbocharge a diversity of search projects across the enterprise.

The development process for the COE takes place on a number of levels. In order for the COE to succeed in its management and strategy dimensions, it must first and foremost gather sponsorship and authority at the senior-executive level. The COE governance model establishes the interaction protocols between the COE and the various business units and technology support groups of the enterprise. In order to align search projects with business objectives and to leverage the benefits of knowledge sharing, experiential learning and technical search expertise, the COE unifies executive-level interactions among all the business units who are or will be making use of search technologies.

Within the operations of the COE itself, the key success factors are: (1.) ensuring that appropriate roles are identified to support the anticipated activities of COE projects (see sidebar, “Typical Roles in a Search Project”) and (2.) ensuring that the competency models and interaction patterns for those roles are thoughtfully specified.

Search technology makes unique demands across the entire spectrum of traditional IT roles, from systems analyst to architect to developer to database administrator to user-interface designer. It also introduces non-traditional knowledge engineering and customer-experience management elements to projects and programs.

The COE leverages resources from across the firm and potentially across the customer and partner universes. In order to deliver high business value and quality user experiences, the COE incorporates input and participation from line-of-business managers, business-process designers and business analysts, human-factors experts, business-intelligence analysts, merchandisers, marketers and other stakeholders of search applications.

The COE practice brings together people with deep business-domain expertise, broad search-applications experience, cutting-edge software infrastructure knowledge, complex project-management skills and demonstrated facility in knowledge transfer. This group has the ability to act as a central point of contact to facilitate collaboration between lines of business, functional specialties and customer, service provider or partner resources. It may provide the resources to staff each of these components of search projects: application architecture and design, project methodology, best practices and standards, user interface design, education programs, support services and analytics for continuous improvement.

By putting a dedicated team in place, companies adopting the COE process gain the ability to:

- ◆ Identify core patterns of search success;
- ◆ Share best practices and facilitate innovation in next practices; and
- ◆ Leverage search technology, knowledge engineering and search infrastructure skills across the enterprise.

The Search Center of Excellence Practice

Using the COE to create a repeatable process, common business rules, standard best practices and custom methods and components tailored to the business will drive down the cost and improve the success rate of implementing search projects.

By providing a project office for search, the COE practice can integrate training programs, business consulting and project portfolio prioritization, best practices examples, advanced solutions “tiger teams,” implementation services, application monitoring and continuous improvement services. These capabilities deployed within the context of an organization’s business priorities offer a fast-track approach to high search quality. In our view it’s time to adopt this approach to driving business innovation with quality search. ■

Hadley Reynolds works in Boston as a vice president and the director of the Center for Search Innovation at FAST. He has been an industry thought leader for over a decade, researching, speaking and writing on new trends in search technology and business practice.



Hadley Reynolds



Silvija Seres

Silvija Seres works in Oslo as a vice president of strategic market development with FAST. She holds an MBA from INSEAD in France and has extensive scientific background in algorithm design and optimization, with a Ph.D. and Prize Fellowship from Oxford University.