

# Process of change

For retailers the decision whether or not to invest in a new technology is often based on the benefits it brings compared with simply opening another store. This option has all too frequently been taken in the case of data warehousing, with retailers regarding it as non-critical to their businesses, says Glynn Davis

wide range of ways to consume the data," says Neale. This has included the use of tailored 'dashboards' that incorporate the most relevant data for each retailer. There has also been an increase in the use of traffic lights within the decision-making process of many retail organisations.

Gordon Knowles, global vice president for solutions management at Torex, says there have also been developments with the databases with many vendors now pre-configuring them (through their schema) for specific sectors, which makes them much easier to use. In addition, Neale notes that there have also been major developments in bringing a packaged approach to data warehouses with Business Objects providing its Rapid Mart solution, which is designed for easy implementation, and the inclusion of data integration (ETL – Extract, Transform and Load) tools that allow retailers to undertake the crucial task of extracting the relevant data from a retailer's various systems and loading it into the data warehouse that gives a single consistent view across a whole organisation.

The collating of 'clean' data in one place, and in the correct format, is a key aspect of data warehouses as it enables this information to be easily analysed and then fed back into all parts of a retailer's business. "If it is done separately then you cannot combine it with other data in the organisation, such as logistics, in order to make sure stock is on the shelf," explains Neale.

Highlighting this at different ends of the retail spectrum are Tesco, which uses its data warehouse to provide a single consistent view of its business across all its divisions around the world, and Caffé Nero, which uses its warehouse of sales data and

It's a view which is gradually changing, however, partly because retail organisations are now awash with data from the various parts of their businesses – notably their online operations – and their growing desire to understand their customers better. Richard Neale, product marketing director at Business Objects, says that although many larger retailers such as the supermarkets have invested in data warehouses and the accompanying business intelligence tools to mine this data, the mid-tier operators have yet to regard it as an essential part of their businesses.

But with the latest business intelligence tools making it increasingly easy for non-technical people to access the data in the warehouse, retailers of all sizes are suddenly becoming more interested in the technology. "Over the last couple of years we've worked on the ease-of-use of the front-end for simplicity as it was originally designed for analysts. We now provide a

## feature | data warehousing

shopper behaviour to link into its supply chain to ensure that it can optimise its ranging and merchandising on a store-by-store basis.

Roy Lee, director at Cognos, who work with Caffé Nero, says this is an example of how data warehouses are now used across whole operations, enabling retailers to ask business-centric questions: "Historically data warehouses solved one problem whereas they can now be integrated into other parts of a business."

He believes that all retailers now need to look at implementing a data warehouse strategy around performance management (with the objective of serving customers better) as there are significant gains to be made from the competitive advantage that this can bring to a retail organisation. This is based on the ability of data warehouses to provide results on a real-time basis that can then be quickly fed back into the business for maximum impact. Lee suggests that the growth of multi-channel will be a key driver of implementations because consumers shopping online are used to immediate responses and technology enables retailers to manage the relationship with these customers across the different channels in a quick and seamless manner.

### Sharing information

In addition to using data warehouses to distribute data around a business, they also provide the opportunity for retailers to share information with third-parties such as their manufacturers, suppliers and logistics partners. Torex's Knowles says: "It is only in its infancy but lots of retailers would like to do it. It will have a big impact even if we are not there yet."

Bob Hewitt, chief executive officer at Kalido, says that much sharing of data is already taking place between the large retailers (such as Tesco and Wal-Mart in the US) and their major suppliers. "Unilever launched an initiative to increase on-shelf availability by studying data from retailers and its own data. By adjusting the supply chain it has had a big effect on margins. There will be more such collaboration and those companies that thrive in the future will be those who've the capability to do this," he suggests.

This is all part of ensuring that retailers (and their suppliers) know their customers better, which ultimately delivers an

enhanced performance through increased sales figures. According to Hewitt, this means the effectiveness and therefore the ROI of a data warehouse should be clearly measurable to a retailer. "We have an audit trail to show retailers how effective the data (they've used) has been. We can re-create the (historical) 'view' from 12 months previous to see what effect the data analysis has had on the business," he explains.

Rather than questioning the potential ROI, Business Objects' Neale suggests the only issue with the implementation of a data warehouse is over which benefits a retailer chooses to pick-off first. "There are a huge range of benefits so it is important to focus on the low-hanging fruit first where the informational problems exist. A data warehouse is a company-changing undertaking," he says.

And this looks set to be increasingly the case in the future, with Neale suggesting there will be a shift away from developing easy-to-use business intelligence tools to a focus on looking at the data held within an organisation. The influx of unstructured (non-text based) data from the likes of call centres, websites and surveys, into retailers will have a "profound impact" on data warehouses that might involve developments like building 'voice of the customer' type dashboards.

Neale says only 15 to 20 per cent of the total data in a business is structured, which means retailers are currently managing their organisations on only a fraction of the information they have available. When this is utilised then retailers really will know their customers like never before, but whether the choice between opening another store or implementing the next generation data warehouse is any easier remains to be seen.

