



Tyson Foods, Inc.

Overview

Country or Region: United States

Industry: Manufacturing

Customer Profile

Since its founding in 1935, Tyson Foods has grown to become one of the world's largest producers of protein products.

Business Situation

Tyson Foods relies heavily on sophisticated image management, but its existing solution was difficult to enhance and extend and costly to support and maintain.

Solution

Tyson Foods migrated its image-management solution and simultaneously upgraded its collaboration environment to Microsoft SharePoint Server 2010.

Benefits

- Easy solution enhancement and extension
- Development time down by nearly 75 percent
- Maintenance costs down by two-thirds

Food-Processing Giant Delivers Extensible Solution, Cuts Maintenance Costs Two-Thirds

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Rebecca Wilson, Project Leader, Productivity Management Group, Tyson Foods

Tyson Foods, one of the world's leading producers of protein products, needed a more extensible solution for scanning, storing, and providing access to thousands of document images. A solution based on EMC2 Documentum Platform and installed in 2006 was difficult to customize or extend to new user groups and costly to maintain. IT executives, who were already familiar with Microsoft Office SharePoint Server 2007 as a collaboration platform, decided to move the Documentum-based image-management solution to Microsoft SharePoint Server 2010 Enterprise while upgrading their collaboration solution to that same platform. Now, employees have far greater access to image management, new development is done in just one-quarter of the time, and maintenance costs have been reduced by two-thirds.

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Rebecca Wilson, Project Leader,
Productivity Management Group,
Tyson Foods

Situation

With more than 75 years in business, Tyson Foods is among the world’s largest producers of chicken, beef, and pork, and the second-largest food-production company in the Fortune 500. From its headquarters in Springdale, Arkansas, and more than 300 facilities worldwide, the 115,000 employees of Tyson Foods serve customers throughout the United States and in 100-plus other countries.

At Tyson Foods, some 15,000 employees are information workers, who interact with an ever-expanding repository of documents and data to help develop and market hundreds of products and process millions of transactions each year. A significant number of these employees work directly with documents that originated on paper and have been converted to a digital format.

In 2010, these employees accessed and processed information from more than 75,000 documents images each week. Because these employees are executing time-critical transactions in business-critical processes ranging from accounts payable and accounts receivable to general ledger, the software solution that Tyson Foods uses for managing document images is a fundamental company asset.

From 2006 until very recently, that software solution was based on EMC2 Documentum Platform, a product designed for enterprise document management that Tyson Foods deployed in a major undertaking. Unfortunately, however, over the years the Documentum-based image-management solution had begun to resemble an asset of diminishing value.

As Rebecca Wilson, Project Leader, Productivity Management Group at Tyson Foods, explains, for Tyson Foods to make the most of its significant investment in producing and deploying the Documentum-based image-management solution, the company had to be able to enhance and extend the solution to keep up with changing business needs. “But delivering productivity enhancements to current users almost always required complex coding,” Wilson says. “As well, delivering the solution itself to new groups of users was similarly challenging.”

This challenge stemmed from the fact that at Tyson Foods each user group—defined as users within a given business unit who work on a given business process—relies on a unique interface between image management and line-of-business systems. “So, to successfully deliver the Documentum-based solution to users in a new group, our team had to develop custom code,” Wilson says. “This required the dedicated resources of a specialist, who might not always be available when a new group was ready to adopt the solution.”

As a result, far too few information workers were taking advantage of image management at Tyson Foods. “We had planned to deploy incrementally, delivering to a few groups of users at the outset and adding others over time,” Wilson says. “But after five years, we had been able to deliver the Documentum-based solution to fewer than one in three of the individuals who could have enjoyed some productivity gains from it. This was hardly the best application of our significant investment.”

“Based on [our collaboration] experience, we considered SharePoint an industrial-strength technology, and an excellent candidate for enterprise-scale document management.”

Mark Barron, Lead Programmer Analyst,
Tyson Foods

To make matter worse, maintenance of the Documentum-based image-management solution was costing the company dearly. This cost stemmed from a comprehensive contract for support, service, training, and upgrades that Tyson Foods had signed when it envisioned keeping the solution in place for many years.

Solution

A turning point came for Wilson and her colleagues after they tried in vain for more than six months to upgrade the image-management solution to a new version of the EMC2 Documentum Platform. “At some point, the version of Documentum on which we were running the solution would no longer be supported,” explains, Mark Barron, Lead Programmer Analyst at Tyson Foods. “Clearly, we needed to consider something different.”

“Industrial-Strength Technology”

What Barron and his colleagues did consider was different, but it was also familiar: Microsoft SharePoint Server 2010, the earlier versions of which the company had come to know and appreciate. “We had used Microsoft SharePoint technologies since the mid-1990s, and had been using Microsoft Office SharePoint Server 2007 for large-scale collaboration projects since 2008,” Barron points out. “Based on that experience, we considered SharePoint an industrial-strength technology, and an excellent candidate for enterprise-scale document management.”

Before deciding to move image management from Documentum to SharePoint Server 2010, however, Barron and his colleagues wanted to address some key concerns. These concerns included the way SharePoint Server 2010

handles disaster recovery, its ability to scale to manage the rising volume of document images at Tyson Foods, and the product’s support for close integration with SAP. Tyson Foods uses SAP as its corporate enterprise resource planning (ERP) solution and requires interfaces between that product’s accounting, human resources, export, and manufacturing components and image management.

Expertise from Microsoft Technology Center

To address those concerns, later that year Barron, Wilson, and two others from Tyson Foods attended a three-day Architecture Design Session at a Microsoft Technology Center (MTC) in Dallas, Texas. They were accompanied by consultants from Microsoft Gold Certified Partner Hitachi Consulting, which had worked with Tyson Foods for more than 12 years.

Because the SharePoint-based image-management solution envisioned by Tyson Foods would be supported by a repository based on Microsoft SQL Server, the team asked experts in that technology about how to design the repository specifically to address concerns about disaster recovery and scalability. They also consulted with experts in SharePoint Server 2010 about third-party options available for integrating the all-important scanning side of the solution as well as the equally important SAP-based accounting side of the solution.

“The most valuable takeaway from our MTC experience was architectural validation—how to select the right third-party tools and integrate them into a SharePoint-based solution,” Wilson says. “The expertise provided by the MTC

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architects was essential in helping us undertake this project, particularly in helping us select the third-party products for integration with scanning and with SAP.” For the scanning interface, Tyson Foods deployed Imaging for SharePoint, developed by Microsoft Gold Certified Partner KnowledgeLake; for the SAP interface, the company deployed ERP-Link, developed by the company of the same name.

Barron concurs with Wilson’s assessment of the MTC experience. “Whether it was general knowledge of image-management solutions or design details specific to our way of doing things, the experts at MTC had the information we needed and shared it in a form that we could readily use,” he says. “We put that knowledge together with what we had learned about SharePoint in our collaboration environment, and we were ready to jump right into the project.”

Simultaneous Upgrades

To deploy the SharePoint Server-based image-management solution at Tyson Foods, Wilson assembled a team equivalent to six-and-a-half full-time employees, along with two specialists from Hitachi Consulting who led the project’s five-week pilot. After the pilot, at the end of 2009, internal team members spent another 15 weeks preparing the solution for production release.

Because SharePoint Server 2010 itself was not yet released into production, this work proceeded in two steps: implementing the solution on Office SharePoint Server 2007, for which thousands of information workers at Tyson Foods were already licensed, and then migrating the solution to Microsoft SharePoint Server 2010 Enterprise.

Just the First Step

Today, Tyson Foods is running SharePoint Server 2010 on a cluster of 16 Windows Server 2008 R2 Standard-based servers, five of which are hosting an image database based on Microsoft SQL Server 2008 Enterprise and dedicated to the SharePoint Server-based image-management solution. Some 3,000 employees from four business units are using the solution for accounts payable, employee reimbursements, payment backup, general ledger, garnishments, and export documentation. In one of those business units, Tyson Foods Corporate, employees are also using the solution for a product-line-specific accounts payable process and garnishments.

According to Wilson, deployment of the SharePoint Server-based image-management solution to these users is just the first step in bringing its benefits to a wide population of information workers at Tyson Foods. By mid-2011, she anticipates that an additional 50 to 100 sales-support employees will make regular use of the solution, a significant expansion beyond the original Documentum user base. Most of these employees were using the Documentum-based image-management solution before, while others were using third-party or self-developed image-management solutions instead.

Benefits

At Tyson Foods, the benefits of the new Microsoft SharePoint Server 2010-based solution include the ability to rapidly enhance and extend image-management capabilities to a broad range of employees, a dramatic reduction in new-development time and maintenance costs, and an anticipated return on investment in just two years.

"We no longer need to seek out specialists ... because we have a wide base of professionals throughout the company who know SharePoint through our use of it as a collaboration tool."

Charles Norman, Lead Programmer Analyst, Tyson Foods

Development Time Cut Significantly

For Wilson and her colleagues, it is enormously satisfying to be able to enhance the image-management solution as needed by various users or user groups, and extend it to user groups that previously did not have access to it. "Consider something as common as routine customizations," Wilson says. "With Documentum, coding was required for almost any customization, but with SharePoint, customization is more of a configuration task. So it's easier to respond to users who need tweaking of the input or search function, for example, to help them become more productive."

Because configuration is easier, Tyson Foods can deploy the SharePoint Server-based image-management solution to different user groups far more readily than it could the Documentum-based solution. "Within the solution, KnowledgeLake inherits from SharePoint attributes about the captured images," explains Charles Norman, Lead Programmer Analyst at Tyson Foods. "Then, for our imaging solutions that interface with SAP, ERP-Link provides a framework for communicating business process details between SharePoint and SAP. As a result, we can deploy imaging solutions to each user group with a minimum of custom code. This has reduced development time for new image-management projects from three or four calendar months down to just one."

Economies of Scale

Whether Tyson Foods needs an enhancement to the SharePoint-based image-management solution for employees in groups currently using it, or an extension of the solution to a different group, the company can address the need easily and effectively.

"We no longer need to seek out specialists, as we did using the Documentum-based solution, because we have a wide base of professionals throughout the company who know SharePoint through our use of it as a collaboration tool," Norman says. "These professionals can build projects on the SharePoint-based image-management solution with little to no involvement from us and they can do it well, considering they'll be deploying in their own business area, whose needs they know better than we do."

Having multiple SharePoint Server experts throughout the company, as well as a large user base already licensed on and experienced with the product, provides significant economies-of-scale at Tyson Foods. "By replacing a Documentum environment with one based on SharePoint, we are reducing those maintenance costs by two-thirds," Wilson says. "Combining this with what we'll save by retiring the third-party and self-developed solutions used in some business units, we expect to see a return on our SharePoint-based image-management investment in just two years."

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