

# Mothercare moves to a service-oriented architecture with IBM WebSphere Message Broker



## Overview

### ■ The Challenge

Mothercare was unable to find a standard ERP package that could support its unique business requirements, and decided to rely on a number of best-of-breed solutions instead. With more than 100 point-to-point interfaces to manage, the IT team was spending significant effort on enhancing software integration, which became necessary due to business change. In some cases, integration could be up to 30 percent of the original development effort – distracting attention from more valuable development work.

### ■ The Solution

IBM and Prolifics ([www.prolifics.com](http://www.prolifics.com)), an IBM Premier Business Partner, helped Mothercare implement a service-oriented architecture, using IBM WebSphere Message Broker as a central hub for integration. Prolifics also provided Message Broker development and support services via an on-shore/off-shore delivery model during the project.



See the video  
of this case study.

### ■ Key Benefits

- The central integration hub makes it easy to introduce new systems or replace old ones: Mothercare has already successfully replaced its JDA finance modules with a financial management solution from CODA.
- By building a library of reusable services, time spent on future integration will be significantly reduced – giving staff more time to focus on strategic development projects.
- Mothercare estimates that its total costs of integration will be reduced significantly over five years.



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James Blackburn  
Enterprise Architect  
Mothercare

Headquartered in the UK, the Mothercare group ([www.mothercare.com](http://www.mothercare.com)) is one of the world's leading specialist retailers, focusing on products for parents and young children. Through its iconic brands, Mothercare has established itself as a multi-channel group, employing 7,700 people at 1,000 Mothercare and Early Learning Centre (ELC) stores in more than 50 countries. Some 600 of these stores are located outside the UK – a testament to the success of the group's international expansion strategy. Allied to its worldwide Internet and catalogue businesses, this store network provides the widest choice of products for mothers-to-be and children under eight years old.

“One of the reasons for our success is our unique business model – we aim to be a one-stop shop for everything that new parents need, from maternity and baby clothes through pushchairs to nursery furniture, toys and gifts,” explains James Blackburn, Enterprise Architect at Mothercare. “But this wide range of products creates challenges from the IT perspective. ERP packages tend not to offer the comprehensive functionality we need, so we have traditionally relied on a range of custom-developed systems.”

## Business Benefits

- Central integration hub makes it easy to introduce new systems or replace old ones
- Library of reusable services will reduce time spent on future integration and frees staff to focus on other goals
- Estimated costs of integration significantly reduced

## Key Components

- IBM WebSphere Message Broker

## The burden of integration

With the growth of the business, this custom architecture was becoming less and less sustainable. The company had to manage more than 100 point-to-point interfaces between individual systems, and the IT team was spending significant effort on enhancing software integration, which became necessary due to business change. In some cases, integration could be up to 30 percent of the original development effort – distracting attention from more valuable development work. As a result, implementing new IT services was expensive, and lead times on IT projects were relatively long.

“We wanted to build a more flexible, versatile architecture that would make it easier to introduce new systems and replace old ones,” says James Blackburn. “We also wanted to build a relationship with a partner who could take on the majority of the actual development and maintenance work, leaving us free to concentrate on architecture, design and business objectives.”

## Building a service-oriented architecture

To form the basis of the new architecture, Mothercare began looking for a messaging solution that could act as a central communications hub – providing a standardised way for systems and services to share data across the infrastructure and eliminating the need for point-to-point interfaces. The company evaluated a number of solutions, and decided to run a head-to-head proof-of-concept between the two strongest candidates: Microsoft BizTalk Server and IBM WebSphere Message Broker.

“One of our key requirements was that we needed simple integration with a number of legacy RPG systems running on the IBM System i platform,” says James Blackburn. “The IBM solution met this requirement easily. In the end, the proof-of-concept clearly demonstrated that WebSphere Message Broker was the right choice for our business.”

### **Leveraging Prolifics’ off-shore resources**

As well as selecting the IBM WebSphere software, Mothercare also contracted with IBM for a multi-year development and maintenance contract, with 24x7 support for Message Broker. IBM recommended Prolifics, an IBM Premier Business Partner, to help deliver these services alongside the IBM software services team.

“Prolifics has an excellent track record with integration and development projects, and a highly advanced delivery model that combines the cost-efficiency of off-shore resources with the close collaboration of an on-site team,” comments James Blackburn. “With the Prolifics team handling the day-to-day development and support workload, we’re free to concentrate on our core skill: designing an architecture that is fully aligned with our business requirements .”

### **Immediate success**

As a first project for the new WebSphere Message Broker architecture, Mothercare decided to replace its existing JDA financial management system with a new financial application from CODA. The new solution, based on Microsoft technologies, would need to draw data from several IBM System i servers into a single financial application, and all communication between systems would be handled by the Message Broker hub. The project was successful both in IT terms and as a test of the working relationship between Mothercare and Prolifics, as James Blackburn explains:

“We integrated the Prolifics team with our own, giving them Mothercare email addresses and full access to the relevant internal systems. At the same time, Prolifics helped us adapt from our traditional ‘waterfall’ development process to a more agile methodology based on the Rational Unified Process (RUP). This allows us to run more projects simultaneously, and should ultimately contribute to faster time-to-market for new IT services. The dedication of both teams has helped us establish an effective working relationship very quickly.”

### **Looking to the future**

With the success of the first project, Mothercare plans to perform a similar upgrade of its Internet and catalogue sales systems, moving to a new product management system called STEP, from Stibo. After this, a number of other projects will follow.

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*James Blackburn  
Enterprise Architect  
Mothercare*

“The idea is that with each project, we will establish more and more reusable services and components that will facilitate integration in the future,” says James Blackburn. “For example, during the first project we built an exception management system which uses Tivoli Enterprise Monitoring Server to handle errors in the Message Broker hub. Now that this is established, we can use the same system in all future projects – saving time and avoiding the need to reinvent the wheel.”

### **Plug-and-play**

Ultimately, Mothercare hopes to create a service-oriented architecture in which individual components can be reused and combined in different ways to create new services. When a new component is added, it will simply be ‘plugged in’ to the WebSphere Message Broker hub, with minimal need for specific integration work.

“Of course, we are still at an early stage in the process, where we are still investing in the technology and the services, but the prognosis is very positive,” says James Blackburn. “By introducing IBM WebSphere Message Broker and eliminating point-to-point interfaces, we should be able to reduce the amount of time we spend on integration – which used to be a significant overhead of our total development workload – and reduce TCO over the next five years. Combining this with Prolifics’ off-shore resources and agile development methods, we hope to accelerate our development cycles and bring new IT services into production significantly faster than before.”



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