Growing healthcare provider drives search accuracy from 1.4% to nearly 100% and reduces IT workload with the Google Search Appliance

Organization
To deliver world-class healthcare to the communities surrounding Atlanta, Georgia, WellStar employs more than 11,000 professionals, each working to meet their patients’ healthcare needs. The company prides itself on providing top-quality healthcare, and equips its facilities and employees with the best technology, resources, and education available. For more than half a century, WellStar has secured grants and partnerships for research, training, and development. The organization has become one of the largest not-for-profit healthcare organizations in the Southeastern United States.

Approach
Access to the latest medical information is key to WellStar’s ability to provide exceptional healthcare, but finding the right information had become increasingly difficult as the provider’s information systems grew. WellStar’s intranet – containing research, medical, and procedural content from more than 70 clinical sites and 60 unique .net portals for enterprise departments – is the center of critical information across its information system. Covering everything from billing and compliance policies to customer information and forms, the content was contained within “eSource” - WellStar’s central Content Management System (CMS) accessed through an employee-specific portal. WellStar’s use of index servers and isolated searches proved ineffective, and increasing employee and patient volumes made it difficult – if not impossible – for users to find the right information.

“At internal research revealed that people had a 1.4% chance of even starting a search in the right place,” says Robert Zanin, Systems Analyst for WellStar. “Employees would need to know in advance which portal to search on. Even then, they would have to sift through a huge haystack to find a specific needle. We needed a centralized, efficient search function that would serve everyone while minimizing the impact on a busy, three-person web team.”

“I would recommend the GSA to any organization. It works tremendously – and virtually on its own, with little dedicated IT support. It has advanced WellStar’s capabilities, knowledge, and efficiency.”
—Robert Zanin, Systems Analyst

In addition to providing a unified search environment, WellStar wanted to remove potential complexities of viewing certain types of documents. The system’s diverse content occasionally required a specific version of Adobe Reader software; in other instances, it called for browser plug-ins or spreadsheet viewers. The team needed a way for clinicians to view documents of any type without having specific readers or applications installed. As the team investigated options for a universal search engine that would span all of WellStar’s content and portals, the Google Search Appliance (GSA) emerged as the clear choice. “In the search space, Google stands alone,” says Zanin. “It didn’t take much deliberation to make the decision.”
About the Google Search Appliance

The Google Search Appliance (GSA) is an integrated hardware and software search solution that extends Google’s award-winning search technology to websites of all kinds, including corporate sites and intranets. Organizations can use GSA to make data on servers, content management systems, databases and business applications instantly and securely available from a single familiar search box. More than 25,000 companies worldwide use Google Enterprise search solutions.

For more information visit: www.google.com/gsa

“Google has helped us meet our goal of efficiently finding information while minimizing the impact on our staff.”

—Robert Zanin, Systems Analyst

Results

The WellStar team installed and activated the GSA within less than an hour by simply following instructions on Google’s GSA support site. Right out of the box, the GSA delivered highly relevant results. “We went through long-forgotten documents and brought things up to date across the intranet,” says Zanin. “We saw changes immediately. Help center calls starting with, ‘Where do I find...’ were completely eliminated. We received a major boost in terms of client service and the number of users viewing compliance documentation, as well as the ability to provide relevant information on medical procedures and rehabilitation protocols.”

The GSA has allowed the WellStar web team to focus on fine-tuning instead of maintenance. Today, with only three developers, WellStar is providing smart, universal search for 11,000 employees, increasing productivity while reducing IT overhead. “The GSA changes the lives of our clinical and business users,” says Zanin. “One person on our staff performs occasional maintenance, such as adding KeyMatches, and the GSA independently takes care of the rest. Google has helped us meet our goal of efficiently finding information while minimizing the impact on our staff.”

With the success of the GSA, the company is looking to invest in more content repositories and plans to customize detailed operating data using the Google OneBox functionality. WellStar is exploring the possibility of using the GSA and the Google Chart API to publish real-time data for managerial interpretation. This would effectively position the GSA as a one-stop resource for managing current operating data. “A hospital is like a hotel,” says Zanin. “As the number of guests increases, it’s important to staff adequately to provide great service.” By supplying admins with department-specific data, ambulatory services could be rerouted to more effective locations during peak capacity scenarios. “We want to immediately answer questions like ‘How many patients are in the ICU?’” he explains. “Then we can calculate what the current nursing staff can support, and bring on more support for patient needs.”

“I would recommend the GSA to any organization” says Zanin. “It works tremendously – and virtually on its own, with little dedicated IT support. It has advanced WellStar’s capabilities, knowledge, and efficiency.”

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Kimberly-Clark to implement low-cost, high-performance search solutions to geographies worldwide with the upgraded Google Search Appliance

Company
Kimberly-Clark is a leading global health and hygiene company employing more than 55,000 people worldwide and posting sales of $18.3 billion in 2007. Headquartered in Dallas, Texas, with operations in 37 countries, Kimberly-Clark’s global brands are sold in more than 150 countries. Every day, 1.3 billion people trust Kimberly-Clark products. With well-known family and personal care brands such as Kleenex, Scott, Andrex, Huggies, Pull-Ups, Kotex, Poise, and Depend, Kimberly-Clark holds the number one or number two market share position globally in more than 80 countries.

Approach
With a workforce that needs ready access to information and documents of all kinds, Kimberly-Clark relies heavily on enterprise search solutions. “Just in the United States alone, our users search through about 22 million documents every day on our intranet and associated corporate file servers,” says Director of Enterprise Business Intelligence, Renée Nocker.

Despite the high-volume requirements of the organization, the previous search solution fell short. It was incapable of searching corporate file servers – it could only search the primary intranet site as well as a half-dozen external sites. And capacity was a major issue. All in all, the previous solution was only searching about 500,000 documents. “Users were complaining that they could not find what they were looking for, so many of them simply gave up and stopped using our search functionality. Accuracy and usability were poor, and we couldn’t add more content to the catalog because the tool couldn’t handle any additional capacity,” says Project and Technical Lead, Sean Powell. “It also took days to generate a full index – and the indexing process didn’t always work.”

Powell and his team began looking for a more robust search alternative – one that could be quickly and easily deployed and managed, all at a reasonable cost. “Our web team is continually shrinking, so whatever we deployed had to be cost-effective and practically run itself,” says Manager of Collaboration and Content Management Dorothy Stephenson. “But our number one consideration was capacity – we needed to search tens of millions of documents.”

“We have the same .2 full-time employee supporting search as we did before, but we’ve gone from searching at best 500,000 documents to searching 22 million documents.”

Ultimately, the strength of the Google brand led the team to choose Google Search Appliance for both internal and external search. “Our users had a bad taste in their mouths when it came to search,” recalls Stephenson. “But the familiar, intuitive functionality and positive brand recognition of Google brought people on board immediately.”
Results

Powell notes that Google Search Appliance is capable of searching a wide array of repositories. It is used to search about half a million static web pages on the company intranet, as well as web applications, homegrown document management systems, web file servers, corporate file servers, and the company’s public internet site. It is also scalable on an ongoing basis. All Powell has to do is call Google to add more capacity. “Google Search Appliance grows effortlessly as our content grows,” says Powell.

Internally, there was no need to convince anyone, and literally no training required. Today, searching through the company’s huge body of documents is fast and seamless. Powell says users comment positively on search performance and the relevance of results returned.

Perhaps best of all, Google Search Appliance offers a lower total cost of ownership because it doesn’t require any servers to be deployed – something that wasn’t the case with other solutions the company considered. “We have the same .2 full-time employee supporting search as we did before, but we’ve gone from searching at best 500,000 documents to searching 22 million documents,” says Powell. “I’d call that minimal administration.”

With years of successful use of Google Search Appliance behind it, Kimberly-Clark now plans to deploy the GB-7007, the new single-box appliance from Google with the capacity to store up to 10 million documents; a threefold-plus improvement over the 3 million documents supported in the GB-1001. Additionally, Kimberly-Clark is excited about obtaining the latest Google Search Appliance features, which include personalized results, alerts, enhanced security through support for Kerberos, metadata biasing, and advanced reporting.

Looking to the future, Powell looks forward to deploying the GB-7007 throughout the Kimberly-Clark organization. “We are excited about the fact that the GB-7007 has the capacity to store up to 10 million documents in a single box,” says Powell. “The new architecture also provides fast performance – a plus because crawl rates are a big deal for us.”

A major advantage of the GB-7007 will be the ability to extend Google search solutions to other geographies outside North America with a low-cost, server-free and easily-maintained solution. “With its ease of management, simple licensing structure and multiple language support, we can easily deploy the GB-7007 to our other geographies without a lot of additional overhead,” says Nocker. “The GB-7007 is a great way for us to deploy search worldwide and have it readily grow along with our organizational content.”
HP gains outsourced contact center savings with the Google Search Appliance

Company
The world’s largest technology company, HP brings together a portfolio that spans printing, personal computing, software, services, and IT infrastructure. When HP purchased EDS in 2008, the combined companies became a leading force in global IT services. Today, HP Enterprise Services is a worldwide organization providing outsourced technology and business solutions to more than 1,700 business and government clients in 90 countries. One of its core businesses is contact center outsourcing, a service provided in over 40 countries and 22 languages across seven call centers around the world. Through contact center outsourcing, HP staffs, manages and operates outbound and inbound customer interactions from marketing and sales to service.

Challenge
HP Enterprise Services has been providing contact center outsourcing for a global Fortune 500 automobile manufacturer for years. Although the customer’s contact center operations were efficient and effective, HP saw an opportunity to cut call durations and expenses through more robust enterprise search. When assisting customers, support specialists used a system cataloged and indexed with IS6 to comb through a knowledge base of hundreds of thousands of HTML and Microsoft® Office documents. The process of assisting customers is driven by HP’s IDOL call center philosophy and workflow, which specifies how agents interact with customers, from logging issues to closing cases. While the workflow was well-defined and clear, the lackluster search experience was the number one complaint among agents, who deemed it difficult to navigate because it required logging into a series of screens. The search process and tools had become outdated and cumbersome.

“Our average call handling time is around 12 minutes. If we can shave a minute or two off, that produces 10–15% savings in our business that contributes to better profitability and reduced costs for customers.”
—Ray Coyle, HP Global Workplace Services Manager

The faster agents can find information to resolve questions, the more HP can improve efficiency, reduce costs, and improve relationships between clients and their end-user customers. According to Ray Coyle, HP Global Workplace Services Manager, the leadership team at HP realized they had outgrown the prior search solution underpinning the contact center outsourcing business. They needed to find a new solution that would allow HP’s outsourced contact centers to be more productive. “Our average call handling time is around 12 minutes,” says Coyle. “If we can shave a minute or two off that time, it produces a 10–15 percent savings in our business that contributes to better profitability and savings for customers.”
Solution
 HP considered creating its own search tool using open source solutions, but eventually chose the Google Search Appliance (GSA) to power agent search for the automobile manufacturer's outsourced contact center. Among the reasons for choosing the GSA: Agents react very favorably to the simple interface, which resembles Google.com. This typically leads to high usage of the search feature. “Our agents got spoiled at home using Google search,” says Rich Lott, technical lead for HP. “They were discontent that the search at work was archaic, slow, and cumbersome – and delighted when we chose the Google Search Appliance to power search in their everyday business lives.”

HP is using many features in the Google Search Appliance to help agents find accurate information faster. KeyMatches, for example, allows HP to promote specific web pages that agents use most often. If there is a flurry of calls from customers about a specific topic, then the GSA makes it easy to put the related responses toward the top of the results page.

HP created specific content collections to group results by categories of client requests – a major help in finding a specific piece of information in a complex maze of documents and websites. Additional features such as case-sensitive recognition help agents hone in on the right information faster. By using crawl diagnostics to drill down and analyze which content is crawled most often, HP can continue to refine the search results delivered to agents. All of these tools help both agents and technical teams at HP use search as a strategic tool to power better customer service.

By finding the exact information they are looking for in a matter of seconds, agents can quickly respond to customer needs. Agents do not have to scroll through pages of information and click on dozens of links. Some GSA customers have experienced average handling time reduction of 20%. HP anticipates that use of the Google Search Appliance will also lead to reduced agent training costs because of the system's familiarity and ease of use.

Results
 Opting for the GSA has already resulted in benefits for HP Enterprise Services, its contact center agents around the world and customers using contact center outsourcing services. “The agents have adapted very well,” says Ide. “They're looking forward to a continuous stream of new features and functionality from Google in the GSA.”

For HP, the Google relationship is about more than just technology. Coyle says a major advantage is Google's earnest commitment to engaging and collaborating to make search a success across HP's contact centers. “Working with Google hasn't just been about bringing in an appliance, it's been about integrating the GSA into our business and using Google's lessons learned in the marketplace to make our business more successful,” says Coyle. “That collaboration along with the technology is what allows us to bring dollar savings to our bottom line.”
The American Red Cross improves search for people in need and those helping them with the Google Search Appliance

Organization
Since its founding in 1881 by visionary relief coordinator Clara Barton, the American Red Cross has been the nation's premier non-profit emergency response organization. Part of a worldwide movement that offers neutral humanitarian care for victims of war, the American Red Cross also distinguishes itself by aiding victims of devastating natural disasters.

Today, in addition to domestic disaster relief, the American Red Cross offers compassionate services in five other areas: community services that help the needy; support and comfort for military members and their families; the collection, processing and distribution of half the blood supply in the United States; educational programs such as lifeguard and CPR training that promote health and safety; and international relief and development programs.

Challenge
As one of the world's largest non-profits, the American Red Cross relies on its public-facing websites and its intranet to keep millions of people and tens of thousands of employees and volunteers informed about its activities. The main external website, www.redcross.org, receives significant traffic from people seeking everything from CPR class schedules and Blood Drive locations to information about disasters such as the 2010 Haiti earthquake and the 2011 U.S. tornadoes.

“Our websites underpin everything we do. On a normal day, we get up to 200,000 hits on our main website, redcross.org – but that number swells to millions during a national disaster,” says Ivan Chou, Web Applications Engineer for the American Red Cross. “During a disaster, we may switch from our regular front page to an emergency template and immediately begin populating it with content such as ways to help or donate or get into contact with family members and friends.”

With such a heavy reliance on the web for delivering information, the American Red Cross needed a faster search system that would deliver better results. The organization had been relying on a previously purchased search solution that also came bundled with its new content management system (CMS) implemented in 2009. That system used a meaning-based context model driven by questions, phrases, or sentences rather than keywords – but this approach often failed to deliver relevant results. “We found that most users search on keywords, not concepts,” says Chou. “Even so, we brought in the vendor to help configure our former product to return keyword-relevant search results. After a lot of effort, it still didn't work out.”

Chou reports that the connector linking the previous search engine to the CMS was slow. Due to the performance of the CMS product, it could take up to ten seconds for search results to be returned. Slow search performance and lack of relevant search results prompted the American Red Cross to investigate other search alternatives – an initiative that coincided with a redesign for
www.redcross.org and creation of www.measlesinitiative.org, a new site supporting a multi-agency push to help halt the spread of measles worldwide.

“From a content standpoint, we were starting the Measles Initiative site over from scratch, and we planned to have a wealth of resources – photo galleries, videos, and other materials in multiple languages. We had to find a better way for people worldwide to search and find relevant information. It was key to the overall success of the initiative,” says Abi Weaver, Senior Press Officer for the International Services Department of the American Red Cross.

At the same time as slow performance and low-quality search results were plaguing the two external sites, the same issues were prevalent on the organization’s intranet site, Crossnet, which also used the older search engine. In addition to issues with search, employees first had to select a category for their line of business – community services, educational programs, international relief, and so on – before they could navigate to the appropriate intranet page. “Even after they chose a line-of-business category and started to drill down into content, users still struggled to make search work quickly and efficiently and get relevant results on our intranet,” says Chou.

**Solution**

Working with Google’s channel partner, Fig Leaf Software, the American Red Cross began evaluating its options and calculating the costs and benefits of deploying a new search solution. “We realized we were at a tipping point – we would have to pay more in licenses for our CMS to support the two external sites, and we saw that we could save IT costs and achieve better results by setting up two Google Search Appliance (GSA) systems,” says Chou.

The organization’s outsourced data center deployed two GSAs: one for production and the other as a hot backup. The Google Search Appliance systems were implemented over a single weekend, and they now power search across Crossnet as well as on the public redcross.org and measlesinitiative.org site. They also readily index multimedia content such as videos and photo galleries, which are especially prevalent on the measlesinitiative.org website.

The American Red Cross sites created three different “collections” of content – one for each site, and also implemented a live feed from its CMS, enabling the GSA to index new or updated content in real-time. According to Chou, these are two of the GSA’s most well-received capabilities.

**Results**

According to Chou, the quality and speed of search improved immediately upon implementing Google’s search solutions. “Out of the box, the search results from the GSA were excellent,” he says. “We did almost no tweaking on our end, and our users comment on how pleased they are that the right search results come straight to the top. Now if you type in Haiti earthquake or CPR classes, you get back just what you are looking for in the first page – and results are returned in a few seconds versus ten.”

The Google Search Appliance has been broadly adopted, and user feedback has been very positive. Visitors to the intranet as well as to the two public websites now have ready access to information through a powerful, intuitive and familiar search experience. “Search has been more popular after deploying the GSA, and has been driving a higher number of page views,” says Chou. Weaver also notes, “When we moved to the Google Search Appliance, search just started working, and working very well.”
Google Search Appliance enhances BP’s search speed five-fold, increases internal and public searches by 80%

Overview

British Petroleum (BP) is one of the world’s largest companies with operations in more than 100 countries and employs over 96,000 staff. BP’s key business segments – Exploration, Production, Refining, and Marketing, along with a growing alternative energy business – serve more than 15 million customers each day.

Challenge

With any organisation of BP’s size, making information accessible is a momentous task. From varying languages and numerous document formats to the differing uses of technical data between departments and brands, the breadth of information used at BP is as diverse as its employee population and customer base.

In theory, keeping information online should make it easier to share. However, if readers are unable to find what they are looking for, work can become frustrating. In addition, every week new sites are created on BP’s intranet, which made it very difficult for the previous search system to keep track, despite its sophistication.

“Despite the theoretical power of our previous search system, in practice it did not return relevant results and was quickly abandoned by staff,” explains Sébastien Olive, Project Manager for the Information Technology & Services team at BP. “It was very complex, expensive and time-consuming to implement and maintain and when searching, people were faced with endless lists of results that lacked relevancy.”

BP recognised it needed an enterprise search system that was not only fast but also provided access to information from the 250+ public-facing and 1,000+ intranet websites used to share information with key stakeholders.

Solution

The Information Technology & Services team at BP was called on to improve the search system and an audit showed a need to consider alternative search tools.

“We had a significant investment in a search solution from a market leader, so the initial brief was not to replace it, but to improve it. However, when we evaluated the scope of work required to improve the system, it became evident that a different approach could prove more effective, from a cost and functionality perspective,” says Sébastien.

As a result, BP asked vendors to create proof of concepts so that it could compare the performance of different search systems on actual BP content.

The team tested these products with a range of keywords and pre-determined expected results. A “traffic light” marking system was put in place that scored each search by its position: the five top search results were shown in the colour green; the five results listed on the bottom of the first page in orange; and the results listed beyond the first search page in red. The Google Search Appliance returned a high proportion of “green” results straight out of the box, even before any fine-tuning took place.
“The results of the test made our decision easy. The relevance factor was important for us and Google knows how readers think – and search. Typically, people type in one or two keywords at most and these are usually not very precise. What they expect the search engine to do is read their minds to find out what they are looking for – if it does not deliver, they quickly stop using the tool,” says Sébastien. “The Google Search Appliance appears to have this ‘mind reading’ skill and has the additional advantage of being a trusted brand.”

“The pairing of the sophistication of the Google Search Appliance’s administrative and indexing capabilities with the fact it consistently delivered relevant results made it a simple choice for us.”

Sébastien Olive
Project Manager
Information Technology & Services

ABOUT THE GOOGLE SEARCH APPLIANCE

The Google Search Appliance (GSA) is an integrated hardware and software search solution that extends Google’s award-winning search technology to websites of all kinds, including corporate sites and intranets. Organisations can use the Google Search Appliance to make data on servers, content management systems, databases and business applications instantly and securely available from a single familiar search box. More than 20,000 companies worldwide use Google Enterprise search solutions.

For more information, visit www.google.co.uk/enterprise

“A tertiary benefit we’ve seen is that the Google Search Appliance has provided an incentive for editors to work on improving their content,” points out Giles Sutehall, Head of Corporate Reporting & Internet.

“The Google brand is trusted and editors no longer blame the search engine for not delivering the right result. Instead, they’re coming to Communications asking for help to improve the quality of their messaging in order to improve their search ranking,” he said.

After reviewing products from a number of search engine suppliers BP chose the Google Search Appliance, a product that supports “Universal Search” across websites, file systems, enterprise applications, and intranets. The appliance indexes and searches over 220 file types, presenting relevant results back to readers with the simplicity and clarity readers expect from Google.

Results

The Google Search Appliance delivers more relevant results five times faster than the previous system, making it more appealing to users. As a result internal searches have increased by 80% and click-through rates rose by 20%. There has also been an increase in reader searches of 80% to 90% on public-facing websites.

As a result of the success of the internal search overhaul, BP subsequently decided to tackle the challenge of its 250+ public-facing websites, featuring a variety of different languages and brands that represent BP’s offerings worldwide, including ampm, Aral, Arco, Castrol, and Wild Bean Café. Each site required a localised, appropriately branded search page in the correct language.

“We were faced with the enormous task of creating more than 250 unique, multilingual search pages, allowing readers to search content in many languages,” Sébastien continues.

“We decided to test the shortlisted products with the same traffic light marking system we had used for our intranet project. While there were some attractive features in the other products we reviewed, relevance was once again the key factor for our readers and the area where Google came out on top,” he said.

“When we went live with the external search solution, we had an 80% increase in searches – a great testament to the fact that readers are pleased with the search results they are receiving.”

“The Google Search Appliance has worked extremely well. Not only has it been reliable from a technology perspective, but it has brought consistency and cost savings to both our intranet and public-facing websites while also making a contribution to the efficacy of our messaging,” Giles concludes.

“The pairing of the sophistication of the Google Search Appliance’s administrative and indexing capabilities with the fact it consistently delivered relevant results made it a simple choice for us.”

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