A NEW DIMENSION

Jacqui Griffiths finds out how Microsoft and its partners are helping to transform the supply chain into a dynamic, demand-driven model that can increase efficiency and save on costs

Multi-channel retailing, shorter product lifecycles and a multi-sourcing environment are challenging the traditional supply chain model. Today's consumers are better connected than ever, with a wide choice of channels for both product information and making purchases – so it's no wonder they're also more fickle than ever, and their need for personalised service and fast delivery are creating fluctuations in demand. Instead of pushing products toward the consumers' end of the supply chain, retailers are having to adopt a demand-driven approach – one that requires dynamic responses, but which also holds huge potential for increasing efficiency, cost savings and profit.

"The main issue affecting the retail supply chain is the multichannel impact and the consumer's ever-increasing demands on product availability and service," says Tony Bryant, head of business development at K3 Retail. "Retailers now need to plan their product against the ever-increasing channels in which they trade – for example, moving into wholesale management online, call centre management and expanding their store presence. These changes impact the rhythm of product behaviour in a real-time supply chain."

"Retailers' systems are optimised for delivery to central distribution centres, regional hubs and then onto individual stores," explains Russell Dorset, sales and marketing director at Maginus. "Since the emergence of multi-channel, consumers are placing orders with retailers at any time of the day, and potentially from anywhere in the world. This point-to-point delivery model is totally different from the hub-to-store model that retailers are used to. Retailers have had to find alternative methods of picking, different carriers and an efficient way to handle returns – which might come into the distribution centre or back to an individual store."

Enzo Capobianco, EMEA industry marketing manager at Honeywell, says that one problem is the one-dimensional, product-focused nature of the current retail model, in which products are manufactured, distributed and sold to consumers who buy what they find on the shelves, stimulated by traditional, mass market promotional activities. "Despite significant improvements in supply chain optimisation, retailers are still losing billions of Euros," he says. "Excess stock of unsolicited merchandise leads to increased discounting and lower margins, and out-of-stock on requested merchandise leads to reduced sales and basket size. Over-discounting and empty shelves are the main consequences of a retail model focused on products, where sales forecasts are based on past sales results rather than on what consumers expect to find in their favourite stores."

Optimising the supply chain is therefore crucial to success in this burgeoning multi-channel environment. "It's all about delivering on the brand promise through excellence in demand chain and supply chain execution," says Colin Masson, worldwide director of operations solutions management at Microsoft. "Today's dynamic retailer needs to maximise opportunities across channels, locally or globally, with technologies that connect, empower and offer the insight needed for proactive consumer engagement."

However, the technologies used by many retailers today aren't capable of achieving this dynamism. According to Retail Info Systems, almost half of retailers view their current architectures as 'basic' and 'lacking integration'. "In the

absence of a flexible, commercially available business management platform, and in a much less dynamic business environment, many retailers have assembled commercial off-the-shelf applications and developed home-grown solutions that are too brittle to deal with the demands of today's dynamic retailer," says Masson. "Many retailers' architectures lack integration, adding too much latency and too little insight to keep up with changes in consumer demand and market opportunities."

"Typically, retailers have different systems to manage different elements of the business from different suppliers," says Dorset. "This makes them very difficult and expensive to adapt and integrate. To deliver a true multi-channel

experience for customers it's important to integrate these disparate systems, but it becomes extremely expensive to develop the middleware required."

"The proliferation of new mobile devices and selling channels has tested even the most advanced retail supply chains," says Doug Daniels, vice-president of business development at JustEnough Software. "It's difficult for planners to create assortments and allocate products to the right location to meet the growing needs of their customers, regardless of the channel they're shopping. And, since more products are taking on 'fashion' characteristics, retail supply chains must increase speed and agility to keep pace."

A dynamic approach

Capobianco says that customer insight and product information are critical to an emerging, two-dimensional retail strategy that uses new technologies to bring the information together. "To meet their customers' expectations, leading retailers are investing in new technologies and tools to capture and analyse customer behaviour and align their offering with customer demands – especially in stores, where customers still make most of their shopping decisions."

In order to achieve that insight, Daniels says that today's retailers need modern solutions that offer advanced planning and trade-off/scenario-building capabilities so

they can effectively sift through and take into account the amount of data required for true demand-driven and localised planning. "Cloud-based solutions can provide the same functionality but for a much smaller investment in resources and maintenance, which is appealing to large and small retailers alike," he explains. "Whether retailers choose to implement modern supply chain planning solutions onsite or via the cloud, they'll be able to react faster and more efficiently to increasing demand and shifting trends."

Microsoft and its partners are working with retailers to deliver those solutions, built on standardised technologies that can support retailers of any size. Microsoft Dynamics AX

2012 for Retail provides a comprehensive platform with cross-channel and multi-channel capabilities, using familiar tools like Microsoft Excel and SharePoint to enhance collaboration and simplify user training. It can be adopted and deployed in a highly modular fashion as a POS, store-level system or at headquarters. A key strength of the technology is that it is designed specifically for the retail market, enabling retailers to use the same architecture and business rules without having to invest in costly middleware. Combined with the expertise of Microsoft's partners, this is enabling retailers to establish an increasingly dynamic supply chain.

"Dynamics AX for Retail provides a platform

that enables customers to buy, pick up, return or replace on their terms," explains Masson. "Support for social and mobile commerce also means retailers can offer promotions, discounts, or coupons targeted to devices or social networks and create new opportunities for customer engagement."

Partners are extending Dynamics AX for Retail to provide advanced functionality for retailers. For example, Aldata is extending the technology to provide advanced retail-focused sales and operations planning. Maginus adds multi-channel capabilities so retailers can trade seamlessly across channels, gaining a single view of the customer while presenting their brand in a consistent manner. And

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Connecting with the mobile shopper

Mobility will play a key role in optimising the emerging supply chain model, says Enzo Capobianco at Honeywell

"In-store staff need to be empowered with new mobile solutions, which improve their productivity while helping them connect with their customers and provide personalised service. The use of mobile devices by store associates to access information about product, price, promotion and stock helps retailers reduce the communication gap between customers and retail staff. Honeywell Scanning and Mobility offers linear, bioptic and area-imaging scanners, as well as mobile computing solutions, which help retailers to embed customer insight and product information in their processes. With the relevant information in their hands, staff can engage and connect with the mobile shopper, offering assisted sales services, trustworthy information and support, and a better shopping experience, which increases customer loyalty.

"Providing store staff with 2D image scanners enables them to redeem the QR

codes used by mobile shoppers on their smartphones for applications such as mobile couponing, mobile loyalty cards, mobile e-gift cards and mobile payments. Wide use of 2D mobile marketing applications increases the opportunities for shoppers to take advantage of promotions and loyalty programmes thanks to the portability and personalisation of 2D codes, and the improved shopping experience enables retailers to increase the redemption rate of their marketing campaigns and reduce the costs of physical couponing and loyalty cards."

Enzo Capobianco is EMEA industry marketing manager at Honeywell

JustEnough's demand management solutions integrate seamlessly with other ERP and CRM systems, giving retailers complete visibility across all channels and suppliers so they can run an agile, demand-driven supply chain.

"Microsoft and its partners provide best-of-breed solutions that can support and drive the multi-channel environment," says K3's Bryant. "Products such as demand planning solutions from JustEnough and warehouse and fulfilment specialist To-Increase provide fully integrated solutions that drive leaner supply chains to meet the anytime, anywhere, any-product consumer."

Looking ahead
The supply chain is being transformed, but the very nature of this new model means it will continue to evolve as new channels emerge and customer demands change. So what does the future hold for the dynamic retailer?

For Dorset, delivery will come under increasing pressure. "In the past, customers were prepared to wait a few days for delivery," he says. "Now, more retailers are offering click-and-collect, but customers are driving the need for increased flexibility in terms of tighter delivery timeframes and the ability to choose the hour in which goods will be delivered. Retailers will have to make some fundamental changes and those with large store estates need to be able to deliver quickly from those stores. An end-to-end retail solution such as Dynamics AX 2012 for Retail will be invaluable, making it much easier to identify what stock is available in specific stores and communicate this information to customers."

"Depending on the retail sector, supply chains can vary massively," says Bryant. "In fashion, for example, you have very short lead times from product manufacturing to the sale across channels, or you have a very long lead time for a niche product which can take up to 18 months to procure. The main differences are the reality of how solutions can cope with the product variants, price and promotions within a challenging supply chain. In the future, agility and flexibility in managing a pool of stock will become normal rather than silos of stock sitting unused. Global procurement of products and real-time collaboration with suppliers will be key to giving retailers a competitive advantage."

Daniels agrees that the retail supply chain will become even more complex. "More channels will emerge as the popularity of social media and social commerce grows," he says. "We'll see new devices that make it easier

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Viewpoint: **Susan Olivier, VP, Consumer Goods and Retail, Dassault Systèmes**

Be prepared

Bringing information together from all touchpoints allows greater insight, and better ability to fulfil demand, explains Susan Olivier

The retail 'speed to market' cycle continues to shrink every year across virtual categories, increasing the pressure on retail supply chains to be as responsive as they are cost-sensitive. Managing costs requires advanced planning and visibility to product sources, delivery destinations and potential product volume and timing. Typically the further out a team can negotiate contracts, the lower their costs will be. But managing responsiveness demands a supply chain that can quickly incorporate new suppliers, even new source countries, different delivery points in response to market needs and with timing and quantities of product committed as close to in-store date as possible.

Today, many retailers still use technologies for managing their supply chains that are completely separate from sources of consumer demand or visibility to product assortment and sourcing plans. This

introduces delay and risk since supply chain teams may be the last ones to know about new product categories, source countries and suppliers, and have insufficient time to provide an optimal response.

Winning retailers know that providing visibility for sourcing and supply chain planning teams earlier in the retail planning and product development process allows everyone to model different scenarios and build flexibility into the system. That in turns allows for the maximum market responsiveness at the best costs.

At Dassault Systèmes, we know that 'information intelligence' extends well beyond the four walls of the enterprise and have developed solutions that look at all available sources of information to bring product to market better, faster and at the right costs. This can include product development and source plans,

retail assortment plans and purchase order information from within the enterprise, but also supplier status information in Excel, logistics information from partner providers, even active weather updates that could impact shipment!

So the key to supply chain effectiveness is connecting and leveraging all available sources of information from across the full breadth of all supply chain touchpoints.

Susan Olivier is VP, Consumer Goods and Retail, Dassault Systèmes

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"Microsoft has delivered the most flexible business management platform for the dynamic retailer with Dynamics AX 2012 for Retail, but that's just the beginning"

Colin Masson
Microsoft

for consumers to shop from any location at any time, and product lifecycles will get even shorter. Microsoft and partners like JustEnough can help mitigate these challenges through the automation of supply chain planning processes, giving retailers the tools to become more demand-driven and efficient, and to produce accurate demand and sales forecasts across channels. In addition, we enable retailers to take an exception-based approach in which their planners focus on competitor product introductions, changing material costs and other critical factors. These types of advanced capabilities will ultimately help retailers achieve a true demand-driven supply network."

Whatever the future holds, it will include a much more dynamic and responsive retail environment.

"There's no going back," says Masson. "Microsoft has delivered the most flexible business management platform for the dynamic retailer with Dynamics AX 2012 for Retail, but that's just the beginning. Across the broader Microsoft platform we're seeing increasing ease of use across devices, and deployment flexibility on premise or in the cloud. In the future, it's the dynamic retailer that will thrive – one that can gather and exploit data and fulfil their brand promise to consumers across multiple channels."

Viewpoint: **Matthias Steinberg, CEO, Lokad**

Harness the cloud to transform the supply chain

Cloud computing can help retailers transform the way they store and use data and, in turn, optimise their supply chains, explains Matthias Steinberg

Retailers face a huge challenge when it comes to optimising their supply chains, particularly when you consider just how much data they have to deal with from their supply chain and distribution networks.

An important part of a demand-driven supply chain is the accurate anticipation, or forecasting, of short-term demand. However, advanced forecasting today only happens on a warehouse level, while more than half of a retailer's inventory is typically in the store. In the best case, naïve automated forecasts are produced, however the application of advanced forecasting technology has, to date, been expensive due to the vast scale of retail networks, leaving a significant part of the retailer's inventory largely unoptimised.

Shelf availability is a top concern for consumers, therefore retail networks make the avoidance and rapid response to out-of-shelf situations a high priority. Many of the top retailers are therefore seeking technology that helps monitor the shelves and alerts store staff when stocks run low. So far, traditional

on-premise technology has failed to provide high performing solutions at a reasonable cost, given the immense data processing and analytic resources that are required. That doesn't mean to say a solution doesn't exist.

The Microsoft Windows Azure cloud computing platform provides compute and storage on an unprecedented scale and in a very cost-efficient manner. This allows us to build solutions that go beyond the limitations of on-premise analytics solutions and, for the first time, address advanced store level analytics in a cost-efficient manner. Fully automated advanced store level demand forecasts that feed into automated store ordering systems lead to a reduction in stock outs, stock obsolescence and supply chain costs. Near real-time shelf monitoring increases shelf availability in the store as staff have better visibility of what's going on and can react quickly as shelf stock levels changes.

Looking ahead, retailers will continue to need smart, rapid and cost-efficient IT that is capable of dealing with the immense amount

of data they and their customers produce. Ticket (receipt) data, for example, holds a wealth of information, which when smartly analysed, provides the opportunity for significant gains in efficiency, availability, cost and customer satisfaction. However today, many retailers are not even storing this data for more than a few weeks given the high cost associated with traditional storage technology. The cloud is a great alternative; it can store vast quantities of data in a cost effective manner, allowing retailers to transform the way they store and use their data.

Matthias Steinberg is CEO of Lokad