

## Honeywell Transportation revs up their product development cycle with the Google Search Appliance

# Honeywell

### At a Glance

#### What they wanted to do

- Reduce the amount of time it took engineers to find key design and specifications documents
- Create a “universal search” environment that allowed employees to use one search tool to search multiple systems
- Reduce the need to duplicate or overlap product simulations and lab tests

#### What they did

- Implemented the Google Search Appliance across multiple internal systems, including MatrixOne (ENOVIA) and Microsoft® SharePoint®

#### What they accomplished

- Reduced total average search time per week by 6,000 hours across the user base
- Improved customer satisfaction survey scores for information availability and the ability to provide answers

### Business

Honeywell International is a \$37 billion diversified technology and manufacturing leader, serving customers worldwide with aerospace products and services; control technologies for buildings, homes and industry; automotive products; turbochargers; and specialty materials. Based in Morris Township, N.J., Honeywell has 132,000 employees worldwide. Its shares are traded on the New York and London stock exchanges, and it is a component of the S&P 500.

### Challenge

For Honeywell Transportation Systems, ensuring their innovative product developments keep moving through the pipeline and providing premium service to customers, each of whom account for millions of dollars in orders, is paramount to their business success.

*“In servicing our customers, the Google Search Appliance gave us a simple, easy-to-implement solution that was immediately familiar to our users, required no training to use, and gave employees visibility to our key data – instantly. As soon as we turned it on, they had visibility to information across systems they didn’t have before.”*

*—Jim Schwaller, IT Manager, Engineering & Emerging Technologies*

But for the 1,000 engineers responsible for designing new products and working with their customers in this 5,000-person division, “10 to 20 percent of their time was wasted” searching for information in their Matrix One (now ENOVIA) product data management tool, according to an applications engineer survey conducted by Jim Schwaller, IT Manager, Engineering & Emerging Technologies, Honeywell Transportation Systems.

The process was excruciating – just logging into the system required five or six clicks, then an engineer had to specify the exact search criteria and document type, and even use “wildcards,” which are characters like asterisks or brackets that substitute for unknown search string characters.

“If you didn’t know exactly where you were going, you wouldn’t be able to find what you were looking for,” Schwaller reported.

Clearly, providing their engineers the ability to quickly find designs, specifications and other documents related to product development and customer service was going to improve Honeywell Transportation’s business processes.

### Solution

Honeywell Transportation configured the Google Search Appliance (GSA) to work with their MatrixOne product data management system and saw immediate results. The engineers could now perform general keyword

---

## About Google Search Appliance

With the Google Search Appliance (GSA), the search experience shared by millions across the globe can be harnessed by your individual company with specific enterprise enhancements that make searching easier, intuitive, and customizable. Ready to index most enterprise content right “out of the box,” the GSA turns your company’s intranet or website search engine into a system that is as relevant and reliable as Google’s - with the same ease of use.

For more information visit:

[www.google.com/enterprise/search](http://www.google.com/enterprise/search)

---

searches like “turbos used by Ford” rather than entering specific criteria like type of document, revision number, or document description.

“What Google has given us more than anything is a place to start – that’s such a powerful aspect of the tool,” Schwaller said.

Since the initial successful deployment of the GSA, Schwaller has configured it to work with other internal systems including:

- Microsoft SharePoint – Collaborative environment used for miscellaneous turbo development project documents.
- ePEP – An SAP xRPM based tool that is used for program / project management. Documents and project summary (individual data elements) are crawled.
- WRS – A centralized Work Request System used to submit, schedule, and manage Lab Requests, Simulation Requests, etc.
- SCC-FAMS – A central warranty management system.

Schwaller preferred using the GSA’s built-in SharePoint connector to SharePoint’s built-in search solution because he found it produced more relevant search results, crawled content that lived within documents, and organically crawled the new sites and sub-sites created by employees.

“In servicing our customers, the GSA gave us a simple, easy-to-implement solution that was immediately familiar to our users, required no training to use, and gave employees visibility to our key data – instantly. As soon as we turned it on, they had visibility to information across systems they had never had before,” Schwaller said.

Schwaller also appreciates how easy it is to scale up his use of the GSA. It currently crawls 1,275,000 documents with plans to expand to 10 million documents this year. One project that excites Schwaller is expanding the GSA to use on “Yeti,” which is Honeywell Transportation’s centralized storage of physical lab test and simulation results. Each year, Honeywell runs hundreds of thousands of hours worth of simulations and physical tests on their Turbo technology and other transportation products. Each test costs between \$20,000 to \$100,000 so the ability to efficiently search test results has the potential to produce very significant savings.

“Imagine if we could find those results and didn’t have to run the test again? If we could skip even 10 to 15 of those tests, it could save the company over a million dollars per year and reduce the average two-year product development time by up to eight months. That’s huge,” said Schwaller.

### Benefits

Looking at hard metrics, the Google Search Appliance has reduced the average search time for an engineer from 10-20% to 5% of his time – multiply that by the more than 1,000 engineers in Honeywell Transportation Systems and you have a total savings of up to 6,000 hours per week.

“Certainly it’s helped us to better respond to customers,” Schwaller said, citing a customer survey conducted by Honeywell in which the respondents singled out that Honeywell Transportation’s availability of information and ability to provide that information has improved tremendously over the years.

From a broader point of view, it has helped to transform Honeywell Transportation from a regionally-oriented division into a more global organization. “It used to be you’d tap on the shoulder of the guy sitting next to you, but now you can work collaboratively around the world without having to be on the phone or IM by looking up and easily finding the information posted by someone in China, or India, or Europe without their emailing me directly to share the latest project information,” Schwaller said.

In addition, with the deployment of the Google Search Appliance, Honeywell has realized a Human Capital Management benefit. Having the latest technologies at their disposal is “what engineering graduates expect,” Schwaller reports, and providing them with the ability to search for information using a Google-based interface has contributed to their satisfaction level and helped Honeywell retain engineering talent that is hard to resource.

