

A woman with dark hair, wearing a white tank top and white pants, is sitting on a bed with white pillows and a blue blanket. She is looking down at a silver laptop open in front of her, with her hands on the keyboard. The background shows a dark blue headboard and a bedside table with a lit lamp. The overall lighting is soft and indoor.

Real-time Retailing

- an industry overview

Microsoft

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Microsoft Real-time Retailing overview

‘Consolidation in the Retail Industry and the spin-off effects have always been part of the changing UK Retail landscape. Retailers are constantly developing and testing new concepts and brands. Store chain expansion and contraction is a given.’†

Even a cursory glance at the ever-shifting retail landscape in the UK and across the globe serves to support this statement, placing a high premium on retailers’ ability to respond rapidly and agilely to changed circumstances. In Microsoft’s view, this agility is enabled only by the rapid and cost-effective integration or re-integration of business process systems and applications, both across the organisation and with partner organisations.

†Dan Conway, General Manager EAI Integration Services at Xigent, EAI Journal September 2001

The multi-faceted customer relationship

The need for customer loyalty is no longer a question of simply concentrating on the in-store experience and answering the questions: ‘Can I buy the products I want? How long do I have to queue for? Are enough lanes open and working properly?’. It’s a need that is driving retailers to move even beyond loyalty programmes and affinity cards to take an increasingly ‘holistic’ view of the customer, one that aggregates and assimilates the data from every touch point, often within a multi-channel environment.

Today, with supermarkets adding whole new dimensions to business through the launch of banking, insurance and other services, customer understanding must extend into every aspect of their aspirations and needs. Integration of the systems used to manage each aspect of customer relationships enables the greater customer understanding needed to enhance service levels and drive effective product development strategies.

Moreover, not only does such a move enhance customer perception of the organisation and their propensity to repurchase, the improved flow of information streamlines processes and improves the potential for profitability both within the business and through the supply chain.

The concept of ‘1° of separation’ in the value chain is becoming ‘mission critical’.

The extended supply chain

As retailers and their manufacturing partners constantly seek to retain margin in a sector where consumers demand ever-increasing levels of service and ‘value’, global sourcing of goods from lower-cost economies is becoming an increasingly urgent priority. This has the inevitable result of a physically extended supply chain, causing retailers to forge closer relationships with new, geographically disparate partners. Systems integration is the key to defusing the impact of geographical and cultural distance between such retailers and their partners. In other words the concept of ‘1° of separation’ in the value chain is becoming ‘mission critical’.

Mergers and Acquisitions

Mergers and Acquisitions (M&A) activity is an ever-present factor. In recent years, we've seen US giant Wal-mart swallow the UK's Asda chain in its ongoing bid to make unassailable its position as the world's largest retailer. And today we're witnessing a bold bid by Baur, Iceland's largest retailer, to buy the remaining 80 per cent of Top Shop owner Arcadia, the fourth-largest clothing retailer in Europe. Such developments highlight the systems integration challenge facing retailers who require the reliable exchange of data and shared business processes within the newly expanded organisation.

Demergers, too, characterise the market's fluidity. For example, should Kingfisher pursue its long drawn-out bid to break itself up into constituent businesses, or the flotation plans drawn up by HMV's co-owners EMI and venture capitalist firm Advent succeed, there will be a need to demerge currently integrated systems and re-integrate them with new partners.

New customer attitudes

It's not only at a corporate level that changes are taking place. Changing consumer attitudes, too, are leading retailers to constantly refine and evolve their marketing, product and partnership strategies. Shifting customer priorities move attention away from the loads-a-money 'label' culture of the 1980s and 1990s to an emphasis on value. According to research company Verdict, the burgeoning UK 'value clothing' sector now represents 15 per cent of the total clothing market, and is worth £4.4 billion. This represents a 19 per cent growth in the sector, in the context of a market that grew by a mere five per cent overall in 2001.

Changing consumer attitudes are leading retailers constantly to refine and evolve their strategies.

The success of companies like Matalan, recently reporting a 45 per cent turnover increase to earn it a 16.6 per cent share of the value clothing market, is causing mid-market players like BHS and Littlewoods to reconsider their marketing and pricing strategies. One possible

response is to seek new, lower-cost manufacturing partners, requiring rapid and easy integration with their systems at both application and business process level.

More competitive retailing

In short, today's retailer has to be an agile, dynamic business, capable of changing its shape and approach rapidly to succeed in an environment of morphing corporate skylines and customers with multiple personalities.

At Microsoft, we believe the key to this need is the ability to rapidly, simply and cost-effectively create and change close, dynamic and mutually beneficial relationships with manufacturing, distribution and service partners across the world. In turn, this leads to better product development and shorter times to market combined with an improved understanding of what customers want. In short, it enables more competitive and more profitable retailing.

The most effective route to achieving this is through Real-time Retailing, based on the Microsoft .NET platform and underpinned by Microsoft BizTalk® Server 2002.

Business processes and applications – the integration challenge

Increasing numbers of retailers are turning to Real-time Retailing as a means of integrating applications and business process systems, regardless of their previous or current development or deployment environment. The resultant improved business agility reduces costs, and accelerates new product development and deployment, so helping create operational excellence.

Integration of a sort has been with us since the early days of computing, as programmers linked systems such as order processing with stock management. The next step came with the arrival of ERP (Enterprise Resource Planning) which linked certain systems like HR, accounting and manufacturing. However, applications such as supply chain management still proved hard to integrate in a flexible manner.

Today, a new type of platform is in use, one which provides the foundation for the integration of all internal systems and with the selected processes and applications of external partners. This is Real-time Retailing.

Cutting the cash burn

The importance of achieving this sort of integration is easy to illustrate. The failure of so many e-commerce initiatives over the last two or three years was caused by an inability to reach profitability before the available cash was spent. Marketing aside, what was the main cause of this burn? It was the need to deploy entirely separate IT departments to support both the range of technology infrastructures within the business and the newer, incompatible e-commerce application servers. Had they been able to integrate sufficiently to be managed by a single team, radically reducing their operating costs, many of these players might still have been with us today.

The lessons have been learned – the drive is on, not only to cut costs out of the next generation of e-commerce ventures, but also to streamline the traditional retail model as a whole, by enabling integrated communications and transactions across a host of previously discrete platforms and technical architectures.

Now, with a Real-time Retailing solution integrating a retailer's business process systems and applications, it is possible to gain an integrated vision of every aspect of the business, from procurement, warehousing and distribution, through marketing and finance to purchasing patterns at individual store, product and even customer level.

Equally significant, an advanced Real-time Retailing solution can extend securely beyond the firewall – away from what used to be termed the Intranet – to supplier and partner systems via the Internet. For retailers, this is where tangible benefits like ensuring stock availability and cutting inventory can really be delivered through participating in mutually beneficial e-commerce communities that ultimately focus on fulfilling customer needs better, faster and more cheaply.

Get your systems talking

In the case of an integration product such as Microsoft's BizTalk Server 2002, the technical platform and architecture of systems, and even the programming language and model, are irrelevant. This is because BizTalk Server 2002 uniquely uses industry-standard software to provide an interface between previously incompatible systems. Other available solutions tend to use proprietary or custom interfaces to achieve the same end.

So Real-time Retailing offers the 21st Century retailer the opportunity to rapidly build and deploy integrated business processes across the organisation and

with trading partners. This in turn enables such companies to get their products and services to market quicker, using fewer resources.

In short, it delivers three benefits at once: more and better products and services created more quickly and cheaply than ever before, based on better understanding of customers through a 360° appreciation of their needs. This is why Real-time Retailing is emerging as the key to enhanced competitiveness and profitability in retail.

BizTalk Server 2002 uniquely uses industry-standard software to provide an interface between previously incompatible systems.

The integration landscape

Today, integration is big business. Several specialist companies like Seebeyond and Webmethods have been active in the field for some time, and other more generalist computing giants like IBM (with its Websphere offering) also offer sophisticated integration solutions. Indeed, the playing field is a complicated one, which corporate technology decision-makers are finding difficult to navigate.

Microsoft believes, however, that there are three central considerations that such a decision-maker has to examine:

- How rapid are these solutions to implement and how easy are they to maintain?
- How widespread is the use of proprietary software, or is the solution based on widely adopted industry standards?
- And, particularly in today's challenging economic environment, does the expense enable a reasonably rapid return on investment (ROI)?

The key considerations

First, many current integration solutions tend not to be single products so much as packaged collections of technologies, connectors, methodologies and practices that can make them complicated, time-consuming and unwieldy to implement, meaning a comparatively slow return on investment.

Furthermore, since many use non-industry-standard platforms, it is often necessary to custom-build interfaces between the integration solution and the various business process systems and applications it is seeking to link together. This is also time-consuming and costly, not just at the initial development and implementation stage but also throughout the entire life cycle as partner relationships change and new interfaces need to be created. BizTalk Server 2002, on the other hand, links all systems via a single interface with the ability to integrate with over 300 file formats.

Second, those solutions not based on an industry-standard platform can create difficulties in reusing information that is configured, mapped and stored in a proprietary fashion. Indeed, until vendors of integration solutions manage to agree on a set of standards to base their integration software, there remains much potential for confusion in the market place as well as a high cost of ownership. BizTalk Server 2002 already uses the most widely adopted public standard across worldwide computing industries, eXtensible Markup Language (XML).

The playing field is a complicated one, which corporate technology decision-makers are finding difficult to navigate.

The benefits that may be accrued through the implementation of integration solutions are too significant to be ignored.

Cost considerations

Third, and a further cause of slow ROI, is the initial expense of many Real-time Retail packages. The cost of certain leading solutions limit their uptake to major, established businesses, and can be sufficient to raise significant questions regarding the short and medium-term value of such investments. Amy Hedrick of AMR Research concurs: 'The problem now is money. Integration is not an inexpensive proposition, whether internal or external.'¹ Indeed, the recent economic slowdown has led to the postponement of

many integration projects as businesses seek to defer major capital outlay on projects likely to deliver only a slow ROI.

BizTalk Server 2002, however, offers significantly the lowest purchase price and total cost of ownership of any current integration solution, reducing initial capital outlay and accelerating full ROI.

The Marks & Spencer experience

For many retailers the benefits that may be accrued through the implementation of integration solutions are too significant to be ignored. And for a company like Marks & Spencer, the speed of implementation, use of the industry-standard XML and comparatively low development and maintenance costs of Microsoft's BizTalk Server 2002 have made it the integration solution of choice.

Marks & Spencer wanted to turn its already strong integration with its suppliers into a flexible, responsive and customer-oriented infrastructure that could respond quickly to customer needs. A report by the Giga Information Group confirmed that BizTalk Server 2002 in conjunction with the Microsoft Windows® 2000 Server family, provided the flexibility and options needed for the project.

Key to the strategy was the need to bring customers and partners into the supply chain, enabling customer transactions from over 300 stores to be collected in real time and be passed on to suppliers at a peak of 250 transactions per second. This real-time exchange of information allows suppliers to deliver more efficiently to distribution centres, resulting in greater product availability and selection in the stores.

1. Source: Information Age Business Briefing, Nov 17 2001

Solving business issues

But the benefits don't end there. Because the system is enabling information to flow in near real time between Marks & Spencer employees and suppliers, they can work more closely together to solve daily business issues. And access to immediate customer data in the stores is enabling new real-time event-driven promotions and distribution pilots.

According to Marks & Spencer group, 'Consolidating our infrastructure using Microsoft Windows 2000 Servers and BizTalk Server 2002 began as a solution to a problem, but could turn into a fundamental shift for the company. It's at the heart of our business going forward, so Marks & Spencer can be flexible in responding to our customers' needs.'

Critically, building the Marks & Spencer integration system using BizTalk Server 2002 took a mere four months from specification to implementation, enabling a full return on investment many times faster than the standard 130% over three years.²

However, it is clear that the benefits extend beyond ROI rates alone. According to Martin Anderson, director of systems integration company Rubus, 'The real benefit is much more in the less quantifiable increase in flexibility and responsiveness which can have dramatic effects on business competitiveness.'³

It's this improvement in business competitiveness that lies at the heart of the growing desire to import Real-time Retailing solutions into retail and other businesses worldwide.

The competitive advantage of Real-time Retailing

The Marks & Spencer experience is merely one illustration of the value of Real-time Retailing. Many of the world's largest retail and wholesale organisations see this as a key competitive tool for the new century, enabling store shelves to be fully stocked and expensive inventory to be reduced through providing stock levels that closely match local consumer demand. In addition, it enables test-marketing exercises to be assessed extremely rapidly through the analysis of real-time, real-world sales data, enabling successful new product lines to be created and distributed much faster than ever before.

2. Source: IDC

3. Source: Information Age Business Briefing, March 20 2002

The ability to be able to take real-time transaction feeds from current point-of-sale (POS) systems and analyse and merge this data with other head office systems, store systems information and supplier information in real time can lead to tremendous benefits including:

- Fraud detection (real-time detection and alerting)
- Stockout reduction
- Shrinkage/wastage reduction
- Point-of-sales to point-of-service capability
- Contra-indication warning
- Just-in-time forecasting for perishable goods/sandwiches, etc.

The above represent only a few of the areas in which Microsoft has already helped its worldwide customers to deliver – all with the same common infrastructure built around the Real-time Retailing approach.

Consumer products giant Procter and Gamble (P&G) has recently completed a pilot project using the Microsoft BizTalk Server 2002. This has seen the number of stores selling out of P&G items fall by 25 per cent and has shown promise of a highly significant 50 per cent reduction in profit-sapping inventory levels.

Taking remedial action

P&G chose BizTalk Server 2002 precisely because of its cross-platform capability to connect with the multiple POS systems used by retail chains. It is used to collect data from retailers' POS scanners and cash registers, standardising the data as it comes in and then customising it to pass on to the appropriate recipients, on computers or mobile devices. This approach enables changes to be detected in the selling patterns of particular items, alerting store personnel to potential sell-out situations and to take remedial action.

According to P&G's associate director of supply chain innovation, Jake Barr, 'No application today can tell a retailer its in-stock position in a specific store in near real time. We're blazing a new frontier.'

Retailing by partner integration

P&G's story illustrates graphically the value available to retailers of working in partnership communities with their suppliers and partners, working together in real time to improve the customer experience. According to Dan Conway, general manager of EAI integration services at Xigent, 'Business-to-Business partner trading is spreading beyond the big players. Smaller suppliers and business partners are joining the ranks through third-party providers and more cost-effective solutions.'⁴

But he warns that such businesses need to be flexible in planning and delivering their future integration strategies. 'Industry consolidation and spin-offs have always been part of the changing market. Retailers are constantly developing and testing new concepts and brands. Store chain expansion and contraction is a given. Is there a strategy to integrate (or disintegrate) chains, brands and stores quickly and effectively?'

4. Source: EAI Journal, September 2001

New tools for the new economy

Ultimately, he believes, integration is the solution today's retailers and their partners need. After all, he asks, 'Can the traditional retailer be successful in the new economy using the old tools?'

Fortunately, this is a new frontier that many retailers and their partners may now successfully explore. The rapid implementation and low purchase cost of BizTalk Server 2002, allied with its ability to unite Enterprise Application Integration (EAI), B2B and business process management in a single product that spans platforms, applications and businesses, make its benefits accessible to a new generation of retailer.

How easy is it to achieve integration?

In 2001, the US giant MEGA Life and Health Insurance company needed an integration solution to help it meet new legislation for the retail insurance industry that required standardised formats and data sets in all electronic transactions. Its use of Microsoft BizTalk Server 2002 enabled it to beat the deadline by a full year and reduce the costs of processing two million claims each year by some 20 per cent.

The ideal solution was built in 10 weeks, easily bolting onto MEGA's existing systems, enabling the delivery of a full ROI within a three-month period. And according to Sharon Dixon, the company's vice president of claims and EDI, 'We expect to triple it within a year.'

Accelerating change

Most remarkably of all, having assessed the available integration offerings on the market, MEGA had originally expected development and implementation to be an 18-month project.

The MEGA experience is typical of many organisations across many industries that have chosen BizTalk Server 2002 as their integration solution. This is simply because its design encompasses four key requirements shared by retailers and other businesses:

- That it should be based on public standards to enable full interoperability of business process systems and applications and to protect customers' existing investments in their systems. These may include sophisticated and costly ERP and Customer Relationship Management (CRM) solutions, even those running on proprietary software and using custom interfaces;
- That its single-product approach using a shared interface to integrate with all existing systems should enable rapid implementation and ease of management;
- That its purchase cost and TCO should be low enough to make it accessible to organisations that had not previously been able to consider an integration solution, and enable IT resource to be freed for other important projects;
- And that it should be supported by Microsoft's industry-leading technical and customer resources.

In short, BizTalk Server 2002 has been developed specifically to respond to the real-world demands of clients seeking to gain the benefits of integrated business systems and applications:

1. Assured integration through public standards

The majority of existing corporate systems are based on proprietary interfaces that use either a document import facility or application programming interface (API) to expose themselves to the outside world. As a result, the successful integration of business processes and applications is often an expensive and time-consuming exercise, in terms of both initial development and ongoing maintenance.

With BizTalk Server 2002, Microsoft has sidestepped these significant development and ongoing maintenance costs by enabling these existing systems and applications to be exposed via an XML interface. This means that existing files may be reused, protecting the investments already made in the current data formats that meet specific business needs, so supporting proprietary data formats as well as current and potentially future standards in XML.

With BizTalk Server 2002, the use of public standards extends beyond XML to encompass other shared specifications such as EDI, Hypertext Transfer Protocol and security standards such as public key encryption, digital signatures and encryption. It includes powerful graphical tools to enable the easy tracking and analysis of all data that's exchanged.

As such, it ensures the highest level of interoperability and security both internally, and externally with business partners, to ensure the efficient, reliable and meaningful exchange of information.

2. Rapid implementation and ease of management

At a development and operational level, the use of public standards extends beyond the protection of existing systems to deliver the fastest and most efficient route to full implementation and the greatest ease of management offered by any Real-time Retailing system.

At the heart of this ability is BizTalk Server 2002's unique approach to enabling links between proprietary systems. Under the conventional approach to integration, it has been necessary to write a custom translation program to allow previously incompatible systems and applications to integrate. Not only does this approach make development and initial implementation a difficult and costly process that takes a great deal of developer time, it also hampers easy and cost-effective maintenance. This is because the addition of a new business partner or application will require a new translation program, new user mapping and new data formats to be written. This can reduce a business' ability to become fully agile, so undermining the most important reason for originally introducing an integration solution.

With BizTalk Server 2002, the use of XML requires only a single wrapper to be created for bi-directional communications between all the linked systems and applications, making initial implementation extremely rapid and change easy to manage.

3. Low purchase cost and TCO

Clearly, the speed and ease of implementation and management outlined above contribute to a cost of ownership that's greatly lower than that of any other Real-time Retailing solution available on the market today.

Microsoft believes that the benefits of technology need to be accessible to all, which is why it has deliberately positioned the entry cost for businesses seeking Real-time Retailing massively below that of its main competitors. Indeed, we estimate that entry costs using three of the most prominent solutions on the market range from \$300,000 to several million dollars, excluding development.

A typical Microsoft BizTalk Server 2002 installation costs a fraction of this sum, including licensing and development.

4. Microsoft support and resources

Microsoft invents, markets and supports the technologies on which global business runs. It has the most sophisticated and proactive customer support infrastructure of any company in world.

Michael Collett, Director of Technology at Sapient – responsible for a BizTalk Server 2002 installation at Argentine energy company PeCom – echoes this sentiment: 'The product exceeded our expectations and has proven to be stable, flexible and well supported by Microsoft.'

How Microsoft can help

Microsoft already helps more businesses throughout the world attain their commercial and strategic objectives than any other organisation.

It isn't by chance that the company has reached this position. It is by recognising the critical issues that businesses face, no matter what their industry or position within it, that's enabled us to provide the tools that help them achieve their plans.

Above all, we recognise that every business, whether a retailer or not, is different. It has unique objectives, structures, trading relationships, customer strategies and supplier networks. Specifically with relation to Real-time Retailing, they will each have a unique set of needs, desires and priorities. Each application is a bespoke application.

This is why we want to work closely with you and your consultants, identifying together the precise benefits you should expect to gain from using BizTalk Server 2002 to fulfil your integration strategy.

From needs analysis, through system design, development, implementation and ongoing support, we'll be there to help ensure you gain the maximum benefit from your investment. And help you gain the competitiveness and agility that are the keys to success in 21st Century retailing.

Conclusion

Real-time Retailing is the way forward for retailers, enabling them to rapidly build and deploy integrated business processes within the enterprise, with individual business partners and within full e-commerce communities.

It enables the rapid development and launch of new products and services, getting them to market faster using fewer resources.

Microsoft's BizTalk Server 2002 Real-time Retailing offering is the only product on the market to unite EAI, B2B and business process management in a single product that spans platforms, applications and businesses.

Its use of public standards ensures it integrates with all systems in use in retail today, as well as enabling fast, cost-effective implementation and straightforward management that leads to the most rapid return on investment of any solution in the market place today.

Backed by the full customer support resources of Microsoft, BizTalk Server 2002 has to be the integration product of choice for any retailer keen to build more dynamic business processes and a more competitive organisation.

Software for the Agile Business



How to find out more

For more information on Microsoft solutions and .NET Servers, go to: <http://www.microsoft.com/uk/servers>

For more information on case studies, go to: <http://www.microsoft.com/uk/casestudies>

For technical information on Microsoft .NET Servers, go to: <http://www.microsoft.com/uk/technet>

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