



OFFICE OF INSPECTOR GENERAL

UNITED STATES POSTAL SERVICE

Letter Carriers: Modern Day Milkmen?

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OFFICE OF INSPECTOR GENERAL

UNITED STATES POSTAL SERVICE

Executive Summary

Because of its extensive fleet, last mile advantage, and reputation for reliability, the Postal Service could be well-placed to play a key role in the grocery delivery market.

In August 2014, the Postal Service started a trial with AmazonFresh to test a grocery delivery partnership in San Francisco — a move that shows a worthwhile effort to explore new revenue opportunities in the promising grocery delivery market.

Groceries are still a relatively small segment of the larger e-commerce business, but there are some indicators that it might become a bigger and more competitive market in the near future as people grow more comfortable with purchasing food items online. The Postal Service's extensive fleet, last-mile service to every household, and reputation for reliability may set the stage for it to become a viable player in this market.

To gain additional insights on opportunities in the grocery delivery market, we examined the service offerings of a variety of providers and foreign posts. Although providers are still experimenting with different business models, two main strategic options seem to emerge.

- Establish partnerships to offer last-mile service to national and regional grocers that have not entered online shopping, as well as small e-stores, local producers, and the fast-growing number of food subscription services.
- Develop an online platform and offer more services in related areas, which may include an online shopping mall directly connecting consumers and producers or local farmers, payments processing, warehousing, picking, and packaging.

Highlights

The Postal Service and AmazonFresh are jointly experimenting with grocery delivery — a market set to grow in the near future.

Because of its extensive fleet, last mile advantage, and reputation for reliability, the Postal Service could be well-placed to play a key role in this space.

There may be opportunities to collaborate with other retailers and producers, create an online shopping mall, or capture different areas of the value chain.

The Postal Service needs to continue to experiment now with different strategies if it wants to be an effective player in this growing market, as the number of new entrants is quickly growing.

If the Postal Service decides to explore any of these opportunities, it is essential to enter the market soon before more players crowd this space and make entry more difficult. Critical to the Postal Service's success in this market will be its ability to provide a level of service in line with customer expectations, industry standards, and technological advances.

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Observations

By 2023, online grocery shopping will represent between 11 percent and 17 percent of grocery retail sales.

Online Grocery Shopping Is Set to Grow Fast

In the United States, online grocery shopping is still a niche market, but one with significant growth potential. Sales were only \$6.5 billion in 2013 — slightly over 1 percent of the U.S. retail grocery market, valued at \$531 billion.¹ However, by 2023, online grocery orders will represent between 11 percent and 17 percent of the market.²

A growing numbers of players are quickly entering this space, many of which are startups funded by venture capital investments. Figure 1 demonstrates the influx of venture capital in food delivery services and how it exponentially grew in just the last year.³ As an established delivery entity with many advantages, the Postal Service is well positioned to explore this promising market to increase revenue. The Postal Service's trial with AmazonFresh in San Francisco is a good start, and it could continue building upon this experience to expand its role in digital grocery shopping.

Main Growth Drivers

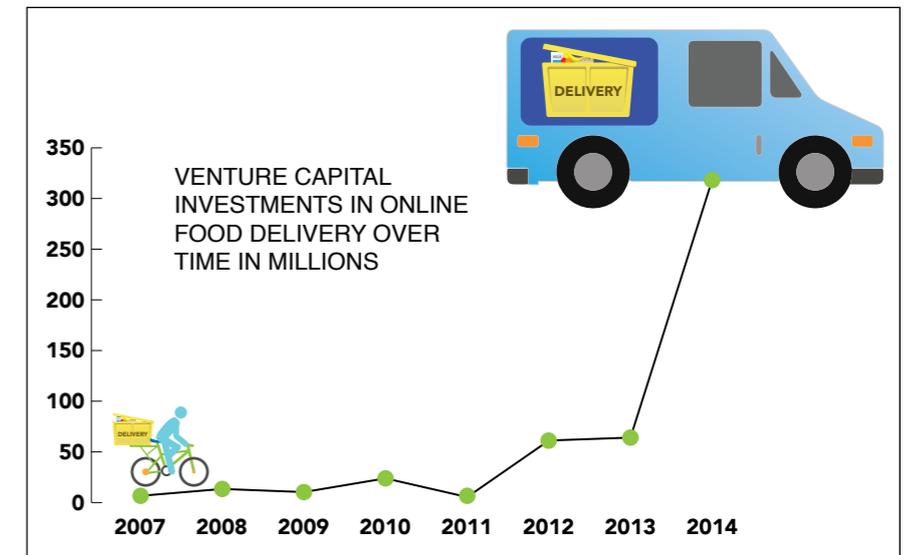
As part of the general e-commerce trend, growth in online grocery shopping is primarily due to changes in consumer habits generated by the spread of broadband facilitating access to the Internet on multiple devices.⁴ More and more people choose to manage their daily tasks online and are increasing the frequency to which they make online purchases. More than half of Americans already participate in e-commerce, and the number of those ordering online will continue to increase in the near future.⁵

Additional factors driving growth include

Consumer needs and demographics. Certain consumer demographics, such as young families and the elderly, are starting to realize the benefits of online grocery shopping. Working parents — mothers, in particular — have less time to grocery shop.⁶ For example, Swiss Post, which has been successful in grocery delivery, has pinpointed working mothers as a large segment of their primary customer base.⁷

In the long term, the aging population may also create more opportunities for growth, as the percentage of the population over 65 increases.⁸ More Americans may become less able to leave their homes as a larger part of the population loses mobility.

Figure 1: Investments in Online Food Delivery have Tripled from 2013-2014



1 Bill Briggs, "Delivery Cost Hold Back Occasional Online Grocery Shoppers, Study Finds," *Internet Retailer*, March 14, 2014, <https://www.internetretailer.com/2014/03/14/delivery-cost-holds-back-occasional-online-grocery-shoppers>.
2 "Consumer Trends: Online Grocery Sales Will Near \$100B by 2019," *Packaged Facts*, October 30, 2014, <http://www.foodmanufacturing.com/news/2014/10/consumer-trends-online-grocery-sales-will-near-100b-2019>; and Jacqueline Renfrow, "Online Grocery Sales to Quadruple by 2023," *Fierce Retail*, October 6, 2014, <http://www.fierceretail.com/story/online-grocery-sales-quadruple-2023/2014-10-06>.
3 Garrett Black, "What Else Is for Dinner? The Future of Food," *PitchBook*, August 14, 2004, <http://blog.pitchbook.com/what-else-is-for-dinner-the-future-of-food/>.
4 "Growth in Online Shopping Spend and Frequency," *Ecommerce Facts*, March 24, 2014, <http://www.e-commercefacts.com/news/2014/03/e-shoppers/index.xml>.
5 "Growth in Online Shopping Spend and Frequency," *Ecommerce Facts*, March 24, 2014, <http://www.e-commercefacts.com/news/2014/03/e-shoppers/index.xml>.
6 Elizabeth Kolbert, "No Time: How did we get so busy?" *The New Yorker*, May 26, 2014, <http://www.newyorker.com/magazine/2014/05/26/no-time> and Vanessa Loder, "Why American Mothers Have Less Leisure Time and Find Ourselves Overwhelmed and Exhausted," *Huffington Post*, July 29, 2014, http://www.huffingtonpost.com/vanessa-loder/why-american-mothers-have_b_5630825.html.
7 Experience Online, *LeShop: A Success Story in the Swiss E-Commerce*, http://www.experience-online.ch/cases/experience20.nsf/volltext/leshop2009_en.
8 Administration on Aging, *Aging Statistics*, http://www.aoa.acl.gov/Aging_Statistics/index.aspx.

At the other end, millennials expect the convenience of online activities in every aspect of their lives. Food delivery startups currently focus primarily on millennials.⁹

Consumers have demonstrated they are willing to pay for convenience. Current providers of grocery delivery services charge convenience fees that range from \$3.99 to \$15.99 or subscription fees from \$99 to \$299.

Technology. The availability of new GPS-based technologies that allow for real-time route optimization and communication with customers via smartphones is favoring the development of a collaborative economy in areas such as grocery delivery.¹⁰ New and small startups are using the Uber model to create small fleets of individuals delivering groceries with their own vehicles,¹¹ which allows for swift entry to market at low cost. Enhanced software capabilities along with the avoidance of warehousing and

vehicle costs are making grocery delivery more likely to be a profitable business.¹² These coordination technologies leveraging advanced algorithms have enabled the creation of new business models matching the needs of people willing to pay for avoiding trips to the grocery store with the needs of individuals with time and in search of additional income.

Figure 2: Reasons for the Rise of Grocery Delivery



Consumer Habits: More people manage daily tasks online, taking advantage of the Internet's immediacy and convenience.

Consumer Demographics: Young families, the elderly and millennials are the main segments targeted as they recognize the convenience and time saved by grocery shopping online.

Technology: Innovations such as GPS-based technologies make it cheaper, faster, and easier to enter the market.

As consumers' expectations continue to change and new technologies emerge, the Postal Service should not overlook the potential in the grocery delivery market. Newcomers as well as established grocers are quickly realizing this.

Many Players Are Realizing the Potential of this Growth

The number of players in the online grocery delivery space is increasing, as new and existing companies are harnessing technological advancements and appealing to changing consumer demographics. In the last couple of years, Wal-Mart, Google, Whole Foods, and startups like Instacart and Postmates have entered the market. Venture capital is flooding into online food and beverage startups.¹³ Right now, the online grocery market is composed of just a few big players and a long tail of very small providers.¹⁴

9 Stephanie Denning, "What's the Future of the Food Industry?" *Forbes*, September 10, 2014, <http://www.forbes.com/sites/stevedenning/2014/09/10/whats-the-future-of-the-food-industry/>.
 10 Claire Cain Miller, "Delivery Start-Ups are Back Like It's 1999," *The New York Times*, August 19, 2014, http://www.nytimes.com/2014/08/24/magazine/delivery-start-ups-are-back-like-its-1999.html?action=click&pgtype=Homepage&version=Mothers-Visible&module=inside-nyt-region®ion=inside-nyt-region&WT.nav=inside-nyt-region&_r=3.
 11 Jill Krasny, "Meet the Companies that Are Reinventing Same-Day Delivery," *Inc. Magazine*, March 2014, <http://www.inc.com/magazine/201403/jill-krasny/same-day-delivery-startups.html> and Farhad Manjoo, "Grocery Deliveries in Sharing Economy," *The New York Times*, May 21, 2014, http://www.nytimes.com/2014/05/22/technology/personaltech/online-grocery-start-up-takes-page-from-sharing-services.html?_r=1.
 12 Stacy Jones, "How Instacart Plans to Win the Same-Day Delivery Game," *Fast Company*, October 15, 2013, <http://www.fastcompany.com/3019936/whos-next/how-instacart-plans-to-win-the-same-day-delivery-game> and Farhad Manjoo.
 13 Lora Kolodny, "Will Investors Still Back Food Startups As Competition Heats Up?" *Wall Street Journal*, July 25, 2014, <http://blogs.wsj.com/venturecapital/2014/07/25/will-investors-still-back-food-startups-as-competition-heats-up/>.
 14 Hartman Group, *The Online Grocery Opportunity*, June 26, 2012, <http://www.hartman-group.com/downloads/the-online-grocery-opportunity-2012.pdf>, p. 3.

The Postal Service states it can offer “a nationwide solution offering a trained workforce and the trust and reliability of the Postal Service brand.”

Entrants include national and regional players in the supermarket industry looking for new channels to engage consumers, platforms like Amazon expanding the scope of products sold, delivery firms looking for new customers, and startups taking advantage of new software and technology to reduce delivery costs. These players are mostly targeting highly populated areas in large cities; achieving efficient economies of density will be essential to make grocery delivery profitable. As the market matures and demand grows, competition will increase and market entry will become more difficult.¹⁵ Now is a good time for the Postal Service to consider how to engage players in this space, further leveraging its delivery platform.¹⁶

The Postal Service and Grocery Delivery: Opportunities and Challenges

The growth of grocery shopping in the digital space could bring huge potential to delivery service providers because of how frequently people buy groceries. Right now, the average American makes 15.6 e-commerce purchases per year in 2014 but visits a grocery store almost two times per week.¹⁷ According to a recent post by Food Manufacturing, the market could develop exponentially if more retailers took advantage of the Postal Service’s reach and if AmazonFresh spreads to more cities.¹⁸ The chance to capitalize on this opportunity and generate new revenues will depend on the Postal Service’s ability to leverage the advantages it holds and address the challenges of entering this market.

Advantages

■ **Extensive fleet.** The cost of investing in a fleet together with the investment in technology poses a barrier to entry for some potential players. Big retailers like Albertsons and Publix abandoned their own home-delivery programs for in-store pick up because of the efficiency of using their existing structures.¹⁹ Others, like Safeway and Costco, have partnered with startups like Instacart to offer grocery delivery at a lower price without investing in additional infrastructure.²⁰ But the Postal Service already has a large fleet and is in a good position to consider new vehicle solutions for delivering groceries. It has started testing alternative vehicles as part of its plan for updating and replacing its current Long Life Vehicles (LLVs).²¹ Even if the Postal Service does not invest in refrigerated vehicles, cold storage packaging could be used to keep food fresh. For example, PostNL of the Netherlands opted for an insulated delivery box after collaborating with a university, packaging companies, consultants, and customers to find the most efficient solution.²² In addition, new Internet of Things technologies could allow equipping boxes or vehicles with sensors to remotely monitor and control temperatures as well as provide real-time information on quality.²³

15 Jeffrey Cohen, “Online Grocery Sales in the US,” IBISWorld Industry Report OD5085, December 2013, page 9.

16 In the PRC’s authorization of the market test, it stated that “the Postal Service seeks to test and develop a long-term and scalable solution to expand the operation of Customized Delivery.” See Postal Regulatory Commission, *Order Authorizing Customized Delivery Market Test*, Docket No. MT2014-1, October, 23, 2014, <http://www.prc.gov/Docs/90/90532/Order%20No.%202224.pdf>, page 3.

17 “Growth in Online Shopping Spend and Frequency,” *Ecommerce Facts*, March 24, 2014, <http://www.e-commercefacts.com/news/2014/03/e-shoppers/index.xml> and Statista, “Consumers’ Weekly Grocery Shopping Trips in the United States from 2006 to 2014,” <http://www.statista.com/statistics/251728/weekly-number-of-us-grocery-shopping-trips-per-household/>.

18 “Consumer Trends: Online Grocery Sales Will Near \$100B by 2019” and Statista.

19 Mirko Warschun, “A Fresh Look at Online Grocery,” *AT Kearney*, March 2012, http://www.atkearney.com/paper/-/asset_publisher/dVxv4Hz2h8bS/content/a-fresh-look-at-online-grocery/10192.

20 Stacy Jones, “How Instacart Plans to Win the Same-Day Delivery Game,” *Fast Company*, October 15, 2013, <http://www.fastcompany.com/3019936/whos-next/how-instacart-plans-to-win-the-same-day-delivery-game> and Marcus Wohlsen, “The Next Big Thing You Missed: Online Grocery Shopping is Back, and This Time It’ll Work,” *Wired*, February 4, 2014, <http://www.wired.com/2014/02/next-big-thing-missed-future-groceries-really-online/>.

21 Anne Steele, “Post Service Seeks to Retire the Old Mail Truck,” *Wall Street Journal*, February 12, 2015, <http://www.wsj.com/articles/postal-service-seeks-to-retire-the-old-mail-truck-1423786375>.

22 “PostNL trials new delivery service for online refrigerated goods,” *Postal Technology International*, June 2014, <http://www.postaltechnologyinternational.com/news.php?NewsID=59463>.

23 “The Internet of Things concept involves connecting machines, facilities, fleets, networks, and even people to sensors and controls; feeding sensor data into advanced analytics applications and predictive algorithms; automating and improving the maintenance and operation of machines and entire systems; and even enhancing human health.” This all happens without requiring human-to-human or human-to-computer interaction. See Vikram Mahidhar and David Schatsky, “The Internet of Things,” *Deloitte University Press*, September 4, 2013, <http://dupress.com/articles/the-internet-of-things/?id=us:el:dc:dup501:awa:cons>.

The Postal Service would be operating in a competitive environment — one where competitors offer same day delivery, customized delivery times, and direct contact with the driver.

- **Last-mile advantage.** The Postal Service covers the last-mile more extensively, consistently, and in some cases inexpensively than other players. It continues to improve its IT infrastructure necessary to manage delivery more and more dynamically to optimize efficiency in servicing these extensive routes.²⁴ For example, it currently uses dynamic routing to deliver AmazonFresh items. While startups like Instacart are using advanced software to provide last-mile service at a low delivery cost, consumers have to pay a mark-up on items that can be as high as 20 percent.²⁵
- **Reputation for reliability.** Handling customers' food requires a high level of trust for both safety and expected freshness. Startups like Instacart and Postmates provide a service where customers are greeted at their doors by individuals in their own cars who have accepted an incoming alert to their smart phone to fulfill specific grocery orders.²⁶ The Postal Service would be able to provide grocery delivery through official and well-identified letter carriers who visit households every day to deliver mail and have access to secure apartment buildings and housing complexes. For this reason, the Postal Service is trusted to deliver grocery items to residents before sunrise.

Challenges

- **Competition.** The Postal Service would be operating in an environment with startups such as Instacart that are offering 2-hour delivery windows for orders made on the same day, as well as customized delivery times, and direct contact between the driver and the customer.²⁷ The Postal Service would have to be ready to compete with the level of immediacy and control that customers can get with other delivery services in a highly competitive market, one where new players are constantly experimenting with solutions and adapting to changes in consumers' expectations and technology advancements. The Postal Service will also be competing with different costing models, especially when it comes to labor costs. Although it has some flexibility in using non-career employees, startups like Instacart are able to pay drivers through commissions.²⁸ Ensuring an adequate level of delivery density will also be essential in the long-term and will determine where offering such services makes business sense.
- **IT and fleet updates.** The Postal Service will have to work to make its last-mile service even more efficient through improved dynamic routing to establish the best routes in real-time with smarter data and to provide real-time communication with vendors and customers. It may need to invest in Internet of Things technology to maintain and monitor temperature control.
- **Quality assurance.** Grocery delivery involves the risk of ensuring the quality of a potentially high volume of perishable items. Delivery services must also meet customers' expectations of what their food should look like. Most customers are happy with the way they buy groceries now; therefore, there is little room for error in successfully delivering fresh and satisfactory orders.²⁹

24 Scot Atkins, "Enhancing Postal Efficiency," SGI, 2014, http://www.sgi.com/pdfs/intel_usps.pdf and Harry Whitehouse, "The Postal Service Emerges as Shipping Powerhouse for Small Businesses," *Entrepreneur*, January 22, 2015, <http://www.entrepreneur.com/article/242046>.

25 Jonathan Mayer, "Is Instacart Deceptive?" *Web Policy*, July 8, 2014, <http://webpolicy.org/2014/07/08/instacart/> and Farhad Manjoo, "Grocery Deliveries in Sharing Economy," *Wall Street Journal*, May 21, 2014, <http://www.nytimes.com/2014/05/22/technology/personaltech/online-grocery-start-up-takes-page-from-sharing-services.html>.

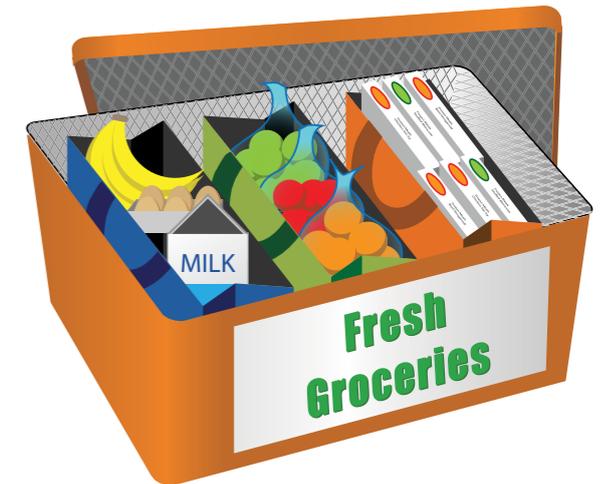
26 <https://www.instacart.com/faq#personal-shoppers> and <https://postmates.com/help>.

27 <https://www.instacart.com/faq#about-instacart>.

28 Nina Meijers, "How Instacart is Growing Grocery Delivery by 15-20% a Week," *Food Tech Connect*, April 2, 2014, <http://www.foodtechconnect.com/2014/04/02/how-instacart-is-growing-its-grocery-delivery-by-15-20-percent-a-week/>.

29 Mirko Warschun, "A Fresh Look at Online Grocery," *AT&Kearney*, March 2012, http://www.atkearney.com/paper/-/asset_publisher/dVxv4Hz2h8bS/content/a-fresh-look-at-online-grocery/10192.

Figure 3: Many Grocery Delivery Services Use Insulated Boxes, Eliminating the Need for Refrigerated Vehicles



The Postal Service asked the PRC to allow for a \$50 million rather than the usual \$10 million market test limit for each year of the Amazon trial.

Current Efforts to Enter the Grocery Delivery Market: U.S. Postal Service Customized Delivery Trial

The trial, referred to by the Postal Service as “Customized Delivery,” started in August of last year in 38 San Francisco area ZIP codes in partnership with Amazon. Originally planned to be a 60-day trial, the Postal Regulatory Commission has recently granted the request of the Postal Service to extend it for 2 more years. Meanwhile, the Postal Service is in the process of expanding the pilot to three new test markets in California—San Diego, Los Angeles, and Santa Ana.³⁰

The process is quite simple. AmazonFresh drops insulated tote bags of grocery orders to the Postal Service’s distribution centers, where they are loaded on postal vehicles and delivered between 3 a.m. and 7 a.m. They are labeled with a QR code that the carrier scans with a smart device to load delivery data; the tote bags can be tracked until being dropped off.³¹

The Postal Service has stated that the test is likely to “benefit the public, meet an expected demand, and contribute to the Postal Service’s financial stability by generating package deliveries.”³² It mainly views the partnership as the beginning of an opportunity to “garner profitable revenue” by meeting a market need that it believes is emerging rapidly, as outlined in its notice to the Postal Regulatory Commission (PRC).³³ Although financial details are not publically available, the Postal Service asked in a notice to the PRC that the \$10 million cap to its market test be removed — an indication of the financial promise of this endeavor.³⁴ In a recent interview with the USPS Office of Inspector General, Postal Service officials say the test is going well so far, and they are looking to expand the service to new ZIP codes.

Considering that the trial is currently being conducted in the San Francisco area, and given the growing number of players in this space, the Postal Service could examine additional options to fully capitalize on the grocery delivery market.³⁵

Additional Opportunities

To gain additional insights on opportunities in the grocery delivery market, we examined the service offering of a variety of providers and foreign posts. Although they are still experimenting with different business models, two main strategic options seem to emerge. Some have focused on the last mile, providing only delivery services for grocers, producers, and e-commerce firms. Others have expanded along the e-grocery shopping value chain to areas such as warehousing, payments processing, and providing an online platform for producers. The following sections will describe some opportunities that the Postal Service could consider as it evaluates its role in grocery delivery.

Strengthening the Customized Delivery Service

If the market test for customized delivery service continues to be successful, and the Postal Service continues to build on it by expanding its service areas, it could also offer its last-mile service to big brick-and-mortar retailers, e-commerce firms, and food subscription services.

30 U.S. Postal Service, “Operations Update,” MTAC Meeting presentation February 2015, David Williams, COO, https://ribbs.usps.gov/mtac/documents/tech_guides/2015/presentations/opensessions/, slide 25.

31 PRC document, page 2 and Brian Sheehan, “USPS Delivering Groceries for Amazon in San Francisco,” *Postal News*, September 4, 2014, <http://postalnews.com/blog/2014/09/04/usps-delivering-groceries-for-amazon-in-san-francisco/>.

32 PRC, page 17.

33 See Postal Regulatory Commission, *Notice and Order Concerning Market Test of Experimental Product Customized Delivery*, Docket No. MT2014-1, September 25, 2014, <http://www.prc.gov/docs/90/90402/Order%20No.%202197.pdf>, page 2.

34 Postal Regulatory Commission, *Order Authorizing Customized Delivery Market Test*, Docket No. MT2014-1, October, 23, 2014, <http://www.prc.gov/Docs/90/90532/Order%20No.%202224.pdf>, page 17.

35 In addition AmazonFresh is currently only available in a few cities, making up less than 1 percent of the market. Jeffrey Cohen, “Online Grocery Sales in the US,” IBISWorld Industry Report OD5085, December 2013.

Grocery stores, e-stores, and producers. National and regional supermarkets that have not entered the online shopping market as well as smaller e-stores and producers could save on logistics costs by outsourcing last-mile delivery to the Postal Service. There are also startups in this space looking for last mile delivery partners. Chicory, for example, places a “get ingredients” button on recipe websites and then arranges for the delivery of those items through a provider like Peapod.³⁶ Foreign posts such as Swiss Post, Post Denmark, Post NL, and InPost have found these partnerships to be successful and a safe way to enter the market. Swiss Post delivers for [LeShop](#), the largest and most successful e-commerce supplier in the supermarket segment. It warehoused and commissioned orders in early years, but logistics were too complex to manage.³⁷ Currently, its distribution centers receive LeShop’s pre-packaged and labeled orders in cool bags and deep-freeze boxes where the last mile delivery is carried out within 3 hours. With more than 12,000 products and delivery coverage that serves 90 percent of the population, the partnership between Swiss Post and LeShop offers more than any other competitor.³⁸

Figure 4: Recurring food deliveries offer a wide range of possibilities in partnerships.



Similarly, Post Denmark has partnered with [Irma.dk](#) to offer its inventory beyond Copenhagen. [Irma.dk](#) is one of the oldest grocery stores in Denmark that began grocery delivery to Copenhagen’s metropolitan area. The deal with Post Denmark will allow it to expand its service after seeing an 80 percent increase in sales and also create an “ideal partnership” for the Post, which can offer reliable distribution through its letter carriers.³⁹ In Poland, InPost has seen a need in delivering for small e-stores that do not compete in the same market as big retailers but need a delivery solution. InPost has chosen to enter grocery delivery with this segment instead of large chains.⁴⁰

Subscription food services. Home-delivered food subscription services offer another opportunity for new partnerships. Similar to online grocery shopping, these services are appealing to consumers who are increasingly shopping online and desire convenience. Besides avoiding frequent trips to the grocery store, customers also get back the time that planning and preparing take. Because of demand, the number of providers in this space is growing. These services are gaining the attention of venture capital funds, new companies are entering the market, and more software developers are creating subscription commerce platforms to run at low cost.⁴¹ Blue Apron, a growing startup in this market that received an additional \$50 million in funding from GrubHub in 2014, went from delivering 100,000 meal kits in 2013 to 600,000 earlier in 2014.⁴² Another food subscription service — Nature Box — shipped 50,000 boxes in 2011 and increased that number to 1 million by 2014.⁴³ New entrants are also trying to carve out their own piece of the diet food market — a market valued at over \$800 million in 2012.⁴⁴ Traditional diet food delivery services such as NutriSystem and Jenny Craig will be competing with meal delivery startups such as Hello Fresh, Freshology, and Z.E.N. Foods as this space continues to attract investments.

³⁶ Issie Lapowsky, “Online Recipes Will Soon Have a Button that Sends You the Ingredients,” *Wired*, October 3, 2014, <http://www.wired.com/2014/10/chicory/>.

³⁷ Experience Online.

³⁸ Ibid.

³⁹ “Post Danmark hails “huge potential” of grocery delivery business,” *Post & Parcel*, August 6, 2014, <http://postandparcel.info/62179/news/companies/post-danmark-hails-huge-potential-of-grocery-delivery-business/>.

⁴⁰ Jacek Ciesnowski, “InPost will deliver groceries,” *WBJ*, June, 25, 2014, <http://wbj.pl/inpost-will-delivery-groceries/>.

⁴¹ “Subscription Commerce Model: Advantages, Key Drivers and Trends,” *Subscription Commerce Insider*, <http://subscriptioncommerceinsider.com/subscription-commerce-model/>.

⁴² Tom Ryan, “Are DIY Meal Kits a Threat to Grocer?” *Retail Wire*, May 14, 2014, <http://www.retailwire.com/discussion/17520/are-diy-meal-kits-a-threat-to-grocery>.

⁴³ “NatureBox Shows Why VCs Are Rushing to Back Food-Delivery Companies,” *Strictly VC*, May 30, 2014, <http://www.strictlyvc.com/2014/05/30/naturebox-shows-vcs-rushing-back-food-delivery-companies/>.

⁴⁴ “Press Release: U.S. Diet Food Delivery Market Worth \$869 Million,” *Marketdata Enterprises, Inc.*, July 3, 2013, <http://www.marketdataenterprises.com/wp-content/uploads/2014/01/Diet%20Food%20Home%20Delivery%202013%20PR.pdf>.

An online shop offered by the Postal Service would allow it to leverage its local reach by connecting farmers and small producers with communities.

For companies providing food and delivery services, subscription-based models offer recurring revenue and predictability in volume.⁴⁵ Recurring food deliveries offer a wide range of possibilities in partnerships — pet food subscriptions, diet food delivery services, ready-to-cook meals, restaurant-inspired meals already prepared, and meal planning services that provide all the ingredients. Right now, almost all of these food subscription companies use UPS or FedEx, with Blue Apron using several couriers including the Postal Service.⁴⁶ But, these types of businesses are not new to the Postal Service, which maintains partnerships in other types of subscription deliveries.

Expanding Along the E-Grocery Shopping Value Chain

In some cases, grocery delivery companies and foreign posts have developed their own online shopping malls, onestop shops for consumers to order from large or small grocery retailers nationwide as well as local farmers and producers who want a way to process payments and shipping at affordable costs. Beyond managing the order, payment, and delivery process, some offer additional services such as picking up, packaging, and warehousing. The Postal Service already operates a highly visible and well-known website — one with 3.4 million visits per day — and offers an app that has been downloaded 1.7 million times.⁴⁷

An online shop offered by the Postal Service may be a way for it to leverage its local reach by connecting farmers and small producers with the community and by providing a delivery platform for farm cooperatives. Alternative ways of shopping for food, such as through farmers' markets and Community Supported Agriculture (CSA) programs, have increased 60 percent since 2002, and the organic food market has seen a 10 percent increase year over year since 2012.⁴⁸ Consumers rank locally grown food as their second priority after price, and the number of farmers markets have almost doubled from 2006 to 2013.⁴⁹ A virtual farmers market would give consumers one platform to find and purchase local products. For example, Good Eggs is appealing to today's increasingly health-conscious shoppers who value fresh and locally produced options. The startup provides an online platform for local farms to sell their products directly to shoppers in Brooklyn, San Francisco, and New Orleans. They facilitate payment and delivery.⁵⁰ Farmers benefit from the time and money saved from bringing their items to the markets and from outsourcing delivery and ordering. Most struggle with distribution and a lack of marketing infrastructure needed to reach customers. A virtual market allows farmers to access a wider audience and boosts sales and would benefit the local economy.⁵¹

Both Foreign Posts and U.S. Companies Can Provide Examples of Successful Platforms

Bpost. The Belgian post offers an online shopping mall, accepts payments, and delivers items within a window selected by customers at the same time they receive their mail.⁵² It has a dynamic digital platform that makes the online shopping experience engaging.

45 "Subscription Commerce Model: Advantages, Key Drivers and Trends."

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Table 1: A Comparison of Grocery Delivery Providers' Offerings along the Value Chain

	Connects Directly to Producers	Ordering & Payment	Fulfillment & Packing	Warehousing & Distribution	Last Mile Delivery
Amazon	✓	✓	✓	✓	✓
Peapod		✓	✓	✓	✓
Fresh Direct	✓	✓	✓	✓	✓
Good Eggs	✓	✓	✓		✓
Instacart		✓	✓		✓
Bpost		✓	✓	✓	✓
Swiss Post					✓
Deutsche Post DHL		✓	✓	✓	✓
Post Danmark					✓
InPost					✓
PostNL					✓
USPS					✓

Source: OIG Analysis.

model via Instacart shoppers who hand-pick and then deliver the orders in their own vehicles. It charges low delivery fees because the only infrastructure or costs incurred is from software. It takes the picking and delivery work away from its partnering stores, but without capital expenses on vehicles or warehouses. Instacart's revenue grew tenfold in 2014 and plans to continue to collaborate with as many retailers as possible. It recently raised over \$220 million in a new tranche of capital funding at a valuation of \$2 billion.⁵⁶

FreshDirect. Similar to AmazonFresh, they offer services that cover the whole value chain, eliminating retailers altogether. They provide a platform for producers to sell their items directly to the consumer and are disrupting the traditional supermarket model. So far, they attract a niche market of customers who like feeling more directly linked to where their food comes from and only operate in a handful of cities; however, they are the second largest player in the market.⁵⁷

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Deutsche Post DHL. It now owns 90% of online superstore Allyouneed and took over the ordering, shipping, and packaging of items. It is working on building a logistics network for grocery delivery for roll out across Germany in 2016.⁵³

Peapod. U.S.-based Peapod, the first successful grocery deliverer, makes up the largest share of the U.S. grocery delivery market at 8.7 percent.⁵⁴ Through its own platform, Peapod manages the warehousing, packing, ordering, payment, and shipping for a few big retailers such as Giant.⁵⁵

Instacart. Instacart is a grocery delivery startup out of San Francisco that allows customers to order from various stores through its website or app. Orders are fulfilled with an Uber-like

Good Eggs. Good Eggs also provides a platform for producers to sell directly to the consumer; however, they exclusively offer groceries from *local* producers. The company describes itself as “farmers market meets online grocery.”⁵⁸ They, too, are leveraging software that makes it easier for local farmers to reach their communities. Farmigo, Relay Foods, and Greenling are among others in this space.

Conclusion

The recent market test with Amazon indicates that the Postal Service recognizes the potential for the grocery delivery market to increase its package volume and revenue. If the market test continues to be successful, the Postal Service could examine additional partnerships and other potential ways to capitalize on the evolving trend towards grocery delivery. Whether it becomes a partner with more retailers or develops its own shopping platform, establishing itself in the market before more competitors crowd this space and make entry difficult will be essential. Finally, critical to the Postal Service’s success in this market will be its ability to provide a level of service in line with customer expectations, industry standards, and technological advances.

⁵⁸ Good Eggs, Inc., 2015, <https://www.goodeggs.com/welcome>.

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