

# A Roadmap to Search as a Strategic Enabler

By Bjørn Olstad, Ph.D., CTO and Silvija Seres, Ph.D., Senior Director of Corporate Development  
Fast Search & Transfer, Inc.™ (FAST™)

This is the beginning of the Age of Search. Whether enterprises realize this or not, search is becoming the *de facto* way of finding information, driving new business models and gaining operational efficiencies. As many traditionally separate markets are converging, new competitive patterns are being developed and search is at the heart of many of them.

Many companies are delaying their response to this changing business environment at their own peril. The basic assumption of this new age is that the value of data must be judged by the ability to use it, not just store it. If its users cannot retrieve relevant information from its available data sources, a company will find its internal users become ineffective knowledge workers, and its external customers leave to a more agile competitor.

The Web is becoming “Wal-Marted”—it is one big virtual store, where consumers shop globally, not restricted by physical location and distribution. Search has become the most

central and strategic tool in this new world of knowledge on demand, and new business applications based on search are emerging and presenting new opportunities for users and businesses alike.

## Enterprise Search: Strategic Business Enabler

Companies are in the process of discovering the true potential of enterprise search. They are using it to improve their daily operations, and drive down costs while increasing revenue. They are also using it as a central access point to all of their information stores, enabling employees, partners and the public at large to more effectively interact with the lifeblood of the firm. With this, the enterprise search market has started to mature and there is a host of search solutions available to businesses. But how can businesses begin to address the most strategic requirements of their search solutions?

How can they reduce risks, minimize total cost of ownership, and track to design and implementation timelines?

Confusion over the best approach to take in terms of needs analysis, features, benefits and overall fit within the corporation can be overwhelming. Companies need to know that they are dealing with a vendor who understands their business problems and can address them using search technology. They also need to know that the vendor has technical vision to meet their requirements today as well as tomorrow.

## Search Complexity: Challenge or Opportunity?

Decision makers and integrators find themselves unable to make optimal decisions and enact effective implementation plans due to lack of knowledge. Too many companies still do not grasp the business value—indeed, the necessity—of good search. Among those that do and decide to invest in the latest search technology, the majority does not have a clear understanding of where search can be most effectively used, or how to define or implement “good search.”

This is why, in this market in flux, the few companies that understand search have significantly increased chances of success. However, developing this specialized search knowledge in-house is a tall order for most companies, and hiring general technical or business consultants does not provide the right level of search expertise or experience. So, where can one go for words of search wisdom? How can a company ensure that their search solution, strategic as it is, is positioned, designed and implemented in an effective and efficient manner?

One answer is strategic search consulting. FAST now offers a comprehensive consulting service called FAST Search Best Practices (FAST SBP™). FAST conducts strategic workshops to examine and explore both the business and technical issues, providing greater understanding of requirements, available content and recommendations that lead to improved use of search. Because analyzing and understanding data is crucial for many applications, gaining better access to that data can have a positive impact on decision-making. For the past 12 months, a team of leading search theoreticians and practitioners have been structuring a useable library of frameworks and methodologies, with the related best practices: patterns of usage, benchmarks, key performance indicators, and process information. This information and methodology is packaged in FAST SBP. Presented as a consulting service, SBP engagements last from one and five days and are designed to maximize the search investment.

**“How can businesses begin to  
address the most strategic requirements of  
their search solutions?”**

## Success Stories

Enterprise Search Platforms (ESPs) have increased revenue and return on investment for many of the world's busiest e-business sites. The growing demand for ESP solutions is also improving productivity and cutting costs for some of the largest and most demanding multinational corporations. Here are some examples:

In e-business, ESP solutions can help companies improve the way they sell and promote products and services, facilitate introductions between buyers and suppliers, and create differentiated search offerings for new business models. In one example, ESP allows a major e-commerce site to update more than 500 products per second and provide near real-time bidding. It reduces the amount of required hardware by 66%, in spite of tripled peak number of queries per second.

A major portal used ESP to aggregate its own disparate sources with federated results from a leading Web search engine, thus providing its visitors the most relevant search results. This solution was developed and launched in less than four months, and resulted in a regained leadership position and a rapid growth of revenues and bottom line.

ESP allows a leading online employment site to improve the way it matches job postings and resumes, and it allows its customers to outsource key HR functions. This solution supports exponential traffic growth, through a highly relevant and reliable search experience. As a result, the site has quadrupled its expected traffic growth rate, and now handles 500 queries per second and delivers results in less than a second.

Finally, one of the world's busiest e-commerce sites uses ESP to process an unlimited number of queries against a rapidly growing data volume. This solution is not only fast, it also allows the vendor to deliver targeted search results to its customers on the first click. The site now handles an average of 450,000 queries a day and is poised for continued traffic and bottom-line growth.

In the area of knowledge discovery, ESP solutions help companies develop a scalable and complete solution that unifies a diverse work force with different needs and applications. For example, a major media news outlet monitors millions of news subscribers to detect intellectual property infringements and breaches of contract.

A major investment bank monitors the Internet to acquire information before the rest of the market. Another major bank has implemented the first BI and CRM integration to incorporate CRM complaints and market event planning.

One of the largest health providers handles multiple data-intensive and disparate data streams, supported by effective use of taxonomies. A major vertical portal has relied on ESP to become the current reference for science discovery. A major content publisher enables its users to search from the Web and from internal databases simultaneously, thus fully utilizing their most valuable assets—the intellectual property and collective expertise already residing within the firm.

A multinational energy corporation uses FAST ESP to provide fast and precise information access to its global workforce. The requirements are complex: huge data volumes, 24/7, many formats and languages, and varied users; however, this solution allows its 60,000 employees around the world to find the right information among the tens of terabytes of continually changing content, across many platforms and legacy systems. This, in turn, enables collaboration and information sharing across organizational and geographical boundaries. It also enables traceability and easy, correct and secure access of information through the information life cycle and with respect to legal requirements.

## Return on Search Improvement: It pays to focus

Accumulated real-world customer experience shows consistent improvement in the following metrics:

- ◆ Search quality through end-user satisfaction and different stakeholder aspects; and
- ◆ Cost and time required to design or implement the right search solution.

For example, in spite of having a visionary search solution, many months ahead of the other players in its segment, a large mobile provider was looking for fresh ideas, and for a review of their release plans. The result: they have also seen a marked improvement in their key metrics: traffic and conversion rates, and a significant reduction in the number of clicks required to go from the initial search to the desired result, from 4.2 clicks to 1.7. According to industry analysts, every unnecessary click loses around 30% of visitors, so it is clear the significant effect that such improvement has on the bottom line. Another example is a major multinational company that is a market leader in the publishing industry. This client had also had a strong search team, with deep understanding of the greatest technical challenges that their search faced and a state-of-the-art search solution. However, the project has had a history of starts and stops, new team members, new priorities, and with it, indecision. The team was struggling to agree on the roadmap and feature set. After FAST SBP, they gained a unified vision of search, and a clarified phased outline for future implementations; the outcome is a significant improvement in user satisfaction, and growth of digital content sales. ■

FAST SBP consultants are available to help your organization explore more effective uses of search-based solutions. FAST SBP provides these services in an objective fashion, looking for the best solutions for you. Please contact FAST SBP at [sbp@fastsearch.com](mailto:sbp@fastsearch.com) for more information, or visit us online at [www.fastsearch.com](http://www.fastsearch.com).



**Bjørn Olstad**

Bjørn Olstad, Ph.D., serves as the Chief Technology Officer at Fast Search & Transfer (FAST). Before joining the company, Dr. Olstad held key positions within General Electric Medical Systems, including Director of Research and Development for Cardiac Ultrasound. He has served as a professor in computer science at the Norwegian University of Science and Technology (NTNU), where he was awarded the youngest professorship ever.



**Silvija Seres**

Silvija Seres has extensive scientific research background in algorithm design and optimization, with a Ph.D. and Prize Fellowship in from Oxford University and ten international scientific publications and awards. Seres has held several long-term visiting research posts, including DEC SRC in the US, the National Science Academy in China, and a professorship from first private female university in Saudi Arabia. Seres now works in Norway as a Senior Director of

Corporate Development with Fast Search & Transfer.