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RUSCA & SUPPLY CHAIN

Rutgers University Supply Chain Association

Welcome!

RUSCA, or the Rutgers University Supply Chain Association, is proud to present our first newsletter of the Fall 2016 semester! The newsletter explores supply chain current events through the perspectives of our student writers. From addressing security risks to implementing supply chain planning software, please find our articles below, as well as a recap of past and an overview of

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FOR RUSCA SPECIFIC EVENTS, SEE PAGE 12

Newsletter Formatted by:

Jessica Lee

EVENT RECAP: RUSCA KICK-OFF EVENT

By: Jessica Lee

On Wednesday, September 21st, RUSCA held its Kick-Off Event for Fall 2016. RUSCA hosted a discussion panel, facilitated by RUSCA President Miranda Wei, that focused on Logistics and Transportation.

The panelists were:

MR. MARTY POLIZZI

Sales Training Operations Manager, North Atlantic District at UPS

PROFESSOR WILLIAM MCLAURY

Assistant Professor of Professional Practice and Assistant Director of SCM Undergraduate Program at Rutgers Business School

PROFESSOR GEORGE HARRY

Director of Global Transportation at Johnson & Johnson Sales & Logistics Company, LLC.

In addition, guests from UPS and Johnson & Johnson included:

Beverly Sommer
Laura Diaz
Tommy Alliegro

Alex Malandrenias
Tiffany Jones
Tiffany Boyer
Benjamin Carruthers

Below is a recap of the topics that were covered in the discussion panel:

Logistics vs. Transportation

In highlighting the differences between logistics and transportation, Prof. McLaury explained that logistics is broader than transportation. Logistics involves tasks such as warehousing, material handling, and inventory management, while transportation focuses on the physical movement of materials. Both involve varying degrees of complexity. Logistics includes inbound and outbound activities: inbound concerns a company's warehouses and facilities, while outbound concentrates on reaching retailers and consumers. With regards to transportation, there are many different modes of transportation: motor, air, rail, water, and pipeline. Combining any of these modes creates intermodal forms of transportation.

J&J: Transportation Challenges

J&J is a huge company with three key sectors: consumer goods, medical devices, and pharmaceuticals. Prof. Harry stated that, as a large corporation, J&J "looks for synergies" among its sectors to find solutions for shipping products of any size. The Transportation Department at J&J has to act as its own 3PL within the company, while also drawing in services from external providers, such as UPS.

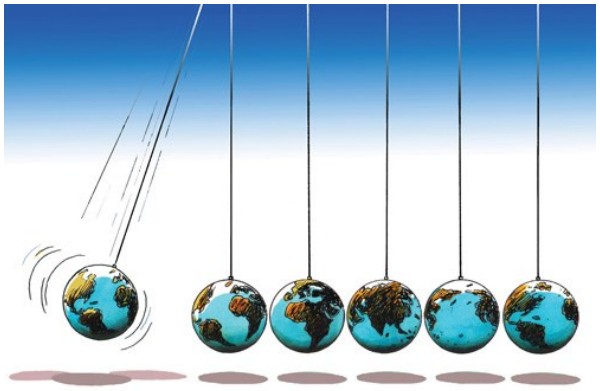
Prof. Harry also described the challenges J&J faces when coordinating the transportation activities among these sectors. Due to the nature of the products being shipped, temperature and humidity are significant factors that must be monitored in transporting, for example, medical devices and medications. Another in-transit risk includes theft: high value pharmaceutical products are subject to being stolen and reprocessed for the misuse of certain ingredients. This requires J&J to implement advanced cargo protection.

UPS: Clients' and Customers' Expectations

From a carrier's perspective, Mr. Polizzi provided insight on how UPS meets and exceeds clients' expectations and satisfies customer needs. He emphasized that the market has significantly changed. In the 1980's, UPS was known as a transportation company that focused on facilitating the flow of goods. Now, UPS also provides the flow of information. The flow of information is key for UPS because of this desire for visibility: clients and customers want to know where their packages are located and when they will be arriving. As a result, as customers have become more sophisticated, UPS has had to parallel that growth in complexity.

Mr. Polizzi also provided an example of UPS' experiences with the shoe e-tailer, Zappos. UPS worked with Zappos to grow and reach its goals of immediate, overnight shipping for all orders. To do so, the companies established an "End of Runway" structure: the Zappos fulfillment center was placed adjacent to the UPS Louisville airport, which expedited the process of transporting goods to UPS for delivery. UPS also provided a logistical solution of including return labels that made returns easy, which helped to enhance consumers' experiences and resultantly increase Zappo's revenue per sale. By aligning its processes with Zappos' company goals, UPS was able to provide great services for its clients, as well as

Global Impacts on Supply Chains



The panelists were asked about global factors that impact supply chains and how supply chains can adapt and respond.

Prof. McLaury discussed the impact of Brexit on supply chains and logistics. He stated that, if the United Kingdom does leave the European Union, the flow of trade will be disrupted if no new trade agreements are put into place. Since many companies have inventories in the United Kingdom, potential tariffs and duties would create difficulties in moving goods in and out of the country. As a result, new trade agreements need to be emphasized.

Prof. Harry elaborated on the importance for companies to understand global events, such as regulatory, political, environmental, and labor climates. By doing so, supply chains can better understand which suppliers, manufacturers, and other parties in the supply chain are impacted. In order to alleviate or avoid supply chain stoppages, Prof. Harry addressed the need for strong partners in a supply chain and constant creation of contingency plans.

Mr. Polizzi expanded on Prof. Harry's points by explaining the importance of a "proactive" supply chain that is always nimble and flexible. When working with partners and customers, companies must discuss contingencies both for U.S. and international activities. He highlighted that a supply chain can no longer be centralized and must instead be diverse.

Desired Skillsets in Transportation and Logistics

Lastly, the panelists discussed important skillsets and qualifications students should have if they want to pursue a career in the transportation and logistics field.

Mr. Polizzi addressed the need for possessing strong communication skills, which are key to supporting favorable skillsets of being able to lead, seek opportunities for growth, handle adversity, and problem-solve. To develop critical thinking skills, Prof. McLaury suggested students to participate in case competitions, which provide opportunities to build analytical and decision-making skills. On top of developing soft skills and critical thinking, Prof. Harry advised students to attend office hours, connect with professors, and get involved in class discussions in order to demonstrate their passion and interest.

RUSCA would like to thank Mr. Marty Polizzi, Prof. William McLaury, and Prof. George Harry for their contributions to the discussion panel.

We also want to thank the guests from UPS and Johnson & Johnson for their attendance.

Thank you all for helping to make RUSCA's Kick-Off event a great one!

VSA: Worth the Rave?

By: Brandon Daley

Uber, Twitter, and Airbnb all come from different cornerstones in the market. From facile transportation to unfiltered self-expression, to affordable vacation booking, all are successful in their own right. However, most recently, these three behemoths converged to form a very critical link: the Vendor Security Alliance.

On September 15th, the three companies coalesced in an attempt to combat third party security-risk, as robust security has remained a lingering problem for years (Kerr). In 2013, Target encountered one of the most controversial hacks when debit and credit information was taken from a refrigeration, heating, and A/C subcontractor (Wallace). When FireEye, Target's malware detection system, discovered the hack, security personnel was supposed to notify Target's main base in Minneapolis. However, they simply did not (Riley). Over a three-week span, roughly 40 million credit card numbers, expiration dates, and CVV's (credit verification values) were stolen and distributed around the world (Wallace). In the end, Target repaid consumers $10 million dollars for their woes, but such turmoil could have been avoided had protocol not been so negligent (Sword). This is what the VSA aims to fix.

First and foremost, VSA will begin to issue a yearly questionnaire to benchmark risk, which can be used by companies to distinguish more legitimate vendors (Sword). The first questionnaire isn't set to come out until October 1st of this year. However, the overarching topics have already been shared (Kerr). These include software supply chain, compliance to standards, and policy and standard efficacy, among other more complicated jargon (Kerr). Top security experts and compliance officers will additionally assist in the construction of annual evaluations (Sword).

Although the VSA is a major step in the virtual war on cyber hacks, the alliance admits that there is still a long way to go before things are resolved. "Evaluating vendors is one part of the equation," says Skyhigh Networks CEO Rajiv Gupta, "but it is just as important to be able to actually enforce policies to prevent data from being shared with high-risk partners (Sword)."

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"Although the VSA is a major step in the virtual war on cyber hacks, the alliance admits that there is still long way to go before things are resolved."

Skeptics argue that there are already a plethora of organizations covering cyber integrity. The European Union (EU), United Nation (UN), and the Internet Corporation for Assigned Names and Numbers (ICANN) are just a few of many working on the exact same issue (Kerr). However, VSA CEO and Uber HOC (Head of Compliance) Ken Baylor insists that VSA is unique because it's not dealing with "the general problem of cybersecurity," but rather it will set its sights on "the narrow area of vendor security" (Kerr). Only time, though, will tell if the latter remains to be the focus of VSA.

For now, it is estimated that the average company connects to 1,555 partners over the Internet, and thirty percent of corporate data shared with them is at high-risk. Until the corporation supply chain relationship becomes secure, the VSA will always be trudging uphill (Sword).

Samsung Recall: A Loss of Reception

By: Jessica Lee

For the past few months, Samsung has been facing challenges concerning its newly released Galaxy Note 7 devices. The multinational conglomerate released the "phablet" – or phone-tablet – on August 19, 2016, and the product was initially praised for its sleek and more functional design, camera, and S pen.

However, battery explosions started occurring with their Note 7 devices. Incidents of the devices catching fire while charging or randomly erupting in users' pockets stalled "sales in 10 countries, including South Korea and the U.S." (Mullen). By the two-week mark following the Note 7's release, Samsung was made aware of "35 claims of faulty phones worldwide," and it had "found 24 devices with problems for every million sold" (Mullen). As a result of this battery issue, the company voluntarily issued a global recall of the Note 7. On September 15th, the U.S. Consumer Product Safety Commission, or CPSC, followed by issuing a formal recall of the device (Wells).

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http://cdn3.bigcommerce.com/s-h4cdzm/product_images/uploaded_images/rev-log-

Unfortunately for Samsung, the recall process has been exacerbated over the past month due to the initial lack of coordination with CPSC. CPSC Chairman Elliot Kaye stated that Samsung failed "at the outset to coordinate efforts with U.S. safety authorities" in carrying forth its own global voluntary recall (Wells). The general practice for a firm is to work with CPSC to issue recalls such that all procedures involving the necessary returns, repairs, and disposals are deemed safe. Without this coordination, a company may issue recall instructions that conflict with CPSC policies.

These consequences led to an additional problem for Samsung: a lack of clear communication with downstream carriers and customers. According to Georgia Wells, Samsung does not have a large network of retail stores in the U.S., so it must rely on outside carrier companies to function as intermediaries in distributing its products to end-customers. When news of the recall spread, customers were told that they could go to their carriers to exchange phones or receive loaner phones. However, carriers were not permitted to distribute replacement Note 7 phones until they were CPSC-approved (Wells). As smartphones have become integrated into consumers' everyday personal and professional life, these further delays in receiving suitable devices intensified difficulties with the recall.

"...reverse logistics will involve moving the Note 7 devices back upstream in the supply chain…"

Now that Samsung has aligned its recall procedures with CPSC, the current stated options for customers are to request battery repairs, replacements, or refunds for their Note 7 devices, all of which collectively involves a key component of supply chain: reverse logistics.

In this scenario, reverse logistics will involve moving the Note 7 devices back upstream in the supply chain, from end-customers to suppliers. Customers will first need to bring their devices back to their carriers. Carriers must track and process the items and provide the replacements or refunds. As intermediaries, carriers will then ship the necessary devices back to the manufacturer for the appropriate repairs or disposals. The manufacturing facilities will be responsible for moving and storing this inventory within warehouses or other spaces. All the while, Samsung will have to conduct investigations on the defective battery materials that led to the explosions and later communicate these issues to the corresponding suppliers.

This reverse logistics process intends to capture the remaining value or to execute the proper disposal of the products and/or its battery parts (Cunnane). As part of asset recovery, Samsung will most likely aim to use as much of the component materials of the existing Note 7 devices as it can in conducting repairs and replacements due to the financial spending already made on these supplies. The asset recovery will not only "repair, upgrade, refurbish (including repackaging), remanufacture, de-manufacture (parts reclamation), and recycle" these devices, but it will also require "channel or routing logic, which means the returned items and components can be sent back to the customer, routed to a warehouse, or sold in secondary markets" (Malone). The collective monetary costs from these activities will take a toll on Samsung's profitability.

However, while these financial costs are important, Samsung must also be wary of the reputational cost, especially since it had previous communication and coordination issues. A key aspect of reverse logistics is communication. Information needs to be quickly and accurately provided to intermediaries and end-customers such that the recall procedure can run as smoothly and efficiently as possible (Malone).

"Samsung needs to enforce increased downstream communication"

In Samsung's case, the external communication with the downstream parties was muddled. First, the battery problem and its significance was not clearly relayed: customers were vaguely told of "battery issues," but not of its potential fire hazard, increasing hesitancy in the recall. Also, carriers struggled with providing much needed phone replacements since corresponding recall instructions conflicted with CPSC protocol. The compounded confusion had negatively impacted customer service, which, if not handled well especially during a recall, can affect Samsung's future business.

As Samsung proceeds with this reverse logistics process, it needs to enforce increased downstream communication in an effort to protect its brand. Even though the battery explosion problem exists, building better channels of communication with customers and carriers, who service the customers, can help to maintain its customer relationship management.

Prioritizing customer relationship management requires Samsung to, down the road, clearly communicate the issues and any solutions, which can help to retain its customer base. However, Samsung needs to deliver in maintaining this relationship to show customers that it can still provide great value and will take responsibility in quickly resolving the problem.

As Samsung continues to face competition from Apple, Inc., it will need to efficiently and effectively establish its credibility in the market, for as Strategy Analytics' Neil Mawston states: "The U.S. is Samsung's biggest smartphone market so the company must fix any problems there as a top priority" (Wells).

Cutting Engine Emissions by Replacing Equipment

By: Sophia Zhou

Ports such as the Great Lake and inland river ports are an important part of the United States infrastructures. They are the main gateways for transporting passenger and moving freight across the country and around the globe. They withstand the test of time as a prevalent mode of transportation along with ground and air shipment today. In order to meet the demands of the economy, these infrastructures must adapt by increasing speed of delivery. Many of the unfortunate calamities result in dire impact on greenhouse gases, air pollution, and the people living and working near these ports. For instance, diesel engines are known as the modern-day workhouse because of their reliability and efficiency. However, this performance in the older diesel models emits significant amounts of air pollution such as fine particulate matter, air toxics, carbon dioxide, and nitrogen oxides, all of which impacts human health and the planet in irreversibly ways (EPA).

On September 22th, the Environmental Protection Agency published its research and "range of available strategies to reduce emissions from port-related trucks, locomotives, cargo handling equipment, harbor craft, and ocean-going vessels." (EPA). As part of the EPA's Ports Initiative, this report contains a collaborative effort with government and industry representatives as well as community groups that aims to reduce pollution and greenhouse-gas emissions. Moreover, an omnipresent social responsibility will be spread by the State and local governments, communities, stakeholders, ports and port operators. They will be able to use the EPA's Ports Initiative as a tool to inform their decisions and priorities for port areas to achieve greater emission reductions across the United States.

"… this report contains a collaborative effort with government and industry representatives...to reduce pollution and greenhouse-gas emissions."

Christopher Grundler, director, of the EPA's Office of Transportation and Air Quality, mentions researchers have found various opportunities to reduce harmful pollution that will guarantee results (WSJ). The new discoveries include replacing retired equipment and improving cargo-handling operations. The aim is to offset the harmful effects of diesel-engine emissions. Additionally, newer models will be added in place of train locomotive engines. Now, on the dock, electrical equipment will be used to handle shipping containers and lower the number of idle trucks that wait for cargo. Instead of running on their polluting diesel engines while waiting, ships will now be required to plug into shoreside power when sitting on the dock.

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"… the hope is for other essential ports to follow in the footsteps and even achieve greater results…"

Director Grundler's efforts have been rewarded through the success of the Georgia Ports Authority (GPA). According to the Saporta Report, The GPA was awarded the 2016 Clean Air Technology Award. The GPA advocated environmental stewardship by implementing an electric rubber tire gantry (RTG) crane program that will transfer the entire RTG fleet to electric power. This will virtually eliminate the diesel fuel usage for these machines and reduce the terminal's diesel emissions. The American Association of Port Authorities reports $164,964 of the GPA's grant resulted in approximately 47 recycled cargo handling equipment units, providing sustainable emission reductions for approximately 20-25 years. Moreover, these retrofitted units, operate on ultra-low sulfur diesel fuel, will reduce emissions by about 13.7 tons, or 34% over the 15-month grant period. While this is one of the many successes through the EPA's Ports Initiative, the hope is for other essential ports to follow in the footsteps and even achieve greater

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SanDisk's New and Improved Supply Chain

By: Kriti Sinha

SanDisk is a global company that primarily focuses on making electronic storage chips for computing solutions, mobile solutions and consumer electronics. It is because of SanDisk that "data is readily available and reliable even in the most challenging environments" (We are Driving the Future Storage). For more than 25 years, SanDisk has been consistently improving its digital storage with helpful and innovative products. Their flash memory technologies are installed in advanced smartphones, laptops and tablets.

"[JDA planning solutions] helps in basic supply chain processes…. [and in implementing] supply chain initiatives…"

From 2006, SanDisk began using JDA software, a planning solution software used to establish a more successful and responsive supply chain. It is beneficial as it "provides industry leading global supply chain solutions for large and enterprise companies across a wide array of verticals" (JDA software). It helps in basic supply chain processes such as manufacturing planning, retail planning, store operations, inventory, etc. The company implemented multiple supply chain initiatives such as postponement strategy, allocation management and profit optimization.

After using JDA planning solutions, SanDisk was able to significantly improve its supply chain. Through JDA, SanDisk was able to manage complicated demand prioritizations, optimize supply and demand responses, and develop statistical forecasts to help the firm monitor and predict its financial position. The company was also able to form a plan which included "the number of units in each segment, promotional plans, how inventory is structured by channel, and how its planned back to supply and on to the shop floor, ultimately providing real-time visibility across SanDisk's entire organization" (Dixon). Furthermore, the company was able to improve its on-time delivery performance to its customers and was able to deliver its products on time more than 95% of the time, enhancing customer satisfaction (Dixon). This software was also able to increase SanDisk's inventory turns from 3 turns to 8 turns which depicts that inventory was being taken out and stored constantly, which is a good thing. Lastly, SanDisk was able to "enhance decision making as a result of improved plan quality and alignment" (The Adaptive Supply Chain).

Through this software, SanDisk's revenue increased from 2.31 billion in 2006 to 5.56 billion in 2015, which is incredible (Dixon). This JDA software did indeed revolutionize SanDisk and brought this firm to a whole new level. Thus this software had and currently still has a positive and valuable impact on SanDisk.

SanDisk

RUSCA EVENTS

What has RUSCA been up to this past month? The following are events RUSCA has held during this past month of September, as well as those we will intend to host for October. Each information session highlighted the company's internal structure, culture, strategy, philosophy, and last but not least, employment opportunities for our fellow RBS students. Each event concluded with the chance to network with the respective recruiters and representatives.

September Events listed as follows:

9/21/16: RUSCA Kick-Off Event

9/26/16: Diageo Information Session

9/27/16: Intel Information Session

9/28/16: Supply Chain Expo

Upcoming Events for October:

10/4/16: JP Morgan Information Session

10/15/16: Excel Certification Course (1st day)

10/26/16: Guest Lecture - Dr. David Schreck

"Supply Chain in the Changing Health Care Field"

Toys R Us Site Visit: TBD

RUSCA's Mission Statement:

To inspire our RBS students into learning more about Supply Chain Management and its opportunities, as well as to serve as an intermediary organization on behalf of the RBS student and support the student in the pursuit of a successful internship, co-op, or full-time offer, most especially for our Supply Chain majors.

Want to know more and stay up to date with RUSCA events?

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