The Global Logistics Revolution: A Pivotal Moment for the Postal Service

June 3, 2013
The Global Logistics Revolution: A Pivotal Moment for the Postal Service

A confluence of forces is revolutionizing the global logistics market, altering hundreds of years of traditional commerce and resulting in major implications for postal operators. We call this rapidly changing environment the Global Logistics Revolution. It is fundamentally changing how, when, and where goods are produced, purchased, and delivered, moving power from manufacturers and retailers to consumers.

Forces and Trends Fueling the Global Logistics Revolution

There are three major developed forces behind these dramatic changes. First, physical location and national borders have become less important as globalization changes how, when, and where goods are produced and sold. Second, the digital revolution has spurred technological advancements that make communications, transactions, and product development continuously faster and easier than previously imaginable. Finally, manufacturing costs continue to decrease while some key inputs to transportation and logistics costs are increasing. Already, these forces are converging and building pressure to increase speed and squeeze more costs out of the supply chain.

In addition, there are a number of emerging trends that may alter the global supply chain in uncertain ways. As such, the Global Logistics Revolution remains highly volatile and has not yet settled into equilibrium. For example, one trend reshaping the

EXECUTIVE SUMMARY

The eruption of the Global Logistics Revolution is fundamentally changing how, when, and where things are produced and delivered, giving more power to consumers.

In today’s increasingly globally connected world, consumers expect speed, omnichannel access, and expanded logistics services.

Some foreign posts are better serving their customers and earning an increasing portion of their total revenues by providing an array of logistics services.

The Postal Service is well positioned to move into the large and fast-growing value-added logistics market.

The Postal Service risks losing volume in the expedited and small package market if it fails to at least keep up with evolving customer expectations for improved and expanded logistics services.
landscape is the rise of mobile commerce. Consumers now use smart mobile devices to make purchases and arrange delivery on the go, at the expense of traditional retail and PC-based commerce. In addition, mobile commerce has fundamentally changed what many people think of as a “store” — stores are no longer just something you find at the mall or your home computer. Mobile technology makes “e-tailing” ubiquitous, and a single shopping experience can now occur across many channels. In response, retailers are creating “omnichannel” or seamless shopping experiences across physical and digital destinations.

Another emerging trend is that major urban areas are starting to connect to and mutually reinforce a global transportation supergrid that may one day link together big, international megacities that will act as logistics hubs. But this threatens to leave behind disadvantaged urban communities, rural areas, and other places off the grid. Without crucial last-mile links, some people may not connect to the supergrid, creating a new society made up of “haves” and “have-nots.”

Both manufacturing and distribution are evolving in ways that could lead to more localized production. For example, some manufacturing jobs are returning to the United States not only because of a shrinking cost gap, but also so production can be closer to end customers and research and development centers. Furthermore, emerging technologies like 3-D printing are starting to disrupt traditional supply chain structures in some industries, by bringing small-scale product manufacturing and shipments down to the most local level. These changes could result in an increase in parcel shipments of raw materials and individual finished goods.

In response to these forces and trends, logistics and delivery firms are adapting to the changing environment by expanding their service offerings from basic transportation of goods to additional, value-added services. Examples of these value-added services include microwarehousing, order picking, assembly, and comprehensive returns management. Manufacturers are increasingly outsourcing many key activities to third-party logistics providers (3PLs).

**Implications for the Postal Service**

The Global Logistics Revolution has clear implications for the U.S. Postal Service. By offering value-added logistics services and partnering with existing logistics firms, the Postal Service could both better meet citizens’ needs and help position U.S. commerce for the future, while also providing a new revenue stream. Enhanced logistics services could support the Postal Service’s core products by providing a more comprehensive range of options and services. Most importantly, failure to at least keep pace in this area could have long-term negative impacts on the Postal Service’s expedited and small package volume.

Some world posts have already built a strong presence in the logistics market by purchasing or partnering with existing logistics firms or by developing their own capabilities internally. These services have not only helped them meet customers’ changing needs, but also provided growing revenue streams that offset declines in traditional mail volume. World posts have extensive last-mile experience and
established infrastructure in areas other providers are less interested in serving. These assets could help them maintain linkages to all citizens and foster economic activity. By doing so, they could help citizens and businesses navigate through the increasing congestion and environmental hazards associated with emerging megacities.

This is a pivotal moment for the Postal Service. As the Global Logistics Revolution collapses the old model and reshapes traditional value chains, new players and emerging forces are focusing on eliminating the costs associated with existing middlemen. Producers and consumers increasingly expect savings from greater efficiency to be passed directly to them. For innovators and startup companies, such savings may be the road to success and these changes may pose great risks to established players.

A common infrastructure supported by the Postal Service and other world posts can address voids in new value chains, assuring that American commerce and citizens maintain a direct link to the changing global marketplace. As the Global Logistics Revolution continues to change the landscape, the Postal Service must become constantly vigilant and agile to provide what U.S. citizens and commerce need and demand from their national infrastructure. In addition, a dedicated unit led by individuals with experience in the value-chain logistics industry could provide the Postal Service with the focus and skills it needs to succeed. Finally, the Postal Service must have the support of key stakeholders to gain the flexibility necessary to provide the logistics services that Americans seek. This paper is a first look at the Global Logistics Revolution and what it means to the Postal Service. More research on this critical issue is necessary.
# Table of Contents

**Introduction** ..................................................................................................................... 1

**Forces and Trends Fueling the Revolution** ........................................................................ 2
  - **Societal Changes** ........................................................................................................ 2
  - **The Rise of a Global Transportation Supergrid — Moving People, Commerce, and Ideas** ....................................................................................................................... 3
  - **Geography of Manufacturing** .................................................................................. 4
  - **The Evolution of Retail** ............................................................................................ 6

**Supply Chains Evolve in a New Era** .................................................................................... 9
  - **Push vs. Pull** ............................................................................................................ 9
  - **Supply Chains Splinter** ............................................................................................ 10
  - **Demand for Value-added Services: New Providers Emerge** .................................. 10
  - **Environmental Concerns** ...................................................................................... 11

**A Pivotal Moment: Implications for the Postal Service** .................................................... 12
  - **First and Last-Mile Capabilities are Critical to Success** ......................................... 13
  - **Succeeding in Logistics Requires Flexibility and Demonstrated Value** .................. 14
  - **Logistics Services Could Support Core Products and New Revenue** ..................... 15

**Logistics Services at Other World Posts** .......................................................................... 16
  - **Diversification Strategies** ....................................................................................... 16
  - **Barriers to Entry** .................................................................................................... 18

**Strategic Guidance for the Postal Service** ........................................................................ 18

**Conclusion** ....................................................................................................................... 21
Tables

Table 1  Examples of Value-added Logistics Services ........................................ 11
Table 2  Total Post Revenue vs. Revenue from Logistics ..................................... 18

Figures

Figure 1  Forces and Trends Affecting Global Logistics ..................................... 2
Figure 2  3-D Printing May Lead to More Package Mail Volume .......................... 6
Figure 3  Evolution of Omnichannel Retail ..................................................... 7
Figure 4  Implications for the Postal Service .................................................. 13
Figure 5  Foreign Post Diversification Matrix ............................................... 16
Figure 6  Logistics Services Value Spectrum ................................................. 19
The Global Logistics Revolution: A Pivotal Moment for the Postal Service

Introduction

A confluence of forces is revolutionizing the global logistics market, altering hundreds of years of traditional commerce and resulting in major implications for postal operators. Several catalysts are fueling this transformation. Globalization has made the world smaller and brought together formerly disconnected populations. Advancements in digital technology are changing how we learn, communicate, and make purchases. Evolving transportation technologies and policies have also led to increased connectivity. We call this rapidly changing environment the Global Logistics Revolution. It is fundamentally changing how, when, and where goods are produced, purchased, and delivered by moving the balance of power from manufacturers and retailers to consumers. Consumer expectations of instant access to information and quick delivery of goods, regardless of geographic origin, make logistics an increasingly challenging market that is attracting new entrants, including local and regional companies.

Logistics is both a simple and complex term. In a world being reshaped by the Global Logistics Revolution, logistics can mean many different things to different people. To some, it means just the transport and delivery of goods. To others, it means the management of resources and information between two different points. In the context of this paper, we define logistics as the transport of goods plus some value-added services that can range from simple to complex. Depending on the customer and provider, these services can include customs solutions, repairing or refurbishing products, warehousing goods, and the many actions behind getting goods from here to there. Not all of these services are immediately relevant to postal operators, but they all play an important role in today's global commerce. The consumers of goods often see different aspects of the wide range of logistics services than the shippers of goods see, and are sometimes unaware of what is going on "behind the scenes." Regardless of vantage point, the Global Logistics Revolution is changing the nature of the logistics market for both consumers and shippers.

Emerging forces and trends will continue to fundamentally shift the balance of power toward consumers, creating an increasingly complex and volatile operating environment for logistics firms. Postal operators, with their ability to connect to vast numbers of homes and businesses, are uniquely positioned to take advantage of these changing market conditions. A number of foreign postal operators have already responded to the changing environment by diversifying their offerings to provide value-added logistics services. This allows them to both better meet consumer demands and simultaneously generate new sources of revenue. The Global Logistics Revolution presents a pivotal moment for the U.S. Postal Service. Will it find a way to make use of the new logistics environment by bringing its services further into the 21st century, or will it miss this opportunity to better serve citizens and businesses in a new era?
Forces and Trends Fueling the Revolution

Today, the Global Logistics Revolution continues to evolve in response to powerful new forces and trends converging to propel it forward. Before understanding how the Global Logistics Revolution will affect postal operators, it is essential to understand how these forces and trends are reshaping commerce more broadly. These forces and trends partially stem from new customer expectations, which further accelerate the pace of change. For example, mobile devices heighten the accessibility and convenience of the Internet by allowing people to communicate and transact anytime, anywhere. This new paradigm is driving retailers and other partners along the supply chain to, in turn, evolve in order to support a customer-centric demand for immediacy, customization, and a seamless experience. As a result, supply chains continue to shift from a manufacturer/retailer-driven “push” structure to a consumer-driven “pull” structure.

The forces and trends propelling the Global Logistics Revolution are interconnected — they influence and drive each other. Their ultimate impact is impossible to predict, but it is clear they are reshaping how citizens across the world interact and trade with each other. Figure 1 shows the major forces and trends affecting global logistics.

Societal Changes

Society is changing at an unprecedented speed. This is partly due to the explosion in digital communications, which frees individuals to control how, when, and where they communicate, collect information, and make decisions. The rise of smartphones has brought about a level of interconnectivity unimaginable even a few decades ago. It also simultaneously fosters society’s demand for flexibility and instant gratification. Social media is disrupting traditional approaches for engagement, communication, publishing, and marketing. As such, social media is shifting consumer behaviors and changing business models to those that emphasize two-way, interactive relationships.¹ Consumers increasingly rely on social networks to guide them in their purchase decisions.

For many consumers, digital communications technology is now a permanent part of everyday life. This impact is most profound for the so-called “digital natives” — young people for whom adoption of technology is second nature. Younger generations have even greater expectations for customization and convenience, especially the Millennial generation — those generally now between ages 16 and 34. This generation quickly

---

adapts to new technological changes and uses them to fit their individualized lifestyles. They want access to goods and information anytime and anywhere. In addition, they are more likely than other generations to view communications technology as an opportunity to interact with others, to share original content, and to trust peers and friends rather than large corporations or academic experts.2

Many modern consumers are also dedicated to sustainability, and corporations are beginning to respond to this growing interest. More individuals and corporations want to use renewable energy and reduce their carbon footprints. Also, a growing number of consumers demand low-carbon products and are conscious of poor environmental practices. To many, sustainability increasingly means recycling, reusing, donating, or reselling goods to other individuals,3 such as on Internet sites like eBay or Amazon. Tossing used goods in the trash is no longer an automatic reflex.

The Rise of a Global Transportation Supergrid — Moving People, Commerce, and Ideas

A recent study commissioned by DHL Deutsche Post envisioned a worldwide supergrid on which people, goods, information, ideas, and capital will interact freely.4 This supergrid is fueled by the clustering of people in big cities, a trend that has already begun. The result is the formation of “megacities,” usually defined as a metropolitan area with a total population in excess of 10 million people, which contain an increasingly large share of the world’s most highly skilled, educated, and entrepreneurial people.5 The megacities also contain most manufacturing jobs, including a great majority of high-tech manufacturing jobs.6 In other words, these megacities are the drivers of modern economies.

Megacities play a key role in this emerging supergrid through their relationship and interactions with their surroundings, including suburbs, neighboring rural areas, and nearby cities. Together, these megacities and their surroundings form “megaregions,”7 a

---

set of interconnected trade hubs. The megaregions serve as vast concentrations of population, knowledge, and commerce. They connect centers of mass production with centers of mass consumption. As of 2008, the top 40 megaregions already represented one-fifth of the world’s population, two-thirds of global economic output, and more than 85 percent of all global innovation.⁸ Today the top five megaregions are Tokyo-Yokohama, with 37 million inhabitants, followed by Jakarta, Seoul-Incheon, Delhi, and Shanghai. The New York metropolitan area is the eighth largest megaregion, with 20 million residents.⁹ One day, most of the world’s new citizens will be born in megaregions. In fact, megaregions are expected to house 7 of every 10 new Americans by 2040.¹⁰

But the rise of megaregions presents its own series of challenges. Although megaregions enable complex logistics and trade opportunities that could bolster the world economy, their growth also increases congestion challenges for goods distribution. Moreover, megaregions could exacerbate the existing urban-rural and inner-outer urban divides, leading to fears that rural and economically disadvantaged areas will be increasingly forgotten in the new global economy. Governments must find ways to also connect the periphery to the global transportation supergrid to ensure that the rapid exchange of people, commerce and ideas includes all citizens — not just those located in mass, affluent urban areas.¹¹

**Geography of Manufacturing**

New developments in manufacturing are underway. After decades of moving American manufacturing jobs offshore to countries with cheaper labor, some companies are now bringing some production elements back to home markets — a phenomenon known as “reshoring.” Some of these companies in the United States include Google, General Electric, Caterpillar, and Ford Motor Company.¹² Increased responsiveness, by way of manufacturing or final assembly at the point of consumption, is a driving force behind this shift. For example, Lenovo, a Chinese company that makes computers, recently began production at a factory in North Carolina due, in part, to

---


a need to quickly respond to the desires of American consumers. Some estimates of
the potential economic impact indicate that reshoring could foster 5 million new jobs and
$130 billion in additional annual exports by 2020 in the United States.

Responding quickly to American customers’ demands is only one reason some
companies have decided to move production to the United States. Another contributing
factor is that wages continue to rise in China and other formerly popular outsourcing
destinations. Beyond increasing input costs, many companies are now realizing that
overseas shipping of manufactured goods is expensive and reduces responsiveness to
supply chain disruptions, such as natural disasters. Lastly, better innovation may
result from locating production and research and development closer together, as well
as closer to the final consumer.

Another emerging trend that may affect the geography of manufacturing is 3-D
printing. This process involves making three-dimensional solid objects from a digital
model using raw materials like liquids or powders, building layer upon layer. Even
though the technology is fairly new, 3-D printing could one day radically transform or
even make obsolete some global supply chains. The 3-D printing market is growing at
16 percent per year and is expected to reach about $5 billion by 2020. The effects of
3-D printing are beginning to be felt across a wide variety of industries, including the
jewelry, footwear, industrial design, architecture, engineering, construction, automotive,
aerospace, medical, and dental industries.

At its most extreme, continued commercialization of 3-D printing could mean that
individual citizens will manufacture items right in their own homes or shops and shatter
existing supply chains. Traditionally, high volume shipments of raw materials to factories
and finished goods to retail stores rarely travel via the Postal Service. However,
because 3-D printing may lead to rapid prototyping and mass customization of goods,
the Postal Service could play a larger role by shipping small quantities of raw materials

---


14 Boston Consulting Group, “Rising U.S. Exports — Plus Reshoring — Could Help Create up to 5 Million Jobs by

15 According to a January 2013 article in The Economist “a Taiwanese firm that does a lot of manufacturing for Apple


18 3-D printing is a type of additive manufacturing, which is distinct from traditional machining techniques (subtractive

19 For more information on 3-D printing, view the PBS Off Book documentary “Will 3D Printing Change the World?” at

20 Joe McKendrick, “3D Printing may put Global Supply Chains out of Business: Report,” Smartplanet, October 9,

21 Patrick Seitz “3D Printers Graduate From Prototypes To End Products,” Investor’s Business Daily, July 20, 2012,

---
used in localized manufacturing, as well as finished goods, to and from individual producers and consumers. This would empower consumers by cutting out traditional middlemen and bringing production to a local, and often individual, level. Moreover, a shift from global mass production to local mass customization would rely on crucial first and last-mile links. Currently, the Postal Service’s network is unmatched in this capacity. Figure 2 depicts how 3-D printing could lead to increased package mail volume.

**Figure 2: 3-D Printing May Lead to More Package Mail Volume**

![Diagram showing the evolution of retail from traditional products to 3-D printing.](image)

Source: U.S. Postal Service Office of Inspector General (OIG) Analysis

### The Evolution of Retail

In today’s increasingly connected society, consumers have grown accustomed to demanding products where and when they want them. As stated by Retail Systems Research, “[r]etailing is no longer about how retailers want to sell, but how consumers want to buy.”22 This has fundamentally changed how retail works in the United States. Increasingly the “store” is everywhere: in the consumer’s pocket, at home, at the office, and at the mall.23 Consumers are using smartphones and tablets to interact with retailers, research products and prices, and make purchases on the go. In addition,

---


e-commerce — including m-commerce (transactions conducted through mobile devices like smartphones) — continues to expand as a major presence in the American economy. Online retail sales in the United States are expected to reach $327 billion in 2016, reflecting a 45 percent increase from 2012 levels.\textsuperscript{24} As e-commerce has grown in volume, many retailers responded by developing separate sales channels to take care of their online trade — a “multichannel” sales approach.\textsuperscript{25} This often meant that retailers kept entirely separate sales systems, inventories, and distribution networks for goods they sold online versus goods they sold through traditional retail stores. However, consumers now want to mix and match their shopping experiences at physical stores and online. In order to meet these new customer expectations, retailers are retooling their multichannel strategy into an “omnichannel” shopping strategy — a seamless customer experience across all channels.

A true omnichannel customer experience means that point of sale no longer dictates the point of product delivery. This is a buy anywhere, deliver anywhere world. Some customers may buy a product in a store but research it through the online channel. Other customers may do the exact opposite and research the product in a store but buy it online — via tablet, laptop, or smartphone. As a result, retailers can no longer view specific sales channels — such as online, mobile, and traditional retail stores — as separate business channels. The implications for inventory management, returns processing, and physical fulfillment functions within the supply chain are significant and complex. Retailers will have to provide products through the channels and delivery methods their customers prefer. Customer choice drives everything.

**Figure 3: Evolution of Omnichannel Retail**

<table>
<thead>
<tr>
<th>Retail 1.0: Single Channel</th>
<th>Retail 2.0: Multichannel</th>
<th>Retail 3.0: Omnichannel</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Example:</strong> A physical retail store</td>
<td><strong>Example:</strong> A physical store, computer, or smartphone</td>
<td><strong>Example:</strong> Fully integrated retail channels</td>
</tr>
<tr>
<td><strong>Example:</strong> A single point of purchase</td>
<td><strong>Example:</strong> Several options for buying products from a retailer</td>
<td><strong>Example:</strong> Seamless experience for consumer across channels</td>
</tr>
</tbody>
</table>

Source: OIG Analysis\textsuperscript{26}


Within 10 years, shopping as we know it could be very different. There are two emerging trends in particular that have the potential to dramatically change how we buy goods: "showrooming" and same-day delivery. While the ultimate effect of these trends is currently unknown, both could have a tremendous impact on how people shop.

The retail stores of the future might be showrooms — physical locations that serve as display areas or catalogs for shoppers to touch and feel products before ordering them from an online source.27 This trend can already be seen in the number of consumers who visit a physical store to check out products but then use mobile devices to conduct price comparisons. One in five consumers is already engaging in showrooming, and a third of those consumers, after researching a competitor's price, leave the store and buy the product elsewhere for a better price.28

Retailers have responded to this trend in various ways. In late 2011, Amazon released a price check “app” that allowed users to easily compare competitors’ prices.29 Target and Best Buy recently announced that their physical stores will match prices of competitors, including online retailers like Amazon, in an attempt to reduce showrooming in their stores.30 Other retailers have responded to this trend by emphasizing improved in-store customer service, installing digital kiosks, and taking other actions designed to keep consumers shopping in their stores.31 If the trend continues, traditional retailers must consider either downsizing or repurposing their physical space to better meet customer demands.

Another emerging trend that could change the way we shop is same-day delivery. Major retailers have recently begun experimenting with same-day delivery models, most often in high-density urban areas. Amazon uses delivery and courier services to get products to consumers. EBay’s model provides online retail partners a proxy physical footprint by linking their products to local buyers — all without eBay having to carry inventory. Walmart fulfills home delivery orders out of local store inventory rather than through traditional, centralized warehouses.32

---

Retailers and analysts are still skeptical about the long-term feasibility and viability of same-day delivery. It is only feasible in high-density, urban areas, where distances between warehousing locations and customers are short. Many question the long-term viability because it is not clear anyone has figured out a way to do it profitably or if consumers even really want it. Some believe the same-day delivery craze has been fueled by competitors’ fears that Amazon will dominate this emerging market. They hypothesize that, rather than being motivated by speed and instant gratification, consumers desire predictable delivery estimates and flexible options for delivery. However, if consumer interest in same-day delivery is validated, retailers will likely follow suit and try to carve out market space to meet this demand. Only time will tell if any of the current models of same-day delivery can meet consumer demand and be made economically sustainable.

Supply Chains Evolve in a New Era

Actors along supply chains across the world are reacting to the forces and trends propelling the Global Logistics Revolution. Already the structures of supply chains are radically changing and new players are emerging on the logistics landscape. Yet new players still have tremendous opportunities to respond to these trends and forces by evolving their offerings from basic transport of goods to value-added services focused directly on what customers want.

Push vs. Pull

The combined forces, discussed previously, are generating increasingly intricate and volatile environments in which manufacturers, retailers, and logistics service providers operate. We may have reached a tipping point where the seller no longer dictates the terms of commerce — power is shifting to the buyer. This has created a demand-driven supply chain often referred to as “pull” (from the consumer demand) rather than “push” (from the production and distribution).

In a traditional “push” system, retailers and manufacturers anticipate consumer demand and produce goods accordingly. The process is not fully dynamic. Under the “pull” system, however, consumer demand is tracked by retailers at the point of sale and then sent to manufacturers — almost in real time. These manufacturers then use the information to try to coordinate their production schedules with actual sales, which allows them to minimize costly inventory buildup or service interruptions that hurt sales. Under a pull system sellers must provide what consumers demand or they will take their business elsewhere. Consumer empowerment — through the information, reach, and choice supplied by the Internet and smart mobile devices — has dynamically matched supply with demand. But the pull system does have potential downsides for retailers. Indeed, adaptable pull networks can result in delays, disruptions, empty shelves, and lost sales that may have an even bigger revenue impact and deeper

customer dissatisfaction. Yet, sales order management software capabilities mitigate these concerns because real-time sales feed order replenishment. Accordingly, the potential efficiency gains still compel logistics channels that were formerly driven almost entirely by the supply side to become dynamic, demand-driven coordinated relationships.

Supply Chains Splinter

To adapt to the heightened focus on consumer demands and mitigate uncertainty for shippers, some pioneering organizations have “splintered” their traditional supply chains into smaller, nimbler forms. Some offshore supply chains that took advantage of cheap labor and available capacity are changing. Firms are seeking less costly inputs, better ways to manage uncertainty like weather and exchange rate risk, and more effective ways to meet fast changing consumer demand more quickly.

Recently, firms began to reevaluate sourcing strategies that influence the location of manufacturing and final assembly according to demand patterns for a particular product. High-volume products with relatively stable demand can be manufactured far away, in locations with easy access to cheap labor or resources. On the other hand, large-size products, those with volatile demand — both high and low volume — can be manufactured closer to their point of consumption.

This fragmented approach aligns the supply chain structure with customer demand in the most cost-effective manner for individual products. It also creates new opportunities for local and regional logistics players to add value to the connection points or hand-offs along the supply chain. For example, in addition to long-haul trips that move products as they arrive at U.S. ports to regional distribution hubs, firms may need a partner to provide more short distance, recurrent distribution as well as an additional leg directly to consumers.

Demand for Value-added Services: New Providers Emerge

Over the last few decades, logistics excellence emerged as an effective way for businesses to differentiate themselves from their competitors and improve margins by cutting costs. Starting in the late 1970s, many companies began outsourcing their logistics services to third-party logistics providers, referred to as “3PLs.” 3PL firms provide a full suite of service offerings by managing, controlling, and delivering comprehensive solutions on behalf of a shipper. Examples of firms providing 3PL services include J.B. Hunt Transport Services, American Global Logistics, National

---

Retail Systems, and many others. These providers have expanded their services to cover specific geographies, commodities, and modes of transport, and have integrated their existing warehousing and transportation services. In the 1990s, 3PLs employed sophisticated logistics software and inventory management technologies to continue to support evolving customer expectations. They also started to offer a full suite of value-added or extra service beyond basic transport, including some of the services depicted in Table 1.

Table 1: Examples of Value-added Logistics Services

<table>
<thead>
<tr>
<th>Example of Service</th>
<th>Description of Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>Warehousing</td>
<td>A spectrum of goods receiving, storage, order management, and dispatching activities.</td>
</tr>
<tr>
<td>Order picking</td>
<td>Fulfilling orders by selecting items in a distribution center.</td>
</tr>
<tr>
<td>Customs solutions</td>
<td>Preparing customs documents, staging and forwarding customs cleared freight, and other services necessary for cross-border trade.</td>
</tr>
<tr>
<td>Reverse logistics</td>
<td>Comprehensive returns and recovery management, customized delivery options, and end-to-end visibility. Can also include testing, repairing, and refurbishing of products.</td>
</tr>
<tr>
<td>Kitting</td>
<td>Assembling various elements originating in different locations into a single package.</td>
</tr>
<tr>
<td>Other services</td>
<td>Custom assembly, freight and fleet management, distribution, vehicle and equipment rental, quality control, sales order management, disposal, recycling, and others.</td>
</tr>
</tbody>
</table>

Source: OIG Analysis

The 3PL market is just one piece of the overall logistics market. However, it alone was valued globally at $134 billion in 2011, with an annual growth rate of 10.3 percent in the U.S. since 1996. While competition in this fast-growing market is strong, there are still opportunities for new entrants with unique skills or assets to garner significant revenues.

Environmental Concerns

Environmental concerns over energy consumption, carbon emissions, waste disposal, and traffic congestion are playing a progressively larger role in the changing logistics landscape. Providers are searching for innovative ways to minimize ecological impacts by optimizing the movement of goods through the supply chain. Some of these

---

37 These examples were identified on Inbound Logistics’ 3PL search tool at http://www.inboundlogistics.com/cms/search-tool/3pl/ on April 3, 2013.
responses make current operations more environmentally friendly, such as switching to more fuel-efficient vehicles and shifting from air and truck transport to train for long-haul trips. Another trend is that customers, who now receive more shipments directly to their door are demanding green packing solutions. In response, firms are implementing new packaging technology that can greatly reduce the amount of packing materials used to protect cargo during transport. Not only do such changes help the environment, but they also cut material and shipping costs. Logistics providers that can create more of these win/win solutions will garner business while also reducing the carbon footprint of their supply chain: “It is good for the company. It is good for the customer. And it is good for the planet.”

A Pivotal Moment: Implications for the Postal Service

The forces and trends shaping the logistics landscape provide an opportunity for the Postal Service to better meet the emerging needs of citizens and businesses while also dramatically improving its finances and supporting core products. In particular, shifting trends in commerce, urban growth, and rural and inner city neglect play naturally into the Postal Service’s unique first and last-mile capabilities. While the Postal Service is certainly making moves to better serve customers and be more involved in logistics services, a February 2013 Accenture report identified the Postal Service as one of the “traditionalist” postal operators, which lag behind other posts in revenue from diversification into high-growth markets like logistics and are more vulnerable to mail volume declines. Regardless of what future direction the Postal Service takes, it needs to be responsive to changing demands on multiple fronts, as the Global Logistics Revolution is affecting both shippers of goods and end consumers.

Changes fueled by technological advancements are happening at an unprecedented pace. The Postal Service must continue to evolve its logistics functions to meet basic demands. If it fails to move forward, it risks missing its chance to become a viable player in the logistics market. Customers’ expectations are evolving beyond rudimentary package transport to a wider suite of logistics services than is currently provided by the Postal Service. Customers want more than to simply have their package arrive; they want control over the delivery and returns process. They now expect visibility tools like full track and trace, options for time-sensitive delivery, and much more. If such basic services are not provided, the Postal Service risks losing its existing business in the high growth expedited and package service market. Some logistics capabilities are no longer optional; rather, they are an integral and necessary extension to the existing delivery entity.

40 Peter Bradley, “That was easy (On the planet),” *DC Velocity*, February 26, 2013, http://www.dcvelocity.com/print/article/20130226-that-was-easy-on-the-planet/.
41 Ibid.
Our analysis suggests additional flexibility will be necessary to respond to constantly changing demands and also highlights viable areas for the Postal Service to develop value-added services or to partner with existing logistics firms. Figure 4 summarizes the implications of the Postal Service moving further into the logistics market.

**Figure 4: Implications for the Postal Service**

**Positive**
- Adds new value to products by addressing consumers’ needs and wants
- Generates new revenue and volume through existing infrastructure
- Strengthens already high value in first and last-mile gateway to the household
- Can help develop closer relationships with other entities in a complicated value chain

**Negative**
- Some aspects may require capital investment that is not currently available
- Could divert management attention from other pending activities
- Some more complicated aspects may not be well suited to core organizational strengths

Source: OIG Analysis

**First and Last-Mile Capabilities are Critical to Success**

The continued growth of e-commerce, omnichannel retail, and 3-D printing heightens customers’ needs for first-mile pickup and last-mile delivery. The Postal Service’s nationwide first and last-mile capabilities provide an infrastructure with unmatched reach in door-to-door level deliveries, and a strong regional and local presence of actively interconnected hubs and spokes. In fiscal year (FY) 2012, the Postal Service reached more than 152 million delivery points, every home and business, along approximately 227,000 routes, an operation managed through nearly 25,000 delivery units often located at Post Offices. Because of this reach, private sector package delivery competitors like UPS, FedEx, and others already use the Postal Service’s Parcel Select™ program because of its natural advantages for last-mile delivery in a number of
areas. The service is also beneficial to online retailers because they can pass on the relatively low cost via cheap or free shipping to their consumers.  

There are also potential risks to the Postal Service’s ability to capitalize on its first and last-mile capabilities, including current efforts to shrink the size of its processing center network and proposals to close a number of delivery units. Plans to reduce or realign processing centers and delivery units should take into account the implications on the Postal Service’s advantages in package delivery and value-added logistics services market. For example, simply downsizing without planning could leave the Postal Service with large regions with no nearby parcel processing facilities. This could limit the number of points available for parcels to enter into the Postal Service system for rapid delivery or the ability to develop microwavehousing capabilities. This could also mean that next-day delivery is cut off from some areas, as the service could be infeasible or impractical without a processing facility nearby.

The Postal Service’s unique first and last-mile capabilities are also critical in relation to the emerging trends of megaregions and 3-D printing. If rural areas are left behind by the rise of megaregions, as envisioned by DHL Deutsche Post, most private carriers will be unwilling or unable to service communities in those areas. But the Postal Service has a legal obligation to provide universal service to citizens all across the United States and it is the only organization with a current requirement to meet that obligation. As such, the Postal Service very well could be the vital link that keeps rural areas connected to the global transportation supergrid — and not just for delivery of mail and small packages, but as a crucial communications link or a last-resort provider for a range of essential services.

The emergence of 3-D printers located in communities across the country could provide a new source of growth for postal products and services. Because 3-D printing can be well suited to small production facilities, it could be done anywhere there is electricity, a broadband Internet connection, and access to raw materials as well as a pick-up and delivery network — anyplace from storefronts to dorm rooms. The new production model disaggregates traditional supply chains and may revolutionize long-haul shipments of raw materials and finished goods. It may also bolster the need for a first and last-mile provider.

**Succeeding in Logistics Requires Flexibility and Demonstrated Value**

The Postal Service has taken steps to develop new capabilities and realign its existing network to offer new services in response to customers’ changing needs. For example, in 2013 the Postal Service introduced free USPS Tracking™ for Priority Mail and

---

Standard Post parcels. The Postal Service hopes to achieve 100 percent package visibility so that consumers and shippers can follow every step of the shipment process. This effort includes real-time package scanning conducted by carriers with mobile devices. The Postal Service also offers gopost® automated parcel lockers so that consumers can pick up packages at desired locations, and it is considering offering parcel delivery on Sundays.45

There are signs that the Postal Service is moving from basic transport offerings to a more wide-ranging array of value-added services. Already the Postal Service is experimenting with dynamic routing, which would allow it to deliver packages along more customized routes, and offer services such as same-day delivery.46 The Postal Service is currently conducting a same-day delivery trial of its Metro Post® program through select retailers in the San Francisco area.

Even with all of these current or planned services in place, the question remains: Does the Postal Service have the flexibility, competencies, and resources necessary to meet consumers’ needs in a new era? Going forward, the Postal Service and its stakeholders should consider its role of “binding the nation together” by facilitating commerce in the context of logistics. Can the Postal Service adapt its strategic position to become a value-added service provider, or partner with existing logistics firms, in order to avoid seeing its package products become less valuable to producers and consumers?

Logistics Services Could Support Core Products and New Revenue

By offering value-added logistics services or partnering with existing logistics firms, the Postal Service could better meet customer needs and improve its bottom line. New logistics services could help attract more volume. This could, in turn, boost its core products, as value-added services could make all affected products more attractive to consumers. As the Postal Service states in its FY 2012 Annual Report to Congress, its “capabilities and skills acquired in [the package delivery] market will be adapted to help grow other Postal products and services.”47

Conversely, not offering logistics services could lead to a decline in postal revenue in the key growing area of expedited and package services as customers increasingly expect value-added services. Right now, the Postal Service mostly offers only the transportation of small parcels, rather than a suite of value-added logistics services. As other posts and private sector competitors continue to offer many more services, retailers and individual consumers may choose to switch because the Postal Service’s options no longer meet their needs. If retailers no longer see the Postal Service as a

---

viable option, reduced competition could result in fewer options and higher costs for consumers.

**Logistics Services at Other World Posts**

Market liberalization that began in the 1990s, expanding globalization, and a decline of their core mail business led many posts to diversify their product offerings to include value-added logistics services. These posts did so *internally* by 1) insourcing and developing assets and capabilities, and/or *externally* by 2) entering into joint ventures or completing acquisitions.

**Diversification Strategies**

Figure 5 illustrates internal and external avenues for diversification and corresponding opportunities found along a continuum of services, ranging from traditional to value-added offerings. With increasing complexity, enlisting varying levels of external support becomes more necessary.

![Figure 5: Foreign Post Diversification Matrix](source: OIG Analysis)
Developing internal logistics capabilities allows posts to take advantage of existing strengths and assets to expand upon their traditional offering by introducing new value-added services. Some posts have explored enhanced delivery services like text message notifications and multi-option delivery, as well as comprehensive reverse logistics capabilities like easy returns from parcel lockers. Such offerings leverage core products and competencies while also meeting customers’ emerging needs for convenience and an “anytime, anywhere” response. An example of a post that developed these capabilities is China Post Group. It introduced contract logistics services in 2003, and created the China Post Express & Logistics Company to offer end-to-end logistics ranging from basic reverse logistics to highly integrated solutions.

The posts’ dependence on business alliances increases with the provision of more complex value-added offerings. For example, some posts have already partnered with firms that provide specific capabilities, like one-stop cross border e-commerce solutions. Other firms may offer services like warehousing, product fulfillment, one-stop payment processing, and customs clearance for small and medium-size retailers. One such example is DHL’s Easy Return, which facilitated high-value returns management services across borders in conjunction with 20 other posts. In North America, Canada Post’s Borderfree Service provided U.S. retailers a strategic partner that delivers marketing, logistics, and consulting services to provide seamless, omnichannel entry into foreign markets.

For the most complex and comprehensive offerings, which are often on a global scale, some posts engaged in mergers and acquisitions or alliances with external firms that have specific capabilities in logistics. The most prominent example is Deutsche Post’s acquisition of DHL in 2002 and Airborne Express in 2003. Today, posts and logistics companies continue to merge to become supranational entities that compete on a global scale. For example, Belgium’s bpost recently acquired a majority stake in U.S.-based Landmark Global Services, a provider of international logistics services. And Austria Post has been a player on the pan-European market following the acquisition of German logistics provider trans-o-flex.

---

Barriers to Entry

The logistics services market is highly competitive, with many established providers, but it is changing fast and expanding in new ways. Developing new capabilities and entering emerging markets takes time. For posts, their legacy infrastructure is principally designed for mail delivery and it may be difficult for them to quickly and easily adapt that infrastructure for advanced logistics services. Regulatory constraints, paired with the Postal Services’ rigid organizational structures and institutional capabilities, can make it more difficult to successfully capitalize on peripheral business opportunities like logistics even when well suited.

However, research has shown that logistics services can provide an avenue for sizable new revenue and might be worth the investment for postal operators. Table 2 provides specific examples of international posts and the approximate percent of their total revenue made from logistics services.

Some research indicates the acquisition of large, existing providers can be a highly successful diversification strategy. The Postal Service can learn from the experience of these other posts. As the evidence shows, foreign postal operators have found value-added logistics services to be a viable way to sustain core products, respond to new consumer demands, and tap into existing strengths and assets to generate new sources of revenue.

Strategic Guidance for the Postal Service

The Global Logistics Revolution provides an opportunity for the Postal Service to better meet the needs of citizens and businesses, increase parcel volume, and generate much-needed revenue. The Postal Service has the trusted brand and the nationwide footprint to become an important part of the logistics realm. Postal management could introduce logistics capabilities along a spectrum of progressive involvement that ranges

---

from basic services (for example, customized pickup and delivery of goods or additional options to enable m-commerce) to a full suite of value-added services (for example, warehousing of goods and materials). However, to develop some complex offerings, the Postal Service would need additional capital and flexibility not currently available. Figure 6 shows examples of logistics services that the Postal Service could offer, potentially by forming alliances with existing private sector logistics firms.

Figure 6: Logistics Services Value Spectrum

With this limitation in mind, starting with basic services that utilize existing capabilities is the first step. Moreover, such action should help the Postal Service maintain its current small parcels business. Many customers expect basic logistics services, and if they cannot get these services from the Postal Service, they will bring their business to others. Next, to keep pace with the expectations in the marketplace, the Postal Service needs to offer logistics services further along the spectrum of involvement. Expanding to value-added logistics services like warehousing may provide a path forward to new revenues, as well as a more diverse, sustainable portfolio of service offerings that customers are actively seeking. The Postal Service would need to balance its focus between utilizing and strengthening its existing assets and abilities to transport goods from point A to point B, with developing capabilities to advance into the logistics sphere.

Every point along the spectrum of services offers unique advantages to the Postal Service. Basic services that leverage the Postal Service’s current transportation system,
as well as its existing focus on small-to-medium-size businesses, involve minimal risk and should not require system-wide changes in its processing or delivery networks. These services would address retailers’ need for customized pick-up, transport, and delivery, and could spur additional parcel volume. By moving up the spectrum to develop homegrown products and services or by working with private sector partners, the Postal Service could create a viable logistics platform by pairing its partners’ strengths with its unmatched first and last-mile capabilities. By partnering, the Postal Service could provide a combination of basic and advanced services, while mitigating financial risk, in order to gain a foothold in the logistics industry as the Global Logistics Revolution propels forward.

Implementation Considerations

For the Postal Service to offer value-added logistics services, it will need to create a strategic plan that could consider the following elements:

- **Identify appropriate private sector partners for potential alliances** – By partnering with key private-sector organizations, the Postal Service could efficiently tap into the skills, experience, and systems architecture needed to successfully enter the logistics market. A logistics unit, supported by public-private partnerships, could minimize the financial and operational risks to the Postal Service. In addition, the Postal Service could benefit from an increase in parcel volumes and corresponding revenue that logistics capabilities could generate. Local, regional, and new logistics firms could also be ideal partners for the Postal Service.

- **Establish long term strategic plans and timeframes** – Outlining a long-term vision, developing a customer-centric strategy, and setting appropriate timelines for introducing logistics service would allow the Postal Service to effectively gather resources and position itself for growing consumer demand. However, it is crucial for the Postal Service to act now to promote future success. Two primary concerns are 1) many established, global players are already moving forward and 2) new entrants like regional and local carriers, which are often more flexible than large providers, are growing and expanding but lack necessary scale.

- **Create a separate, dedicated unit focused on value-added logistics** – The Postal Service will need special capabilities, expertise, and knowledge to successfully implement a strategy for delivering logistics services such as comprehensive returns management and warehousing. Establishing a dedicated business unit with experienced leadership in the value-added logistics industry would provide the Postal Service the vision, focus, and skills necessary to succeed in this market and support its customers and core products.

- **Assess statutory and regulatory landscape** – Because regulatory constraints prohibit the Postal Service from moving into nonpostal businesses, some logistics services might face legal challenges. However, the existing legal framework may allow logistics services that require only simple variations or extensions of existing Postal Service offerings.
Review existing resources – Some current resources and assets might be extremely useful to the Postal Service for engaging in logistics services. For example, declining mail volume has led to excess capacity in the Postal Service’s processing network. In addition to ongoing optimization efforts, the Postal Service could consider utilizing excess capacity to provide logistics services, such as warehousing and other offerings, or leasing the extra space to companies skilled in such services.

Design networks to support logistic services – The number of processing facilities decreased from 673 in FY 2006 to 417 in FY 2012. Plans suggest an even further decline — to fewer than 250 processing facilities by early 2014. And the Postal Service has proposed closing some delivery units. Although efficiency gains are paramount, the Postal Service should also analyze how facility closures might impact its ability to support logistics services that citizens demand.

Funding considerations – The Postal Service’s current financial circumstances and lack of capital limit investments in growing new lines of business. Public-private partnerships could be a first step in acquiring the financing and capital necessary to take the next steps. Ultimately, stakeholders must decide if additional logistic services are part of an appropriate role for the Postal Service, and then allow it to acquire and allocate the necessary resources to meet the changing needs of American citizens and commerce.

Conclusion

The Global Logistics Revolution will continue disrupting traditional supply chains and changing how, when, and where people buy products. Although the Postal Service is currently in a great position to capitalize on the forces and trends reshaping commerce, the window of opportunity could be closing. To meet Americans’ needs, the Postal Service should ensure that it can provide, either internally or through partnerships, value-added logistics services that are rooted in convenience, flexibility, customization, and speed. The Postal Service can and should begin preparing itself to meet future scenarios as the Global Logistics Revolution continues to reshape the way products are made and delivered. The Postal Service has many assets and capabilities, like its first and last-mile network, that can support successful entry and complement other players to better meet citizen and business needs. Further waiting on the sidelines could result in a missed opportunity as entry barriers become too high and preferences become entrenched.
