



OFFICE OF INSPECTOR GENERAL

UNITED STATES POSTAL SERVICE

Thinking Outside and Inside the Box

RARC Report

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OFFICE OF INSPECTOR GENERAL

UNITED STATES POSTAL SERVICE

Executive Summary

Craving those maple candies only made in Vermont? Amazon to the rescue. Need a one-of-a-kind housewarming present? Etsy. Searching for a limited edition comic book? eBay. Consumers search, click, and the product is shipped, frequently without the consumer knowing which company sold the product. The shipper made the sale, but the anonymity of digital marketplaces makes it difficult to earn repeat customers. As a result, many shippers who sell their goods online need ways to differentiate themselves from competitors.

The U.S. Postal Service has a proven record of showcasing technology to make mail more appealing to the recipient, which helps advertisers make their mailpieces stand out. For example, the mail promotion including near field communication (NFC) encourages advertisers to experiment with technology that launches digital content, such as movie trailers or live music, by simply tapping a phone to a postcard. The Postal Service's success in promoting mail innovations could carry over to parcels.

By helping shippers enhance their parcels, the Postal Service could demonstrate its commitment to continued innovation, set itself apart from competitors, and bolster its role as a valuable ecommerce business partner. The Postal Service has

benefited greatly from the rise of ecommerce; packaging and shipping revenue grew 63 percent from 2011 to 2016. However, competition remains fierce, and carriers are racing to capture increasing parcel volume from ecommerce. Creating a program to help shippers provide a more memorable delivery and package experience for recipients could be the Postal Service's ticket to continued growth.

Noting that the plain cardboard box is a missed marketing opportunity for shippers, the U.S. Postal Service Office of Inspector General (OIG) researched technologies and innovations that can enhance parcels. This paper highlights eight innovations in particular, six of which are for the outside of the box, and two are for the inside. [Table 1](#) lists the specific innovations discussed in this paper.

Innovations on the outside of the box could transform the parcel from a simple receptacle into an engaging customer experience. Creative box designs present a powerful branding opportunity for shippers. Shippers could use integrated technologies that the Postal Service already encourages in advertising mail — including augmented reality, quick response (QR) codes, and NFC — to connect parcel recipients with digital content via their

Table 1: Proposed Parcel Enhancements

Where Is the Enhancement?	What Is the Enhancement?
Outside the Box	Cobranding
	Augmented Reality
	Near Field Communications
	QR Codes
	Temperature and Security Sensors
	Box Buttons
Inside the Box	Parcel Connect
	Delivering Thanks

mobile phones. Sensors on the outside of the parcel can track its condition and provide delivery information to the recipient, such as whether the package was opened or damaged in transit. Shippers can even include “box buttons” that integrate special effects directly into the box itself, such as lights, sounds, or video display.

Inside the box, there are also other opportunities to continue customer engagement. The Postal Service could build on its Share Mail offering by enabling shippers to include mailings in parcels as well — an idea referred to

as “Parcel Connect” in this paper. Another idea, called “Delivering Thanks,” uses the parcel as a springboard for sending social, First-Class mail tied to gift registries.

By enhancing both the outside and the inside of the box, shippers could harness the power of customer engagement and feedback in novel ways. Thinking outside (and inside) the box by fostering parcel innovations could help both the Postal Service and shippers differentiate themselves from competitors.

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Introduction

There are 226,187 different decorative pillows for shoppers to browse on Amazon.¹ Digital marketplaces that sell goods from a variety of sellers, like Amazon, Etsy, and eBay, provide consumers with far more options for products than even the biggest physical superstore. And although an increasing number of online sellers and consumers are connected across the world, the ecommerce environment can make it difficult for sellers — referred to as shippers in this paper — to differentiate themselves from the competition and earn repeat customers.

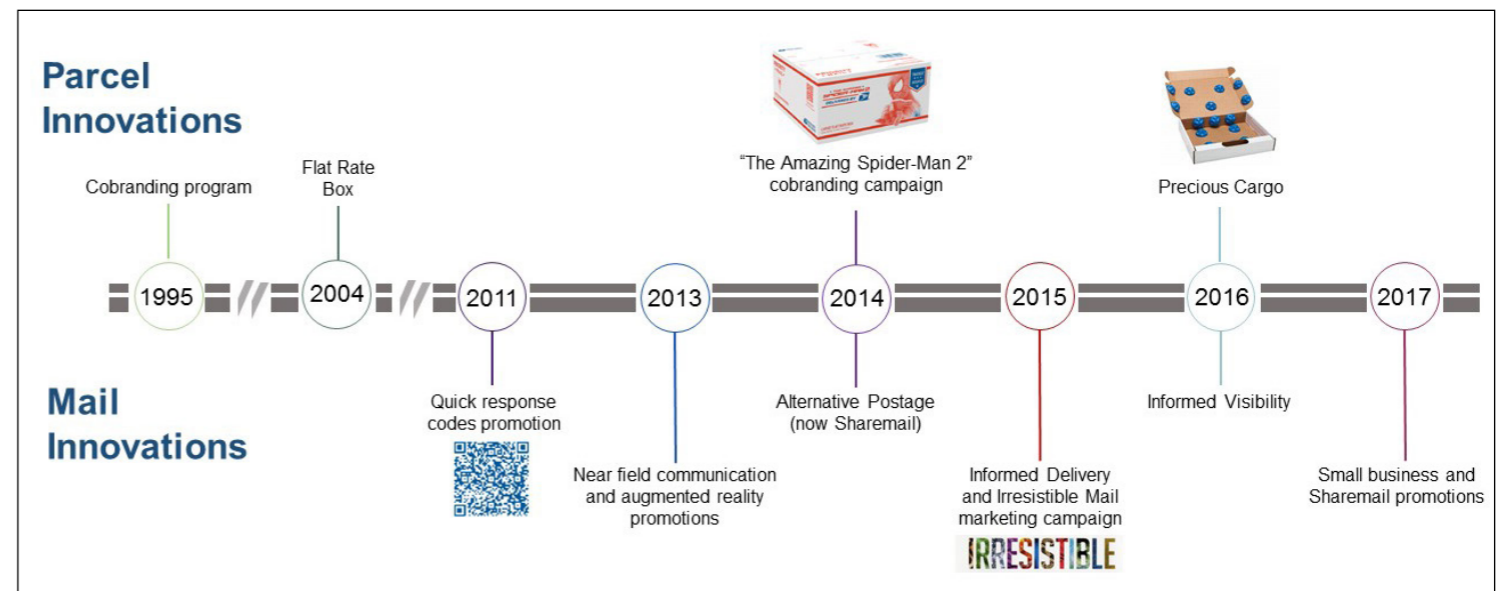
Shippers selling goods through digital marketplaces lack control over their online visibility. The shipper's product shows up in a search result on a digital marketplace, but the shipper does not have much control over where on the list of competing products its goods show up. This lack of control continues into delivery of the item. Parcels from a digital marketplace are often packed along with other, unrelated items in a box labeled with the marketplace's logo, rather than the shipper's. This lack of control over the packaging, shipping, and delivery of the item is important. If a parcel is delayed or damaged in transit, customers might blame the shipper, however unfair. When customers complain to the third-party seller, it could affect the shipper's rating or rank in search results. Furthermore, it can be difficult to establish loyalty and brand allegiance. When a customer goes to make a repeat purchase, they might choose a different seller that appears higher in the search results.

One way shippers can better establish themselves and foster direct customer feedback is by reclaiming the shipping process and differentiating themselves through package enhancements. This can foster brand memorability, which could lead to customers returning to the product or brand when they are looking to buy more. The U.S. Postal Service, as a parcel carrier and innovator, could help companies differentiate themselves by promoting these enhancements and making them more accessible to shippers both small and large.

The Postal Service as an Innovator: Past and Future

The tremendous growth of ecommerce has translated into growth for all carriers, and the Postal Service is no exception. Its shipping and package revenue grew 63 percent from 2011 to 2016.² As parcel volume has increased, the Postal Service has innovated its service to remain competitive. In 2004, the Postal Service revolutionized the payment and ease of

Figure 1: Timeline of the Postal Service's Parcel and Mail Innovations



Source: OIG analysis of selected postal innovations.

¹ Number of search results returned on March 6, 2017.

² OIG analysis of USPS Annual Reports to Congress. "Shipping and Packages" includes revenue from Priority Mail Express, First-Class Packages, Priority Mail, Priority Select Mail, Parcel Return Service Mail, and Package Services. For FY 2011, see: U.S. Postal Service, *2012 Annual Report to Congress*, 2012, <https://about.usps.com/publications/annual-reports/2012/annual-report-2012.pdf>, p. 21; For FY 2016, see: U.S. Postal Service, *2016 Annual Report to Congress*, 2016, <https://about.usps.com/who-we-are/financials/annual-reports/fy2016.pdf>, p. 27.

shipping by introducing the Priority Mail Flat Rate Box. With the tagline, “if it fits, it ships,” the Postal Service made estimating costs easy for small businesses and home shippers.³ Figure 1 highlights a number of Postal Service innovations directly related to the enhancements discussed in this paper.

Although a plain cardboard box or padded envelope gets the job done, it is a missed opportunity for a shipper to connect with the recipient. An eye-catching or technologically savvy parcel could make a positive impression on the recipient the second they see it on their doorstep. Parcel innovations can connect recipients with a shipper’s website or serve as a conduit for gathering customer feedback. The Postal Service could help shippers take advantage of packaging and the delivery experience to set themselves apart and build customer loyalty.

To learn more about parcel technologies and innovations, the U.S. Postal Service Office of Inspector General (OIG) attended industry events and met with stakeholders in parcel delivery and advertising innovation.⁴ The research highlighted two broad categories for parcel enhancements: those placed on the outside of the parcel and those placed inside the parcel.

Outside-the-box innovations use the box as a platform to engage recipients. Integrated technologies — augmented reality (AR), quick response (QR) codes, and near field communication (NFC) — lead recipients to digital content through mobile phones. Temperature and security sensors provide delivery information to the recipient, such as whether the package was opened or damaged en route. Creative branding and high tech designs, such as a box that lights up when picked up, could also delight recipients, inspiring them to share their experience with friends and family.

Inside-the-box innovations use the parcel to increase mailing opportunities. An idea this paper calls “Parcel Connect” enables recipients to use mailings to continue the conversation about a parcel they have received. An idea called “Delivering Thanks” capitalizes on opportunities to make thank you notes easier to use.

Harnessing Customer Feedback

The integrated technology enhancements in this paper offer rich opportunities for shippers to solicit customer feedback and observe the preferences of their customers. For example, a company could design a short, multiple-choice survey, ask a specific question about the product line, or provide an opportunity for free-form written feedback on the product. In addition, the shipper could collect indirect feedback from integrated technologies, such as tracking how customers navigate through their mobile website or AR application, which could help the shipper optimize mobile browsing. Another feedback opportunity would be to ask customers how and how often they would like to be contacted about new products and sales. This could improve the quality of future mailing lists and lead to higher return on investment (ROI).

Encouraging recipient feedback via parcel innovations could also allow shippers to create a stronger relationship with the Postal Service. Currently, the Postal Service primarily measures recipient satisfaction through complaints it receives directly from recipients or from small businesses who call into the Customer Care Center.⁵ Parcel innovations offer a way for shippers

³ U.S. Postal Service, “U.S. Postal Service TV Commercial For If It Fits, It Ships,” *iSpot.tv*, 2012, <https://www.ispot.tv/ad/7kW3/us-postal-service-if-it-fits-it-ship> .

⁴ See Appendix A, OIG Research. The OIG explored mail innovations in two prior papers. First, in 2014 the OIG released its *Mail Innovations* whitepaper, which discussed how integrated technologies, electronics, and nontraditional materials could make mail more effective. RARC-WP-14-013, September 22, 2014, https://www.uspsoidg.gov/sites/default/files/document-library-files/2015/rarc-wp-14-013_0.p . In 2016, the OIG released a follow-up whitepaper, *Advertising Mail Innovations*, which discussed strategies that the Postal Service could utilize to continue promoting innovation in advertising mail. RARC-WP-16-016, September 6, 2016, <https://www.uspsoidg.gov/sites/default/files/document-library-files/2016/RARC-WP-16-016.p> .

⁵ The same representatives in the Customer Care Center handle both small business complaints and household recipient complaints; they are filed in the same, centralized system.

to aggregate complaints that affect their customers' satisfaction and communicate them to the Postal Service, rather than going through the same call lines as recipients. Shippers can collect delivery experience feedback through integrated technology to provide new perspective on what works and where there might be room for improvement in the end-to-end delivery process. For example, a QR code could link to a satisfaction survey, where customers could note if a sensor on the parcel registered temperatures outside the safe range. Fostering a customer-focused dialogue between the shipper and the Postal Service could potentially resolve parcel recipients' complaints more efficiently by avoiding duplicative complaints through the Customer Care Center. It would also strengthen the Postal Service's collaboration with shippers. [Appendix B](#) addresses some possible shipper implementation concerns and potential Postal Service solutions.

Why Would the Postal Service Encourage Parcel Enhancements?

As a result of the growth in online shopping, competitors abound in the delivery space. Not only do traditional shipping companies own large shares of the market, but new players have begun to offer fast deliveries through innovative business models that make getting a package a bit like using an app to order a taxi. It is no longer enough for carriers to offer just low prices and dependable service. They have to distinguish their services in other ways. By enabling shippers to take advantage of parcel innovations, the Postal Service could set its shipping services apart from its competitors.

Because of the Postal Service's success in promoting innovations in mail, it is well suited to incentivize similar applications on the parcel. As both a delivery service and provider of packaging materials, the Postal Service could help shippers rethink parcels, turning them into an opportunity to try physical advertising. Parcel enhancement opportunities for shippers could include design elements or integrated technology outside the box, add-on mail campaigns inside the box, or coordinated campaigns that use both mail and parcel design. This use of physical advertising could inspire shippers to integrate ad mail into their marketing mix. The Postal Service could promote this connection between the parcel and advertising by connecting parcel enhancements and related mail campaigns, offering discounts to companies who use both.

Although other carriers could offer similar enhancements to shippers, the Postal Service could be the first to make them widely accessible and has the benefit of being able to combine the power of advertising on the parcel with advertising in the mailbox. The remainder of the paper describes the suggested enhancements in detail.

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COBRANDED BOXES



Source: FabFitFun.

Thanks to advances in printing technology, companies can now make their parcels stand out from a pile of plain, cardboard boxes. The Postal Service could expand their cobranding program to encourage shippers to enhance their brand through creative packaging.

USE CASES

Judge a Book by Its Cover

Shippers — especially monthly subscription service companies — have embraced using innovative parcel designs to delight and engage with customers.⁶ In a recent survey, over 40 percent of respondents said branded packaging made them more likely to share on social media.⁷ For example, subscription box company FabFitFun offers giveaways to customers who share pictures or videos of their products on social media, generating 79,000 mentions on Instagram and nearly a half million likes on Facebook.⁸

Advertising Building Blocks

By coordinating the package design with a broader advertising campaign, shippers could generate excitement and interest in the brand. This could help keep the shipper in the top of the customer's mind. For example, competing meal delivery companies have tried to differentiate themselves by creating branded boxes that match, in color and design, follow-up mail campaigns.

The Unboxing Phenomenon

Americans spent 60 million hours in 2015 watching videos online of brand ambassadors opening and playing with products.⁹ Not only can engaging packaging lead to more social media attention for parcel shippers, but enabling shippers to add design elements to Priority Mail Boxes could lead to higher brand visibility for the Postal Service, as well.

IMPLEMENTATION

The Postal Service could help small businesses use branding to delight customers in three ways. It could publicly share a list of approved printers and package designers that specialize in creative packaging, allow companies to independently add their own designs to Priority Mail Boxes, or offer discounts on advertising mail and branded boxes that use a coordinated design theme.

Current USPS Applications

Large shippers who generate over \$250,000 in Priority Mail annually can add their logo onto packaging for free through the Postal Service's box printer.¹⁰ The Postal Service has also participated in high-profile cobranding campaigns. For instance, to promote the film "The Amazing Spider-Man 2," Sony Pictures used cobranding Priority Mail Boxes, branding on postal vehicles, and television commercials featuring USPS. According to the Postal Service, the promotion created valuable sales leads, generating significant revenue.



6 Michael Rosenwald, "How the boring brown box on your doorstep became an object of desire," *The Washington Post*, August 18, 2016, https://www.washingtonpost.com/local/how-the-boring-brown-box-on-your-doorstep-became-an-object-of-desire/2016/08/17/9f17b990-5e5e-11e6-8e45-477372e89d78_story.html.

7 Dotcom Distribution, "Unwrapping the Customer Experience," 2016, <http://www.dotcomdist.com/Unwrapping-the-Customer-Experience>, p. 15.

8 FabFitFun, "Summer Giveaway Rules," <https://fabfitfun.com/summer-unboxing-giveaway-rules>.

9 Shan Li, "Watch how these YouTube stars make money unboxing toys," *Los Angeles Times*, December 24, 2015, <http://www.latimes.com/business/la-fi-toy-unboxing-boom-20151224-story.html>.

10 U.S. Postal Service, Publication 22, January 2016, p. 13 and Interview with Joe Owens, USPS, Manager, Business Solution for Expedited Packaging Supplies, November 15, 2016.

AUGMENTED REALITY

AR uses the camera on a mobile device and an app to superimpose digital content into a view of the real world. The digital content is often linked to a company's website, where customers could make purchases or provide feedback. AR is commonly used in gaming and as a marketing tool for a variety of consumer goods. Pricing could be pay-per-use or per campaign, but it is relatively inexpensive.

USE CASES

Tailor-Made

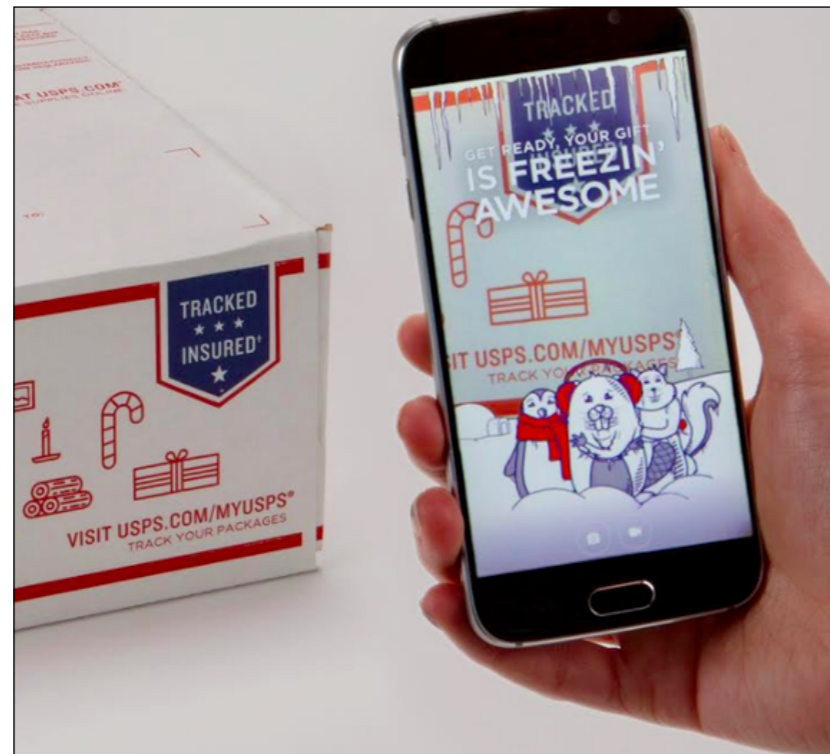
Retailers recently pioneered AR apps that turn the user's surroundings into a virtual dressing room where shoppers can see how a piece of clothing looks without trying it on.¹¹ Imagine receiving shoes and being able to scan the parcel box to see how they would look with a dress from the same retailer. If the dress looks fabulous, you could instantly purchase it directly from your phone. This would capitalize on the excitement of receiving the parcel and create an upsell opportunity for the shipper.

Game On!

The extremely popular Pokémon Go app catapulted AR into mainstream pop culture.¹² AR games, accessible on a parcel, could give customers more opportunity to engage with the shipper's brand and provide a connection to mail. For example, a toy car retailer could provide an AR experience where the package recipient "drives" a car on a race track around the house, using the phone to dodge digital obstacles. A follow-up mailpiece with AR could give access to a new level on the game, encouraging the user to browse new toy cars.

IMPLEMENTATION

- The Postal Service could create incentives for shippers to integrate AR into packaging and corresponding ad mail campaigns. The Postal Service could offer a discount on ad mail for companies that include AR on a parcel and a similar experience on an ad mail campaign.
- The Postal Service could allow shippers to print their AR-enabled design onto Priority Mail Boxes and integrate them into its existing AR app, USPS AR. The fewer apps users need to download digital content, the more likely they are to do so. Adding shipper content to the USPS AR app would make it a more worthwhile download and could increase the number of users accessing the Postal Service's AR content.



Source: U.S. Postal Service.

Current USPS Applications

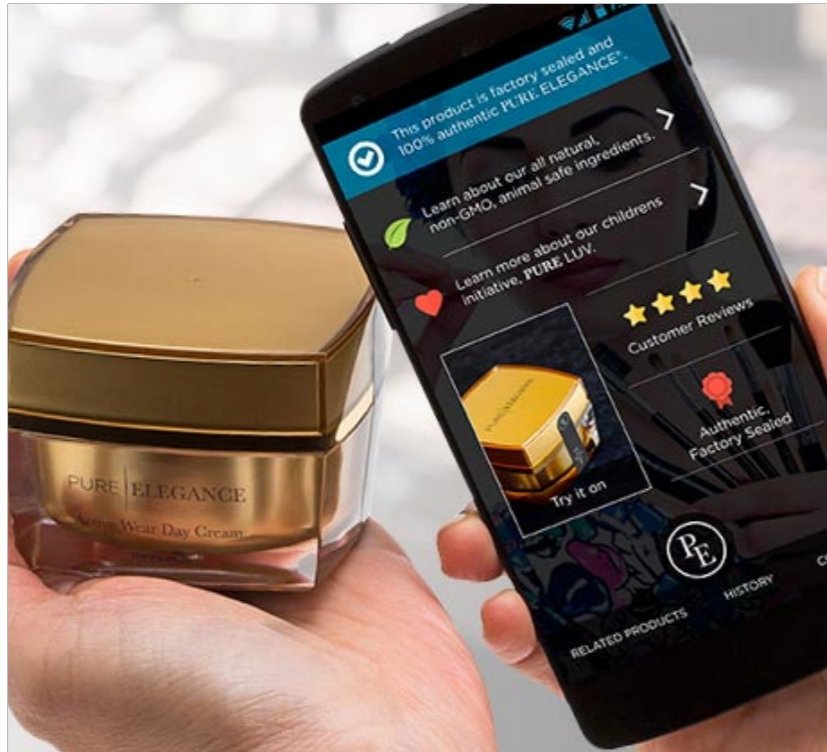
The Postal Service has promoted AR in its "Irresistible" catalog as well as in its Emerging and Advanced Technology Promotion since 2013. The Postal Service has used its USPS AR app in its holiday-season mailing campaign for a few years. In 2016, postal customers could pick one of two decorated Priority Mail Boxes that had AR messages for the recipient to unlock using the Postal Service's app.



11 Edgar Alvarez, "Gap Envisions a Future with Augmented-Reality 'Dressing Rooms,'" *Engadget*, January 30, 2017, <https://www.engadget.com/2017/01/30/gap-augmented-reality-dressing-rooms/>.

12 Christopher Heine, "Pokémon Go is Still Going, with New Content and Big Brand Partnerships," *AdWeek*, February 21, 2017, <http://www.adweek.com/digital/pokemon-go-is-still-going-with-new-content-and-big-brand-partnerships/>.

NEAR FIELD COMMUNICATION



Source: Thin Film Electronics ASA.

NFC technology offers some of the most exciting and well-developed applications for parcels. NFC tags send electronic data to nearby mobile devices, making the technology extremely convenient for users. Although only some types of mobile devices are NFC-enabled, more models are added to the list each year.¹³ By simply holding their phones near an NFC tag — usually embedded in a sticker or a product label on the packaging — parcel recipients could launch tailored digital content via website, app, or video.

USE CASES

Accept No Substitutes!

For luxury goods, authenticity is paramount; this is especially true for those products that are often counterfeited. NFC can enable customers to confirm product authenticity upon delivery. The recipient would put his NFC-enabled mobile device near the parcel, and the tag would open a website on the device to register the product.

Digital Destinations Galore

After registering the product, the customer could write a product review, leave delivery comments, note interest in receiving ad mail from the shipper, or look at related products. NFC tags can be universally programmed to send all recipients to the same site, or they can be personalized so that each customer's experience is different based on the product received.

Safety in Stickers

NFC tags are often embedded in stickers. In addition to opening digital content, they could serve as a tamper-evident seal. Placing the tag along the opening of the box would draw attention to the technology and immediately alert a recipient if someone else had tried to open the box.

IMPLEMENTATION

The Postal Service could sell NFC tags in bulk through its online store directly to shippers or connect shippers with NFC tag providers. The price of the tags could include technical support from the provider to program the tags so that they direct users to the correct digital destination.

Current USPS Applications

The Postal Service included NFC in the 2015 and 2016 "Irresistible" campaigns. It also has featured NFC in the Emerging and Advanced Technology Promotion since 2013.



13 Most notably, Apple products do not read NFC tags.

QR CODES

Widely recognized, easy to customize, and relatively inexpensive, QR codes give businesses another avenue to reach consumers. Mobile users simply scan the QR box, and content, such as a website, video, or app, is launched. QR codes are typically black boxes on a white background, but they can now be made in a number of colors and designs.

USE CASES

Not a Good Fit?

QR codes could help customers start the returns process. Scanning the code would launch return instructions on the shipper's website.

You Might Also Like This

QR codes could be used to make other product recommendations. For some items, the QR code could be on the internal packaging — like the clamshell packaging for toys — but other items are shipped with no product packaging, like articles of clothing. A parcel QR code on the external packaging of a new outfit could direct the recipient to a discount for accessories.

Happy Birthday!

Instead of including a slip of paper inside the package with a gift message, the QR code becomes the gift message, a concept pioneered by Australia Post in 2013. A scan could launch a video message from the sender.

The Color is Perfect

QR codes could be a simple way to begin a product review. With the mobile device in hand, it is easy to include a picture. QR codes could also become the quick and easy way for recipients to leave packaging or delivery feedback, helpful for both the shipper and the Postal Service.

Sign Me Up!

QR codes could allow a user to indicate interest in receiving future ad mail from the retailer. Customers could snap a picture of their delivery address as confirmation of their identity.



Click above to watch a video on Australia Post's use case.

Current USPS Applications

QR codes have been a featured postal promotion since 2011. In 2017, they are part of the Mobile Shopping Promotion, which encourages customers to use a mailpiece to embark on an online shopping experience with their mobile phones. At the 2017 Consumer Electronic Show (CES), the Postal Service featured customizable QR code stickers for packages. When scanned, the sticker launched a video recorded by the shipper, similar to what Australia Post offered (see video). Although only a prototype at this point, this technology could engage and excite customers, incentivizing them to use the Postal Service over other delivery agents.



TEMPERATURE AND SECURITY SENSORS

Twist-off jar lids read, “safety button pops up when original seal is broken, reject if button is up.” The safety button gives the consumer immediate information about the condition of the jar’s contents. Temperature and security sensors could do the same thing for packages. The simplest sensors are stickers that attach to the outside of a box. These sensors change color if, for instance, ambient temperatures fall outside a certain range or the parcel endures a potentially damaging impact. More sophisticated sensors, like those offered by company Avery Dennison, include the functionality of a sensor as well as an NFC tag. Recipients can see detailed reports of the parcel’s temperature over time on their mobile device.¹⁴

USE CASES

Spoiler Alert!

Some food, electronics, and pharmaceuticals are temperature sensitive. A sensor could alert consumers that their delivery of specialty chocolate did not languish on the tarmac. In Houston. In August.

This End Up!

Fragile items can be damaged in ways not immediately apparent when a package is opened. Sensors that monitor for forceful impact could give customers peace of mind that their expensive new laptop was not dropped in transit. Similar sensors can indicate if a parcel was tipped more than 90 degrees, which is valuable for delicate shipments that must stay upright.

IMPLEMENTATION

- The Postal Service could offer impact or temperature sensors as add-on products at post offices or it could sell the sensors in bulk to parcel shippers through the online Postal Store.
- Temperature sensors could also be integrated into the Postal Service’s Customized Delivery pilot, where USPS delivers groceries on behalf of Amazon.



Source: ShockWatch.

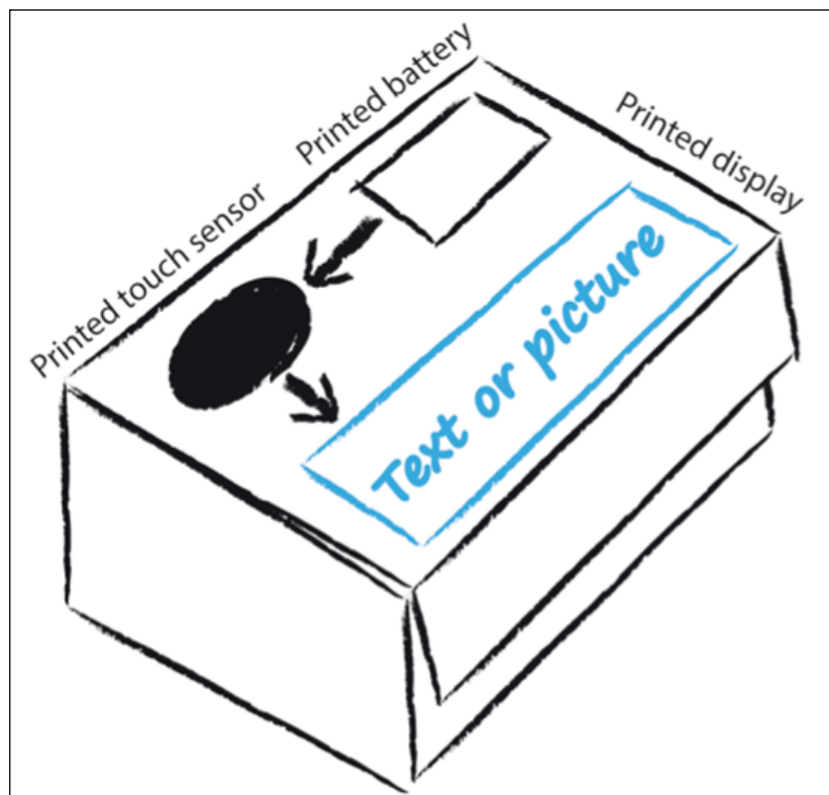
Current USPS Applications

The Postal Service recently debuted a parcel box designed to better protect package contents in transit. Called the Precious Cargo Box, it uses polyethylene (EPE) foam dots to hold a packed item in place and distribute outside pressure on the box. These boxes are a great way to prevent products from being damaged, but their sizes are geared for specific electronics, such as cell phones, tablets, and laptops. Sensors could supplement this offering by enabling the recipient to monitor the condition of the parcel, regardless of a product’s size or shape.



¹⁴ Avery Dennison, “TT Sensor Plus,” <http://label.averydennison.com/en/home/lpm-products/key-label-innovations/TT-sensor-plus.html>.

BOX BUTTONS



Source: Saralon.

Box buttons include special effects — such as lights, sound, or video display — that can be integrated into parcel boxes. These technologies are fully self-sufficient; they do not require any additional devices to work. A recipient simply presses a button to activate the electronic content. Using these electronics can help a shipper create a compelling parcel experience for recipients.

USE CASES

Let There Be Light

Imagine coming home to find the parcel you have been anticipating. When you go to pick it up, the box glows, exposing a brand logo that was not visible before. Using conductive ink, LED lights, and printed battery cells, this could be a reality. The novelty of this type of design could inspire recipients to share their experiences with friends and online. Thousands of people have viewed a YouTube video of a Bombay Sapphire gin box that glowed when picked up.¹⁵

Anybody in There?

Another use of box buttons could be the box making a sound when opened. A button could be activated when the flaps of a parcel are opened. This novelty would increase the customer's brand impression and engagement with the parcel. Americhip, a company who creates packaging with embedded electronics, found that a campaign using audio and lights led to 84 percent of recipients engaging with the content multiple times.¹⁶

Innovation Spotlight

Box buttons can also be used in conjunction with other technologies to bring awareness and excitement to all that parcel packaging can do. For instance, light-up content could draw attention to QR codes or an NFC tag, leading the recipient to a digital experience that could lead to additional purchases.

Current USPS Applications

The Postal Service promoted high-end printed electronics, like video in print technology, in the 2016 and 2017 Emerging and Advanced Technology Promotion. Discounts were also allowed for mailers using innovative inks, like conductive inks, in the 2016 and 2017 Tactile, Sensory, and Interactive Promotion. While the more advanced technology, like video in print, might be better suited inside a box or letter, where it is protected from the elements, technologies like conductive ink are printed directly onto the outside of packaging and are more durable.



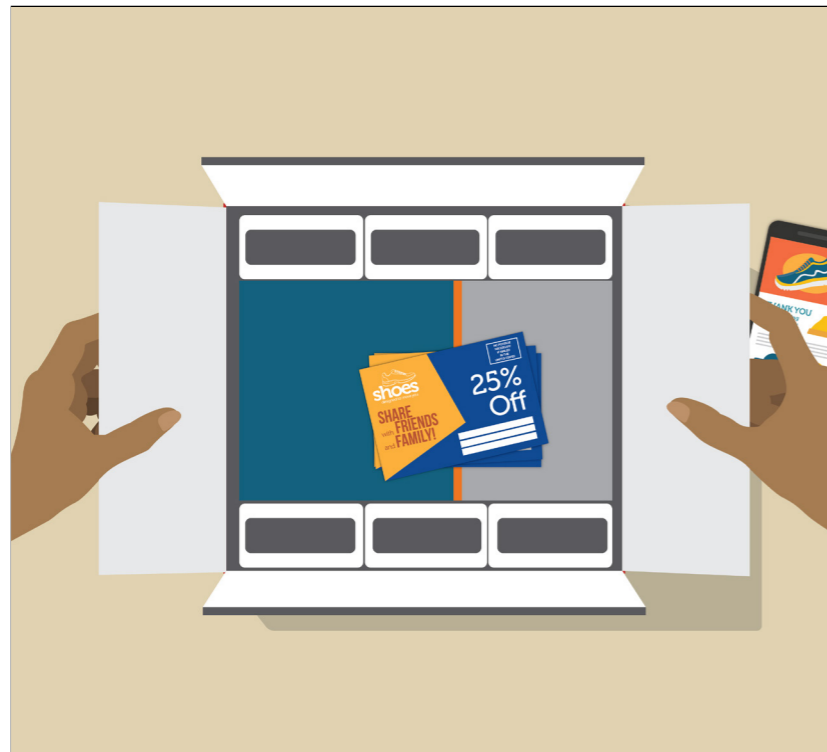
¹⁵ "Lumious Packaging for Bombay Sapphire," YouTube video, 1:37, May 27, 2013, posted by "karlKnauer," <https://www.youtube.com/watch?v=nTppXvsJKbc>.

¹⁶ Americhip, "Rediscovering Multisensory Technologies", <https://www.americhip.com/media/pdf/multisensoryinfographic-2.pdf>.

INSIDE-THE-BOX ENHANCEMENTS

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PARCEL CONNECT



Source: OIG.

Consumers have become digital billboards for goods and services. By sharing their brand experiences — good or bad — with friends and followers on Twitter, Facebook, and Snapchat, they generate buzz that can promote or torpedo a product. Marketers try to incentivize customers to share brand impressions on social media through giveaways and promotions, hoping that what follows the hashtag will be positive. The Postal Service could launch its own word-of-mouth platform by promoting prepaid mailings inside of parcels.

USE CASES

Sharing is Caring

Receiving a parcel often creates a shareable moment, but it does not have to happen only in digital form. A clothing retailer could include prepaid postcards advertising discounts for the same product in each shipment. The recipient would be encouraged to address and send the coupons to friends with similar taste. The personal touch of a mailing sent to friends and family would likely make these advertising mailpieces especially effective, demonstrating the power of advertising mail at generating new customers.

Loyalty Makes the Wallet Grow Fonder

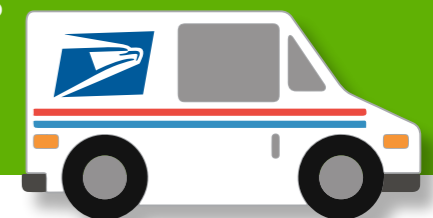
Companies could tie Parcel Connect to an existing customer loyalty program; the customer would benefit if any of their friends took advantage of the prepaid mailings. For example, in the digital world, online dress rental company Rent the Runway encourages customers to share a message about their rental on social media; if a post encourages friends to sign up, the poster and the friends are eligible for discounts on their future rentals.

IMPLEMENTATION

Clear instructions are key for this type of program. Recipients need to understand the call to action: address and send the prepaid mailpieces containing discounts. The shipper could choose at what level to prepay the mailings, which would determine the postage rate.¹⁷

Current USPS Applications

Recognizing the power of word-of-mouth advertising, the Postal Service created its own social sharing platform: Share Mail. Companies using this program include prepaid First-Class letters or postcards advertising their products in their mailers, which the recipients can then send to friends and family.¹⁸ Share Mail was included in the 2016 “Irresistible” catalog and as part of the 2017 Earned Value Promotions Program.



¹⁷ U.S. Postal Service, “Introducing Alternate Postage,” 2014, <https://www.usps.com/business/pdf/alternate-postage-sales-sheet.pdf>.

¹⁸ Ibid. Share Mail was previously called “Alternate Postage.”

DELIVERING THANKS



With texting, instant messaging, and email all at the consumers' fingertips, it is no wonder that greeting card sales are down.¹⁹ This innovation would link thank you cards and gift registries to encourage the sending of hand-written thank you notes. The concept is that registry owners — the gift recipients — could request that stores include pre-addressed thank you notes with their gifts or send a separate parcel with them after the event.

Why would retailers go to this extra effort and expense? Gift registries are valuable, generating nearly \$10 billion in sales in 2014, and they create brand-loyal, life-long customers.²⁰ Research shows consumers desire increased convenience with gift registries, and ready-to-go thank you notes could drive a customer to sign up with one store over another.²¹ For the Postal Service, the benefit extends beyond enhancing the value of the parcel to supporting First-Class Mail.

USE CASES

When You Care Enough to Send the Very Best (but Are a Little Lazy)

When you create a gift registry, you are usually preparing for a life-changing event that will bring many parcels, full of new housewares or baby items, onto your doorstep. It can be difficult to keep track of who sent what and to acknowledge the gifts in a timely manner. Many retailers already provide registry customers with a digital list of addresses for the people who purchase gifts. This service goes one step further by providing gift recipients addressed, pre-paid thank you notes. The notes could arrive individually with each gift or in bulk at a time desired by the recipient, such as after the wedding or birth. No need to buy stationery, locate stamps, and remember who gave you the crystal wineglasses. Instead, you just jot a quick note in the included card as soon as you open the package and drop it in a mailbox.

IMPLEMENTATION

Registry mail could be priced similarly to Share Mail: the retailer chooses whether to prepay some or all of the postage, and the amount prepaid determines the postage cost.²² This connection between mail and parcels allows the Postal Service to offer mailing promotions connected to a parcel product. Retailers could decide to either offer the program for an additional charge or as a way to make their registries more appealing than the competition.

¹⁹ IBISWorld Market Research Report, *Greeting Cards & Other Publishing in the US*, June 2016, <http://www.ibisworld.com/industry/default.aspx?indid=1235>, p. 7.

²⁰ Rieva Lesonsky, "Reasons to Say 'I Do' to the Wedding Business," *Fox Business*, April 28, 2015, <http://www.foxbusiness.com/features/2015/04/28/reasons-to-say-do-to-wedding-business.html>.

²¹ Bryant Harland, "Gift Registries – Executive Summary," *Mintel*, April 2015, <http://store.mintel.com/gift-registries-us-april-2015>, p. 2.

²² U.S. Postal Service, "Introducing Alternate Postage," 2014, <https://www.usps.com/business/pdf/alternate-postage-sales-sheet.pdf>.

Conclusion

Since the ecommerce boom, the parcel has become one of the most important connections between shippers and recipients. The OIG demonstrated, in past work, that parcels drive Digital Natives' interest in and anticipation of mail.²³ Keeping this growing segment of the population engaged with the mail is critical to the Postal Service's future success. Parcels provide an opportunity for the Postal Service to help shippers set themselves apart from the pack and provide a better recipient experience. Recipients, delighted by innovation, might be more likely to become repeat customers, seeking out a specific brand rather than the first product that shows up in the digital marketplace search engine.



Source: OIG.

²³ OIG, *Enhancing Mail for Digital Natives*, Report No. RARC-WP-14-001, November 18, 2013, p. 7, <https://www.usps.oig.gov/document/enhancing-mail-digital-natives>.

Appendices

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Appendix A: OIG Research

To learn more about technologies and innovations to enhance the parcel experience, the U.S. Postal Service Office of Inspector General (OIG) attended industry events and met with stakeholders in parcel delivery and advertising innovation.

Conferences Attended:

Advertising Week (September 2015, NY)

Advertising Research Foundation, ARF West (November 2015, Menlo Park, CA)

Advertising Research Foundation, Re!Think 2016 (March 2016, NY)

National Postal Forum (March 2016, Nashville, TN)

Postal Vision 2020/6.0 (March 2016, Pentagon City, VA)

Collision (April 2016, New Orleans, LA)

Advertising Week (September 2016, NY)

CES 2017 (January 2017, Las Vegas, NV)

Companies and Organizations Interviewed:

Beaconix

B-Reel

Canada Post

InfoTrends

Occipital

Pair3d

Swiss Post

Thinfil

United States Postal Service

Xpreso

Appendix B: Shipper Implementation Concerns and Incentives

The Postal Service would need to consider what different shippers might need in order to use parcel innovations. Generally, large businesses might have different needs and expectations than small businesses when they are deciding where to spend resources. Large shippers, who are more likely to be familiar with shipping through the Postal Service, might be attracted to parcel enhancements because of discounts on shipping or related ad mail campaigns. Enhancement programs could be rolled out to these shippers quickly. Small shippers, who might have fewer resources or little experience working with the Postal Service, might feel more comfortable trying out parcel innovations if the Postal Service ushered them through the shipping process with easy-to-use tools. Table 2 is not a comprehensive list of considerations, but a starting point for further discussion.

Table 2: Barriers to Shipper Adoption of Parcel Innovations

Barriers	Tools to Incentivize Shippers to Use a USPS Parcel Program
Too costly for shippers to experiment with parcel innovations	Negotiated Service Agreements (NSA) <ul style="list-style-type: none"> Consider discounted shipping price for select innovations in NSA
	Market Experiments <ul style="list-style-type: none"> Offer discounts on parcel shipping to companies that use specific enhancements through a Postal Regulatory Commission-approved experiment Revenue from experiment must be under \$10 million
	Advertising Mail Discounts <ul style="list-style-type: none"> Discount advertising mail when parcel innovation is part of an integrated, mixed-media campaign Offer assistance in cross-media campaign planning
Shippers lack of information about technology companies	Approved Vendors <ul style="list-style-type: none"> Provide list of technology vendors, similar to list of Every Door Direct Mail service providers²⁴
	Use Cases <ul style="list-style-type: none"> Develop use cases from early adopters of parcel innovations to demonstrate the effectiveness of enhancements at engaging recipients
Easier to use marketing, warehousing, and delivery services of digital marketplaces	Warehousing <ul style="list-style-type: none"> Provide warehousing as part of a comprehensive solution for small shippers without the space to store large quantities of inventory²⁵
	Streamlined Mobile App <ul style="list-style-type: none"> Make all USPS website parcel services available via mobile app Combine My USPS and USPS Mobile apps to house all functionality in one location
	Customer Analytics Dashboard <ul style="list-style-type: none"> Provide tool to help shippers use parcel insights for targeted follow-up mailing campaigns Combine parcel delivery information, mail delivery data, and publicly available demographic information

²⁴ U.S. Postal Service, "Mailing and Printing Services: Online Vendors and Specialists," <https://www.usps.com/business/vendors.htm>.

²⁵ The OIG has explored the idea of warehousing in postal facilities previously. See OIG, *The Evolving Logistics Landscape and the U.S. Postal Service*, Report No. RARC-WP-16-015, August 15, 2016, https://www.usps.gov/sites/default/files/document-library-files/2016/RARC-WP-16-015_0.p, OIG, *Opportunities for the Postal Service – Micro-Warehousing and Other Logistics Support Services*, Report No. MS-WP-14-003, March 13, 2014, https://www.usps.gov/sites/default/files/document-library-files/2015/ms-wp-14-003_0_0.pd, and OIG, *The Global Logistics Revolution: A Pivotal Moment for the Postal Service*, Report No. RARC-WP-13-010, June 3, 2013, https://www.usps.gov/sites/default/files/document-library-files/2015/rarc-wp-13-010_0.p.

Appendix C: Management's Comments

GARY C. REBLIN
VICE PRESIDENT
PRODUCT INNOVATION



April 17, 2017

Christopher Backley,
Acting Director, RARC Central, Risk Analysis Research Center

SUBJECT: Management Response to Draft Audit Report
Thinking inside and outside the Box (Project Number 2016RARC011)

Thank you for the opportunity to respond to the final draft of the white paper, Thinking Inside and Outside the Box. We agree that many of the proposed use cases are good ideas. In fact, US Postal Service already in the process of exploring and bringing to market most of the use cases presented in this report.

For future reports of this nature, we recommend that your team identify the customer segments that are most likely to adopt the proposed ideas. Also, providing analysis supporting the cost effectiveness and profit potential of the proposed solutions would add value to those reports.

This report and management's response do not contain information that should be exempt from disclosure under the Freedom of Information Act.

A handwritten signature in black ink that reads "Gary Reblin".

Gary Reblin

cc: J Otis Smith, A/Director, Product Innovation
CARMManager@usps.gov

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UNITED STATES POSTAL SERVICE

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