THE OMINI-CHANNEL RETAILING MODEL is upping the ante on how efficiently supermarkets can move product between suppliers and warehouses, and ultimately, into the hands of shoppers. Requiring a new level of operational flexibility, grocers are leveraging supply chain trends that automate processes and drive enterprise visibility—efforts that enable them to more expertly meet consumers’ demands, and ideally, increase sales.

The omni-channel business model creates a seamless shopping experience regardless of the channel the customer uses to make a purchase. This integrated shopping concept is quickly becoming a mission-critical business model, one that is essential for growth and industry survival. However, 88 percent of retailers believe they can no longer rely solely on traditional sales channels to drive omni-channel growth, according to Re-engineering the Supply Chain for Omni-Channel Growth for Tomorrow, a report from Ernst & Young.

Omni-channel is also wreaking havoc on how grocers manage the last mile of merchandising—moving product from the warehouse into stores. Supermarkets are already hard-pressed to match consumer demand with product availability, but the adoption of omni-channel is proving that traditional consumer goods supply chains are inadequate for this new retailing model and need to be re-engineered, as summarized in the report.

More specifically, retailers must be able to monitor

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consumer consumption trends, as well as have eyes on available inventory throughout all stages of the value chain. With new business challenges straining traditional operations this is clearly easier said than done.

For starters, an omni-channel supply chain is far more complex than moving product from point A to point B. An all-channel business operation must be ready to:

- Fulfill orders from a retailer’s warehouse and ship them to a consumer’s home;
- Deliver merchandise from individual stores to a consumer’s home;
- Drop-ship them to shoppers directly from a manufacturer partner or enable consumers to buy online (or via mobile device) and pick-up in-store (BOPIS).

These prerequisites leave no room for inefficiencies in the supply chain, which is why the number of companies struggling with this continues to grow. “There are so many inefficiencies cross supply chain processes that it can affect what is happening to get product upstream,” says Mike Ludka, senior product manager - retail supply chain for ORBIS Corp., based in Oconomowoc, Wis.

One factor affecting supply chain efficiency is the increasing number of SKUs retailers must manage to remain a competitive omni-channel option. “As companies increase the number of SKUs they carry as a means of meeting consumers’ increasing expectations for availability and variety, it is becoming more complex to manage the supply chain,” says Jim Mozer, senior vice president of Crown Equipment, based in New Bremen, Ohio. “Companies that improve speed to more quickly satisfy that customer need will be the ones that win.”

However, this effort requires a substantial amount of coordination and investment. For example, retailers need to integrate workflows between distribution centers and stores and coordinate product shipments from store to store, as well as those from suppliers. This also makes it more difficult to coordinate among warehouses, as well as with supplier partners, especially when consumer demand or promotions increase turns of specific merchandise across different channels or individual stores.

“These issues require more flexibility and resiliency across supply chains,” says Su Doyle, Radio Frequency Identification (RFID) industry marketing manager for Checkpoint Systems, based in Thorofare, N.J. “Much of this new agility relies on up-to-the minute data to change sourcing, transport and revise inventory assortments on the fly.”

However, Doyle notes, a lack of systems integration and supply chain visibility leads to additional product touches, more dwell time on fleet trailers and additional labor needed to execute supply chain movement. “In addition to adding more labor and associated costs for execution, these processes are not making it easy to execute that last mile of delivery,” she says.

Regardless of the fulfillment option, now grocers’ supply chains must extend beyond the traditional four walls of a brand and go in a variety of directions. Meanwhile, each touch point must converge and deliver visibility within each division. It is a goal that requires grocers to integrate multiple enterprise business processes to streamline product movement.

**MAKING A CHANGE**

As omni-channel increases the pace of change in retail, retailers are investing in IT solutions that allow them to be more agile and responsive throughout the supply chain. The good news is retail IT budgets are on the rise, and according to the Ernst & Young study 76 percent of retailers agree that significant supply chain transformation is required to succeed in an omni-channel world.

With so many options available to drive this change, supermarkets are becoming more focused on the solutions that will drive the highest returns on investment, such as:

**Cloud-Based Systems.** The need to create a more agile, flexible supply chain that can seamlessly integrate supporting operational systems makes cloud-based solutions
a key opportunity to drive ROI. A business model in which resources are shared by multiple users, cloud computing enables grocers to transition from local servers or personal computers to a network of remote servers that connect grocers to web-based solutions, storage and data on an as-needed basis. Providing a single platform that seamlessly integrates mission-critical solutions, this on-demand platform eliminates the need for point-to-point solutions, a factor that helps grocers to keep a lid on operating costs.

“Automating tiresome manual processes reduces the risk of errors and makes things more efficient,” says Chris Cunnane, senior analyst for ARC Advisory Group, based in Dedham, Mass. “Retailers are investing in technology to simplify their supply chain operations.”

More importantly, automated solutions are a means of breaking down silos and enabling business groups to collaborate and share project capital and savings.

**Next-Generation Electronic Data Interchange (EDI).** Whether it is a lack of accurate store inventory records or inadequate manual efforts that manage omni-channel inventory and shipping processes, retailers are finding it difficult to fulfill e-commerce orders and to replenish in an efficient way. As existing operations continue to create errors, redundancy and even jeopardize business relationships, grocers are looking for ways to alleviate constraints of supply chain business processes. One of the first steps to this automation is next-generation EDI.

EDI can assist grocers in transferring data from one computer system to another by standardized message formatting, without the need for human intervention. The process, which permits multiple companies—potentially across different countries—to exchange documents electronically, is getting an upgrade as companies adopt complete EDI solutions from one source.

Mommy’s Bliss, a San Rafael, Calif.-based provider of all-natural baby care products, can attest to the value of integrated EDI. A company that initially processed orders using off-the-shelf software and paper-based transactions, Mommy’s Bliss needed a new strategy when the company began supplying product to one of the nation’s largest retailers in 2011. Besides needing product for 3,800 stores in just six weeks, the retailer required all financial transactions to be automated through an EDI-based solution that met its strict requirements.

By adopting TrueCommerce EDI, from TrueCommerce, a division of Minneapolis-based HighJump, Mommy’s Bliss began leveraging the solution’s managed service offerings and seamless integration with all major financial systems—a move that supports its new, large-scale distribution channel. The solution now manages account relationships with many large retailers and meets all their diverse EDI, labeling and shipping requirements.

“EDI, in general, streamlines our order processing and keeps everything running efficiently,” says Alexandra Skogstrom, account manager with Mommy’s Bliss.

**Radio Frequency Identification (RFID).** The key to supply chain efficiency is to ensure that retailers have as many details as possible to gain visibility into inventory movement. RFID can provide this insight.

A solution that allows grocers to track merchandise from manufacturing through purchase at the store, RFID labels are affixed to individual product or pallets and dedicated readers are installed throughout the supply chain. Meanwhile, unique identification electronic product codes (ePCs) are embedded with product-specific information, including SKU number, quantity, size, and in some cases, styles.

Scanners throughout the supply chain can locate tagged merchandise, read individual ePC codes and manage inventory in real-time. As product hits store level, dedicated scanners detect and deactivate the tag and update inventory systems when merchandise has been purchased, ensuring retailers can stay abreast of stock levels and replenishment needs. This process is especially important as grocers continue to compete with specialty food stores and provide a larger variety of premium meats and seafood.

“These items are high-margin, higher cost and highly perishable,” says Doyle. “Grocers are starting to use RFID technology to manage this sort of inventory. There have been a few pilot programs to monitor time and temperature of perishable items in the supply chain, as well as for fresh item management in store, to reduce waste and to drive effective promotions that increase sales.”

**Forklift Software.** Omni-channel is quickly becoming mission-critical, however the rise of BOPIS and home delivery create significant challenges for supermarket retailers. “Omni-channel changes the way stores are staffed, as employees are
now picking and packing orders, rather than working registers or re-stocking,” says Cunnane. Additionally, it creates a challenge when picking frozen items, as well as fresh produce and pre-packaged goods together, as these all need to picked at different times and coordinated.”

These factors are also impacting the efficiency that allows retailers to move goods across their distribution centers—a process that requires technologies that make their warehouse employees more productive. Among the top investments, forklift software that drives operator efficiency. “As retailers continue to plan their future supply chains, it will be critical for them to engage forward-thinking forklift manufacturers early in the process to maximize the technology benefits,” says Mozer.

Evolving well-beyond their ability to move product from one place to another, retailers are utilizing forklifts integrated with software that enables them to optimize warehouse design, improve employee productivity, reduce product and facility damage and enhance safety for all warehouse employees.

“Operators are driving a roaming computer that tracks each movement,” says Mozer. Operators are instructed via their headset where to pick product and use a scanner that ensures the right product is collected thus getting grocers one step closer to optimizing the supply chain and streamlining operations.”

**Streamlined, Reusable Packages.** Omni-channel assortments are more diverse than ever and retailers need to ensure their supply chains can handle shipments in the most efficient, cost-effective manner possible. For example, square footage across distribution centers and the physical stores’ back rooms have not expanded, yet the sizes of product packaging have.

“Omni-channel has increased the bulk and velocity of goods moving across the supply chain, but tight, condensed back rooms, warehouse loading docks, even front and rear entrances do not always have available square footage,” says Ludka. “This presents issues on how product moves upstream between the manufacturer to the distribution center, to the trailer and into the store.”

As a result, some grocers are opting for streamlined plastic reusable packaging designed to improve the flow of product throughout the supply chain—a move that improves food safety, reduces risk of product damage and fosters more maneuverability for enhanced supply chain performance. ORBIS is solving this issue with five product forms, including nestable pallets that allow retailers to leverage trailer capacity and enter small format stores.

These pallets can move, store and distribute product loads across the entire supply chain and protect the product until it reaches its final destination. When empty, the pallets nest for a cost-efficient return trip or warehouse storage.

Buckhorn, based in Milford, Ohio, also provides reusable containers as a means to help its customers that are under tremendous pressure to manage costs and deliver value to consumers, says Kris Roach, the company’s market manager for bakery and distribution.

Among the issues affecting Buckhorn customers include expanding operations into larger footprints for specialty items, such as healthier alternatives. Others are challenged by the need to adopt mixed pallet loads across distribution centers for pick and pack setups that organize inventory based on store aisles versus individual products or brands.

“Nestable distribution pallets offer secure stacking and eliminate things like splinters, nails and dust from operations,” says Roach. “This results in increased warehouse space, better productivity and reduced worker’s compensation claims. Equally important, reusable packaging is hygienic and easy to clean.”