

March 5, 2018

TO: Members, Subcommittee on Digital Commerce and Consumer Protection

FROM: Committee Majority Staff

RE: Hearing entitled “Review of Emerging Tech’s Impact on Retail Operations and Logistics”

I. INTRODUCTION

The Subcommittee on Digital Commerce and Consumer Protection will hold a hearing on Wednesday, March 7, 2018, at 10:00 a.m. in 2123 Rayburn House Office Building. The hearing is entitled “Review of Emerging Tech’s Impact on Retail Operations and Logistics.”

II. WITNESSES

- David Borris, Founder, Hel’s Kitchen;
- Jonathan Johnson, Member, Board of Directors, Overstock.com, and President, Medici Ventures;
- Dan Sanker, Founder, President and Chief Executive Officer, Casestack, Inc.; and,
- Rob Taylor, Chief Executive Officer, Convey.

III. BACKGROUND

The consumer-retailer relationship has been transformed in recent years due to the popularity and adoption of e-commerce, new methods of payment, and convenient options for delivery. The Internet has made shopping a seamless, global experience. U.S. consumers can buy almost any product from anywhere in the world, beyond State lines and international borders. They are using the Web, smartphones, and apps to research products and services, compare prices, make purchases online, locate stores to buy in-person, and track deliveries. What motivates U.S. consumers today will have a major impact on the future of retail, e-commerce and supply chain logistics.

A. Retail Activity and Sales

Retail is generally the process for getting goods and services to shoppers and consumers, typically through physical establishments that operate as fixed places of businesses in order for

the general public to buy.¹ According to industry data, retail is one of the nation's largest private sector employer, supporting one in four U.S. jobs – 42 million working Americans and contributing \$2.6 trillion to annual GDP.² 98.6 percent of all retail businesses employ fewer than 50 employees.³ Moreover, retail supports \$1.2 trillion of GDP in other U.S. industries, and \$1.58 trillion in wages and benefits (16 percent of the nation's total wages). Recent retail sales data from the U.S. Department of Commerce saw a 0.4 percent increase from November to December 2017 at \$495.4 billion along with a 5.4 percent annual gain.⁴ From October through December 2017, retail sales were up 5.5 percent annually, with total 2017 retail sales up 4.2 percent compared to 2016, following annual increases of 3.2 percent in 2016, 2.6 percent in 2015 and 4.3 percent in 2014.⁵ According to industry analysis, the November-December 2017 sales growth marked the strongest gains since the Great Recession and the largest year-over-year gain since 2010.⁶

B. E-Commerce Activity and Sales

Whereas retail is generally characterized by brick-and-mortar operations to conduct business transactions, e-commerce⁷ – or electronic commerce – is the facilitation or transaction of business and commerce on the Internet. For purposes of this hearing, it is specifically the buying and selling of goods and services online. Sellers in the e-commerce world establish online storefronts that are the virtual equivalent of brick-and-mortar; the primary difference, however, between physical and virtual storefronts is any shopper – domestic or international – around the globe can see into the window of a virtual storefront. Shoppers can browse and purchase via Web, mobile and apps. Increasingly, foreign consumers are making purchases from international retailers or marketplaces outside of their home market in a phenomenon loosely

¹ Retail trade is generally defined as establishments that are engaged in the sale of merchandise for personal or household consumption and in the rendering of services that are incidental to the sale of the merchandise. Additional characteristics of retail establishments are they usually operate at fixed places of business, are engaged in activities to attract the general public to buy, and buy or receive and sell merchandise. <https://www.census.gov/svsd/www/artsdef.html>

² <https://nrf.com/who-we-are/retail-means-jobs>; <https://www.rila.org/Public-Policy/agenda/Documents/2018%20RILA%20Public%20Policy%20Agenda.pdf>;

³ PricewaterhouseCoopers LLP, “*The Economic Impact of the U.S. Retail Industry*,” (October 2014), at <https://nrf.com/sites/default/files/Documents/The%20Economic%20Impact%20of%20the%20US%20Retail%20Industry%20REV.pdf>

⁴ www.logisticsmgmt.com/article/retail_sales_finish_2017_with_momentum_says_commerce_and_nrf

⁵ *Id.*; <https://www.wsj.com/articles/u-s-retail-sales-increased-0-4-in-december-1515763942>

⁶ <https://nrf.com/media/press-releases/holiday-retail-sales-increased-55-percent-2017-exceeding-nrf-forecast-and>

⁷ In the first U.S. government estimate of retail e-commerce sales in 1999, the Commerce Department described e-commerce as “sales of goods and services over the Internet, an extranet, Electronic Data Exchange (EDI), or other online system. Payment may or may not be made online.” At that time, Commerce reported retail e-commerce sales for 4Q1999 was \$5.3 billion, and those sales accounted for 0.64 percent of \$821.2 billion in total retail sales for the same quarter.

<https://www.census.gov/mrts/www/data/pdf/99Q4.pdf>

known as “cross-border retail.”⁸ The end result: total e-commerce sales for 2017 were estimated at \$453.5 billion, an increase of 16 percent from 2016.⁹ E-commerce sales in 2017 accounted for 8.9 percent of total retail sales, a 0.9 percent increase in e-commerce sales in 2016.¹⁰ By way of comparison, in 1999, the first estimate of e-commerce sales was \$5.3 million (1999 Q4).

Domestically, Amazon is responsible for a significant share of e-commerce sales, with other corporate giants like Walmart, eBay, Apple, just to name a few. According to government data, e-commerce sales have been growing nine times faster than traditional in-store sales since 1998.¹¹ In 2015, 87 percent of total e-commerce sales were attributed to electronic shopping and mail-order houses, which includes both Internet-only businesses and traditional stores' online divisions.¹² The data indicates that non-store retailers, or businesses with little to no physical store establishments, accounted for 65 percent, or \$192.1 billion, of these sales, while the online and catalog divisions of traditional retailers accounted for the remaining \$102.7 billion.¹³

C. Omnichannel Activity and Sales

As noted above, online sales growth has outpaced retail sales growth for several years back to 1998-1999. According to various online retail consultancies, the continued increase in online sales “isn’t attributed solely to swelling online buyer penetration rates in the US or pure play online retailers selling more. Retailer investment in omnichannel initiatives is also responsible for ecommerce sales growth.”¹⁴ By owning and operating both online and physical stores – dubbed “omnichannel” retail or “e-tail” – traditional retail is endeavoring to better serve consumers. For example, larger retailer Walmart acquired the online retailer Jet.com in 2016 to bolster its online presence and revenues. The Walmart-Jet.com “acquisition will build on and complement the significant foundation already in place to serve customers across the Walmart app, site and stores and position the company for even faster e-commerce growth in the future by expanding customer reach and adding new capabilities,” according to the company’s press release.¹⁵ PetSmart acquired Chewy.com in April 2017 to “provide the most convenient customer experience to a wider base of pet parents across every channel.”¹⁶ Government data indicates

⁸ Janine Nothlichs, “*Global Cross-Border Retail Will Triple Over The Next Six Years*,” (April 10, 2017), <https://cross-border-magazine.com/global-cross-border-retail-will-triple-over-the-next-six-years/>

⁹ https://www.census.gov/retail/mrts/www/data/pdf/ec_current.pdf

¹⁰ *Id.*

¹¹ U.S. Department of Commerce, “*New Insights on Retail E-Commerce*,” (July 26, 2017), <https://www.commerce.gov/news/fact-sheets/2017/07/new-insights-retail-e-commerce>

¹² *Id.*

¹³ *Id.*

¹⁴ <https://retail.emarketer.com/article/omnichannel-investments-paying-off/5a8f092febd4000744ae4133?ecid=NL1014>

¹⁵ Press Release, “*Walmart Agrees to Acquire Jet.com, One of the Fastest Growing e-Commerce Companies in the U.S.*,” (August 8, 2016), <https://news.walmart.com/2016/08/08/walmart-agrees-to-acquire-jetcom-one-of-the-fastest-growing-e-commerce-companies-in-the-us>

¹⁶ Press Release, “*PetSmart Announces Agreement to Acquire Chewy, A Leading Online Pet Retailer*,” (April 18, 2017), <https://www.businesswire.com/news/home/20170418005823/en/PetSmart-Announces-Agreement-Acquire-Chewy-Leading-Online>

when e-commerce sales from electronic shopping and mail-order houses are attributed to the primary business activity of their brick-and-mortar stores, e-commerce sales accounted for 18 percent of total sales from electronics and appliance stores, 10 percent from miscellaneous store retailers, and 10 percent from clothing and clothing accessories stores.¹⁷

At the same time, non-store retailers, or businesses with little to no physical store establishments, are increasingly looking to build out physical retail presences, often for the purpose of fulfillment, pick-up and delivery. In June 2017, Amazon announced it would acquire Whole Foods Market.¹⁸ In the six months since the Amazon-Whole Foods merger, Amazon has begun experimenting in areas such as grocery home delivery, Amazon order pickups, and sales of Amazon-branded consumer electronic devices.¹⁹ Subsequently, the company has announced plans for “Amazon Go,” an automated convenience store where consumers are able to purchase products without a cashier or check-out line, and greater physical retail ambitions for Amazon Books and Amazon Plants to name a few.

D. Supply Chain and Delivery

As online shopping – from both e-commerce and omnichannel – continues to gain popularity with U.S. and global consumers,²⁰ the growth in parcel volumes will accelerate to impact supply chain and delivery (particularly for residential last-mile), and emerging innovations, such as drones, parcel locker boxes, scheduled delivery, alternative delivery and pick-up options, will influence the future investment into supply chain and customer service.

Motivating factors for today’s consumers include shipping costs, speed of delivery and ease of returns. Having a free shipping option is one of the top considerations for Americans when checking out online, 63 percent of consumers shared that shipping costs are their least favorite part of online shopping.²¹ A majority of both women and men had abandoned an online purchase if included shipping costs made the total purchase cost more than expected.²² Consumers are gravitating to free shipping, faster shipping (including if available same-day delivery), and free returns.

According to parcel delivery service UPS, 64 percent of online consumers expect orders placed by 5 p.m. to qualify for next-day shipping and 61 percent expect orders placed by noon to

¹⁷ U.S. Department of Commerce, “*New Insights on Retail E-Commerce*,” (July 26, 2017), <https://www.commerce.gov/news/fact-sheets/2017/07/new-insights-retail-e-commerce>

¹⁸ Press Release, “*Amazon to Acquire Whole Foods Market*,” (June 16, 2017), <http://phx.corporate-ir.net/phoenix.zhtml?c=176060&p=irol-newsArticle&ID=2281414>

¹⁹ Nick Wingfield, “*Bit by Bit, Whole Foods Gets an Amazon Touch*,” New York Times (March 1, 2018), www.nytimes.com/2018/03/01/technology/bit-by-bit-whole-foods-gets-an-amazon-touch.html

²⁰ According to industry data 80 percent of Americans shop online at least monthly; 30 percent of Americans shop online at least weekly; 5 percent of Americans shop online daily. <https://www.bigcommerce.com/blog/ecommerce-trends/#stats7>

²¹ *Id.*

²² *Id.*

qualify for same-day shipping.²³ On average, online consumers would send over a third of their packages to an alternate delivery location, with urban online consumers having packages delivered (38 percent of their orders) to these locations the most. This preference has grown year-over-year since 2014, increasing from 26 percent in 2014 to 37 percent in 2017.²⁴

Industry players likely understand these consumer expectations and the fundamental challenges they present. Such demands will likely impose or exacerbate several challenges relating to delivery workforce,²⁵ air and ground freight capacity,²⁶ barriers to entry into last-mile delivery, and deploying digital and advanced technology solutions for more efficient delivery tracking and status, customer communications and notification, and intelligence on rates, routes and capacities.²⁷ Finally, one overlooked issue of the growth of e-commerce sales means the volume of returns will grow as well. UPS reported that shoppers returned more than 1 million packages to retailers every day in December through December 27, 2017.²⁸ Data is not currently available about the percentage of shoppers or retailers who discard or donate returned products purchased. Accordingly, supply chain will need to focus not only easy returns but reverse supply chain considerations of returned products.²⁹

IV. ISSUES

This hearing will examine how the e-commerce industry has changed the face of retail, with impacts on supply chain operations, delivery, and consumer expectations. The hearing will provide for an in-depth discussion of the opportunities and challenges presented by the ever-evolving e-commerce world.

The following issues may be examined at the hearing:

²³ Executive Summary, “*UPS Pulse of the Online Shopper: A Customer Experience Study*,” (June 2017), https://pressroom.ups.com/mobile0c9a66/assets/pdf/pressroom/white%20paper/UPS_2017_POTOS_media%20executive%20summary_FINAL.pdf

²⁴ *Id.*

²⁵ Jennifer Smith, “*A Shortage of Trucks Is Forcing Companies to Cut Shipments or Pay Up*,” Wall Street Journal (January 25, 2018), <https://www.wsj.com/articles/a-shortage-of-trucks-is-forcing-companies-to-cut-shipments-or-pay-up-1516789800>

²⁶ Doug Cameron & Jennifer Smith, “*Why Airfreight Traffic Is Up: Dog Food and Semiconductors Are Vying for Space*,” Wall Street Journal (January 10, 2018), <https://www.wsj.com/articles/why-airfreight-traffic-is-up-dog-food-and-semiconductors-are-vying-for-space-1515493800>

²⁷ Manuel Baumi & Ludwig Hausmann, “*Air-freight forwarders move forward into a digital future*,” McKinsey & Company (February 2018), <https://www.mckinsey.com/industries/travel-transport-and-logistics/our-insights/air-freight-forwarders-move-forward-into-a-digital-future>

²⁸ James Melton, “*E-retailers can expect a sharply higher volume of holiday returns*,” Digital Commerce 360, (January 2, 2018), <https://www.digitalcommerce360.com/2018/01/02/online-retailers-returns-onslaught-ecommerce-volume/>

²⁹ Erica E. Phillips, “*What Stores Do With \$90 Billion in Merchandise Returns*,” Wall Street Journal (February 16, 2018), <https://www.wsj.com/articles/what-stores-do-with-90-billion-in-merchandise-returns-1518777000>

- How are consumers empowered and innovation is enhanced by the evolution of different purchase and delivery methods by retailers? What are the challenges for consumers and industry in this environment?
- What are the emerging solutions that will shape the future of supply chain and delivery, and how can shippers determine if they should play a role in their operations?
- What challenges relating to supply chain and delivery are anticipated in the future (12 months, 24 months, 5 years)?

V. STAFF CONTACTS

If you have any questions regarding this hearing, please contact Melissa Froelich or Paul Jackson of the Committee staff at (202) 225-2927.