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## WHAT'S NEW THIS MONTH

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RUTGERS UNIVERSITY BUSINESS SCHOOL

#### ABOUT THE RUSCA NEWSLETTER

We are a team of writers and editors who write content based on current news and events happening in the supply chain world.

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# BLACK FRIDAY AND THE CHANGING NATURE OF E-COMMERCE

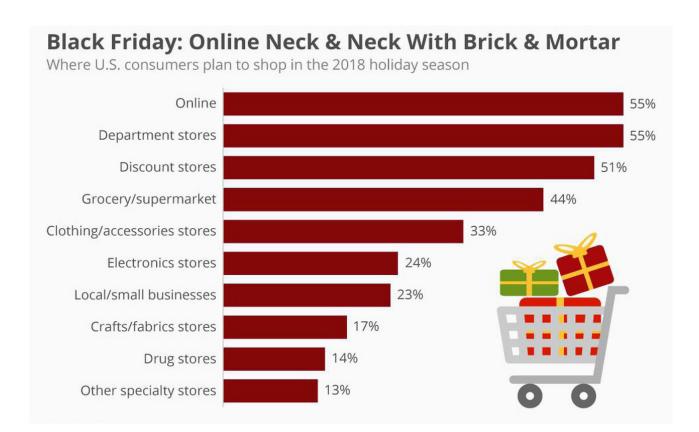
BY JONATHAN DIPIPPA AND SOMIK SHAH

Typically the busiest shopping period of the year, the Thanksgiving weekend saw a decrease in overall shopping in 2018. The National Retail Foundation reported that the number of people who shopped in stores and online between Thanksgiving and Cyber Monday dropped by 5 percent from 2017. That said, overall sales for the 2018 holiday season were projected to rise 4.8 percent compared to 2017. In fact, sales rose 5.1 percent, leading to the highest spending level in six years ("U.S. MarketFlash: Retail Holiday Performance Unwrapped"). Most retailers did not increase the level of discounts they offered for their products (compared to the previous year), and many opted to extend their promotions over several days rather than restrict them solely to Black Friday or Cyber Monday (Nassauer). Evidently, big one-day sales are becoming less critical for the success of retailers during the holiday season. This change in strategy has undoubtedly had an effect on the retail supply chain.

As a result of this shift in holiday season retail promotions, parcel carriers have had an easier time meeting consumer demand. Due to earlier and longer promotional periods, carriers such as UPS, FedEx, and the U.S. Postal Service did not face the bottlenecks and system strains that were common on Black Friday and Cyber Monday in prior years. Therefore, although e-commerce sales grew to record levels this past holiday season, the parcel carriers were able to efficiently process incoming orders over multiple-day periods rather than face







sharp spikes in demand. In a week that included the single-largest online shopping day ever recorded in the United States (November 26, 2018), UPS, FedEx, and The U.S. Postal Service all maintained ontime package delivery rates of around 98 percent (Smith). This strong Thanksgiving week performance was an early indicator of what would become a lucrative and stable holiday season for retailers and their distribution networks.

It is worth noting that the recent upswing in the economy contributed to the 5.1 percent increase in sales from last year to this year. Consumer Confidence (survey data that measures consumer sentiment on economic conditions) went up from 2016 to 2018. Another trend is that online sales went up 15 percent during the first 3 quarters of 2018, which helps to explain why the overcrowding common on Black Friday lessened significantly (Ali). In fact, online sales grew by 19 percent, from \$18.9 billion in 2017 to \$22.55 billion in 2018 during the period between Thanksgiving Day and Cyber Monday. This was no doubt aided by the increased length of time retailers ran promotional deals, with week-long Black Friday deals becoming commonplace. The growing trend towards e-commerce can also be shown by Amazon Prime Day, in which Amazon generated \$4.19 billion in sales, exceeding its own Thanksgiving Day figure of \$3.05 billion. Amazon Prime Day was started in 2015 as an annual summer sales event, yet in only 3 years it has become a bigger selling day for the company than Thanksgiving Day and the Sunday after Thanksgiving (Ali). However, Amazon still sold far less on Prime Day than it did on Black Friday, likely because the retailer's holiday does not yet have the same level of cultural significance.

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Going forward, it is likely that the number of people who shop on Black Friday will continue to decrease, as noted previously by the 5 percent drop in shoppers. This can be attributed to rising income inequality that continues to get worse and worse every year. For example, from 1992 to 2002, the 400 largest incomes doubled despite aftershocks from the dotcom boom and other financial market shakedowns. On the other hand, those that do shop will buy more than in previous years, because over the last 30 years the rich have consistently got richer while the poor have been getting poorer ("Income Inequality"). Lastly, it is a possibility that other major online retailers like eBay will come up with their own promotional event similar to Amazon Prime Day, and that they may end up selling more than they do during the Thanksgiving holiday.

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## HONESTY IS THE BEST POLICY: THE ETHICS OF SUPPLY CHAINS

By Brandon Daley, Mike McGuire, & Kevin Reshamwala

"Ethics is knowing the difference between what you have a right to do and what is right to do". Years later, Supreme Court Justice Potter Stewart's words still ring true, especially in the world of business. Nowadays, the idea of ethics in business has shined a light on the "triple bottom line": people, planet, and profit. Given the massive globalization in the last twenty years, corporations are not only required to make money, but are also responsible for the social and environmental impact of their businesses. But how exactly can companies improve their ethical standards? Please direct your attention to the supply chain.

#### **Before the Supply Chain Starts**

## 1. Hire a corporate social responsibility (CSR) manager in your supply chain department.

Most corporations give lip service to ethics and corporate social responsibility, but when it comes to using their dollars, the story is very different. Companies that are serious about CSR should

devote financial resources to creating a CSR department or hiring a CSR manager. The prevailing opinion amongst corporate employees is that CSR is a politically correct, superficial public relations initiative just to make people feel good. In addition, supply chains for multi-national companies are so deep and complex that employees are simply unaware of certain ethical violations. Therefore, it is important to allow a CSR manager to facilitate "effective education of key executives, managers, and procurement employees," regarding problems such as "forced labor and human trafficking and how it manifests within supply chains" (Blanche). In other words, informed employees are better equipped to identify these issues in the supply chain, which can help companies protect their reputation and bottomline.

### 2. Implement blockchain technology in your supply chain.

Blockchain has become a buzzword in supply chain circles due to its efficient and secure nature.

However, blockchain technology can be the foundation of an ethical, socially responsible supply chain as well. For instance, with the help of blockchain, each product that a company produces can be assigned a unique identifier and then tracked at every step in the supply chain. Thus, we can understand the "provenance" of a product: where it came from, how it was sourced, what materials were used, and who produced it. A solid blockchain infrastructure compels companies to be transparent about their product provenance and allows consumers to hold them accountable for malpractice in their supply chains (Vandevelde). As a result, the negative social and environmental impact within a supply chain can be drastically reduced using blockchain.

#### **Procurement/Sourcing**

#### 3. Update and review supplier contracts.

When it comes to becoming an ethically run supply chain, a major area to focus on is procurement and sourcing. To accomplish this, you must evaluate the suppliers that you are working with. A strong relationship with the suppliers that you are working with creates a visibility that allows the supply chain to be closely monitored. This relationship will ensures that all business is being done ethically, which is extremely important. A company will look bad if they are working with a supplier that is unethical. For example this happened to Nike when they were found using child labor. In an article Nike and Child Labour, Mallen Baker indicates that in the early 90s, "Nike became defined by the term 'sweatshop labour'. It was simply one of the principal things for which it became famous." This happened because Nike lacked the visibility to their factories, which was a failure to being ethical. Nike still has the reputation for these actions.

"A solid blockchain infrastructure compels companies to be transparent about their product provenance and allows consumers to hold them accountable for malpractice in their supply chains"



Updating and reviewing supplier contracts is necessary to assure that your partners are staying ethical and meeting their requirements. Companies should constantly push their suppliers to receive certificates and reward them for their work. You should also hold the right to audit suppliers and have a clause in the contract that allows you to back out when business is not being done right. "Both internal and external codes need to be up to date and contain clear statements regarding the commitment to human rights, ethical labor practices, compliance with labor laws, and express prohibition of human trafficking, forced labor, and human rights abuses." (Blanche).

#### 4. Replicate Nike's Materials Sustainability Index.

A few years back, Nike was under fire for its use of sweatshop labor and harmful environmental practices. In response, the footwear company developed its "Materials Sustainability Index" -- a six-year project creating a massive library containing specific details about every one of the 77,000 materials that it uses (Vandevelde). Thus, consumers can ensure that the products that they buy are ethically sourced. Other companies looking to improve the transparency of their supply chains should definitely explore this initiative. Overall, understanding that the business will be exposed to the public eye will push companies to make socially responsible decisions.

#### 5. Invest in biodegradable packaging.

Biodegradable packaging is an investment that your company should be investing in. In today's world, many consumers are very worried about the environmental impact of the products they buy. 75% of consumers make an effort to buy "green" products. Biodegradable packaging could immensely help the environment by removing waste such as plastics and other trash that fills up landfills.

#### What Consumers Can Do

#### 6. Put your money where your mouth is.

In general, many consumers verbally support ethical and responsible supply chains. They would like for their products to be properly sourced and created. However, studies indicate that we only show

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"In today's world, many consumers are very worried about the environmental impact of the products they buy"

support with our words, not our wallet. Often times, when consumers go to the store, they will based their purchases solely on brand or price, not ethics. Therefore, the public needs to start taking action by supporting ethical supply chains with their dollar.



### IS AUTONOMOUS TRUCKING A HIT OR A MISS?

By Kiley Williams and Ameer Ali

#### Introduction

Another technological innovation is stirring up excitement in the supply chain industry - autonomous trucks! The start of autonomous technology began in 2004 when the U.S. Department of Defense's research arm held a competition that challenged individuals to create self-navigating vehicles that could travel 150 miles of desert road. Even though all the contestants failed, this competition encouraged the potential that fueled the creation of vehicles seen today including Tesla's introduction of hands-free driving on highways due to the autopilot feature. Today, companies such as Waymo, Tesla, GM, and Uber, are currently working on the research and development of self-driving trucks that could change the way of logistics. However, how will this impact the trucking industry, the safety of the drivers and civilians, and will it break the bank when it comes to implementation? These are all factors to consider when introducing new technology into businesses. So is autonomous trucking the next big step for supply chains?



#### **The Pros**

With long-haul drives, the average truck driver needs to take multiple breaks to rest, fuel up, and recharge to avoid falling asleep at the wheel. With self-driving trucks, there will be fewer breaks which means longer distances are traveled in a 24 hour period. The increase in speed will increase the speed of delivery which will impact ordering patterns, lead times, inventory levels, and safety stock (Potts 3).

With an increase in delivery speed and a decrease in transportation cost comes a decrease in the cost of goods sold. Cutting costs is the prime objective for an effective supply chain ("How Drivers and Autonomous Trucks Could Work Together to Move Freight" [Transport Topics], 2018). Overall, autonomous trucks would improve efficiency and speed throughout the supply chain.

One of the main concerns when it comes to technology that has the capabilities of replacing workers is the effect it has on the job market. The current business model proposed for autonomous trucks is using the self- driving technology for the long-haul highway drives and trading off a shipment to local truck drivers for local deliveries. With this business model, there will be an increase in demand for local truck drivers ( "Supply Chain News: Will or Will not Autonomous Trucks Eliminate Huge Numbers of Truck Driver Jobs?" [SC Digest],2018). The demand for local truck drivers will also increase because Uber Technologies predicts that a decrease in shipping and transportations cost will decrease the cost of goods and increase the demand from consumers which would up the freight volume and contribute to more jobs.

#### The Cons

With new technologies come new responsibilities. There are several safety issues that arise with the increase in usage of autonomous trucks. One of these issues includes the laws and regulations of the trucks. Who would be at fault if the autonomous truck was to get into a car accident with a regular vehicle? One could blame the software developer or the manufacturer of the truck itself, but it is unclear who would truly be responsible for the malfunction (Webster). Currently, the regulations for autonomous trucks vary from state to state but the trucks will need to be regulated nationally if they are to run efficiently.

Another issue regarding the safety of autonomous trucks is the fact that, since there is no real driver, the trucks lose the ability to adapt to driving conditions. These trucks are unable to see changes in road conditions or

weather conditions which would prevent them from being able to run properly. Autonomous trucks do not know to drive around road work, pull out of the way of emergency vehicles, or drive in adverse conditions. This could lead to more serious accidents on the road and prevent deliveries from being made on time.

Hacking is another issue that could very likely be seen in the future of autonomous trucks (Webster). Although some trucks have a single operator to maintain the vehicle, there is still the possibility of individuals hacking into the software of the truck itself. Hackers will have the ability to disrupt the software in the trucks and override the controls. This could lead to a loss of product in the shipment itself, a greater loss of money, and potential harm to anyone around the truck.

The use of autonomous trucks will also lead to a major loss of jobs. Many truckers have been in the industry their entire lives and will be replaced by these new technologies. According to the American Trucking Association, there are around 3.5 million professional truck drivers in America (LTX). What this number does not include are the individuals indirectly related to the freight industry: gas stations, motels, diners, and more. All of these businesses will directly be affected by autonomous trucks. All of these truck drivers, business owners, and their families will feel the economic impact of these automating the freight industry.

#### **Verdict**

Overall, autonomous trucking has proved itself to be an exciting innovation. These trucks will cut costs for the producer and will be much more efficient versus their traditional counterpart while increasing the demand for local drivers. On the other hand, autonomous trucks will become more of a safety issue on the roads and have the potential for loss of cargo. The trucks will also create a large loss of jobs and will impact every business, directly and indirectly, in the freight industry. Taking in account the safety of other drivers on the road, autonomous trucking is not feasible in every situation in the long run, however, with time and innovation, autonomous trucking has huge potential for easing the workload on truck drivers and increasing efficiency.

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> "Autonomous trucking has huge potential for easing the workload on truck drivers and increasing efficiency"





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We are a student organization dedicated to inspiring our RBS students to learn 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 sutdent in the pursuit of a successful intership, co-op, or full time offer, espeically for our Supply Chain majors.

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