

Integrating to execute

Tough markets and fundamental shifts in the way supply chains operate have placed the emphasis on slick execution. But it requires a holistic view of the supply chain, says **Nick Allen**.



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As markets continue to remain tough, companies are turning to more efficient means of supply chain execution to deliver competitive advantage. This is a complex task as well ordered execution relies on the integration of a whole raft of supporting systems within the organisation and along the chain – including those of suppliers and partners – to deliver the required results. Visibility is the key word that has come to sum up this bringing together of data, a prerequisite for making more informed and intelligent decisions on how to deploy resources and execute fulfilment.

“Traditionally, supply chain execution has implied transport management, warehouse management, order management/order promising capabilities, as well as supply chain visibility, alerting and event management capabilities,” says Razat Gaurav, European SVP at JDA Software. Although JDA does not play in the warehouse management space, the company has solutions for transport management, order promising and supply chain visibility.

Gaurav says that by implementing a distributive order management layer companies have been able to provide a single face to both customers and suppliers, presenting the opportunity for manufacturers and retailers to take a more intelligent approach to managing customer expectations at the point of taking an order. “Most companies had static or flat lead-times and in reality, sometimes they met those lead-times and sometimes they did not – because they didn’t have the inventory, the material availability or whatever,” he says. Giving the customer an accurate estimate of delivery against an order has come to be a very important aspect of supply chain management for manufacturers and retailers alike.

Configure

“Depending on your business model, you could have an ‘available to promise’, an ‘allocated available to promise’ or a ‘configure to order’ capability,” says Gaurav. “In PC manufacturing a lot of companies have a ‘configure to order’ capability in their order promising processes. During the time of order taking the customer is able to configure different options for a given laptop, for example. And based on those configurations the order promising capability will be able to let the customer know ‘we can have this order ready for you in ten days’ – whatever the case may be. And when it is doing that it is looking at available inventory, both finished goods and parts inventory, it’s looking at manufacturing lead-times and transport lead-times, and it’s looking at making the right sourcing decisions to fulfil a given order.”

In these highly unpredictable times, agility in the way a supply chain reacts to change has become an essential “business winning” capability. Efficient and flexible execution is central to achieving agility and this requires the many various elements of the supply chain to be inter-connected in a way that facilitates swift action. These ideas are behind the launch of Manhattan Associates’ Platform Thinking approach.

Steve Smith, senior vice president, EMEA at the company says: “Platform Thinking encourages companies to think about the supply chain as an interconnected universe rather than separate solutions designed for specific functions within company processes. Every action, from order processing to distribution to returns management, affects the way the entire supply chain performs – the supply chain process platform is designed to draw on information from each integrated solution, apply it across the network and deliver improved levels of agility and responsiveness.”

Complexity

Retailers, in particular, are facing much higher levels of complexity as they look to manage their supply chains across multiple channels. Brian Kinsella, senior director, product management at Manhattan Associates, explains: “To create continuity across channels, and to acquire the ability to act and react in accordance to customer demand, a retail organisation must move from a siloed landscape where each channel operates independently and develop a service offering that represents excellence for the brand across all channels.” He says that many retailers are looking for the means of bringing this cross-channel functionality to their business, but “few as yet, have successfully made the transformation. Achieving success in this regard requires a new way of thinking.”

Kinsella says, “It is important that consumers do not feel that they are using distinct and individual channels, but feel they are interacting with the brand in a cohesive way. The channels must be ‘blended’. By way of example, say you are shopping online and you want to see what’s at the local store. It’s vital that the store’s inventory is fully merged with the web site experience. You may want to buy online and return it to the store or you may be in a store and cannot find exactly what you are looking for, so you need the store assistant to have easy access to information that helps you find what you want – perhaps, finding it somewhere else on the network and then placing an order for you. The assistant should also be able to reserve an item for you at another store for pick-up.”

Acting on this requirement for continuity, flexibility and reactivity is the issue facing the retailer and demands the



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bringing together of information from a number of sources within the organisation. "Large retailers are going to have a point of sale system, an e-commerce engine, a warehouse management system ... but data from these systems has to be accessed to deliver on the "activation" element of the transition," he says. "However, you don't have to go ripping out these systems and replace them. It's a matter of working with them and scaling up integration over time."

Andrew Kirkwood, senior VP & executive director EMEA, RedPrairie, believes that retailers are coming to realise that the internet sales channel is no longer a small part of their business and this is highlighting the inadequacies of legacy systems in dealing with the increased complexity of a multi-channel business.

Several of the major retail brands are moving to optimise inventory by moving to a large distribution centre that is capable of dealing with fulfilment for all channels. Kirkwood points out that this is dramatically increasing complexity, "because you are dealing with both retail stores and home delivery through one distribution centre," he says. "These centres are enormous – the volumes we are talking about are unprecedented – and this is a real stretch for systems in a mission critical environment."

The big challenge for these multi-channel centres is handling both pallet loads and parcels, and everything in between. "These centres are often both national distribution centres as well as e-commerce DCs so they are trunking products between centres, as well as doing store deliveries, as well as dealing with parcels – all from the same building. This creates huge complexity with configuration, and together with the very large volumes, puts a lot of stress on the system and on those people operating them," he says.

"Traditional 'execution' in a warehouse management system is no longer good enough," Kirkwood says. "They [retailers] need sophisticated yard management to cope with all those vehicles, they need a means to effectively manage the workforce – using productivity tools and to help forecast labour demand – to tight integration with transport and parcel carriers to make sure goods are routed through the right carrier."

"Whereas a few years ago we would have probably only delivered a warehouse management system, we are now delivering four or five products," he says. "Supply chain execution has become a lot more than warehouse management – involving nodes outside of the centre and getting views of inventory across those nodes."

According to Kirkwood, retailers are now using sophisticated systems to calculate and execute ever more



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complex scenarios. "If I have a high value product on hand in my store and also in the DC, but I'm short of it in another store, do I ship it from the store or DC? Do I give the customer the option of going to the store that has got it in stock or do I move it from store to store? Because the vehicle is going on a milk-run it can do a pick up as well as a drop," he says.

Moving to properly aligned execution involves change and, inevitably, this presents challenges to an organisation in the way change is effected. According to Nigel Lack, managing consultant at Unipart Expert Practices: "Many organisations do not tend to be terribly process-oriented and do not take an end-to-end supply chain view, so implementing process-oriented systems can present challenges for them." The consultancy has developed a standard methodology for managing change borne out of a combination of its experiences in implementing SAP within its own business and its background in lean practices.

Lack emphasises the importance of taking an end-to-end view of the supply chain when looking to bring about change to processes and systems. "Firstly, it's necessary to deeply understand the process as it is, and to question which aspects of the process are needed for the future. Does the process give me competitive advantage, or am I doing it because I have always done it like this? And if it doesn't give me an advantage and it's introducing waste into my processes, can I take it out?" he says.

Claire Umney, general manager, AEB (International), sees the main drivers for future IT investment remaining as standardisation and automation, "as companies will make the greatest potential return on investment by improving their supply chain execution, rather than by better planning or controlling," she says.

Umney emphasises the need for good visibility. "As supply chains grow longer the need for more integrated communications between systems becomes stronger – both in-house, and with systems deployed by suppliers, partners, warehouses, and logistics services providers... Competitive edge will come from the quality of the visible data rather than merely having visibility itself," she says.

Cloud computing can be a very powerful and effective way of deployment, believes Umney. "Freight rate shopping, customs declarations, and visibility platforms are particularly well suited to this delivery method." However, she sees legacy systems continuing to play an important role for quite some time, with the likely new trend being a hybrid approach. Rob Gibney, UK country manager of Imtech ICT Logistics Software, says: "Reduced capital investment and increased agility make SaaS particularly advantageous for the 3PL sector where contracts are won, lost, extended or reduced on a regular basis, and the length of those contracts is getting shorter."

Capabilities

Linking up with suppliers to effect execution is critical. At this present time, several of the large supermarket chains are looking to move their electronic trading capabilities to outsourced service providers on a fully managed basis. Sainsbury's is in the process of transferring 4,000 of its suppliers onto a single B2B platform operated by Wesupply to significantly improve visibility into critical supply chain processes.

Other retailers in the sector are known to be evaluating an outsourced, fully managed approach to EDI. "Given the scale of this sweeping change within the industry, it is highly likely that the majority of suppliers to the grocery sector will be mandated to comply with the varying and expanding electronic trading requirements of the major supermarkets," says Andy Watts, director of sales, retail and CPG, at Wesupply.

Nathan Pieri, SVP marketing & product management at Management Dynamics – a provider of global trade management solutions – says: "an on-demand, software-as-a-service model allows companies to quickly implement technology as needed and at a much lower cost than a traditional SCE system install."