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Chris Doyle | Editor-in-Chief **Brandon Daley** | Assistant Editor Newsletter Formatted by: **Michelle Fu**

RUSCA and Su

Rutgers University Supply Chain Association



Shaping the world's future Supply Chain leaders

Keeping with the Times

Supply Chain savings fall to the bottom line. Such is the nature of our role in the business that every little advancement, innovation and new technology that can drive greater efficiency and efficacy is seized. Buzzwords such as Blockchains and Predictive Analytics are gaining traction for its potential applications as Preeti Kaur, VP of Business Development at ISM NJ, explains. Meanwhile technology is being further integrated into every step of the supply chain process from procurement to transportation and now with Amazon not only addressing the "last mile," but the "final feet" of a delivery. So with technology constantly evolving, we must constantly evolve and never remain stationary.



RUSCA is now a recognized affiliate of ISM, the largest international professional supply management organization! For RUSCA-specific events, see page 11

> For previous newsletter editions, visit http://rutgersrusca.weebly.com/newsletter.html

Supply Chain Supplements

In Case You Missed It

While Under Armour's first ever quarterly sales decline of 4.5% coincided with the general contraction of the sportswear market, declines were exacerbated due to issues with an ERP system implementation impacting their supply chain.



Under Armour deployed a new SAP SE integrated ERP tool targeting pointof-sale warehouse management, inventory control, merchandising and product allocation systems. The wholesale changes and lack of training of vendors and partners led to the "delay [of] shipments and loss of productivity" according to Patrik Frisk, President and COO of Under Armour. However, operations are expected to improve moving forward.

In their October report, the American Trucking Association reported a 7.4% year-over-year growth in truck tonnage for September, part of a series of indicators showing a general strengthening of the freight hauling market.

ACT Research's for-hire trucking index hit 63 in September (above 50 indicates expansion) while 36,200 Class 8 truck orders were placed in September, growths of 45.2% and 60.4% respectively from the previous year. Indications of expansion seems to be across the board especially during a time when fleet capacity typically loosens up in July and August, "it seems like we're busy from July all the way through December and for returns in January" according to DAT industry analyst, Mark Montague.



Apple's well-documented supply chain delays have resulted in early delivery estimates of five to six weeks for their new flagship product, the iPhone X. Analysts so far have been forgiving in forecasting Apple's full year sales even with these missteps; however, the supply chain delays hint at deeper issues at Apple.



Many of the production bottlenecks can be traced back to Apple's decision to use an Organic Light Emitting Diode Screen (OLED) for this year's iPhone even with the understanding that supply would be limited and that supply would come from an affiliate of their rival, Samsung. OLED, unlike the LCD screen being used in the iPhone 8, has come with its fair share of compatibility issues, most notably with Apple's Touch ID feature.

In his October 17th, 2017 Letter to Shareholders, Jack Ma, founder and Executive Chairman of Alibaba, arguably one of the world's biggest online commerce companies, outlined the vision for the company for the coming decades.

This comes after the announcement of a \$15 billion investment into research and development in their technology labs. In his letter, Ma outlines the 5 new strategies of the future: New Retail, New Finance, New Manufacturing, New Technology and New Energy. And how these elements are critical in alleviating poverty and jumpstarting economic development in rural China - underscoring the necessity for businesses to think beyond making money.



Guest Article: Predictive Analytics "WHY"

BY: PREETI KAUR (VP Business Development ISM-NJ, Rutgers Class of 2007)

Predictive Analytics is primarily used to make predictions about future forecast and patterns derived from historical and transactional data sources. Traditionally, analytical and business intelligence software is utilized in Supply Chain and Operations Management against stagnant data sources. The advent of computing power and more sophisticated technologies has changed the analytics landscape across most industries. Many leading organizations are now leveraging predictive analytic tools to recognize key trends and patterns along the Supply Chain over traditional reporting specially in the area of Supply Chain Risk Management.

Supply Chain is a global phenomenon and organizations must be proactive and innovative enough to predict early on unforeseen events for risk management. Global catastrophes in recent years such as hurricanes in Florida, the floodings in New Orleans and Houston, and tsunamis in Asia have created havoc to supply chains. It is pertinent for organizations to invest in tools that support Predictive Analytics, Artificial Intelligence, and Data Mining in order to better forecast and recognize patterns to take appropriate actions in advance for business continuity.

Predictive Analytics can be used to notify SCM and Operations Management professionals regarding any major potential issues averting future risks. For example, via predictive analytics algorithms, an alert can be sent if any significant changes occur at a supplier, such as a material shortage. Predictive analytics can be used against industry benchmarks to measure supply chain efficiency and performance; in logistics safer routes for transport of goods are planned by applying predictive models against historical data regarding cargo thefts ensuring safety of both goods and drivers.

When planning to implement any analytical system, it is important for the organization to first establish data capture, data quality, and data governance initiatives. Typically, businesses depend on IT functions for any data related issues forgetting in the process that IT is a technical function and data is owned solely by the business. *This distinction must be understood at the beginning of any data related project to achieve success*.

Block Contamination Across the Chain

BY: SOMIK SHAH

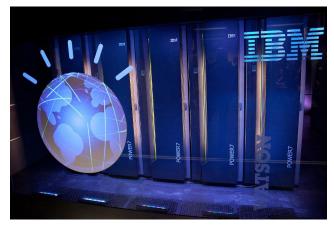
Nestle, Walmart, Tyson and other retailers are all collaborating with IBM to integrate blockchain technology into their global supply chain. Blockchains are a spread out network of computers that maintain digital records of inventories, making a physical ledger obsolete. Furthermore, the data and processes are visible to all parties in the supply chain, provided that they are also using Blockchains. This provides companies the visibility of a product as

'It is pertinent for organizations to invest in tools that support Predictive Analytics, Artificial Intelligence, and Data Mining in order to better forecast and recognize patterns to take appropriate actions in advance for business continuity."

Works Cited:

Browne, Ryan. "IBM Partners with Nestle, Unilever and Other Food Giants to Trace Food Contamination with Blockchain." *CNBC*, CNBC, 4 Oct. 2017. Web. it moves through the supply chain and to the end customer, and more importantly for Nestle, Walmart and Tyson, if and when a food becomes spoiled somewhere along the way. According to the World Health Organization, 1 in 10 people become ill from consuming contaminated food every year, but with blockchains a company can retrieve useful data within three seconds, and that promptness can help mitigate the issue of food contamination in the supply chain (Browne).

Those three seconds go some way to increasing the transparency and accountability within food supply chains. In the past, identifying compromised food could take several weeks at a time, resulting in unhappy customers, lower sales, and potentially severe brand damage before the issues could be addressed. In fact, foodborne maladies' economic impact over the years has ranged from "as low as about \$4.4B per year to as high as \$93.2B (Food Poi-



as high as \$93.28 (Food Poisoning). With blockchains, companies now know that their produce is being properly handled by suppliers and being verified by the U.S. Department of Agriculture and other governing bodies that regulate food requirements and health standards. Constantly checking in with supply chain partners ranging from sourcing to retailing

should stop health fiascos before they even occur and lower the on average, 420,000 people that die each year due to food poisoning (Food Poisoning).

However, even if multinational companies like Walmart or Nestle started using blockchains, it could still take weeks to identify possible defects in food if other supply chain partners were using more archaic methods to keep track of inventory (Food Poisoning). In China, a blockchain test was conducted in which IBM, Walmart and a pork supplier ran a network node between the entities. A node is a connection point that can receive, store and send data and through these nodes, Walmart and their suppliers could pass information about farm origination details, factory processing data and shipping details within a few seconds. The implementation of 10 such network nodes could potentially save billions of dollars in the pork industry (Pork Market). However, without the widespread use of blockchains, these many supply chains would not have a centralized information base and would need to match up different inventory management systems in order to find defects, which could take weeks.

Despite the potential cost savings, incorporating blockchains requires a large initial investment of time and money, in addition to convincing potentially reticent supply chain participants to adopt a new system. Suppliers that use physical ledgers or other obsolete inventory tracking systems would need to be open to revamping their product management processes. Blockchains are like any other technological advance in that they require their users to adopt a new way of thinking. Not to mention, the transparency from sharing data would expose unethical suppliers, so Walmart and other retailers would have to implement quality management initiatives and possibly need "...1 in 10 people become ill from consuming contaminated food every year, but with blockchains a company can retrieve useful data within three seconds, and that promptness can help mitigate the issue of food contamination in the supply chain (Browne)."

Castillo, Michael del. "Walmart, Kroger & Nestle Team with IBM Blockchain to Fight Food Poisoning."*Coin-Desk*,22 Aug. 2017. Web.

Castillo, Michael del. "Walmart Blockchain Pilot Aims to Make China's Pork Market Safer." *CoinDesk*, 20 Oct. 2016. Web. to re-negotiate or void existing supplier contracts. Nevertheless, if the savings projections from the Chinese pork industry are accurate and can be successfully applied elsewhere, incorporating blockchain technology could very well be worth the price.

Driving the Clinically Integrated Healthcare Supply Chain

BY: ADARSH RANGAN

The Healthcare field has historically segregated itself from its buy-side supply chain, procurement and inbound logistics requirements (HISCI). Hospitals currently outsource their needs in procurement to companies known Group Purchasing Organizations (GPO). A GPO is an organization that helps health providers achieve savings and efficiency by leveraging purchasing volume by negotiating discounts with manufacturers and distributors. Leveraging buys from manufacturers is complicated and GPOs help the industry manage that side of things. GPOs have been critical in allowing the healthcare field to focus their financial resources and time to tending to the care of patients. However, with the increasing accessibility of technology, GPOs use may start to fade in favor of more efficient internal tools.

Figuring out how to manage the complicated day-to-day hospital functions along with long-term supply chain functions can only be described as incredibly difficult. Unlike classic retailers or service based businesses, a hospital provides services and products in an incredibly high-strung envi-

ronment, which goes some way in justifying their reliance on GPOs despite the expensive nature of this relationship. GPOs can collect up to 3 percent of the total sales volume in payment, and on large buys this cost can be huge (Becker's). The supply chain and nonlabor costs for hospitals in the nation



amounted to \$74 billion in 2012, meaning GPOs could have collected over \$2 billion from hospitals (Rubenfire). New technology has given rise to Supplier Performance Management (SPM) tools of cloud computing, data integration and logistics transparency that can help the healthcare supply chain achieve the benefits of GPOs at a fraction of the cost and time (Martyn).

SPM can transform the current landscape of the healthcare supply chain. This tool aids in providing information to the user to maintain the best suppliers while eliminating suppliers who fail to address the need (CIPS). By providing visibility about supplier risk and performance, SPM allows organizations to track risk, enact corrective action, and collaborate with suppliers.

Works Cited:

Becker's Hospital Review. "50 Things to Know about the Country's Largest GPOs." *Becker's Hospital Review.* N.p., n.d. Web.

CIPS. "CIPS - Chartered Institute of Procurement & Supply." Supplier Performance Management (SPM) - The Chartered Institute of Procurement and Supply. Chartered Institute of Procurement & Supply, n.d. Web.

HISCI. "A PRIMER ON GROUP PURCHASING ORGANIZA-TIONS Questions and Answers." *HISCI Online*. Health Care Supply Chain Association, n.d. Web.

JAGGAER Staff. "6 Benefits of Supplier Performance Management." *JAGGAER*. N.p., 21 Sept. 2017. Web.

Martyn, Paul. "Driving The Clinically Integrated Healthcare Supply Chain." *Forbes*. Forbes Magazine, 16 Oct. 2017. Web.

Rubenfire, Adam. "100 Top Hospitals: Efficient Purchasing Linked to Higher Performance." 100 Top Hospitals: Efficient Purchasing Linked to Higher Performance -Modern Healthcare Modern Healthcare Business News, Research, Data and Events %]. *Modern Healthcare*, 13 June 2015. Web. Comprehensive data and accessible analysis of suppliers could do wonders for the healthcare field. In fact, one study by The Aberdeen Group found that implementing SPM could improve supply chain performance by nearly 27 percent (JAGGAER). SPM would ultimately allow users to simplify and and utilize their supply chains with greater efficiency and at lower cost.

Serving patients well and at a reasonable cost is critical to health providers. SPM eliminates GPOs from the equation while reducing costs and simplifying the buying and supply chain management process. A lower cost for hospitals means that even more money can be allocated to patients than ever before to the benefit of the entire healthcare industry.

Open Sesame: Amazon Unlocks Your Door

BY: KEVIN RESHAMWALA

Never let strangers come into your house. Except for Amazon delivery workers that is. Jeff Bezos, the billionaire founder of this e-commerce giant, has an interesting proposition for online shoppers: why stop delivery at the doorstep when you can have stuff delivered to inside your house?

Enter Amazon Key, an advanced security system that facilitates indoor deliveries. The concept consists of two interconnected parts: a "smartlock" and an Amazon CloudCam. An Amazon delivery worker arrives with a package and scans its label with a phone to verify the customer's address. The smartlock receives this message and automatically unlocks the door. The moment the door unlocks, the security camera inside the house immediately begins recording the visit. The delivery worker simply walks in, drops the package off, and then exits. The delivery worker then closes the door, taps his phone, and the door relocks. By downloading an app, customers can monitor this entire process by receiving updates, watching the live video, or blocking entry into the house at any time (Stevens).

The Amazon Key is just another addition to the twenty-three year old company's massive e-commerce business. With close to \$136 billion in online sales in 2016, Amazon is the leading e-retailer in the United States. The company has a \$54 billion brand value and more than 310 million customer accounts worldwide (Duncan). You can buy just about anything - from a New York Times Bestseller, to your favorite winter jacket, to a pair of Beats head-



phones. And the company has already begun to install self-service lockers in office buildings and outside supermarkets where customers can fetch their orders (Wingfield). Amazon Key will take this one step further by placing orders inside people's homes in an effort to limit re-deliveries and lower Works Cited:

Armstrong, Paul. "Amazon's Door Opener Isn't What You Need To Be Worried About." Forbes, Forbes Magazine, 26 Oct. 2017. Web.

Duncan, Eric. "Statistics and Facts about Amazon." *Statista*. Web.

Salinas, Sara. "Amazon Key Isn't Any Less Safe than Uber or Airbnb, Tech Investor Calacanis Says." *CNBC*, CNBC, 25 Oct. 2017. Web.

"Could the Amazon Key be a possible signal of society's over-reliance on technology? When was the last time we needed something so badly that we couldn't make any other arrangements (Armstrong)?"

Stevens, Laura. "Amazon's New Plan for Home Deliveries: Hand Over the Keys." *The Wall Street Journal*, Dow Jones & Company, 25 Oct. 2017. Web. Wingfield, Nick. "Amazon's Latest Way Into Your Life Is Through the Front Door." *The New York Times*, The New York Times, 25 Oct. 2017. Web. item theft. Amazon Key does however come with some drawbacks. First, the security system (Smart Lock and CloudCam) is priced at a steep \$250. It is questionable as to how willing customers will be to paying to secure a process many are comfortable with and perceive as safe, when it opens up the possibility of theft and damage within the residence. Second, as the success of the system is entirely mediated by technology, Amazon must actively manage the expectations and fears of customers handing the security of their home to no one identifiable person (Wingfield). Could the Amazon Key be a possible signal of society's over-reliance on technology? When was the last time we needed something so badly that we couldn't make any other arrangements (Armstrong)? Such potential issues and the unknown lie ahead for the Amazon Key for both the customer and Amazon.

Even though this innovation will face its hurdles, the modern consumer has shown the ability to quickly adapt to new technologies. At first, startups like Uber, Lyft, and Airbnb faced tremendous doubt and backlash. The idea of hopping into a stranger's car or allowing a random person to stay in one's house was, at one point, rather dangerous. Slowly but surely, consumers gravitated towards these services and accepted them as a part of daily life (Salinas). Amazon Key can have the same effect if it provides the same type of value. The problem is that everybody needs a ride or place to stay, but not everyone is in dire need of in-home deliveries. In other words, the market outlook for Amazon Key appears to be niche. However, Amazon appears to be using this product and service as a gateway for bigger projects that will transform "last mile" delivery into delivery of the last couple of feet.

Johnson & Johnson



SCM Professional Profiles: Matthew Manfre

BY: KIERAN WILLIAMS

RUSCA had the privilege of talking with Matthew Manfre, Transportation Manager at Johnson & Johnson, to get to know him and learn more about being a Rutgers graduate in the Supply Chain field.

Q: So tell me a bit about yourself!

A: I was born in New Brunswick, NJ and grew up in Milltown. I went to Rutgers, worked at Robert Wood Johnson University Hospital, and I now work at Johnson & Johnson. The first BAND-AID® was invented next door to my grandmother's house in Highland Park. I guess you could call me a Johnson & Johnson baby! My wife and I live in Bridgewater with our 10 week old daughter, Olivia, along with our dog, Sydney, and cat, Bebe. I love college football and of course, Rutgers football. I have season tickets and am a member of the Rutgers Athletics Fan Advisory Board. I enjoy spending time with my daughter and taking care of the house. I grew up in the area so I see my family and friends all the time and couldn't live without them.

Q: What year did you graduate from Rutgers, and with what degree?

A: 2007, Information Technology & Informatics.

Q: So how did you find yourself in Supply Chain Management?

A: I knew nothing about it. I did not have great career direction in college and [had] no mentors. All I knew was that I loved technology. My first job was at an engineering firm providing project management and infrastructure support. I learned a lot, but their business was struggling. I had a friend who worked in a hybrid IT/supply chain role, so my background was a good fit, and getting into J&J was a no brainer.

Q: What roles have you had in Supply Chain?

A: Aside from that first role, I've worked in Supply Chain at J&J. I've worked in many roles, a great benefit of working at such a diverse manufacturer. E-Commerce (Piscataway, NJ), Distribution (Memphis, TN), Customer Solutions (Piscataway, NJ), Global Systems Strategy (Bridgewater, NJ / Latin America / Japan / Canada), Transportation (Skillman, NJ), and [am

now] currently doing a part-time assignment in Consumer Supply Planning (Skillman).

Q: In working in various fields within Supply Chain over the years, what was your favorite role? Why?

A: That is a tough question, because each brought unique learnings, challenges, friends, and fun. If I had to choose, then my current role in Transportation. I have the privilege of managing a large team with colleagues so full of life. I try to coach them, but they always give more back to me and

the company than I can ever hope to give them. In my Global Systems Strategy role, I spent long periods traveling around the world, and that was a once in a lifetime experience that I will always treasure as well (especially Tokyo!).

Q: What would a typical day at Johnson & Johnson look like for you?

I'll describe my entire day, because with a baby and a working spouse, I need to have good routine and discipline to do well at work, but [also] protect my family life. I wake up around 6:00am, potentially feed the baby, feed the animals, and walk the dog. Around 6:30-7:00, I check my e-mail and make some coffee. I head to the office around 7:45 and get in around 8:15. My calendar is usually full of meetings, but I use any free time to catch up on deliverables or collaborate with my team and other teams face-to-face. My meetings range from staff meetings, one-on-one meetings, system project updates, supplier performance reviews, new product introduction planning, production and product availability/vulnerability reporting, and many other topics. I try very hard to leave the office each day by 5:30 so I can be home by 6:00 and spend time with my family. Once the baby goes to sleep around 9:00, I spend time catching up on work I couldn't get to during the day, and cleaning up the house – my "honey-do list"! I try to be in bed by midnight at the latest.

Q: What's your favorite part of the job?

A: Hands down the people management. Every day I continue to be impressed with how dedicated and hard-working this young millennial generation is (I'm a millennial myself, but on the older side).

"Our employees are our greatest asset, and we believe that by investing in their health, we are investing in the success of our business."

- Alex Gorsky, Chairman and CEO of Johnson & Johnson

Q: What's the least favorite part of your job?

A: The bureaucracy of a company our size can be challenging at times. Things often do not move as fast as I would like. But as a great leader of my organization once said, "Deal with it!"

Q: As a whole, how do you enjoy working at Johnson & Johnson?

A: I thoroughly enjoy it. The company has a consistent sense of purpose stemming from our Credo, ensuring our focus is continually on patients and the well-being of our consumers worldwide. At the same time, we can pursue opportunities across different businesses and cultures during our career. And frankly, our financial and strategic management has been outstanding over the years. Culture and success start at the top.

Q: Have you ever thought of a different career after choosing Supply Chain?

I thought about going into consulting, but between the time I started and finished graduate school, my life had changed and I wanted to be home with my family. That's a great job when you first graduate from Rutgers to build your resume and skillset.

A: If you could give any advice to a graduating Supply Chain Management major what would it be?

"Run to the fires". What I mean by that is, wherever you end up working, gravitate to the difficult projects where help is needed and where your peers are less willing to go to create variance between you and them. As far as finding your job, focus on companies that are willing to invest significantly in you. Like compounding interest on a financial investment, the skills you build and experience you gain early will pay off more significantly than what you can pick up later.

Matt explains that the most rewarding thing his career at Johnson and Johnson has provided him was his family, as he met his wife through the company. RUSCA wants to thank Matt for taking the time out of his day to take part in this interview and wish him and his family a happy holiday season!

Works Cited:

24/7 Staff. "Anheuser-Busch & Convoy to Drive Efficiencies in Supply Chain and Advance the Trucking Industry." Anheuser-Busch & Convoy to Drive Efficiencies in Supply Chain and Advance the Trucking Industry - Supply Chain 24/7. Web.

"Why Strategic Partnerships Are Important to Your Supply Chain." Smartrend Manufacturing-Group, 23 Nov. 2016. Web.

Anheuser-Busch and Convoy Driving Trucking Forward

BY: MIKE MCGUIRE

The supply chain industry is adapting everyday to overcome obstacles and be as productive as possible. This leads to many companies trying to attain a competitive advantage over competitors to either make their product unique, easier to make, or possess better quality. One strategy that supply chain managers practice to facilitate their advantages is through Supplier Relationship Management (SRM). SRM is improving performance and strategically planning for all interactions with third party organizations that supply

goods or services to an organization in order to maximize the value and output. Anheuser-Busch, a leading U.S. brewery, has teamed up with Convoy, a leader in tech-enabled trucking services, to build a network of trucks that will ship products more efficiently all while enhancing the wellbeing of their truck drivers.

Strategic partnership needs a strong rela-



tionship grounded in communication of the respective goals, needs, quality and expected performance in order to produce the desired results and profits for both sides. This is what makes strategic partnerships so valuable and so coveted in the supply chain. For Anheuser-Busch, they wanted a quicker, safer, and more productive trucking system. Convoy and their network of technology connected carriers across the United States could help achieve that goal by performing the work in matching price and freight size of available trucks in the area. Convoy also provides quick, automated payment and real time freight tracking via their data management platform. The business insights provided on trucking capacities, pricing and visibility regarding Anheuser-Busch's operations all help "drive increased wages for truck drivers and reduce empty miles on the road" (24/7 Staff).

While the benefits of strategic partnerships, such as that between Anheuser-Busch and Convoy is very evident, many business continue to work with partners they have worked with for some time without the angle of building a strategic partnership. Such traditional partnership do not look to continuously improve on essential business metrics such as delivery times and production schedules. Stagnant relationships also do not look to implement newer or updated technologies, which leaves them behind competition. Without the long term focus of a strategic partnership and focusing too heavily on the short-term deliverables and one's own business can lead to to poor outcomes due to the higher risks of missing something in today's interconnected world. A strategic partnership has the goals well known, and keeps everyone on the same page with communication. They also help each other out to reaching heights one cannot reach by doing business themselves.

This is why the supply chain industry strongly values teamwork and encourages companies to work together. "Strategic partnerships involve more than just efforts to drive costs for all. They promote a greater understanding between the parties, which results in a more efficient and effective supply chain" (Strategic Partnerships). The right blend of communication, shared visions and data insight yields the successes and profits at the end of the day. However, the hard part is taking that first step in building those strong longterm partnerships as Anheuser-Busch and Convoy have done.



"Strategic partnership needs a strong relationship grounded in communication of the respective goals, needs, quality and expected performance in order to produce the desired results and profits for both sides."







General Interest Meetings start biweekly at 9:45pm at Livingston Campus - Tillett Hall 103A

Events for November:

11/16: Tableau Workshop

7:30pm-9:30pm, RBS Room 1095

Register here!

11/27: General Interest Meeting: Guest Lecture

Prof. Kevin Lyons on Sustainability and Green Purchasing

Rutgers University Supply Chain Association



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 intermedi- ary 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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