



Getting access to sales information, store margins and gross performances hasn't always been straightforward for retailers. With new technologies, this information can be available at the click of a button. Lindsay James reports



The role of business intelligence (BI) in retail is more important now than it has ever been. Embattled retailers are finally starting to realise that they need to gain insight into every aspect of their business in order to stay ahead of competitors. Not only this, but they need to understand how one area of business impacts another, who their customers are and how successful a particular promotion is likely to be.

"Retailing is a complicated business with tech-savvy consumers leveraging multiple channels to both purchase and talk about the products and stores that they shop at," says Ed Dupee, vice president for retail solutions at Teradata. "This is producing a wealth of information about customers and their shopping habits. Retailers that have an effective BI strategy and supporting technology to capture and integrate this wealth of information into their decision making across all key areas of their business will be able to stay competitive."

"In these financially difficult times, BI is more essential than ever for helping to ensure the

success of a retail business," says David Hobbs-Mallyon, Microsoft's UK data management and business intelligence product manager. "BI allows you to quickly understand which areas of the business are either under- or over-performing, allowing organisations to quickly shift focus to the important areas."

ShiSh Shridhar, Microsoft's retail industry market development manager, echoes this view and explains that the new economy is driving retailers to increasingly move toward 'right product, right place, right time, right price' product and promotion initiatives. "We have seen an increased interest in demand intelligence technologies to reduce out of stock and overstock situations," he says.

"Those forward-thinking retailers are looking at predictive analytics to better determine the right assortment of products and forecast inventory needs in specific geographies. In addition to this, retailers are also looking to be more agile with self-service BI solutions that empower everyone within the organisation to connect to relevant data, gain insight and act on it."

Although the top industry players are

WAITROSE BUYS BETTER

UK grocery business Waitrose has grown from a single west London store in 1904, to more than 220 supermarkets across England, Wales and Scotland in 2009. As the first major supermarket to sell organic food, the retailer is renowned for its high-quality grocery products and its buyers are skilled in maintaining the level of quality that customers expect.

In recent years, Waitrose deployed a variety of head-office applications. However, in 2008, Holos, the application that buyers used for analysing their sales and profitability had come to the end of its lifecycle. The retailer needed to replace its business intelligence system and find a way to provide buyers with improved analysis tools to support their decision making.

Waitrose developed a solution that went live in November 2008. Based on Microsoft technologies, the system fully aligns with buying processes to reduce data analysis time significantly. Microsoft SQL Server 2005 data management software offers sophisticated business intelligence and reporting functionality. Microsoft Office SharePoint Server 2007 Enterprise provides a user-friendly interface, helping employees to access and organise information such as trading figures and supplier performance data. And Microsoft

PerformancePoint Server 2007 – now a component of Office SharePoint Server 2007 Enterprise – supports a specially designed buying dashboard.

Charles Bullock, systems manager for buying systems developments at Waitrose, comments: “When a user logs on to the system, he or she can see a dashboard of reports that summarise sales and trade information. Everyone in a buying area can look at the same data on a Monday morning and use it to review the previous week’s performance or as a basis for the following week’s activities.”

Reports are customised so buyers in different areas of the business can specify the part of the report that’s relevant to them. Menus offer access to more detailed information, which can be generated according to branch, product area or department.

Waitrose now boasts a flexible solution that meets buyers’ varied needs and helps them to work even more efficiently. Bullock concludes: “Using Microsoft technologies, we’ve built a solution that helps buyers work in a more strategic way. We believe that it can help us strengthen supplier negotiations, optimise our assortment range and, ultimately, boost sales and profits.”

looking at these solutions, the reality is that the majority of retailers have dated BI solutions that don’t provide the right people with the right information. “A number of retailers would state they have been using BI techniques for many years, but when you look at this a little closer, it may not be entirely true,” says Alister Jones, business intelligence manager at K3 Business Technology Group. “This is because many retailers regard their static weekly and monthly reports as BI. While standard report generation plays a part in delivering BI solutions, it doesn’t make a BI solution. When faced with some of the day to day ad-hoc questions that pop up, answering these suddenly becomes a problem.”

The majority of retailers’ solutions are disjointed and focus primarily on methodology, technology and data usage to drive decision making. Users can develop historical, current, and predictive analyses by combining operational and strategic views, though the process is generally lengthy and tools are cumbersome. Andrew West at Kronos agrees. “Various business applications have embedded third party business intelligence tools,” he says. “This unfamiliar and often complex technology creates a significant overhead for IT. These siloed approaches have made it difficult to create a meaningful set of enterprise

intelligence, and the problem is intensified by managers’ inability to access the data through familiar desktop tools.”

Kevin Lief, Microsoft’s channel development manager for business intelligence, says that, much like other industries, retailers find that BI solutions often tend to be expensive per user, and therefore remain the domain of the few rather than becoming pervasive throughout the organisation. “This is often coupled with a tendency for different departments to buy point solutions to solve their own information needs, rather than adhering to a corporate strategy for BI,” he says.

Clearly this is not an effective way of working. “The challenge for retailers is to ensure that affordable, scalable tools are adopted organisation-wide,” says Lief. “This allows business intelligence to be used by many more employees and teams than at present.”

“It’s hard to compete these days without continuous improvement, and business intelligence is imperative for those initiatives,” says West. “Retailers have long used consumer intelligence to improve merchandising and marketing, and must now use business intelligence for a deep, introspective look into opportunities for reducing expense and increasing margins.”

Jason Foster, managing consultant for the Microsoft BI practice at Blueprint, says that retailers can’t get away with not having a BI solution. “In an environment coming out of a credit crunch, where custom is at a premium and retailers fight on the high street to make a difference through price and offering, access to the data that tells people about how and where the organisation is performing and being able to react to business activity is paramount,” he says.

The most effective BI solutions support workflows, key performance indicators, alerts, and other notifications of live operational procedures to gain a competitive advantage. “This includes supporting all of the processes required for localised pricing, promotions and assortments,” says Shridhar. “The right tools can help retailers streamline processes and reduce costs by using role-based workflows and electronic forms to apply a consistent and systematic approach to improve and automate daily tasks and back-of-the-house functions. Triggers can also be set up to engage the next step automatically while routing and tracking the overall process through to completion.”

Another way that BI can enable a smarter, leaner operation is by enabling retailers to proactively manage and monitor their stores’ IT environment and provide alerts if a hard disk drive is failing or a POS print malfunction holds up a checkout lane. “A support engineer



IN PREVIOUS YEARS, BIG DATA VOLUMES PREVENTED RETAILERS FROM USING THE POWER OF THE ANALYTICAL CAPABILITIES IN THE BI TOOLS. NOW NEW ANALYTICAL METHODS SUCH AS DATA MINING HAVE GIVEN RETAILERS NUMEROUS NEW OPPORTUNITIES TO DETECT NEW INCOME AND COST SAVING POTENTIAL

Kai Robert Hallberg, Profitbase

can be alerted and quickly analyse the issue from any remote location by drilling down all the way to the retail peripherals connected to the POS device. Stores can also monitor key performance indicators such as service wait-times to ensure the optimal level of service, especially at peak times.”

In addition to real-time alerts, business intelligence solutions are giving retailers the necessary tools to analyse and collaborate on performance and operational data in real time to improve efficiencies and lower costs. “Ten years ago the top retailers would have a manager go from store to store armed with complex spreadsheets based on historic data,” says Sahir Anand, research director for the retail and hospitality sector at Aberdeen. “Now, with the latest business intelligence solutions, store managers have access to dashboards which contain real-time data that they can access at the touch of a button. Using this information in the right way can not only motivate employees, but it can empower employees to change their performance instantly.”

Kai Robert Hallberg, sales manager for retail and hospitality at Profitbase, says that the progress of both hardware and software in handling large data volumes has given retailers a much broader spectrum of opportunities in analysing data. “In previous years the big data volumes were preventing retailers from using the power of the analytical capabilities in the BI tools,” he says. “Now, new analytical methods such as data mining have given retailers numerous opportunities to detect fresh income and cost-saving potential.”

But the benefits of good business-wide BI solutions should filter further than the hands of retail employees – they should impact the

customer too. “Besides the operational aspects, BI is used in setting strategy for retailers,” says Teradata’s Dupee. “One example of this is as it relates to the customer – and customer centricity. Retailers are using customer segmentation to better understand and serve their customers. This is becoming central to their whole company strategy. Tesco and Best Buy are good examples of retailers that have done this very effectively.”

“Retailers collect a lot of data about customer buying behaviour and preferences,” says Shridhar. “Using this data to better target and enhance customers’ buying experiences can help create better value and hence increase loyalty. Business intelligence solutions based on SQL Server 2008 can help retailers collect, analyse and use customer data effectively to create the ultimate customer experience. Enhanced value also means providing a great experience for the customer with the right assortment of products at the right price. Assortment planning solutions and price optimisation solutions become very important as a result.”

K3’s Jones agrees that SQL Server is a very useful tool. “The single most important technology that underpins our BI solutions is SQL Server,” he says. “It provides many of the ingredients for a successful BI implementation. These include the storage capability of a terabyte warehouse, the technology for shifting and transforming large volumes of data, and the capability of easily identifying deltas in data to reduce processing time.”

Microsoft’s business intelligence solutions like SQL Server 2008 and SharePoint Server 2007 have already gained respect in the retail industry, but the technology provider



OUR DATA SHOWS THAT THOSE
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RELY ON OTHER SOLUTIONS

Sahir Anand, Aberdeen

isn't stopping there. At the recent SharePoint Conference in Las Vegas, Microsoft chief executive officer Steve Ballmer announced the public beta of Microsoft SharePoint Server 2010 and Office 2010, and revealed some of the new products' capabilities for the first time.

"By taming the overflow of information across systems and technologies, SharePoint enables organisations to thrive," Ballmer said. "SharePoint 2010 is the biggest and most important release of SharePoint to date. When paired with Microsoft Office 2010, it will transform efficiency by connecting workers across a single collaboration platform for business."

Shridhar says that SharePoint 2010 will transform business intelligence for retailers. "Whether deployed as an on-premise or hosted service, SharePoint's integrated capabilities are enhanced by search technologies and enable retailers to rapidly respond to changing business needs by making data-driven decisions and by deploying customised solutions quickly and securely."

With Office 2010 and SharePoint 2010 capabilities, retail employees can create and share powerful analysis from their desktops or a browser. With improved analysis capabilities, they can make better, smarter decisions and share sensitive business information more broadly with co-workers, customers and business partners in a security-enhanced environment. This democratisation of business intelligence can enable retail organisations to be more agile and competitive.

Retail managers can be more proactive to situations if they have access to real-time scorecards and analytics. "PerformancePoint Services in SharePoint 2010 enables retailers

to deploy rich, interactive, context-driven dashboards that enable users to access the information they need, no matter the source, combining multiple systems and content into a single browser-based experience," explains Shridhar.

But this isn't all. Microsoft PowerPivot for Excel 2010 is a data analysis add-on to SharePoint 2010 that gives retailers the power to create self-service BI solutions, facilitates sharing and collaboration on user-generated BI solutions in a Microsoft SharePoint Server 2010 environment, and enables IT organisations to increase operational efficiencies through Microsoft SQL Server 2008 R2-based management tools. These new tools will empower retailers to extend the benefits of BI across their ranks to information workers with minimal reliance on IT to help drive smarter, quicker decision-making, free up IT staff for more valuable activities, and dramatically drive down deployment costs.

Microsoft is clearly doing a great job in the BI space. "What's really important right now is performance reporting tools at an affordable price and this is where Microsoft and its partners excel – they have a fantastic roadmap for the future," says Aberdeen's Anand.

Anand highlights recent research which illustrates Microsoft's strength in business intelligence technology. "Our data shows that those retailers that are using Microsoft BI infrastructure, applications and delivery tools are seeing better results in terms of return on investment, customer retention and gross margin than those that rely on other solutions," he says.