

# Tesco.com Home Shopping One Till

## Home Shopping One Till Project Delivers Benefits for both Customers and Tesco.com

### Tesco.com's Business Challenge

Although Tesco.com had automated the checkout system for the home shopping orders, parts of the checkout process were still executed on a manual basis. Handling refunds was one area where significant time and cost savings could be made by improving the process. When delivering to customers, Tesco.com drivers had to make a note of the products to be returned and hand this to the Home Shopping Manager at the branch who would manually process the refund using a standard till and post the receipt to the customer.

### IVIS Group Solution

In the new home shopping system built by IVIS Group, drivers can notify customers of any substitutions on their doorstep and if the customer rejects a substituted product the driver can scan the products to be returned at the customer's door using Reach, a hand-held device.

The Reach device sends the details to the One Till system which processes the refund automatically and emails the receipt to the client. The system speeds up the checkout process by minimising the need for manual intervention which reduces errors leading to a higher customer satisfaction level. It also enables a more seamless reverse logistics process where rejected products can be returned to the store, and where possible to the shelf, more quickly than before

### Business Impact

The main purpose of the Home Shopping One Till system was to reduce human intervention in the order fulfilment and checkout process that often resulted in errors. These errors led to a drop in customer satisfaction with the delivered goods, which in turn led to unnecessary returns and additional cost.

The main operational benefit of the system has been freeing up the Home Shopping Managers allowing them to increase the number of tasks they complete. This has been achieved by automating the checkout process whenever an order has no errors or exceptions. This functionality has been built as Web Services thus ensuring future expansion and scalability.

The new system saved Tesco.com £1.25M in the first year by a combination of reduced returns, improved fulfilment and increased efficiency in the Home Shopping Team. Another major financial benefit of the Home Shopping One Till system has been the ability to allocate refunds to the correct cost centre, reducing transaction costs between operational companies and improving reporting. This has also helped improve customer satisfaction by dealing in refunds in a more concise and efficient manner.

In addition, further benefits were realised by reducing the reliance on out dated legacy technology and providing a basis for future expansion.

case study

## How did we do it?

The Home Shopping One Till system solves these problems by using Microsoft .NET technologies to produce a highly maintainable, integrated and scalable automated checkout solution.

This is achieved by exposing system functions as Web Services, which also allows for technology independent future development. For example, this could in the future enable the checkout functionality to be exposed for use on PDA's and other remote devices enabling in-store staff to use these to checkout customers in busy periods, reducing queuing and increasing customer satisfaction.

As the application is deployed in different geographies the use of a Web Services based architecture allows different local requirements to make use of this core standard application.

### *Technical Project Overview*

The system is based on a 3 tier architecture using a SQL Server database and Windows Forms for data entry. Communications with other application domains is handled by the use of remoting. The business logic was developed using Visual Studio .NET and C# and makes full use of the .NET Compact Framework.

The architecture of the system makes extensive use of a Web Services model, which allows the system to be extended to other technologies and devices as the need arises.

### *Integration*

As well as being fully integrated with the Retailix till application the system is also tightly coupled with several other internal applications. It interacts with the Picking Control System (PCS) and runs on the same hardware. It also integrates with the system used by the delivery drivers on their hand-held devices which handles refunds and returns.

### *Project Delivery*

This application was developed using an eXtreme Programming (XP) paradigm. NUnit (an open source tool) was used for unit testing and communication with the POS system was handled using XML. Visio was used in the early stages of the project to capture UML diagrams.

## Details and Information

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