Key Challenges and Best Practices for B2B Fulfillment

**BUSINESS-TO-BUSINESS (B2B) COMMERCE**, the exchange of products, services, or information between businesses—instead of businesses and consumers—is expanding by leaps and bounds. This growth is pushing more companies to rethink their fulfillment practices, particularly in the areas of inventory management, order velocity, and the ability to meet order commitment dates.

Credit the rapid expansion in e-commerce with driving much of the need for improved B2B processes. Today, 74% of B2B buyers research at least one-half of their work purchases online, according to Frost & Sullivan. Combined with cost savings gained by the self-serve e-commerce environment, more businesses are expected to move online in the next few years.¹

For further proof of the shift to higher B2B sales, you need only look at the online giant itself, Amazon.com. The company reported a number of key increases for the first quarter of 2016, when total sales rose 20.5% year over year to $20.58 billion from $17.08 billion. More specifically, it saw a surge to “more than 300,000” businesses that it serves in its Amazon Business marketplace, “ranging from small to Fortune 500 companies.”²

Rather than simply applying existing strategies in a constantly-evolving business environment, organizations are being called upon to work smarter, better, and faster in an environment that’s fraught with both opportunities and challenges. To keep up with the growing demands of their online buyers, for example, companies are tapping into new technologies, implementing automated platforms, and using integrated software solutions that support their entire supply chain operation.

The strategies appear to be working, but the obstacles to success are still many. According to a new survey conducted on behalf of Supply Chain Management Review and Modern Materials Handling magazines, key supply chain executives and materials handling professionals employed with companies conducting B2B commerce claim they need to do a better job managing inventory, meeting order commitment dates, and filling orders.

In this report, we’ll explore the key challenges facing today’s B2B companies, showing how companies are attempting to address these issues, and discuss the value of using automation and intelligent order orchestration to improve order capture and fulfillment processes.

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A Major Shift: How Companies Manage Sales & Fulfillment

Over the last few years we’ve seen a significant shift in the way companies manage sales and order fulfillment. According to the survey, the majority of companies receive their B2B customer orders from traditional sales channels such as field reps, on the web, using an EDI connection, or through a call center. However, over the next few years, preferred methods for order taking are expected to transition as more organizations rely on their websites for orders. In doing so, these entities will become less dependent on sales personnel, call centers, and EDI transactions. (See Figure 1.)

**Sales channels currently offer/plan to provide during the next 24 months**

<table>
<thead>
<tr>
<th>Channel</th>
<th>Now provide</th>
<th>In 24 months</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal/Sales person</td>
<td>60%</td>
<td>72%</td>
</tr>
<tr>
<td>Field sales</td>
<td>55%</td>
<td></td>
</tr>
<tr>
<td>e-commerce via own website</td>
<td>50%</td>
<td>54%</td>
</tr>
<tr>
<td>EDI</td>
<td></td>
<td>43%</td>
</tr>
<tr>
<td>Call center</td>
<td>27%</td>
<td>39%</td>
</tr>
<tr>
<td>Catalog</td>
<td></td>
<td>27%</td>
</tr>
<tr>
<td>e-commerce storefront via 3rd party (Amazon, eBay, other)</td>
<td>23%</td>
<td>20%</td>
</tr>
<tr>
<td>Brick and mortar store</td>
<td>15%</td>
<td>26%</td>
</tr>
<tr>
<td>Other</td>
<td>8%</td>
<td>7%</td>
</tr>
</tbody>
</table>
Most organizations fill their orders through distribution centers (DC’s). Some have other sources as well where their orders are also fulfilled as seen in the chart below.

Over the next few years, more companies will expand beyond their own DC’s to add additional fulfillment options, or become even less dependent on their own DC’s. This could be an indication that companies will rely on more third-party providers to manage certain functions (i.e., value-added services like product kitting and finishing) rather than trying to “manage it all” themselves. (See Figure 2.)
Regardless of the methods organizations are employing for sales, distribution, and fulfillment, many admit there’s room for improvement within their operations. Roughly two-thirds say they are only “somewhat satisfied” with their fulfillment and order-taking methods, while nearly 15% claim to be dissatisfied with their order handling methods. Less than 25% proclaim that they are fully satisfied with their sales and fulfillment procedures. This uncertainty can likely be traced back to the quick uptick in e-commerce that’s taken place over the last few years. The speed and velocity of orders moving through the typical warehouse or DC—driven mainly by omni-channel distribution—is also impacting warehouse managers’ opinions of their facilities’ levels of efficiency and effectiveness. (See Figure 3.)

**Figure 3**

**Level of satisfaction with the effectiveness and efficiency of...**

<table>
<thead>
<tr>
<th></th>
<th>Sales and order-taking processes</th>
<th>Fulfillment processes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completely satisfied</td>
<td>24%</td>
<td>20%</td>
</tr>
<tr>
<td>Somewhat satisfied</td>
<td>63%</td>
<td>67%</td>
</tr>
<tr>
<td>Not very satisfied</td>
<td>12%</td>
<td>12%</td>
</tr>
<tr>
<td>Not at all satisfied</td>
<td>1%</td>
<td>1%</td>
</tr>
</tbody>
</table>
What’s the Game Plan?
Filling orders in a timely manner is the top issue that fulfillment operations managers grapple with today, with e-commerce and omni-channel having significant impacts on this activity. Processing a larger number of smaller orders (individual item versus pallet, for example) quickly and accurately has become very challenging in today’s e-commerce-centric environment. No longer focused solely on moving pallets of goods, and many times more concerned with getting smaller orders to customers, more companies are reassessing their order fulfillment processes. Concurrently, managing workforces and subsequent productivity levels also poses challenges for warehouse managers. (See Figure 4.)

58% are having difficulties processing orders on-time and meeting order commitment dates.

Top challenges related to customer order management, fulfillment, and distribution
Multiple responses accepted

<table>
<thead>
<tr>
<th>Challenge</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meeting order commitment dates/On-time fulfillment</td>
<td>58%</td>
</tr>
<tr>
<td>Order accuracy/Processing errors</td>
<td>46%</td>
</tr>
<tr>
<td>Workforce productivity/Labor management</td>
<td>44%</td>
</tr>
<tr>
<td>Ability to process more orders, faster</td>
<td>42%</td>
</tr>
<tr>
<td>Managing order fulfillment costs</td>
<td>39%</td>
</tr>
<tr>
<td>Implementing and better utilizing technology related to distribution and fulfillment</td>
<td>36%</td>
</tr>
<tr>
<td>Inventory visibility across all locations (including in-transit inventory)</td>
<td>34%</td>
</tr>
<tr>
<td>Meet next day/same day delivery requirements</td>
<td>32%</td>
</tr>
<tr>
<td>Managing production, distribution and fulfillment for multiple products/brands</td>
<td>29%</td>
</tr>
<tr>
<td>Complex order configuration and/or pricing and quoting</td>
<td>27%</td>
</tr>
<tr>
<td>Coordinating activities across various divisions/disparate facilities/Handling the complexities of order management processes</td>
<td>26%</td>
</tr>
<tr>
<td>Inventory allocation across supply chain partners</td>
<td>26%</td>
</tr>
<tr>
<td>Real-time order tracking</td>
<td>26%</td>
</tr>
<tr>
<td>Returns</td>
<td>19%</td>
</tr>
<tr>
<td>Single view of all orders from all sources (online, EDI, fax, etc.)</td>
<td>19%</td>
</tr>
<tr>
<td>Avoiding chargebacks</td>
<td>15%</td>
</tr>
</tbody>
</table>
These process failures can lead to breakdowns in business relationships and hamper a shipper’s ability to process, ship, and deliver orders in a timely manner. Often, suppliers are held accountable for their roles in those process breakdowns, many of which can be traced back to those vendors’ inability to meet delivery commitments, too-long lead times, incorrect orders, and inaccurate labeling. Other culprits include shippers (often blamed for damages or lost shipments as well as poor tracking) and contractors (for their lack of communication and poor visibility).

Assessing Key Process Failures
Distribution and fulfillment process breakdowns often occur as a result of ineffectual internal operations or supplier-related issues. (See Figure 5.)

In most cases, internal process backlogs and disruptions can be traced to issues like inventory visibility constraints, erroneous sales forecasting, inaccurate information, poor information flow, a lack of communication, and a dependency on legacy or incompatible systems. Systems incompatibility often plays a major role in these key process failures, and particularly when internal or external systems don’t “talk” to one another efficiently.

“More than one-half experience process failures with either their own internal operations or in collaborating with suppliers.”

“Not all of our locations use the same ordering system. But, we are trying to standardize.”
Logistics: Automotives; $1B - $2.5B

Process failures in distribution and fulfillment operations
Multiple responses accepted

- With our own internal processes: 54%
- With suppliers: 52%
- With shippers: 25%
- With contractors: 14%
To help mitigate problems with their fulfillment operations, companies are re-engineering execution practices, boosting labor resources, and adopting or upgrading supply chain technology and applications. These actions can help prevent disruptions while adding to the overall streamlining of the end-to-end supply chain. With labor as the most expensive aspect of running a warehouse or DC, for example, companies are looking more carefully at how to combine a human workforce with automation to create a streamlined and profitable operation. (See Figure 6.)

### Actions being taken to prevent disruptions

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>40%</strong></td>
<td>Re-engineering our fulfillment operations</td>
</tr>
<tr>
<td><strong>36%</strong></td>
<td>Increasing staffing, labor</td>
</tr>
<tr>
<td><strong>31%</strong></td>
<td>Implementing or upgrading supply chain software applications</td>
</tr>
<tr>
<td><strong>27%</strong></td>
<td>Adopting supply chain analytics</td>
</tr>
<tr>
<td><strong>20%</strong></td>
<td>Increasing equipment spend</td>
</tr>
<tr>
<td><strong>16%</strong></td>
<td>Outsourcing some or all order fulfillment tasks to a 3PL, manufacturing or distributor partner</td>
</tr>
<tr>
<td><strong>7%</strong></td>
<td>Other</td>
</tr>
</tbody>
</table>
As part of the survey, respondents were asked to identify the primary areas where their companies will focus during the next 12 months. The most common responses include enhancing order fulfillment and distribution performance, controlling costs, increasing margins on a per-order level, and improving customer service procedures. Other areas of priority will be on improving end-to-end supply chain visibility and improving warehouse management processes, both of which can help companies work smarter, better, and faster in today’s high-volume/high-velocity distribution environment. (See Figure 7.)

Organizations’ priorities during the next 12 months
Multiple responses accepted

- Improving order fulfillment and distribution efficiencies: 52%
- Reducing overall costs associated with order fulfillment: 48%
- Improving customer service/Maintaining satisfaction levels: 47%
- Increasing margins and profitability on a per order basis: 42%
- Improving end-to-end supply chain visibility: 28%
- Upgrading our warehouse management system: 26%
- Optimizing order fulfillment across multiple fulfillment channels: 22%
- Configure, Price, Quote: 12%
- Reducing IT costs and complexity associated with order fulfillment: 10%
- Order visibility across sales channels: 10%
- Other: 6%

Organizations Employ Various Distribution Strategies
Roughly one-half of the organizations surveyed handle their distribution practices through a single distribution fulfillment center. Others are using multiple DCs that are operationally segmented by shipping or delivery variables, with one DC dedicated to filling orders based on sales channels or other criteria. These distribution strategies were likely developed as a way to manage the growth in e-commerce orders while also maintaining traditional distribution methods for other channels. (See Figure 8.)

Organizations’ distribution strategy

- Multiple distribution centers, with each primarily serving a single channel or geography (i.e. one DC for online orders, one DC for retail, one for distributors, etc.): 19%
- Multiple distribution centers, with the source of fulfillment determined by business rules for the order (speed of delivery, cost of delivery, etc.): 26%
- Single distribution center fulfills all orders: 51%
- Other: 4%
KEY CHALLENGES AND BEST PRACTICES FOR B2B FULFILLMENT

Companies are largely satisfied with their current distribution paradigms. Those running multiple distribution centers with each dedicated to its own sales channel credit their success to sensible planning and their ability to leverage their business information.

Organizations operating multiple DCs based on a specific set of business rules contend that a streamlined order routing execution enables faster shipping. This, in turn, translates into satisfied customers.

Single distribution managers claim they are able to better handle fulfillment processes through improved labor force management. Additional benefits of this strategy include the ability to reduce costs while still meeting customer requirements. (See Figure 9.)

Among those running multiple distribution centers, with each primarily serving a single channel or geography, managers feel their strategy is successful due to . . .

. . . “effective planning, continuous improvement, focus and experienced management and personnel, and quality web tools and reporting applications.”
Operations; Distribution; $1B - $2.5B

“. . . our ability to leverage leading indicators and business intelligence to configure optimized and proactive solutions.”
Management; 3PL; $500M - $1B

One executive responsible for managing multiple distribution centers, with the source of fulfillment set by business rules had this to say about his network’s accomplishments.

“We have customized solutions for all our clients and we can leverage our extensive logistics and distribution network to exceed customer expectations.”
Operations; 3PL; $500M-$1B

**Figure 9**

Overall performance rating of organizations’ distribution strategy

<table>
<thead>
<tr>
<th>Performance</th>
<th>Excellent</th>
<th>Very Good</th>
<th>Good</th>
<th>Fair</th>
<th>Poor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single DC</td>
<td>6%</td>
<td>16%</td>
<td>36%</td>
<td>2%</td>
<td>1%</td>
</tr>
<tr>
<td>Multiple DC, with the source of fulfillment determined by business rules for the order (speed of delivery, cost of delivery, etc.)</td>
<td>13%</td>
<td>40%</td>
<td>42%</td>
<td>9%</td>
<td>15%</td>
</tr>
<tr>
<td>Multiple DC, with each primarily serving a single channel or geography (i.e. one DC for online orders, one DC for retail, one for distributors, etc.)</td>
<td>3%</td>
<td>29%</td>
<td>53%</td>
<td>36%</td>
<td>9%</td>
</tr>
</tbody>
</table>

Multiple distribution centers fulfill all orders
While companies on the whole feel their fulfillment models are moderately successful, executives realize there is room for improvement. Working to gain greater control over inventory and enabling supply chain visibility, for example, are the leading areas that they are looking to improve over the next few years. (See Figure 10.) These improvements will be critical as B2B e-commerce—and the challenges it poses—continues to grow and morph. With an eye on maintaining and growing profitability while also scaling up and/or improving their fulfillment and distribution operations, companies are continually assessing their current setups and making changes (both big and small) in order to achieve desired productivity levels.

**58% assert that inventory management is the #1 area of their fulfillment and distribution operations they need to improve.**
KEY CHALLENGES AND BEST PRACTICES FOR B2B FULFILLMENT

When it comes to fulfilling orders, most organizations (35%) use an enterprise resource planning (ERP) system to handle the process. Others are using separate order management systems that interact with their ERPs, warehouse management systems (WMS), and Transportation Management (TMS) while others have “no visibility to the fulfillment process or when disruptions occur.” (See Figure 11.)

**FIGURE 11**

Organizations’ order management solutions in use

- We use our ERP system to manage all orders: 35%
- We use a separate order management system that sends order information to our ERP and WMS systems: 15%
- It’s a part of an ERP system—order information is from an ERP: 14%
- We have no visibility of when a disruption will occur until after the fact: 11%
- Different sales channels use different systems to manage orders: 10%
- It sits between the ERP system and our WMS—order information is collected from the customer and sent to the WMS for processing: 8%
- We have to call supply chain partners to place orders for items that are fulfilled outside our organization: 4%
- Other: 3%

Roughly one-half of the managers surveyed are leveraging their ERP backbone for order fulfillment operations. A WMS is also used in roughly one out of three operations. Other technology applications used to support order fulfillment include material requirement planning (MRP), customer relationship management (CRM), and order management solutions. (See Figure 12.)

**FIGURE 12**

Software solutions currently supporting order fulfillment operations

Multiple responses accepted

- ERP (Enterprise resource planning): 49%
- WMS (Warehouse management system): 38%
- MRP (Material requirement planning): 24%
- CRM (Customer relationship management): 22%
- Order management solutions: 17%
- Configure, Price, Quote: 16%
- WCS (Warehouse control system): 7%
- WES (Warehouse execution system): 2%
- Other: 10%
Many of the organizations relying on their ERP backbone for order orchestration are discovering that this approach is coming up short. While some are satisfied with their ERP as an order management solution, more than one-half (56 percent) rate the efficiency of their ERP as being merely good, or even fair to poor. Today’s order fulfillment and customer experience challenges require a system more robust than an ERP solution. (See Figure 13.)

56% say that their ERP is not very efficient and is not meeting their needs as an end-to-end order processing solution

The majority of companies surveyed do not use a distributed order management (DOM) application to manage omni-channel order processing. B2B has not quite transitioned as fast as B2C. While only one out of six claim they run a DOM application, over one out of four (27%) are not sure whether or not this application is in place. (See Figure 14.)
Organizations are split in their opinions on how well they meet growing customer requirements. A mere 1% believe they are failing to meet customer demands while roughly one-half say their operation is either somewhat or very successful in addressing those demands. (See Figure 15.)

More than one-half (52%) of organizations need to improve their ability to meet customer demands.

**Figure 15**

Organizations’ ability to meet customer demands

- Very successful: 48%
- Somewhat successful: 51%
- Not very/Not at all successful: 1%
The Implementation of Technology
Curiously, performance metrics for gauging order fulfillment processes such as order accuracy, customer satisfaction, delivery of the right product to the right customer, or goods damaged during shipment are each susceptible to errors. That’s because these areas are most commonly managed manually. Only shipment scheduling and invoicing are largely automated (however, less than one-half of respondents handle these procedures using technology). (See Figure 16.)
Ultimately, companies are interested in improving their order capture and fulfillment operations to meet the demands of the B2B landscape. These efforts will become even more important as web and mobile e-commerce gain further ground and become the shopping mechanisms of choice for both business buyers and consumers. Specific efforts to improve order capture and fulfillment processes largely center on replacing legacy technology with more innovative solutions, like Order Management. Other companies are taking strides to evaluate total cost of ownership (TCO), acquire other companies/business operations or expand/add fulfillment operations. (See Figure 17.)

**Actions taking to improve order capture and fulfillment operations**

Multiple responses accepted

- Replacing legacy technology with current solutions: 46%
- Extending brands/Developing new products: 32%
- Evaluating total cost of ownership (TCO): 26%
- Acquiring other companies/business operations: 24%
- Expanding fulfillment operations/Adding fulfillment locations: 21%
- Evaluating/employing disaster recovery solutions: 13%
- Outsourcing fulfillment activities: 11%
- Other: 5%
A Look Into the Crystal Ball
As supply chain and materials handling executives look to the future, most will focus on improving processes and adopting progressive technology platforms. In an effort to better serve their customers, companies will implement new systems and applications that are built to capture and process customer orders in the new “digital era”. This step alone should help operations standardize processes as well as analyze data to leverage business intelligence. Solutions that prune order handling processes and shorten shipping windows—and systems that allow for same-day delivery—are all going to be crucial to advancing business prospects. The greatest aspects of fulfillment and distribution operations looking to improve, 58% indicated inventory management, stresses the need for an order management solution that supports eCommerce an B2B.

Technologies such radio frequency identification (RFID), and drones all have the potential to fundamentally improve process efficiencies and customer service. And as e-commerce continues to expand—by 14.6% in 2015 alone, according to the U.S. Commerce Department—it’s no longer enough for companies to use their age-old processes and ERP platforms and hope those tools will continue to serve them well.

By assessing and rethinking their B2B fulfillment and inventory management practices, and by leveraging end-to-end order management technology platforms that serve as central data repositories for all users and business partners, organizations can best position themselves for success in today’s ever-evolving distribution environment. One platform that can handle B2C and B2B is more economical, efficient, and recommended.

Methodology
This research was conducted by Peerless Research Group (PRG) on behalf of Modern Materials Handling and Supply Chain Management Review magazines for IBM. This study was executed in April/May 2016, and was administered over the Internet among subscribers of MMH and SCMR.

Respondents were qualified for being employed with an organization conducting business-to-business commerce.

The findings are based on information collected from 213 individuals. Respondents are primarily corporate management, supply chain management, warehouse, distribution, or logistics management professionals. All company sizes are well represented in the survey results.

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IBM Commerce brings market-leading solutions for marketing, selling and fulfillment, customer analytics, procurement, B2B integration and payments together with deep industry expertise, equipping leaders to achieve business outcomes and drive shareholder value.

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