URL: www.tesco.com
Industry: Retail
Country: United Kingdom

Tesco

Redistributing mainframe applications creates a common operating model for fast, global deployment for Tesco

Challenge

Retail giant, Tesco, has an unusually flexible business model, enabling swift expansion in target markets, thanks in part to their common operating model. This required modernizing crucial mainframe COBOL applications to run on standardized platforms worldwide.

Solution

> Micro Focus Enterprise Server
> Micro Focus Enterprise Developer

Tesco

Tesco plc is the world's third largest retailer with over 5,000 stores in more than a dozen countries and annual sales in 2010/11 of £67 billion. Already the UK's market leading food retailer, Tesco is pursuing an ambitious growth strategy to become as strong in non-food sectors and expand its international businesses. Tesco's management sees technology as a business enabler and the company has long been at the cutting edge in the use of IT, viewing innovative technology as a major driver of growth and competitive advantage.

Mission critical replenishment locked into the mainframe

International growth is high on Tesco's list of priorities, and the $600 billion US food retail market, set to expand by 40% in the next five years, makes an attractive target. Tesco's bold attempt to enter this new and potentially lucrative market was supported by a reactive and flexible IT strategy enabled by the support and technology of Micro Focus. It is that support that emboldens the Tesco team to spread their operation in some of the world's most challenging markets.

Tesco's proven competitiveness in retail is dependent on its highly effective IT systems. This is especially true for its innovative Continuous Replenishment (CR) system, which drives store ordering and makes sure that what customers want is always available while minimizing waste. The unique application was developed by the Tesco IT department in the UK and encompasses decades of retail expertise and experience.

Highlights

> Far lower cost than rolling out mainframe-based solution
> Maintain a near single code base across the group
> International operations access functions directly
> Fast user interface refresh
> Faster and lower risk than adapting package solution or rewriting

"Elements of our common operating model are already in place and benefiting some of our businesses. Micro Focus' modernization expertise is not only helping us maintain the momentum behind this strategic IT project, but is also playing a key role in the development of our international presence. "

Colin Cobain,
Group IT Director at Tesco

The CR application plays a key part in generating tens of millions of pounds in profit for Tesco in the UK and more importantly, delivers substantial improvements in customer service. The challenge was that the highly sophisticated stores ordering system resides on an IBM z/OS mainframe in the UK. Tesco wanted to make the advantages of this intellectual property available to the rest of its group where the data centers are based around IBM System p servers running Oracle Retail under AIX. Several options presented themselves to the Tesco team:

- Upgrade UK mainframe capabilities and support international operations from UK using z/OS-based Continuous Replenishment
- Introduce mainframes and the mainframe-based CR system into all international data centres
- Build a new system from scratch for AIX and integrate it with Oracle Retail. Update the current Oracle Retail-based replenishment system and enhance it to include the unique capabilities available in CR
- Make z/OS-based CR available on AIX (port it to AIX)

However, guiding Tesco's decisions is its 'common operating model', which defines how to build a set of repeatable processes and systems to support international growth. This involves establishing a standard computing platform using consistent technologies and then ensuring that all key applications can run in this environment.

An important aspect of this flexible approach is that all versions of the enterprise applications have to be derived from common sources, even if they run on different platforms. This is essential to ensure that enhancements and fixes only have to be developed once and can be propagated consistently and quickly. Achieving the goals of a common operating model is made particularly challenging because of Tesco's dependence on its powerful z/OS mainframe in the UK, the global platform strategy based on IBM System p servers running AIX and the pressure on IT for new features.

For Tesco's executives global success meant they had to 'think globally and act locally'. A local instance of the crucial CR application would be needed, running on existing Tesco servers within their international operations to manage the local supply chain. The first four options were discarded for not fitting with the common operating model strategy.

It was this challenge that led Tesco to Micro Focus. The key feature of the Micro Focus solution was that it enabled Tesco to address its issues without changing the IT architecture within its current international operations structure.

Migrating and replicating the Continuous Replenishment application

Migrating and replicating the critical application for its US launch deadline focused Tesco's common operating model effort on enabling the mission critical z/OS based CR application to run on its AIX servers. This application is vital to the retailer as it regulates the flow of stock through the supply chain, from the source through to point of sale.

Micro Focus' Application Migration and Modernization offering was chosen to port the CR application to the System p server and integrate it with the existing Oracle Retail solution. Within four months the Tesco IT team had a version ready to demonstrate and test on the new environment.

The time-to-market delivery of this unique operation was reassuringly short and the team was impressed with how well the Micro Focus tools worked. Also, compared to the long and risky alternative of developing a new application for the IBM System p server, or adding the functionality to Oracle Retail, the project was remarkably risk free and straightforward.

Proven functionality rolled out internationally

Tesco went live with its powerful replenishment application in July 2007. An initial trial operation was set up in Turkey to address any teething problems before tackling the roll out in time for the North American launch later in 2007. The migration approach taken has the added benefits of preserving the unique, proven functionality of the CR software and meeting the goal of a common source stream for both versions of the application.

Establishing the crucial CR application on the flexible IBM System p server platform has moved the common operating model strategy forward by a major step. Tesco has been able to release its unique CR functionality, which provides it such a competitive advantage in the UK, across all its international operations. It can do this cost efficiently by deploying this major improvement to the supply chain system on existing data center environments with suitably sized servers for each specific international operation.

Tesco's IT managers believe it was the combination of the comprehensive Micro Focus solution together with expert assistance that led to success. They found that Micro Focus was able to quickly mobilize a group of experts to help them implement the software.

Technology adding competitive advantage

Continuing the journey to a comprehensive common operating model for their IT infrastructure will remain a priority for Tesco. This will allow them to respond efficiently to market demand and support operations efficiently anywhere in the world. Tesco will always look to technology for competitive advantage and better service for its customers. Micro Focus solutions will continue to play a key role in helping Tesco generate maximum value from their application investments.

About Micro Focus

Micro Focus, a member of the FTSE 250, provides innovative software that allows companies to dramatically improve the business value of their enterprise applications. Micro Focus Enterprise Application Modernization, Testing and Management software enables customers' business applications to respond rapidly to market changes and embrace modern architectures with reduced cost and risk.

Note: Enterprise Developer and Enterprise Server are the current names for products used in this project.