September 2017 Issue

#### In this issue of Premium Procurement Bulletin...

- How a Cyber Attack Impacts Global Supply Chains
- [Case Study] Amazon Soars Past Prime Day Challenges
- E-Commerce and Last-Mile Logistics: An Insurmountable Challenge
- [Case Study] Wal-Mart Imposes On-Time Performance Regulations
- How the Push to Buy American Could Impact the U.S. Defense Supply Chain
- [Case Study] COSCO Seeks New Strategy for Global Competition

### **How a Cyber Attack Impacts Global Supply Chains**

Maersk Line may have absorbed the greatest impact from the June 2017 Petya virus attack, but the shipping and logistics company was far from the only one affected. In fact, this cyberattack affected countless vendors and customers, ultimately disrupting supply chains around the globe. Learn more about the nature of the Petya cyberattack and find out what Maersk has done to limit the impact from future attacks.

### **How the Petya Virus Attack Affected Maersk**



Image via Flickr by Visual Content

September 2017 Issue

The Petya virus, which struck on June 27, was a ransomware attack. This type of virus essentially locks a user's computer unless the attacker receives a specified payment by a certain date. If the attacker doesn't receive payment, he or she can delete all of the files on the device or leave it encrypted, rendering the system useless. In some cases, even after receiving payment, the attacker may still refuse to return control of the device to the user.

Ransomware has the ability to shut down entire computer systems, as it can spread quickly. As soon as the Petya virus infiltrated a single computer at Maersk, it quickly spread through the company's entire network. Countless systems were affected, including business units ranging from container shipping to oil and gas production to port operations. To stop the cyberattack from spreading, Maersk shut down systems around the globe.

### How Worldwide Supply Chains Felt the Aftereffects of the Cyberattack

Like most logistics companies, Maersk depends on numerous global partners to keep its operations running. In turn, port operators, manufacturers, and logistics companies depend on Maersk to keep the supply chain operating efficiently. Since Maersk handles <u>one out of every seven containers</u> shipped anywhere in the world, the company's shutdown had a drastic effect on global supply chains.

During the Petya cyberattack, Maersk <u>ceased booking client shipments</u> and limited or stopped operations at three of the largest ports in the world. Though the shipping company reacted quickly to the attack, Petya still caused substantial financial losses and significant shipment delays. Since Maersk has such an extensive global footprint, customers everywhere experienced the aftereffects.

#### How Maersk Has Protected Itself from Future Attacks

Though Maersk resorted to tracking shipments and cataloging cargo manually during the ransomware attack, the company has since restored its digital systems and implemented additional security measures. Nearly three weeks after the attack, Maersk announced that it had analyzed its operating systems and anti-virus software applications to determine more effective methods for protecting its systems from future attacks.

While this may be welcome news for the company's partners and customers, it could take Maersk months or even years to recover from this attack. In addition to financial losses, the shipping company has suffered from a <u>widespread loss of trust</u>, with many customers reportedly refusing to open emails from Maersk in order to avoid becoming the next Petya victim.

Maersk executives remain optimistic about the company's response to the attack, its ongoing recovery, and its improved security measures. In the coming months, the shipping company may need to reassess how customers have ultimately responded to the situation and build partnerships that give the shipping giant greater flexibility in case of future cyberattacks.

September 2017 Issue

### [Case Study] Amazon Soars Past Prime Day Challenges

In 2015, Amazon introduced Amazon Prime Day as a marketing initiative designed to boost summer sales and promote awareness of its Prime membership program. Now an annual event, Amazon Prime Day happens every July, which is historically a slow month for sales, and offers some of the online retailer's biggest discounts of the year. Find out how Amazon has handled increased Prime Day demand and take a look at the retailer's Prime Air fleet.

#### Situation: Amazon Anticipates the Biggest Prime Day Yet



Image via Flickr by Fernando Amaro

Prime Day has quickly become Amazon's most lucrative day of the year, with sales numbers even larger than those from Black Friday or Cyber Monday. In 2017, the e-commerce giant ensured that the 2017 Prime Day event would be even bigger than the last in terms of both sales and new Prime memberships. Since <a href="Prime members spend almost twice as much">Prime memberships</a>. Since <a href="Prime members spend almost twice as much">Prime members spend almost twice as much</a> as regular Amazon shoppers, attracting more sign-ups is a smart way for the e-commerce brand to continue to build its online retail empire.

Amazon also extended its standard shopping window by six hours, turning Prime Day into a 30-hour event. With deep discounts on countless items and shoppers from over a dozen countries participating, Amazon set the stage for the biggest Prime Day yet. To ensure that every purchase arrived on time, however, the retailer needed to make key supply chain adjustments.

### **Approach: Amazon Introduces Its Prime Air Fleet**

For years, Amazon has taken concrete steps to gain more control over the complex logistics that keep the online retailer running around the clock. In spring 2016, Amazon partnered with air cargo provider Atlas Air, from whom the e-commerce giant leased over three dozen jets.

September 2017 Issue

To tackle the massive influx of orders on Prime Day, Amazon announced the <u>debut of its Prime</u> Air fleet, about 40 jets outfitted in partnership with Atlas Air.

### **Impact and Advantage**

Amazon's plans to engineer the most lucrative Prime Day yet proved successful, and its Prime Air fleet appears to have met the challenge head-on. Forbes reports that the 2017 Prime Day event generated 60 percent more sales than the same period during the previous year, even taking into account the slightly longer time period of this year's event. Overall, Amazon produced an estimated \$2 billion in sales and recorded more Prime membership sign-ups than any other day in the company's history.

The e-commerce company's Prime Air fleet helped ensure that packages arrived right on time, even with the shorter delivery window that Prime members receive. In fact, the Prime Air delivery service can accommodate a much later purchase time cutoff, which saves Amazon time and money while making shopping more convenient for customers. Since the fleet flies directly from one point to another, rather than relying on transit hubs, Prime Air can <u>reduce cross-country shipping time by up to 15 hours</u>.

Debuting Prime Air for the purpose of Prime Day enabled Amazon to test its latest technology, potentially paving the way for more in-house logistics. As Amazon continues to expand its footprint, its supply chain management methods are likely to set the pace for the industry and offer a glimpse of what's to come.

September 2017 Issue

# E-Commerce and Last-Mile Logistics: An Insurmountable Challenge

As the demand for e-commerce grows, it has continually presented logistics managers with a range of challenges. Last-mile logistics remains one of the most pressing tasks for logistics experts, and it doesn't yet have a clear-cut solution. Discover some of the biggest challenges related to last-mile logistics and find out how some major e-commerce companies are handling them.

### **Last-Mile Logistics Encompass More Than One Mile**



Image via Flickr by SounderBruce

For most e-commerce companies, "last-mile logistics" is a misnomer. One of the most substantial <u>takeaways from a recent CBRE study</u> is that in practice, these logistics typically encompass 6 to 9 miles, and some include an even larger range. The main reason for this is that most of the small distribution facilities that handle last-mile logistics are located an average of 6 to 9 miles outside of population centers, with facilities in major cities on the shorter end of the spectrum.

Many of these distribution centers are newly built for the purpose of handling last-mile logistics. Though they currently set the standard for e-commerce deliveries, supply chain experts will determine whether they're simply a stepping stone toward smaller, more convenient distribution facilities.

September 2017 Issue

### **Expensive Last-Mile Logistics Can Mean Lost Revenues**

Given the complexities involved with last-mile logistics, it may come as no surprise that this component can be incredibly expensive for e-commerce companies. As a general rule, last-mile logistics account for over a quarter of the total delivery cost.

Many e-commerce companies pass this cost along to customers via shipping fees or altered pricing structures, but some have taken a more innovative approach. For instance, Amazon has taken steps to limit outsourcing, preferring instead to own the whole supply chain from beginning to end. By doing so, Amazon can lower its overall shipping costs to an extent that smaller e-commerce companies can't.

### **Last-Mile Logistics Could Allow for Customized Deliveries**

As the number of customers turning to online shopping rapidly increases, so does their need for transparent shipping processes and efficient deliveries. Since standard delivery methods are prone to failure, especially in hard-to-locate residential areas or when a package requires a signature, some last-mile logistics providers are considering customized products.

For example, to increase the rate of delivery success, some providers have begun to explore the potential for <u>on-demand delivery</u>. When customers can choose the date and time they want to receive their packages, the success rate of last-mile logistics is likely to increase. Using pickup stations in transit hubs or other central locations can even allow customers to retrieve their own packages at their convenience, streamlining last-minute logistics even further.

As the demand for same-day delivery grows, e-commerce companies may consider adopting pickup stations at a faster rate, partnering with established logistics companies to find cost-effective solutions, or pioneering drone and other high-tech deliveries.

Though many potential solutions exist for last-mile logistics, a combination of constantly evolving consumer demands and cutting-edge technology debuts suggests that most companies will continue to explore their options for months and years to come. As e-commerce businesses strive to please customers while increasing revenues, last-mile innovations will drive this industry forward.

September 2017 Issue

### [Case Study] Wal-Mart Imposes On-Time Performance Regulations

In the trucking industry, time is money, and on-time performance is key. While many companies penalize suppliers for late deliveries, Wal-Mart recently imposed even stricter time-based requirements. Find out what Wal-Mart's new on-time performance regulations entail and how these new guidelines could impact the entire supply chain.

Situation: Wal-Mart Strives to Improve On-Shelf Availability



Image via Flickr by Walmart Corporate

Like many major retailers, Wal-Mart has its fair share of issues with keeping the most in-demand items on store shelves. Despite scheduling almost back-to-back deliveries for its thousands of stores, the retailer has continued to struggle with keeping some of the most popular items in stock while balancing staffing needs at the loading dock and monitoring its bottom line.

Wal-Mart has already launched numerous programs that aim to improve on-time performance and increase its revenue. In fact, the retailer has such a long list of supplier rules that it regularly hosts summits to introduce new regulations and ensure that suppliers adhere to the many guidelines.

September 2017 Issue

Some of Wal-Mart's most persistent issues remained unresolved, however. After Amazon's recent announcement of its intention to purchase Whole Foods Markets, Wal-Mart executives determined that its stores must improve on-shelf availability immediately in order to compete.

### **Approach: Wal-Mart Implements On-Time, In-Full Initiative**

To fine-tune its stores' complex delivery schedules, Wal-Mart announced its On-Time, In-Full (OTIF) initiative in July 2017. The initiative effectively penalizes suppliers for either early or late deliveries as well as for incomplete orders.

According to <u>Bloomberg Businessweek</u>, Wal-Mart requires suppliers to deliver complete orders on the chain's must-arrive-by date a minimum of 75 percent of the time. If items are missing from the orders or if they're delivered late, suppliers must pay a fine equal to 3 percent of their value. Wal-Mart also levies a fine for early deliveries, since these create storage issues and overstock problems.

### **Impact and Advantage**

Wal-Mart's OTIF initiative launched at the beginning of August 2017, so it's still too soon to tell what the true impact will be on the retailer's supply chain. However, many industry experts have already weighed in with a range of concerns.

Thanks to its vast network of retail stores and distribution centers, Wal-Mart is responsible for large percentages of some of its suppliers' sales. That means many suppliers, both large and small, must adhere to these new regulations in order to maintain their revenue streams. Yet some of Wal-Mart's biggest suppliers, such as Unilever and Procter & Gamble, have an OTIF rate of about 10 percent. That means some suppliers will have to make substantial modifications to their own supply chains to meet these new guidelines.

Some industry experts suggest that even though Wal-Mart's OTIF requirements are strict, they may become standard. Due to its size and influence, Wal-Mart has the power to push for substantial supply chain improvements, just as the retailer did when it encouraged the <u>adoption of universal barcodes</u> in the 1980s. If this new OTIF initiative pays off, Wal-Mart stands to gain an estimated \$1 billion in revenue.

Suppliers, logistics professionals, and trucking executives are likely to benefit from paying close attention to the rollout of this OTIF initiative. Even those without direct connections to Wal-Mart should anticipate a push to improve efficiency and decrease errors in the supply chain.



September 2017 Issue

### How the Push to Buy American Could Impact the U.S. Defense Supply Chain

Many people strive to buy local, but for government agencies, purchasing American-made supplies and products is mandated by federal law. Agencies can often sidestep this legislation due to legal loopholes, but more stringent enforcement may put an end to this practice and force agencies to buy strictly American-made articles. Learn how phasing out foreign vendors could impact the U.S. Department of Defense's supply chain and global trade relationships.

### What the Buy American Act States



Image via Flickr by Thomas Hawk

The <u>Buy American Act</u> dates back to 1933, when it became law with the intention of prioritizing domestically produced materials and goods over those made overseas. The act requires federal agencies to buy American-made products unless they exceed certain price thresholds.

For decades, the Buy American Act ensured that taxpayer funds would have a positive impact on domestic supply chains and the national economy. However, numerous loopholes and reciprocal free trade agreements have compromised the original intention of the act, often giving equal priority to international firms and contractors, especially in terms of defense spending.

September 2017 Issue

In fact, *The Washington Post* reports that about <u>6.4 percent of U.S. military spending</u>, or almost \$20 billion, went to foreign suppliers and producers in 2014. Historically, many federal agencies have neglected to enforce the law, largely due to the agency's lack of knowledge or administrative error.

#### **How New Enforcement Affects the Buy American Act**

In April 2017, President Trump signed an executive order that emphasized the administration's support of the Buy American Act. The order, which demanded that the U.S. Department of Commerce investigate federal procurement policies and analyze free trade provisions that affect procurement, also emphasized the importance of building up domestic supply chains, stating that doing so could have a multiplier effect on the U.S. economy.

On June 30, the Office of Management and Budget released <u>specific guidelines</u> for enforcing the Buy American Act. First, agencies must evaluate their adherence to the Buy American Act and train employees on best practices for following the original legislation. In addition, agencies must provide detailed reports regarding their use of waivers and exemptions, including details on the spending level related to each exemption.

### **How These Changes Could Impact the Department of Defense**

Enforcing the Buy American Act more strictly could impact the DOD in several ways. The effects could be wide-ranging, since the agency is part of a global supply chain that's much more complex and firmly established than it was in 1933.

First, the Buy American Act could affect how domestic weapons manufacturers source raw materials and build supply chains. To do business with the DOD, these manufacturers may have to place tighter restrictions on their supply chains, eliminating some foreign suppliers and potentially increasing costs.

In addition, agency heads may be less willing than ever before to consider waivers and exemptions, even legitimate ones. This could draw retaliation from foreign suppliers and compromise U.S. firms' future participation in reciprocal trade agreements.

The full impact of renewed enforcement and tighter restrictions remains to be seen, but defense manufacturers and contractors may better understand the range of effects in late 2017. The administration has given Commerce Secretary Wilbur Ross a November 2017 deadline for providing in-depth analysis and recommendations related to the impact of the Buy American Act.



September 2017 Issue

### **COSCO Increases Its Market Share by Merging With OOCL**

In recent years, mergers have played a substantial role in shaping the shipping industry. In recent years, Japan's three largest shipping companies, two major Chinese shipping groups, France's CMA CGM SA, and Singapore's Neptune Orient Lines Ltd. have each merged to form shipping companies with greater power and reach than ever before. Find out why China COSCO Shipping plans to acquire Orient Overseas Container Lines (OOCL) and learn how this could affect the global shipping industry.

### Situation: COSCO Seeks New Strategy for Global Competition



Image via Flickr by mk97007

Many industries have struggled to recover in the wake of the global financial crisis of 2008-2009, but the <u>shipping industry has faced particular challenges</u>. Decades ago, shipping companies tended to compete with each other by designing larger ships with greater capacities. After the financial crisis, however, many shipping companies tried new tactics, including drastically underbidding their competitors. As a result, many shipping companies began operating at a loss, a trend that still plagues some in 2017.

Like many shipping companies, COSCO has sought to improve its ability to compete through acquiring or merging with other groups with surplus capacity. The current iteration of the company is the result of a January 2016 merger between the COSCO Group and the China

September 2017 Issue

Shipping Group, and just over a year later, COSCO seeks to expand yet again, shifting from its position as the fourth-largest ocean carrier to become the third-largest carrier.

### **Approach: COSCO Plans to Acquire OOCL**

In July 2017, COSCO announced its intention to acquire a majority stake in the parent company of OOCL, Hong Kong's top shipping company. COSCO's \$6.3 billion offer values OOCL's shares at HK\$78.67 each, which is a 31 percent premium over the stock's closing price in early July. While OOCL has agreed to the offer, seeking the necessary approvals could delay the close of the deal by several months.

If approved, the new company would have access to more than 400 vessels, along with nearly 3 million 20-foot units. The merged company would also attain an 11.6 percent market share, allowing COSCO to overtake third-place CMA CGM.

### Impact and Advantage

While COSCO and OOCL must still agree to contractual terms and obtain regulatory approvals around the globe, the stock markets have already responded. Following the announcement, OOCL achieved its biggest gain in the Hong Kong stock market in eight years, while COSCO's stock value increased more than 8 percent.

Industry experts have also begun to speculate about possible outcomes of this acquisition. Since this move will enable COSCO to become the world's third-largest ocean carrier, the acquisition brings the shipping company closer to its goal of surpassing the Swiss Mediterranean Shipping Company (MSC) and the Danish A.P. Moller-Maersk Group to become the world's largest carrier.

If the COSCO acquisition proceeds as proposed, supply chain executives around the globe should pay close attention to the next moves of the top three contenders in the shipping industry. Subsequent mergers, innovative pricing structures, and cutting-edge technology could all impact how shipping companies compete with each other and drive global supply chains.

September 2017 Issue

#### **Related Procurement Events**

#### **Certified Procurement & Purchasing Specialists (CPPS)**

- 23-26 October 2017 London, UK
- 6-9 November 2017 Lagos, Nigeria
- 19-22 November 2017 Dubai, UAE
- 27-30 November 2017 Singapore
- 4-7 December 2017 Hong Kong

Download the full details: <a href="https://www.ethanhathaway.com/training/certified-procurement-purchasing-professional-specialist-cpps/">https://www.ethanhathaway.com/training/certified-procurement-purchasing-professional-specialist-cpps/</a>

#### Certified Chief Procurement Officer (CCPO)™ Training Course

- 16-18 October 2017-London,UK
- 13-15 November 2017-Dubai
- 6-8 December 2017-Singapore
- 11-13 December 2017-Hong Kong

Download the full details: <a href="https://www.ethanhathaway.com/training/certified-chief-procurement-officer-ccpo/">https://www.ethanhathaway.com/training/certified-chief-procurement-officer-ccpo/</a>

#### **Certified Corporate Compliance Specialists (CCCS)**

- 17-20 October 2017 London, UK
- 13-16 November 2017 Singapore
- 19-22 November 2017 Dubai, UAE
- 4-7 December 2017 Hong Kong

Download the full details: <a href="https://www.ethanhathaway.com/training/certified-corporate-compliance-specialist-cccs/">https://www.ethanhathaway.com/training/certified-corporate-compliance-specialist-cccs/</a>

September 2017 Issue

#### **Related Procurement Events**

### Certified Big Data Analyst (CBDA)<sup>TM</sup> Training Course

- 15-19 October 2017-Dubai
- 6-10 November 2017-Hong Kong
- 4-8 December 2017-Singapore

Download the full details: <a href="https://www.ethanhathaway.com/training/certified-big-data-analyst-cbda/">https://www.ethanhathaway.com/training/certified-big-data-analyst-cbda/</a>

#### **Successful Project Management**

- 6-8 November 2017- Kuala Lumpur
- 19-21 November 2017- Dubai
- 11-13 December 2017- Singapore

Download the full details: <a href="https://www.ethanhathaway.com/training/successful-project-management/">https://www.ethanhathaway.com/training/successful-project-management/</a>