



# OFFICE OF INSPECTOR GENERAL

UNITED STATES POSTAL SERVICE

## Parcel Payment Technologies and Payment Strategies

### White Paper

Report Number  
FT-WP-15-001

November 19, 2014





# OFFICE OF INSPECTOR GENERAL

## UNITED STATES POSTAL SERVICE

## Executive Summary

*The Postal Service must consider additional payment options that address how individuals and small businesses conduct transactions.*

The U.S. Postal Service maintains a network that offers postage, mailing, shipping and package, and other services to its customers. However, changing consumer habits have led to changes in demand for services across this network. As consumers embrace online and portable eCommerce,<sup>1</sup> First-Class Mail® volume is declining. Since fiscal year (FY) 2011, First-Class Mail revenue has declined by about \$1.9 billion. At the same time, packages are becoming more important to customers as they explore the convenience of eCommerce. Since FY 2011, shipping and package revenue increased by \$1.8 billion. The Postal Service recognizes the growing opportunities in the world of package delivery as customers increasingly buy and sell goods over the Internet. In addition, it recognizes the need to connect the mail to a digital experience. Individual customers and small businesses are not only mail recipients but also senders with specific package delivery needs.

Individual and small business customers can use credit or debit cards to pay for package postage online or at a Postal Service retail facility. However, the Postal Service lags behind its primary competitors in mobile application and credit services for its technology-savvy customers. To attract and retain these customers, the Postal Service must consider additional payment options that address how individuals and small businesses conduct transactions.

To address this challenge, the Postal Service plans to implement the Mobile Web Optimization and Mobile Point-of-Sale (mPOS) initiatives during FY 2015. These initiatives will improve the purchase experience for mobile website and smartphone customers by offering the convenience of mobile checkout. In addition, during FY 2014, the Postal Service deployed smart card readers to all post offices. Smart cards provide, among other advantages, more security for the customer than the standard credit card.

We reviewed payment initiatives currently underway to enhance the Postal Service's shipping and package services. In addition, we researched global trends to identify payment technologies and strategies that may enhance the Postal Service's shipping and package services to capture more of the revenue created by eCommerce. We found:

- The United Kingdom offers individual and small business customers the convenience to present and pay for packages at a dedicated counter using a prepaid account.
- Third-party payment vendors analyze credit sources and online purchasing data to determine customer credit worthiness and offer credit to customers while assuming the burden of payment default. Partnering with a third-party vendor to offer credit could allow the

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<sup>1</sup> Portable eCommerce refers to mobile devices such as smartphones and tablets, used to buy and sell goods over the Internet.

***Providing flexible payment options will allow the Postal Service to capitalize on revenue in shipping and package services and be more relevant in the digital age.***

Postal Service to provide its customers with a fast, secure way to make payments, without incurring credit risk.

- Dot Post, which is regulated by the Universal Postal Union, connects electronic posts worldwide in a secure and trusted environment, allowing the Postal Service and other posts to offer international payment solutions necessary in a digital economy.

eCommerce customers want flexibility in buying postage. Providing flexible payment options will allow the Postal Service to capitalize on revenue in shipping and package services and be more relevant in the digital age.



November 19, 2014

**MEMORANDUM FOR:** GARY C. REBLIN  
VICE PRESIDENT, NEW PRODUCTS AND INNOVATION

KELLY M. SIGMON  
VICE PRESIDENT, RETAIL CHANNEL OPERATIONS

A rectangular box containing a handwritten signature in cursive that reads "John E. Cihota". There is a small black dot in the upper right corner of the box.

**FROM:** John E. Cihota  
Deputy Assistant Inspector General  
for Finance and Supply Management

**SUBJECT:** Parcel Payment Technologies and Payment Strategies  
(Report Number FT-WP-15-001)

Attached are the results of our review of Parcel Payment Technologies and Payment Strategies (Project Number 14BD003FT000). Our objective was to identify possible payment technologies and strategies that may enhance revenue growth in the U.S. Postal Service's shipping and package services.

We appreciate the cooperation and courtesies provided by your staff. If you have any questions or need additional information, please contact Lorie Nelson, director, Finance, or me at 703-248-2100. Thank you in advance for your time and consideration.

Attachment

cc: Corporate Audit and Response Management

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# Observations

## Introduction

The U.S. Postal Service offers services through a network of nearly 32,000 post offices, stations, and branches, as well as its website ([USPS.com](http://USPS.com)). Postal services are also offered through thousands of Contract Postal Units, Community Post Offices, Village Post Offices, and retail establishments. Through an infrastructure of about 153 million delivery points, the Postal Service offers customers the convenience of having online purchases delivered directly to their homes.

Changes in consumer habits have led to changes in demand for services across the Postal Service network. Since fiscal year (FY) 2011, First-Class Mail® revenue has declined by \$1.9 billion while shipping and package revenue has increased by \$1.8 billion. In FY 2013, the Postal Service generated total revenue of \$67.3 billion. Of that amount, \$12.5 billion, or 19 percent, came from delivery of about 3.7 billion packages.

Changes in customers' use of the mail also impacts revenue and volume. Digital natives and, increasingly, digital immigrants,<sup>2</sup> pay bills online and with smartphones. The resulting declines in First-Class Mail volume have weakened the Postal Service's financial condition.

As consumers continue to explore the convenience of eCommerce,<sup>3</sup> the Postal Service needs to increase revenue by growing its shipping and package services and effectively competing with its primary rivals, FedEx and UPS. The Postal Service serves all areas of the country at fair, reasonable prices. Therefore, it is well positioned to fulfill the shipping needs of individuals and small businesses.

But, to remain relevant, the Postal Service needs to adopt technology and payment innovations that meet the needs of package senders and recipients. We researched global trends to identify payment technologies and strategies that may enhance the Postal Service's shipping and package services to capture more revenue created by the technology-savvy customer. This paper discusses current payment options, current Postal Service payment initiatives, and innovative payment options.

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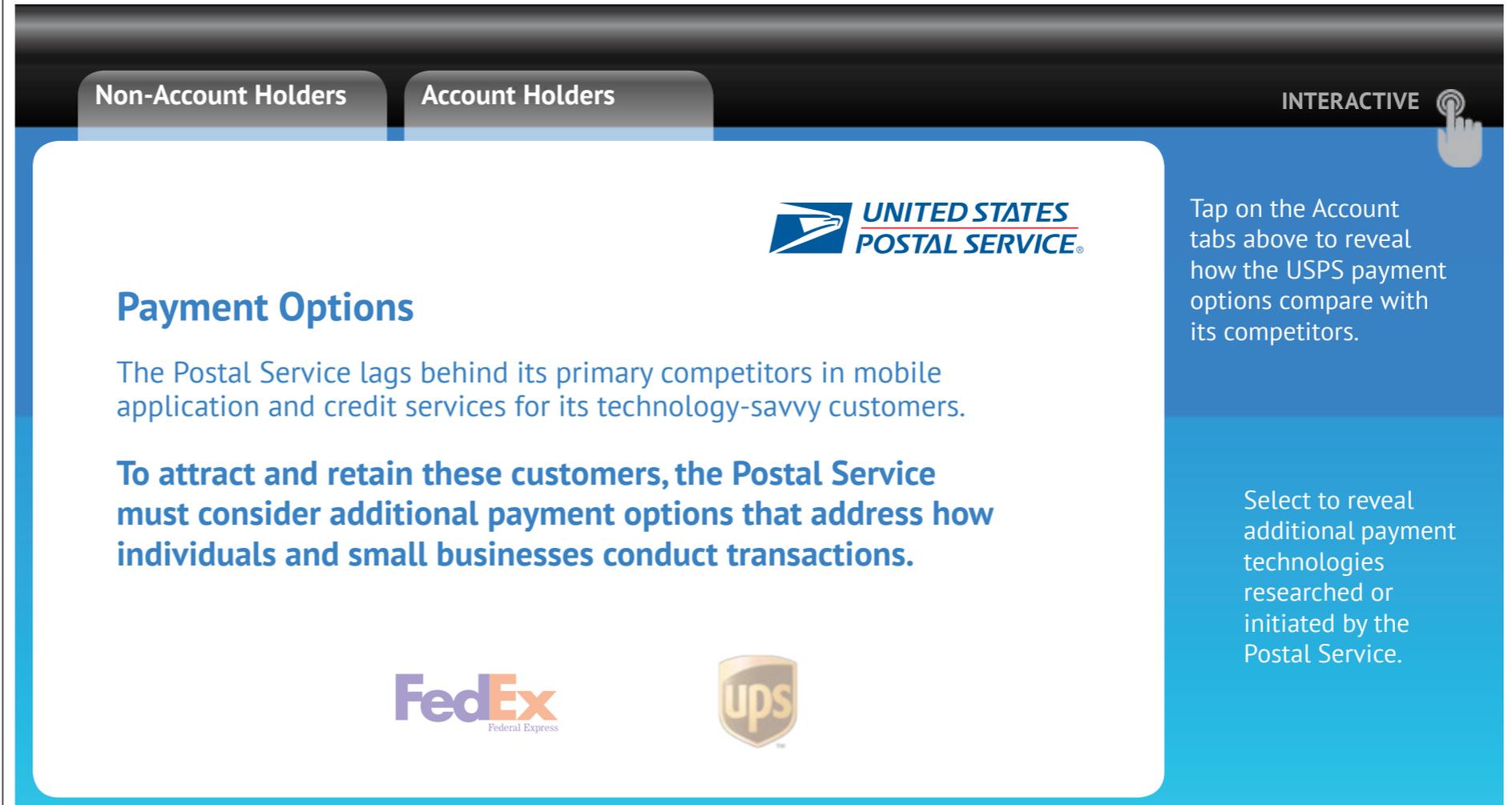
<sup>2</sup> *Enhancing Mail for Digital Natives* (Report Number [RARC-WP-14-001](#), dated November 18, 2013) identifies digital immigrants as older users who were born when technology was not prevalent. Digital natives are those born and raised in the age of the Internet and are the largest generational segment of the U.S. population.

<sup>3</sup> Electronic commerce, better known as eCommerce, is activity related to buying and selling goods and services over the Internet.

## Current Payment Options

We compared the Postal Service's package payment options with two of its competitors (see Figure 1).

**Figure 1: Payment Options**



Source: FedEx, UPS, and Postal Service websites.  
\*Check or money order.

For customers without accounts,<sup>4</sup> all three companies provide similar payment options at the counter. The competitors offer payment options (debit/credit cards) on the Internet, but the Postal Service does not. Although the mobile<sup>5</sup> payment options among the companies are limited, one company offers customers the capability to pay using a smartphone or tablet.

For customers with accounts, all three companies provide similar payment options at the counter and on the Internet. However, the competitors allow customers to use stored payment information at the counter while the Postal Service does not.<sup>6</sup> Further, the Postal Service does not currently offer any mobile payment options while the competitors do. The Postal Service is scheduled to implement a mobile payment application for smartphone users in FY 2015 but should consider offering additional payment options to increase revenue.

<sup>4</sup> Using a unique username and password, a registered account holder can store contact and payment information for future purchases on a company's website.

<sup>5</sup> Devices such as smartphones and tablets.

<sup>6</sup> Except for Priority Mail Express corporate accounts.

## Current Postal Service Payment Initiatives

The Postal Service, recognizing the need to identify and build innovative parcel payment technologies that enable future revenue growth and enhance the customer's mobile experience, initiated Mobile Web Optimization, Mobile Point-of-Sale (mPOS), and smart cards.

### Mobile Web Optimization

Mobile Web Optimization will expand the current smartphone application<sup>7</sup> to allow customers to make payments via smartphone and retain that purchase data. The initiative will be fully implemented in two additional phases during FY 2015: phase 1 will refresh the current smartphone application design; and phase 2 will focus on eCommerce and create fully functional versions of Click-N-Ship<sup>8</sup> and the Postal Store<sup>9</sup> for smartphone users. Phase 2 will provide customers with improved smartphone application options, including:

- Creating user accounts to store payment information and pay for purchases.
- Purchasing of postage stamps for at-home delivery.
- Creating paid shipping labels for domestic flat rate products with wireless printing capability.

The initiative will improve the mobile website and smartphone application experience for customers.

### Mobile Point-of-Sale

mPOS handheld devices will allow Postal Service lobby assistants at retail units to divert simple transactions from the full-service line, reducing customer wait times. Using mPOS, the lobby assistant can accept credit and debit card payments for stamps and flat rate packages and can print or email customer receipts<sup>10</sup>. In the retail industry, mPOS devices are increasingly popular ways to enhance the customer experience. Major retailers like Apple, J.C. Penney, and Sephora employ smartphones, tablets, and mPOS units to enable mobile checkout. The Postal Service anticipates full implementation during FY 2015.

### Smart Cards



Smart cards are debit and credit cards with embedded integrated circuits or chips that encrypt information, require personal identification numbers, and generate one-time only passwords. These features provide greater security against identity theft than standard credit cards, which use magnetic strips that can easily be counterfeited. To deter fraud, the credit card industry adapted the EMV<sup>11</sup> standard for authenticating credit and debit card transactions.

<sup>7</sup> Currently, the smartphone application lets customers locate post offices, track packages, and order free mailing supplies.

<sup>8</sup> Click-N-Ship allows customers to mail packages from their home. Registered customers can pay postage with a credit card, print shipping labels, purchase insurance, view their shipping history, and maintain an online address book.

<sup>9</sup> The Postal Store is a timesaving website where customers can buy stamps, stationery, philatelic collectibles, and gift items, and order free shipping supplies.

<sup>10</sup> mPOS also allows carriers the ability to create receipts when they pick up prepaid packages or create notices for package pickup when they are unable to deliver packages to a customer's home.

<sup>11</sup> A joint effort, started in February 1999, among Europay, MasterCard, and Visa to ensure the security and global interoperability of chip-based payment cards. On June 28, 2002, Europay was absorbed into MasterCard. The standard is now defined and managed by the public corporation, EMVCo, LLC.

Internationally, debit and credit card payment networks have shifted liability because of this technology. Specifically, in the standard credit card environment, the credit issuer (for example, a banking institution) is liable for fraudulent transactions. After the liability shift, the merchant will be liable for fraudulent transactions if the point-of-sale terminal does not support the EMV standard. In the U.S., banks continue to rely on standard credit cards, largely because upgrading to the EMV standard is costly. Effective October 2015, banks and merchants will be expected to conform to the EMV standard.

The Postal Service estimates it has a potential liability of \$3 to \$5 million annually from fraudulent transactions after implementing the EMV standard. In an effort to avoid such costs, it recently deployed smart card readers to all post offices and self-service kiosks. The readers can process transactions for both smart cards and standard credit cards.

## Innovative Payment Options

We researched global trends and identified additional payment technologies that may increase revenue opportunities in the Postal Service's shipping and package services. Specifically, the Postal Service could consider Drop & Go, third-party payment options, and Dot Post (.Post) to entice technology-savvy customers.

### Drop & Go



The United Kingdom's Post Office Limited<sup>12</sup> launched Drop & Go in August 2013. The Drop & Go service is designed for online sellers, small businesses, and frequent mailers. Unlike the Postal Service's self-service kiosk,<sup>13</sup> Drop & Go offers customers a prepaid card to pay for packages and provides a dedicated counter to reduce wait time. Customers with prepaid accounts can leave their packages for processing and have postage deducted without them having to "check out." Additionally, the Drop & Go service periodically offers postage discounts to customers as an added incentive.

Drop & Go operates similarly to the Postal Service's system for large business mailers. Drop & Go customers drop packages at dedicated counters without waiting for processing, and payment automatically is deducted from their accounts. As a result, Drop & Go enhances the customer experience, increases customer loyalty, and could increase revenue.

### Third-Party Payment Options

We considered the feasibility of the Postal Service offering credit to individuals and small businesses. The Postal Service stated that it does not offer credit because it negatively affects liquidity and cash flow. Specifically, the Postal Service would have to borrow funds to implement credit services, but it cannot do so because it has reached its maximum borrowing authority. Furthermore, the Postal Service would have to manage credit risk, and denied credit could damage goodwill, potentially leading to lost revenue. To implement a credit option, the Postal Service would have to develop or purchase a billing system, create credit and collections departments, and expand staffing.

As an alternative to individual credit, many online sellers and businesses use a third-party payment option to allow customers to purchase items easily and pay for them later. These services provide a simple, convenient payment process that does not require the customer to enter or store payment information with each purchase.

<sup>12</sup> The Post Office Limited is owned by the United Kingdom's government through the Postal Service's Holding Company Limited, which also holds the government's stake in the Royal Mail public limited company.

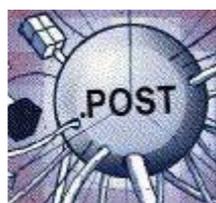
<sup>13</sup> A self-service kiosk allows customers to weigh and measure packages, purchase and print postage, and buy stamps using a credit or debit card. Packages that meet size requirements can be placed into a mail receptacle for mailing.

**Benefits of Third-Party  
Payment Vendors include  
increased customer loyalty,  
increased revenue, immediate  
payment, and transferred fraud  
and credit risk.**

Several third-party vendors offer online payment services.<sup>14</sup> Vendors providing this payment option sometimes require customers to have money in their account or a credit card on file before purchases are completed and sometimes underwrite the financial risk of the customer. For example, the customer enters limited information and, in return, the vendor instantly analyzes credit sources and online purchasing data to determine if it will assume liability for the purchase. If the liability is assumed, the customer confirms the purchase, and the vendor pays the business immediately. The vendor then collects payment from the customer, sometimes up to 2 weeks after the customer receives the goods. The vendor assumes all risk of fraud and nonpayment. It charges the business a monthly flat fee and a transaction fee,<sup>15</sup> but the payment process is simple, convenient, and can be used on mobile devices such as smartphones and tablets.

Businesses using online payment services report increased customer loyalty and volume and, in turn, increased revenue. A partnership with a third-party vendor could be another alternative for the Postal Service to become more competitive by providing its customers with a fast, secure way to make payments without incurring the credit risk.

#### Dot Post



.Post, established in April 2013, is a virtual space that connects current and future electronic worldwide posts and makes them interoperable in a secure and trusted environment. The goal of .Post is to link the physical and digital worlds, creating a secure platform that enables delivery of postal eServices to citizens and businesses. The Universal Postal Union<sup>16</sup> regulates .Post and can secure it from spam and cybercriminal activity, such as phishing<sup>17</sup> and identity theft. It authenticates post providers and strengthens the postal brand globally. Applications such as identity management, eShops, and ePayments will eventually be available on this platform.

In .Post, the Universal Postal Union has identified an opportunity to integrate a digital platform with the existing international physical and financial platforms:

- The vision is for .Post to be a central gateway for postal customers to access ePost, eCommerce,<sup>18</sup> and eGovernment services.
- Governments and posts have a unique opportunity to define a space on the Internet for securing trust in digital transactions and relationships.
- .Post could enable posts to develop cross border electronic postal services.

Although .Post is in its early stage,<sup>19</sup> its more secure payment features could help the Postal Service remain relevant in the global digital economy.

<sup>14</sup> These include Braintree, Klarna, PayPal, Square, and Stripe.

<sup>15</sup> The transaction fee can range from 1.5 to 3 percent.

<sup>16</sup> A specialized United Nations agency that is the primary forum for cooperation among members of the postal sector. It helps to ensure a universal network of up-to-date products and services.

<sup>17</sup> Phishing is a fraudulent attempt, usually made through email, to steal your personal information.

<sup>18</sup> The goal of the eCommerce service is to provide international payment solutions for merchants and buyers, including cross border cash on delivery, escrow services, and payment tracking status.

<sup>19</sup> We identified 30 countries from Africa, Asia, and Europe that are members of .Post.

## Conclusion

Shipping and packages are increasingly important to the Postal Service's prosperity. Since FY 2011, shipping and package revenue has increased as First-Class Mail revenue has declined, and represented 19 percent of total revenue in FY 2013. The Postal Service has the infrastructure and delivery network to accommodate existing customers' shipping and package needs and more effectively engage potential customers. It also recognizes the need to use mobile and digital payment technologies to attract and retain customers who increasingly explore the convenience of eCommerce. Individuals and small businesses want flexible ways to buy postage. If it provides this flexibility, the Postal Service can increase shipping and package revenue and remain relevant to consumers in the digital age.



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